Taser And Social, Ethnic and Racial Disparities research programme

University of Exeter

UCL Security & Crime Science

STAFFORDSHIRE UNIVERSITY

Address for correspondence: Professor Clifford Stott, Keele University, UK. c.stott@keele.ac.uk.
When referencing use: TASERD (2023) Taser and Social, Ethnic and Racial Disparities research programme. Published online by Keele University, 13th December 2023.

Contents

Acknowledgements

This research was conducted by a team of researchers based at four Universities in the UK. The researchers at University College London included and Professor Ben Bradford, Dr Krisztian Posch, Dr Arabella Kyprianides, Dr Jyoti Belur, Amal Ali and Jasmine Oware. The researchers at Keele University included Professor Clifford Stott, Professor Marcus Beale, Dr Matt Radburn, Dr Terry Au-Yeung, and Debbie Tallent. The research team also included Professor Abi Dymond[i] from the University of Exeter and Dr Leanne Savigar-Shaw from Staffordshire University.

We thank project consultants; Herval Almenoar-Webster, Katrina Ffrench, Sherrel Fikeis, Nick Glynn, and Desmond Jaddoo who collectively undertook a variety of roles, including raising awareness of the project amongst potential participants, circulating the invite to interview, working to recruit participants directly and / or participating in interviews, the roundtable, and the community testimony day. We would also like to record our thanks to Lynette Charles, the CEO of Mind in Haringey, and Chair of Mind in London, for kindly attending and providing support at the Community Testimony Day, held in May 2022.

We extend our gratitude to Nathalie Stewart, Pan London Stop and Search Community Monitoring Network Chair, for her assistance in circulating invites to interview.

We acknowledge the funding for the work was provided by the National Police Chiefs' Council and London's Mayor's Office for Policing and Crime (MOPAC). We thank all the police forces that provided data or access to their staff. This included Bedfordshire, Cheshire, Devon and Cornwall, Derbyshire, Greater Manchester, Gwent, Hampshire, the Metropolitan, Staffordshire, Surrey, Warwickshire, West Midlands, West Mercia, and West Yorkshire Police.

More broadly we would like to thank the College of Policing, especially Dr Oliver Chetwynd and Dr Paul Quinton, the Independent Academic Advisory Panel (IAAP) and the National Taser Stakeholder Advisory Group (NTSAG). We would like to thank Lucy D'Orsi, Andy Harding, and the Less Lethal Weapons Team as well as the Police Federation of England and Wales for their support as well as all those individuals who participated in or otherwise supported the project, commented on draft versions (including two anonymous peer reviewers) and otherwise made the research possible.

The views, findings and analysis expressed within this report have been made by the authors and do not represent the views of the individuals and organisations listed above.

1. Executive summary

1.1. Background

Conducted Energy Devices (CEDs) were introduced into UK policing in 2003 and were initially made available for use only by authorised firearms officers. The CED adopted by the UK is manufactured by AXON and referred to as Taser. The College of Police describes CEDs as follows.

> *"A CED is a less lethal weapon system designed to temporarily incapacitate a subject through use of an electrical current that temporarily interferes with the body's neuromuscular system and produces a sensation of intense pain. It is one of a number of tactical options available when dealing with an incident with the potential for conflict. CEDs will not be routinely used to police public order or public safety events, but may be used as an option to respond to circumstances within the operation. The use of CED ranges from the physical presence of a drawn device through to the application of electrical discharge to a subject. Even before a CED is drawn, the mere visibility of an overtly carried holstered device may serve a deterrent value".* [1]

In 2008, Taser was made available to non-firearms trained police, who could be equipped and deploy with the device after becoming a Specially Trained Officer (STO). This transition was particularly important because it meant that, in most cases, the strict command and control protocols supervising Taser use within firearms operations no longer applied. Rather, individual STOs made decisions to deploy the weapon in the context of routine operations. Moreover, training for Taser moved from the specialist arena of extended firearms training into a shorter, usually three-day, training programme. In 2019, access to Taser was extended to Student Officers and, in 2022, it was expanded again to Special Constables. To retain their qualification, STOs in England and Wales are required to undertake a minimum of six hours refresher training every twelve months, typically delivered over one day.

Whilst, under certain circumstances, Taser is effective tactically, its use carries a range of risks, both individually and organisationally. Home Office figures show that in 2017/18, when new use of force recording rules came into force, there were just under 17,000 uses of Taser; by 2021/22 this had grown to over 34,000. As the use of CED increases so too does the possibility of incidents occurring that pose a threat of harm to citizens, as well as individual and cumulative threats to police legitimacy. This is particularly true with regard to its deployment involving people from ethnic minority communities. For example, Home Office statistics for 2021/22 showed that Black

[1] https://www.college.police.uk/app/armed-policing/conducted-energy-devices-taser#use

people were approximately five times more likely than White people to have Taser used against them. The extent and nature of ethnic disproportionality in police use of Taser is measured and understood primarily via these Home Office statistics. According to the Voice newspaper a review of Taser cases between 2015-20 by the Independent Office for Police Conduct (IOPC) found that 60% of Black people were subjected to Taser use for up to five seconds longer in comparison to just 29% of White people, people with mental health issues were also more likely to be subjected to multiple and prolonged discharges and a total of 16 people have died where the use of Tasering has been a factor following the inquests into their deaths.[2] Moreover, within England and Wales there have been several high-profile incidents where individuals of Black heritage have died following police use of Taser. These patterns of policing are a significant challenge for the police. As the National Police Chiefs' Council Lead for Taser and Less Lethal Weapons, Chief Constable Lucy D'Orsi has said: "*Police officers across the UK do an exceptional job under immense pressure, but these statistics cannot be ignored. The impact of this disproportionality on communities is far-reaching and it is important that we do as much as we can to understand the underlying reasons*".[3]

1.2. This report

This report describes a programme of research, funded by the National Police Chiefs' Council (NPCC) and the London Mayor's Office for Policing and Crime (MOPAC), which aimed to explore the potential causes of these ethnic and racial disparities in the police use of Taser. The project was commissioned and managed by members of the Government Social Research profession at the College of Policing.[4] All design work, data collection and analysis was undertaken by teams of researchers based at a consortium of four Universities: University College London, Keele University, the University of Exeter, and Staffordshire University. The composition of the research team was diverse in terms of gender, nationality, and ethnicity.[5] The study's aims, objectives, timescale, and methods were jointly agreed by the College of Policing,

[2] https://www.voice-online.co.uk/news/uk-news/2022/09/30/families-call-for-an-end-to-taser-use-against-people-with-mental-illness/

[3] See https://news.npcc.police.uk/releases/disproportionality-in-police-use-of-taser-independent-panel-chair-announced It is also important to recognise that these statistics relate to general patterns of policing across England and Wales. Specifically, they are a cumulative measure of the number of recorded incidents of Taser use, relative to the recorded residential populations within police jurisdictions as measured in the national census. In other words, the Home Office statistics are a summary measure of patterns of policing across multiple interactions between police officers and citizens of different ethnicity. They are not a measure of whether or not police use of force within any one of those interactions was justified or proportionate.

[4] The Government Social Research Code requires members to be objective and impartial: https://www.gov.uk/government/publications/the-goverment-social-research-code/government-social-research-code

[5] https://www.keele.ac.uk/kpac/fundedprojects/taserd/researchteam/

NPCC lead for less lethal weapons, and an Independent Academic Advisory Panel (IAAP), the members of which were, bar one, all from Black or minority ethnic groups.

Together, they determined two broad questions for the research to address.

1. Can racial disparities in Taser use be explained by geographic patterns in police demand, deployment, and activity intersecting with the characteristics of the neighbourhoods where policing is concentrated?
2. Can racial disparities in Taser use be explained by the factors and processes at play during use-of-force incidents?

A mixed methods approach was developed to address the research questions, the specific details of which are provided within each chapter and in the accompanying appendices. In general terms, the study involved quantitative analysis of routine police statistical data from ten of the fifteen forces from England and Wales involved in this study. Where possible this police data was compared with demographic data from the census to examine a range of issues, including: the association between ethnicity and Taser use compared to other uses of force across the different police forces; the extent to which the detectable associations between ethnicity and Taser use persisted even after demographic, situational and other variables were controlled for; and in one case, whether disparities in Taser use could be explained by geographic patterns in police demand, deployment, and activity intersecting with the characteristics of the neighbourhoods where policing was concentrated. The study also gathered a substantive body of qualitative data including over 150 interviews (with community members, scrutiny groups, STOs, and others), observations of Taser training and routine police deployments and a small sample of Body Worn Video (BWV) footage. We utilised this data to explore officer psychology, the nature of training and to examine interactional factors and processes that may be at play during use-of-force incidents.

1.3. Individual chapters

The report is structured into ten substantive empirical chapters each dealing with different issues; chapter three explores some of the voices of communities disproportionately affected by Taser in England and Wales, chapter four examines scrutiny groups and public oversight of Taser; chapter five analyses the empirical opportunities afforded by Body Worn Video footage, chapter six reports on an observational study of Taser training, chapter seven provides an analysis of the experience and understanding of police officers. Chapters eight through to twelve then focus on a quantitative analysis of police routine data. We summarise the key findings and analytical outcomes for each chapter below and then conclude the Executive Summary by drawing out a series of cross cutting themes.

1.3.1. Affected community voices

- For many of the community participants who chose to engage with the study, several were relatives or close associates of people who had died after Taser had been used against them.
- For our participants, the use of Taser is experienced within a broader context of perceived police illegitimacy, articulated in terms of disproportionality in police use of force (i.e., heavy handedness) as well as embedded institutional and structural racism. The police, in turn, were seen as an organisation that was just one element of a broader criminal justice system unable and unwilling to either deliver even-handedness to Black and minority communities or adequately holding the police to account.
- Decisions by officers to utilise Taser were described as generally driven by colour, most pronounced with regards to dealing with young Black men suffering a mental health crisis. Participants defined Taser as a weapon, as an extremely high-level use of force, as dehumanising and potentially lethal. Police officers were often described as lacking de-escalation skills and concerns were raised about an insufficient regulation of the weapon in terms of guidance, poor levels of training, and in particular about a lack of accountability.
- While our participants described the physical harm posed by Taser, up to and including deaths of their loved ones in several tragic cases, they also emphasised the psychological harms and racialised traumas generated through use of the weapon. This extended not only to the individuals directly subjected to it use, but to their families and wider communities. In other words, when Taser is used against a Black or minority ethnic individual it was understood to impact upon already negative experiences of policing among wider communities.
- Therefore, the various high-profile incidents involving the death or serious injury to members of the British Black community linked to Taser, were described as totemic incidents symbolic of, and further contributing to, a divide between minority communities and the police.
- However, while multiple participants emphasised a potential for unrest, they also emphasised that this was far from inevitable. Indeed, many participants expressed a desire for this research to lead to measurable change and called for affected people and communities to be meaningfully involved in dialogue with the police as a matter of urgency.

1.3.2. Scrutiny groups

- Given the evidence of community concerns about a lack of police accountability, the study suggests that community scrutiny can and should be an important vehicle for providing oversight of Taser use by police.

- Scrutiny Groups Members (SGMs) we spoke to in the study described taking their work extremely seriously, were concerned to safeguard their independence and were able to cite examples where they felt they had made a difference around incidents involving concerns about unnecessary police use of force.
- Yet they also described the systematic disempowerment of scrutiny groups in multiple ways. Their experiences were that their groups were under-resourced and lacked support. Particularly, they were often not set up to focus specifically on the use of Tasers, nor to address the broader disproportionality issues that surround it. As such SGMs also described how they were unable to provide adequate scrutiny of this important issue.
- SGMs identified a range of structural, practical, and capacity issues which were felt to hamper the effectiveness of these volunteer-led structures, including their groups' lack of representativeness of the wider community, difficulties experienced in accessing data, difficulty accessing officer's Body Worn Video (BWV) footage, defensive attitudes and little or no genuine engagement or financial support.
- Such issues meant it was difficult for groups to shift from individual cases to identify patterns across multiple cases, and to address systemic issues in police-community relationships as well as individual incidents.
- All these factors appeared to amplify a sense of powerlessness that some SGMs feel which in turn may be fostering rather than alleviating a sense of police illegitimacy. Consequently, SGMs expressed important reservations about how much fundamental change they were able to bring about and were sceptical about the ability and desire of police to change.

1.3.3. Body Worn Video Footage (BWV)

- It is often suggested that BWV audits are an effective way forward regarding scrutiny and research-based analysis of CED use. This may well be the case, and we understand that analysis of BWV footage of Taser use for scrutiny purposes is routine among forces in England and Wales. However, mirroring the experiences of SGMs, the research team encountered acute difficulties accessing BWC footage for a variety of different reasons.
- These data sharing problems were overcome with three forces involved in the study but, even here, footage could only be viewed in two forces via police computers, thus restricting analysis. In the other force, the footage had large episodes of verbal interaction and image detail redacted.
- We were heavily reliant on the force Single Points of Contact to identify and process BWV footage incidents and so we had relatively little control over what clips we were able to review.

- Nonetheless, when undertaking analysis of this limited sample, it was evident that the footage itself was not sufficient to make adequate sense of what was happening within the police-public interactions that were occurring. To render it meaningful, it was necessary to examine the footage and cross reference it to other data sets (e.g., use of force forms, incident logs, etc.).
- Therefore, our study was only able to undertake a limited analysis of the BWV data and instead focuses on the opportunities afforded by emerging data integration capacities, like the cloud-based system being used by West Midlands Police, to enable BWV to become a useful analytical and scrutiny tool.
- However, even in our limited sample we observed several instances where use of Taser appeared to us to be contrary to the guidance provided in Authorised Professional Practice (APP) and training.

1.3.4. Taser training

- Taser training sits within a national curriculum, produced, and regulated by the College of Policing which evolves over time. Previous reports (e.g., Anglioni, 2017; IOPC 2021), and coroner conclusions have identified, amongst other issues, the need for improved inputs on de-escalation, disproportionality, vulnerability, the risks of prolonged exposure as well as the need to involve the voices and perspectives of affected communities.
- Observations of initial and refresher training suggest that these earlier recommendations are not yet being adequately realised because trainers lack the capacity, resources, and time to incorporate deep and reflexive discussion on complex issues.
- While it is acknowledged that the duration of Taser training in England and Wales is longer than that in other countries (e.g., in the USA), our study does suggest that current constraints are leading to a series of missed opportunities to develop key skills among STOs.
- The study suggests that, in practice, there is an imbalance in the training towards utilising the weapon in contrast to developing parallel de-escalation skills. The study highlights concerns relating to assessment, relatively permissive guidance, and other issues all of which combine to heighten the risk of creating a ‘push’ towards the use of Taser.
- While the study suggests that additional training time would be valuable, it also indicates that this will not be sufficient. It will also be crucial to address problematic working assumptions and objectives sometimes observed in the training environment, such as normalising the use of CEDs by positioning the weapon as the lowest use of force within a tactical hierarchy and downplaying risks associated with its use.

- Our observations indicated that the training would be improved by designing input that encouraged reflective thinking by officers to discourage discriminatory outcomes and awareness of the potential for CED deployments to generate significant legitimacy threats to the police.

1.3.5. Police officer interviews and observations

- Officers often described Taser as an institutionalised response to situations of high risk which was creating an operational need for STOs within their units. In this respect, entering the training and becoming an STO was described by some as an important career development opportunity and milestone.
- A universal benefit of the device for STOs involved in the study was its capacity to act as a potent visual deterrent and its inherent capacity to drive behaviour change, often without any need to draw or discharge it. Correspondingly, officers described drawing, laser pointing ('red-dotting') or firing Taser only on rare occasions.
- When officers gave accounts of using Taser, this was always to deal with situations that were judged by them to have been circumstances of high threat and risk, usually involving a weapon and often involving people suffering from mental health issues threatening harm to themselves or others.
- Correspondingly, officers were keen to highlight that a key aspect of their policing role was to take control of situations that were posing a threat of harm, either to others or themselves. In such contexts, Taser was described as a 'go to' device that helped officers achieve their primary objectives (i.e., enabling them to enforce behavioural compliance with directives or effecting an arrest or disarmament in a manner that was proportionate relative to baton and irritant spray).
- Officers sometimes described utilising Taser as a 'fast-track' resolution in situations where verbal instruction had proved ineffective.
- Officers also highlighted several drawbacks to Taser. These related primarily to 1) certain situations that physically preclude the use of Taser (e.g., confined spaces) 2) that the device is not always effective at achieving Neuro-Muscular Incapacitation (NMI); 3) that Taser can accentuate difficulties when dealing with vulnerable people; and 4) the objective tension between carrying Taser and being in a community engagement focused role (e.g., neighbourhood policing).
- During the interviews we discussed the Home Office Taser statistics and asked officers to express their views on them and how disproportionality might come about. The principal theme expressed by our predominantly White interviewees was that race was not a factor in their decisions to use a CED, which they insisted were always dependent on the threat and risk of that specific situation. Correspondingly, some officers misunderstood the UK Home Office statistics

and interpreted them as a measure of the proportionality of force within a given interaction, rather than a reflection of patterns across multiple interactions. Therefore, when provided with an opportunity to offer explanations of the racial and ethnic disparities that are evident in those statistics, several questioned their validity because the figures did not make sense of their own experiences.

- In contrast, some Black or minority ethnic officers offered powerful accounts of their own first-hand experiences of direct discrimination from some colleagues (i.e., subjective biases). Some also argued that organisational crime priorities were often racially defined and patterned (i.e., institutional racism).
- Nonetheless, officers also put forward suggestions for what they thought were causing such disparities. The dominant perspective in this regard was to suggest that the statistics could be explained in terms of their experience of a concentration of policing in economically deprived geographical areas. These were, in their experience, also neighbourhoods with relatively large ethnic minority populations. These officers described how they would be deployed into these areas on a regular basis as part of a strategic operation to disrupt and deter organised crime groups (OCGs). At the start of their shift, they described how they would be provided with intelligence about the activity of the OCGs which would often direct them specifically toward individuals of ethnic minority heritage in these areas. These officers suggested that policing activity and, by implication Taser use, would therefore be higher against ethnic minorities in these locations.
- Our observations of a control room and the process of deploying Taser officers indicated that in circumstances judged by staff to be posing a threat of harm, it was seen as safer to send a Taser STO than not to do so. The process around the deployment of the weapon was structured in such a way that passing calls up the chain of authorisation, and ultimately authorising the deployment of Taser officers, was seen as the responsible course of action.
- Our data suggested an institutionalisation of Taser had occurred such that the question for control room staff had become not ‘can we justify sending Taser officers’ but, rather, ‘can we justify *not* sending Taser officers’. It was also noteworthy that those making decisions around the deployment of Taser officers sometimes lacked an understanding of disproportionate Taser use in their own force area.

1.3.6. The statistical analysis of routine data

- Securing data sharing agreements with participant forces was slow, complex and resource heavy. Single Points of Contact (SPOCs) assigned to the project usually needed to seek sign-off from their senior leadership, lawyers, and the data protection team. They also had to secure analyst support for the dataset(s) to be compiled. This arduous process led to significant delays in the quantitative

analysis and made some police organisations reconsider their participation in the project.

- Quantitative analysis was reliant on use of force forms. We also requested geographical information on where the uses of force took place as well as data from other sources, such as incident logs, calls for service, and deployment data. However, we could only secure these additional data in the rarest circumstances and even then, with limitations. This hampered our capacity to analyse the data meaningfully.
- Furthermore, the use of force forms suffered both from over and underreporting. Although we received some data from 14 forces, we encountered several issues during the cleaning and the overview of the data provided which meant that only data from 10 forces could be entered in some (but not all) analyses.
- The data we received only included incidents where force had been used, but not other situations where no force had been used. This meant that we were only able to compare incidents involving Taser use to other use of force incidents. A non-statistically significant finding in this case merely indicates that Taser use was no more or less disproportionate *than other uses of force.* It does not mean that Taser use was not disproportionate per se. It should also be remembered that, as forms are completed by the officer using force, they provide an account of what happened from the officer perspective (i.e., they are subjective reports).

1.3.6.1. The comparative analysis

- Notwithstanding these issues, comparative analysis was conducted on use of force forms collected between January 2018 and December 2021, with ten forces included for descriptive statistics, and 8 forces for complex statistical modelling. These forces differed in their share of Taser use as a proportion of all uses of force (ranging from 2.72% - 9.97%), the percentages of people from Black and ethnic minority backgrounds recorded in the data (9.82% - 57.15%), and the frequencies of logged use of force incidents (7,911 – 478,406).
- The outcome variables in the multivariate modelling were Taser use versus all other uses of force and different levels of Taser use with ‘serious’ use (i.e., red-dotting and firing) separated from other uses of Taser (i.e., drawn, aimed), both compared to other uses of force. The explanatory variables considered were citizen demographics, officer demographics, factors that officers recorded as having impacted their decision to use force (i.e., the subject being under the influence of alcohol or drugs, police prior knowledge of the suspect, sex, size, and build of the subject, the presence/absence of a weapon) and contextual variables (e.g., time of day, Covid-19 ‘lockdown’ etc.).
- The results detected a bivariate relationship between ethnicity and Taser in roughly four of the eight forces. In these cases, being Black significantly

increased the likelihood that Taser had been used. However, these relationships were not statistically significant once other variables were considered, especially police reported impact factors.

- Strikingly, there was not a single conditional association between our explanatory variables and Taser use that was consistent across all forces. However, some variables had a notable positive association with Taser use in the majority of forces. These included the presence of a weapon on the subject, police having prior knowledge of the individual, mental health problems, the citizen being older, and the officer having a longer service record. Across most forces, if the subject was a woman or under the influence of alcohol, Taser use tended the be less likely compared to other uses of force.

1.3.6.2. Single force analyses

- Three 'deep dive' analyses were also conducted on three separate forces. These were selected because the quality of their data enabled more focused analysis. These explored: (1) representative bureaucracy, geographical patterns, and the mediating effects of police recorded impact factors in Greater Manchester Police (GMP); (2) use of force incidents as they are 'nested' in officers in West Mercia; and (3) the social ecology of Taser use in Hampshire.

- The GMP study relied on use of force forms but was able to compare these with additional data on officer ethnicity across relatively large geographical areas. The analysis demonstrated that, even after controlling for all other factors, the officer being the same gender and ethnicity as the subject had a de-escalatory effect: the use of Taser became less likely and, more importantly, the odds of Taser being red-dotted or fired also reduced significantly. The same analysis highlighted the importance of accounting for location, showing that significant difference in the use of Taser emerged between the City of Manchester and the rest of the force area.

- Importantly, within the GMP study, analysis indicated that some police-recorded impact factors were themselves affected by ethnicity, and that the lack of ethnic disparities in the multivariate analysis might be partly attributable to these other variables. For example, the results suggest that threats perceived by police officers due to the sex, size, and build of individuals might be amplified if those individuals are from a Black or Mixed background, and that prior intelligence might be more prevalent or readily available if they were from Black or Mixed background. The variables such as sex, size, build, and prior intelligence were in turn associated with Taser use.

- The West Mercia dataset allowed us to consider Taser incidents as they are 'nested' within officers; in other words, to explore the extent to which multiple uses of Taser are made by the same officer(s). We showed that while just under

half of officers working for the organisation did not record any use of force during the study period, 52.9% recorded at least one incident.

- In West Mercia, multilevel analysis was used to separate the influence of subject and officer level variables. Of those that were involved in use of force there was a decidedly skewed distribution of use of force generally and Taser specifically. Whilst this meant that most officers who had recorded use of force this related just one incident, a small number of officers were 'high frequency' users of force. In other words, a relatively small number of officers were responsible for most uses of force. We suspect that this finding will be true of most police forces in England and Wales and is a by-product of some officers being deployed into roles where using force is far more likely than others (e.g., firearms or public order specialisms).
- Thus, while several subject-level variables could explain the increased likelihood of Taser being used, it was apparent that some officer-level variables also played a role. These were officer gender, age, and rank. When we analysed the frequency of Taser use by the same officer, subject-level characteristics did not have any statistically significant association, but gender and age of the officer did. However, given limitations in the data it was impossible for us to determine why such patterns were occurring. This highlights the need for better data and further research to help unpack why certain officers are more likely to use Taser more frequently compared to others.
- Finally, our Hampshire study utilised data from police recorded use of force forms from January 2018 to December 2021, consisting of 19,136 observations. In this one case study we were able to realise our primary goal and examine Taser use at a neighbourhood level. We achieved this because the use of force data was merged with information on calls for service using a unique identifier provided by the force. This allowed for the identification of the Lower Layer Super Output Area (LSOA) where the use of force was exercised. In the period under scrutiny, 833 Taser uses were recorded within the LSOAs included in the analysis.
- Using this approach, we were able to determine that Taser use in this force area was much more likely to occur in some types of areas compared with others. Specifically, the data suggested that as the Black residential population of an LSOA increased, so too did the probability of Taser use in that location. It was also the case that for these LSOAs the intensity of stop and search as well as general police use of force also predicted Taser use.
- However, these patterns of policing were also predicted by the levels of socio-economic deprivation and crime. In other words, the data suggests that those areas with larger residential Black populations have greater ethnic diversity in general, but in turn these areas also experience higher levels of socio-economic

deprivation, have larger proportions of young people, and people who suffer from mental health problems. Such neighbourhoods were more 'exposed' to policing in general, and Taser in particular, simply because police activity was higher in those areas, relative to others, which in turn was linked to - but not necessarily determined by - levels of recorded crime. In short, Black people in Hampshire were more likely than others to live in such places.

1.4. Cross-cutting themes and implications

Several cross-cutting themes and implications emerge from the research. We were not given a mandate to produce recommendations per se, and we are also conscious that our study suggests that proposals from previous reports, which have also identified some of the issues raised here, have not been adequately realised. Nonetheless, we conclude this Executive Summary by highlighting some of the implications of our research in a way that we hope will prove helpful in future deliberations.

Despite some important limitations of the data, the picture emerging from the varied evidence we have gathered suggests that the patterns of ethnic disproportionality in police use of Taser in England and Wales stem from complex interactions between multiple factors. It was the case that some aspects of the data highlighted that Black and other people from ethnic minority communities can be more likely to be subject to Taser within use of force incidents, perhaps because they are seen by officers as physically threatening. It may also be the case that increased Taser use occurs because people from Black and ethnic minority communities are more likely to have had prior contact with police, affecting the expectations that officers take into their encounters with these individuals. Nonetheless, taken together, our evidence suggests that the patterns of ethnic disproportionality in police use of Taser cannot be adequately explained merely in terms of individual officer psychology and decision-making. Rather our research suggests that these patterns are occurring primarily through a complex interplay between social structures and organisational processes, both within and external to policing.

First of all, our study reflects the challenging nature of policing in a society already characterised by inequality and racism. It is evident that police deployments are being pulled into urban areas that are marked by economic deprivation, perhaps because recorded calls for service or crime rates are higher in such neighbourhoods. Government analysis shows that economic inequality and race overlap in British society which means areas suffering from socio-economic deprivation will often have residential populations that are relatively ethnically diverse. According to this research in 2019, people from all ethnic minority groups except the Indian, Chinese, White Irish and White Other groups were more likely than White British people to live in the most

overall deprived 10% of neighbourhoods in England.[6] Put differently, our data resonate with the idea that British policing is occurring within a society that is structurally racist, by which we mean that for a variety of different reasons people with ethnic minority heritage find it harder to access opportunity and wealth in the UK and are therefore more likely to reside areas of socio-economic deprivation.[7]

Second, a theme evident in our data is the centrality of mental health as a factor determining patterns of police use of Taser. The issue was evident in our discussions with affected communities who highlighted their experiences of how officers struggle to deescalate situations involving young Black males – and others - with mental health conditions. Our police interview data suggested that it was common experience among STOs to use their weapon in circumstances involving people experiencing a mental health crisis, usually involving self-harm or harm to others with a weapon. Mental health was also an important impact factor identified as mediating the relationship between ethnicity and Taser use in our statistical analysis. Research elsewhere has shown clear and robust indications that poverty and inequality are directly linked to poor mental health (e.g., Knifton & Inglis, 2020). Moreover, there is evidence that people from minority ethnic communities are more likely to experience mental ill health but are less likely to have access to mental health services (MIND, 2023). It therefore follows that the structural issues discussed above feed powerful interactions between deprivation, race, mental health, and policing that cannot be ignored or addressed merely by policing.

Third, at the same time our data suggests that deprived neighbourhoods are, at least on occasion, being defined as strategically important 'hot spots' or 'impact areas' by the police. Where this is the case, previous Home Office research suggests police resources are being actively pushed into deprived areas which, through their targeted actions, may be disproportionally exposing ethnic minority communities to proactive enforcement activities (Miller, 2000). Our evidence also suggests that the likelihood of Taser use flows from, and is predicted by, the intensity of police activity in any given location.

Thus, our study suggests it may be a combination of societal issues and institutional policing priorities, policies and practices which are systematically and disproportionately affecting Black and other ethnic minority communities in deprived neighbourhoods relative to the populations of more wealthy surrounding, predominantly White areas. In other words, our study supports the idea that the patterns of ethnic disproportionality evident in the UK Home Office statistics cannot be

[6] https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/people-living-in-deprived-neighbourhoods/latest

7 Here our definition of structural racism has been informed by Dean and Thorpe (2022) who describe it as "*the totality of ways in which multiple systems and institutions interact to assert racist policies, practices, and beliefs about people in a racialized group*" (p. 1523). See: https://academic.oup.com/aje/article/191/9/1521/6631584

explained solely or even primarily at the level of individual officer behaviour or psychology because they are an outcome of an interaction between structural and institutional racism. For the latter, we use the definition of institutional racism developed by Sir William Macpherson who described it as the "*collective failure of an organisation to provide an appropriate and professional service to people because of their colour, culture, or ethnic origin. It can be seen or detected in processes, attitudes and behaviour which amount to discrimination through unwitting prejudice, ignorance, thoughtlessness, and racial stereotyping*" (Macpherson, 1999).[8] Beyond this, we would add, such patterns of unequal treatment and discrimination also occur because they become embedded in the routine systems, processes, and practices of an organisation. Therefore, recommendations and actions could usefully focus on the following issues.

The prioritising and targeting of specific types of crime (e.g., the supply of illegal drugs, county lines, etc.) by concentrating on relatively small urban economically deprived and ethnically diverse neighbourhoods is likely to inevitably lead to sustained patterns of ethnic disproportionality in Taser use, as well as use of force more generally. This is because such patterns of police deployment are likely to result in higher levels of recorded contact between minority communities and the police, relative to the levels of recorded contact with predominantly White communities that tend to populate the jurisdiction as a whole (e.g., the county). Given our data also suggests that Taser tends to be used where the police are active and police-citizen contact are not evenly spread, it follows that Taser is more likely to be used in areas with larger residential Black populations even if it is other factors that are 'attracting' police attention to that location (i.e., crime, deprivation, and so on).

It is important to acknowledge that these structural and institutional processes are, of course, always channelled through the actions and decisions of individual officers deployed to these locations who choose to use Taser. Nonetheless, our data underline that deployments of Taser are not merely dependent on individual officer decision-making, because its use is part of a broader institutional response to situations categorised as posing a threat or risk. Our evidence suggests that police organisations are deploying STOs in circumstances identified from the call to service as, or likely to become, potentially hazardous and that such decisions are a matter of routine. These deployment decisions are influenced not only by dispatcher protocols but also by guidance. In other words, it may be the case that Taser has become institutionalised as an organisational risk management response. Consequently, the deployment of an STO is now more likely in situations that would otherwise, and historically, have been resolved without the presence of a CED. There may therefore be benefits in revaluating and reconsidering guidance on institutional risk management protocols and decision-making practices in this regard.

[8] The Stephen Lawrence Inquiry, report by Sir William Macpherson of Cluny, Cm 4262-I, para. 6.34, p49, February 1999.

It is also evident that Taser is considered by STOs as a primary choice for handling situations perceived as challenging and with the potential for harm. Our data suggests that this is an increasingly consensual view within policing because it is a judgement reinforced through training, policy, and guidance, all of which systematically position Taser as a relatively low risk, highly effective and legitimate use of force in a wide range of situations relative to other use of force options. This push toward and legitimisation of Taser corresponds with claims from training staff about a notable lack of officer proficiency in utilising dialogue, or 'tactical communications', to handle situations without having to utilise force. As noted above, our affected community voices also highlight their concerns about such officers lacking de-escalation skill, particularly when being faced with young Black males who are experiencing a mental health crisis.

Our observations of training suggest that it is time constraints and a lack of investment that explain why little consideration is being given to improving officer skills for de-escalation through tactical communication. Given the necessary priority to make officers adept in handling the weapon there is insufficient time to help them understand the complexities of interacting with marginalised and vulnerable people or the potential psychological, community level and legitimacy harms that can flow from Taser use. The limited time dedicated to, and abstract nature of, discussions of ethnic disproportionality during Taser training, and sometimes incorrect understanding of disproportionality among officers, may be further contributing to a lack of skills in these regards. Reinforcing this point, data from one of our deep dives suggests that higher frequency users are less likely to use Taser against ethnic minorities, perhaps because they are, through their specialised roles, better trained and more skilled (e.g., firearms officers).

Our evidence from affected communities suggest that experiences of Taser sit within a broader context where policing more generally is already understood as disproportionate toward Black and other ethnic minority communities. The shift toward CED use is seen as problematic for those who seek an approach to policing based upon consent. But for some the issue was not merely Taser use in and of itself but that there was a corresponding experience of weak frameworks of officer accountability and unequal access to criminal justice processes. Reinforcing this view, our discussions with groups that are there to provide community oversight and engagement spoke of being under resourced, poorly coordinated, disempowered, and lacking genuine impact.

Turning to implications, the analysis within this report therefore implies the need to review multiple areas of Taser policy and practice, including guidance, training, deployment processes and oversight and accountability mechanisms. We would suggest that guidance is revisited, and that more time is allocated to both the initial and refresher training to include a fuller and deeper focus on local complexities, disproportionality, and de-escalation. We propose that a particular focus should be given to the 'legitimacy gap' between affected community and police perspectives as

is evident in the view among officers that Taser is less of a weapon and more of tool for driving behavioural compliance. Correspondingly, we would advocate that public scrutiny groups are provided with a better framework of support.

Going beyond Taser policy, our study points to broader considerations around understandings of how discriminatory practices emerge, how policing priorities shape such practices, and how policing is taking place in what we have defined as a structurally racist society fragmented by inequality and debilitated by poverty and mental illness. As we have noted, it is evident that recommendations from previous reports remain to be adequately implemented, particularly concerning the need to involve affected individuals and families within training. If left unchecked, these structural issues will mean that the ramifications of Taser use will endure, and these patterns of policing will continue to significantly contribute to what some might consider to be an ongoing legitimacy crisis for policing in England and Wales.

However, we must remind ourselves that this study can only ever offer tentative conclusions regarding our primary research questions. Our inability to access high quality data, narrowly geolocate officer use of force in all but one force area, integrate different police data sets and gather important data about officer roles, responsibilities, and deployments, all undermined our analytical capability. Consequently, the powerful and enduring issues we have sought to begin to address with this study can only be partially understood. It is therefore a central conclusion that the challenges experienced by this research project will not change without improving the quality and accessibility of police routine data collection at a national level, so that a multi-force comparative and ‘deep dive’ analysis, of the kind that we achieved with Hampshire police, can be undertaken at scale. To resolve this issue, it is imperative for all police forces in England and Wales to enhance, standardise, and integrate their data gathering and sharing practices. This should be centrally supported with quality assurance schemes put in place that would monitor both how the data is being gathered and processed. Furthermore, IT and data science support should be provided to allow the ‘legacy’ systems to be linked.

2. Introduction

During 2019/20, at the time this study was being conceived, police recorded data published by the UK Home Office showed Taser was used 32,058 times in England and Wales and provided clear evidence of race disproportionality. People perceived by the police to be 'Black or Black British' were 8.6 times more likely than 'White' people to experience Taser during use-of-force incidents. A subsequent Officer and Staff Safety Review (OSSR) published by the National Police Chiefs' Council (NPCC) and the College of Policing found the evidence base on Taser was limited overall, and almost non-existent in respect of race disproportionality. Recommendation 14.1 of the OSSR, therefore, proposed that the "*NPCC and the College commission an independent programme of social research to explore the nature, causes and consequences of racial disparities in the police use of Taser, with a view to identifying changes aimed at minimising the problem and mitigating its impact*".[9]

The NPCC and College accepted the recommendation and have since included the research programme in the Plan of Action on Inclusion and Race, and secured research funding from Chiefs' Council and the London Mayor's Office of Policing and Crime (MOPAC) for 2021/22 and 2022/23. The NPCC and College also established an Independent Academic Advisory Panel (IAAP) to provide advice on the programme and any proposed changes to policing policies, procedures, processes, and practices. This report describes the outcomes of the commissioned programme of research, which aimed to explore the potential causes of ethnic and racial disparities in the police use of Taser. As noted in the Executive Summary, the project was commissioned and managed by the College of Policing and was undertaken independently by a consortium of four Universities: University College London, Keele University, the University of Exeter, and Staffordshire University. This study's aims, objectives, timescale, and methods were jointly agreed by the NPCC lead for Less Lethal Weapons (LLW), the College of Policing and the IAAP.

A mixed methods approach was adopted drawing in secondary quantitative and primary qualitative data, the specific details of which are provided within each chapter. In general terms, the study involved a) analysis of routine police data from seven to ten forces depending on the type of analysis, all of which were from England and Wales. Where possible we compared this with demographic data to examine whether disparities in Taser use can be explained by geographic patterns in police demand, deployment, and activity intersecting with the characteristics of the neighbourhoods where policing is concentrated, b) qualitative data was also gathered via interviews with community members, scrutiny groups, specially trained officers (STOs) and other officers, observations and body worn video footage. The analysis aimed to understand

9 https://paas-s3-broker-prod-lon-6453d964-1d1a-432a-9260-5e0ba7d2fc51.s3.eu-west-2.amazonaws.com/s3fs-public/2020-09/CoP-NPCC-Officer-Staff-Safety-Review.pdf

if the racial disparities in Taser use can be explained by the factors and processes at play during use-of-force incidents. The report is structured into ten substantive empirical chapters each dealing with different issues; chapter three explores some of the voices of communities disproportionately affected by Taser in England and Wales, chapter four examines scrutiny groups and public oversight of Taser; chapter five analyses the empirical opportunities afforded by Body Worn Video footage, chapter six reports on an observational study of Taser training, chapter seven provides an analysis of the experience and understanding of police officers. Chapters eight through to twelve then focus on a quantitative analysis of police routine data. Before turning to these themes across the following chapters, we provide a brief introduction to Taser and to the official Home Office statistics on its use.

2.1. Taser use

Conducted Energy Devices (CEDs) were introduced into UK policing in 2003, initially for use only by authorised firearms officers. The device adopted in the UK is manufactured by AXON and referred to as Taser. Taser is a battery-operated pistol-like weapon that generates repetitive high voltage electrical pulses that can be delivered in several ways, including through the firing of sharp tethered probes intended to penetrate the skin[10]. It is designed to create temporary Neuromuscular Incapacitation (NMI) which research suggests carries with it relatively low risks of permanent injury or harm.[11] According to the College of Policing, Taser use is defined as any of the following actions carried out in an operational setting all of which may be used in conjunction with communication and de-escalation techniques. These are: drawing the device in circumstances where any person could reasonably perceive the action as a use of force, sparking of the device, commonly known as ‘arcing’, aiming the device or placing the laser sight red-dot onto a subject, firing a device so that the probes are discharged at a subject or animal, application and discharge of a CED in direct contact mode (including three-point contact) and angled drive stun modes or discharged in any other operational circumstances, including an unintentional discharge. In 2008, Taser was also made available to non-firearms trained police, who could be equipped and deploy with the device after becoming a Specially Trained Officer (STO). This transition was particularly important because when it was first trialled in the UK, its use was limited to specialist firearms officers in selected forces. Yet now, in most cases, individual STOs were deployed with the weapon in the context of routine operations. Moreover, training for Taser moved from the arena of extended firearms training into a shorter, usually three-day, training programme. In 2019 the Home Office provided a budget £10 million for a Taser uplift and access was extended

10 https://www.gov.uk/government/publications/medical-statement-and-technical-reports-for-the-taser-7/sacmill-medical-statement-accessible-version
11https://www.researchgate.net/publication/8047885_Cardiac_Safety_of_Neuromuscular_Incapacitating_Defensive_Devices

to student officers and in 2022 access to the device was extended to Special Constables.[12] To retain their qualification STOs are required to undertake a minimum of one day of refresher training every twelve months. Whilst, under certain circumstances, Taser is effective tactically, its use carries a range of risks, both individually and organisationally. Home Office figures show that in 2017/18, when new use of force recording rules came into force, there were just under 17,000 recorded uses of Taser; by 2021/22 with the increased number of officers carrying the device this had grown to over 34,000. It is important to note that around 90% of these did not involve discharging the device (see below). As the use of CED increases so too does the possibility of incidents occurring that pose a threat of harm, as well as individual and cumulative threats to police legitimacy. This is particularly true with regard to its deployment involving citizens from ethnic minority communities. For example, Home Office statistics for 2021/22 showed that Black people were approximately five times more likely than White people to have Taser used against them.

2.2. Home Office statistics

In this section, we describe current patterns of Taser use as presented in a report published by the Home Office (2022). In order to maintain accurate documentation of Taser usage in various incidents, it is imperative for officers to record its usage, even in cases where it is not actually fired (known as non-discharge uses). As above, the recording of Taser deployment is categorised into seven distinct types: drawn, aimed, arced, red-dot, drive-stun, fired, and angle drive-stun. It should be noted that drawn, aimed, arced, and red-dot categorisations pertain to non-discharge uses, as they do not involve the discharge of electricity into the individual. On the other hand, drive-stun, fired, and angle drive-stun categorisations signify discharge uses. Consistent with previous practices of documenting Taser use, the statistics reported by the Home Office (2022) present the ‘highest’ level of Taser utilisation for each incident. To illustrate, if a Taser is drawn, aimed, red-dotted, and ultimately fired, this specific usage would be classified solely under the "fired" category. Out of all recorded Taser incidents where the type of usage was specified, Taser was discharged in approximately 10% of cases. In the year ending on March 31, 2022, Home Office Statistics record that Tasers were utilised in a total of 34,276 incidents, which is a comparable figure to the previous year ending on March 31, 2021, with a minor decrease of 140 incidents (-0.4%). Notably, there was a 2% increase (+707) in non-discharge uses, totalling 29,983 incidents, and a 3% decrease (-109) in discharge uses. Moreover, there was a significant 41% reduction (-738) in incidents where the specific use type was not indicated. Among the incidents where the use type was stated, it was observed that Tasers were discharged in approximately 10% (3,212) of cases, while they were not discharged in the remaining 90% (29,983) of incidents. Specifically, there were 30 instances of drive stun uses during the year ending on

[12] Home Office announces £10 million for Taser uplift - GOV.UK (www.gov.uk)

March 31, 2022, in contrast to 64 instances during the previous year ending on March 31, 2021, reflecting a notable decrease of 53%.

Taser usage has shown consistent year-on-year increases from the period ending on March 31, 2018, until the period ending on March 31, 2021. However, in the year ending on March 31, 2022, the level of Taser use remained similar to that of the previous year. The prior increases can be attributed to factors such as the rise in the number of Taser-trained officers and the increasing availability of STOs, which are determined by police Strategic Threat and Risk Assessments (STRAs). Additionally, the rise may have been attributable to a higher number of incidents with the potential for conflict, leading to increased STO deployment. The increase in recording Taser usage can also be attributed to the adoption of improved and simplified recording methods.[13] The similarity in Taser usage during the year ending on March 31, 2022, may also indicate a stabilisation of Taser availability and training following a period of rapid growth and that recording practices have become more established after the introduction of simplified recording methods. The data suggests that, irrespective of background, the frequency of Taser discharge remained comparable across different ethnic groups once the Taser had been drawn. Individuals perceived by officers as belonging to a Black ethnic group were involved in a higher proportion of Taser-related incidents (17%) compared to their already disproportionate representation in overall incidents involving police use of force (14%). Conversely, individuals perceived as belonging to a White ethnic group were involved in a slightly lower proportion of Taser-related incidents (70%) compared to their representation in use of force overall (73%). However, once drawn, Tasers were discharged in approximately 10% of incidents involving individuals perceived to be from a White ethnic group, while in incidents involving individuals perceived to be from a Black or Asian ethnic group, Tasers were discharged in approximately 9% of cases.

The rate of Taser utilisation is higher for individuals perceived by officers as belonging to a Black ethnic group. The use of Tasers, encompassing both discharge incidents (such as firing or using "drive-stun" or "angled drive-stun") and non-discharge uses (including drawing, aiming, and red-dotting), can be assessed for different ethnic categories. This analysis involves calculating the frequency of Taser use on individuals within each ethnic category (as perceived by the officer involved), divided by the respective residential population size of each category within a specified area (e.g., a county). While this calculation provides insights into the relative Taser usage toward ethnic groups across England and Wales, it is essential to interpret the figures with caution due to certain limitations. For example, data on the ethnicity of all individuals who come into contact with the police are not always recorded and there are considerable local variations. Nonetheless, according to these statistics, individuals perceived as belonging to a Black ethnic group were involved at a rate 4.1 times higher than those perceived as belonging to a White ethnic group in police force areas across

[13] https://assets.college.police.uk/s3fs-public/2020-09/200818-use-of-force-final-report-1.0.pdf

England and Wales (excluding the Metropolitan Police). In the Metropolitan Police force area, this rate increased to 4.7 times higher, based on the 2021 census. These rates were 4.1 and 4.5 in the year ending on March 31, 2021, when updated with 2021 census population data. Regarding Taser discharge incidents (where the Taser was fired or used for "drive-stun" or "angled drive-stun"), individuals perceived as belonging to a Black ethnic group were involved at a rate 3.8 times higher than those perceived as belonging to a White ethnic group in police force areas across England and Wales (excluding the Metropolitan Police, Warwickshire, and West Mercia, which did not provide personal characteristics for these data). In the Metropolitan Police force area, this rate increased to 4.1 times higher, based on the 2021 census. It is worth noting that the Metropolitan Police Service (MPS), being the largest police force in England and Wales, had the highest number of Taser uses (7,655, accounting for 22% of the total for England and Wales). Additionally, the police force area of the Metropolitan Police had a relatively larger proportion of individuals from Black, Asian, or other minority ethnic groups (46%) compared to the rest of England and Wales (13%), as calculated from the 2021 census. The combination of these factors can skew the national-level figures due to the influence of data from the Metropolitan Police force area.[14] It is also worthy of note that within these statistics officers document whether they perceive individuals involved in incidents to have a mental health condition. Individuals perceived as having a mental health condition, account for approximately 16% of all police use of force incidents. This proportion was higher for incidents involving Taser. Mental health was identified in 19% of incidents where Taser was drawn, and 26% where it was discharged. When examining incidents involving individuals with perceived mental health conditions, the use of Tasers exhibited similar patterns across different ethnicities, with approximately 7% for individuals perceived as Black or White ethnicity, and 6% for those perceived as Asian, mixed, or of other ethnicities.

2.3. Structure of the report

The next ten chapters outline our analysis. Each chapter starts with a summary that provides details on what we did empirically and highlights the main ‘take home’ findings, which are expanded on in the main body of each chapter. Additional material can be found in the accompanying ‘Qualitative Research Appendix’ and ‘Quantitative Research Appendix’ respectively. These documents contain supplementary detailed information for interested readers, which is signposted in the relevant sections of this report. Following these empirical chapters, we surmise with a short Conclusion chapter. As outlined above, we begin in the next chapter by exploring some of the voices of communities disproportionately affected by Taser in England and Wales.

[14] https://www.gov.uk/government/publications/stop-and-search-data-and-the-effect-of-geographical-differences/stop-and-search-interpreting-and-describing-statistics

3. Affected Community Voices

3.1. Chapter Summary

This chapter outlines our analysis of semi-structured interviews (individual and group) with 31 people, predominantly from non-White minority ethnic backgrounds. These included people who had experienced some form of Taser use themselves, had been present at an incident where Taser was used on others, or had family, friends or acquaintances subjected to Taser use which included bereaved families. The interviews and discussions sought to explore participant's views on Taser and its use, the causes of disproportionality and how these might be tackled as well as the consequences of use of Taser. In so doing, we make no claims to representativeness or to capturing any specific 'community voice'. Rather, we aimed to engage with non-White communities including, but not limited to, those directly affected by Taser and to represent what we heard.

We conducted semi-structured interviews both individually and in groups and conducted an analysis of what these people told us. For many of our participants the use of Taser is not experienced in isolation but within a broader context of routine policing that itself is understood in terms of institutional racism. They described Taser as an extremely high-level use of force, as dehumanising, potentially lethal and symbolic of the deterioration of a model of policing through consent. Decisions by officers to utilise Taser were described by participants as often driven by colour, especially when dealing with young Black men suffering a mental health crisis. Police officers were also described as lacking de-escalation skills and concerns were raised about an insufficient regulation of the weapon in terms of guidance, training, and a lack of accountability. The police are also experienced as just one element of a broader criminal justice system unable and unwilling to deliver even-handedness to Black and minority communities or to adequately hold the police to account.

While our participants described the physical harm posed by Tasers, including the deaths of their own family in some tragic cases, they also emphasised the psychological and community level harms and wider racialised traumas generated through use of the weapon. We conclude that the various high-profile incidents involving the death or serious injury to members of the British Black community linked to Taser have become totemic incidents within this context, becoming symbolic of, and further contributing to, a divide between minority communities and the police locally. While multiple participants emphasised the potential for unrest, they also expressed a desire for this research to produce change and for affected people and communities to be involved in dialogue with the police as a matter of urgency.

3.2. Introduction

This chapter seeks to explore perspectives of non-White ethnic minority communities affected by Taser and, more specifically, on the causes and consequences of Taser disproportionality and how these might be tackled. We have chosen the title Affected Community Voices to emphasise the multiplicity of accounts and views expressed and aim to represent key themes from what we heard, while appreciating that many people did not want to engage in the research, or with particular research questions, for multiple reasons. Multiple reports, including those by Angiolini (2017) and the IOPC (2021), have highlighted the need to attend to the voices of those affected by, and on the receiving end of, police use of force. As such reports have noted, these experiences are critically important in their own right. Moreover, a growing literature demonstrates that experiences of police use of force, including more indirect experiences, such as viewing social media footage, can be highly traumatic and have far reaching consequences (Hawkins, 2022; Stoudt et al., 2011; Williams, 2021) – perhaps especially for viewers from minoritised backgrounds (Ang, 2021), particularly Black people who may be, as a consequence, more vulnerable to developing PTSD (Isen, 2022).

However, with a few partial exceptions (e.g., Deuchar et al., 2019; Dymond, 2022; Rojek et al., 2012; Root et al., 2013), the academic literature on Taser has traditionally focused on officer accounts of the weapon. Yet if we wish to understand and tackle the causes and consequences of the disproportionate use of Taser, studies cannot be restricted to the perspectives of those carrying the weapon, but also need to consider the views of those affected by it and those critical and challenging of it. As one of our participants noted "*they* [officers] *need to know the lived experience impact of what they are doing*" (Participant 10). In turn, this must include not only listening to more positive, 'familiar' or 'comfortable' views about the weapon, but listening to views, themes and suggestions that may be, for some, difficult or uncomfortable to hear and cannot be ignored in a society that emphasises policing by consent. Interviewing those affected by the weapon also provides an important counterpart to, and source of triangulation for, interviews with officers and others.

3.3. Methods

3.3.1. Recruitment and participants

Participants were recruited in multiple ways. A call for participants was held on the project website, via Twitter and a Twitter space. Project consultants drawn from, and with links to, minoritised communities were also involved in a variety of roles. This included raising awareness of the project amongst potential participants, designing the interview schedule, circulating the invite to interview, working to recruit participants directly, conducting individual and group interviews, and a roundtable held with Non-Governmental Organisations (NGOs) and others to introduce and discuss the project. Following the roundtable, invitations to participate were also kindly circulated by

attendees, including by organisations working with adults, young people, children, bereaved families and with those in contact with the criminal justice system.

There was a considerable amount of scepticism expressed by some about engaging with the research project. Of the 31 people who came forward, 11 had experienced some form of Taser use themselves (including being threatened with the use of the weapon, having it pointed at them or, in one case, having it fired at them), had been present at an incident where Taser was used on others, or had family, friends or acquaintances subjected to Taser use. This included bereaved families, who wished to waive anonymity for the purposes of this report. Specifically, we spoke with Lisa Cole, whose brother, Marc Cole, died in 2017; Carla Cumberbatch, whose brother, Darren Cumberbatch died in 2017; Germaine Phillips, whose son, Adrian McDonald, died in 2014**;** and a family member of Oladeji Omishore, who died in 2022.

Other participants included people involved in organisations such as INQUEST, a charity based in England and Wales providing expertise on state related deaths and their investigation to bereaved people, policy makers and others. We were also able to interview people who had observed police use of Taser on somebody else, including through viewing online footage, and people who articulated impacts of Taser in minoritised communities and supported those affected by the weapon. These included community organisations and NGOs as well as those who described themselves, more informally, as 'community champions'. Some 20 interviewees fell into this second category. While all participants were offered anonymity as standard, a small number of participants, specifically, the family members detailed above, Desmond Jaddoo, and representatives from INQUEST, asked to waive this right and, as such, have been identified in the report. Where participants had requested to waive anonymity, they were contacted prior to publication to ensure they were happy for the extracts from their transcripts to be included, and to double check that they still wished to waive anonymity. To protect anonymity for the other participants, we have allocated them a unique number to allow readers to identify how often a particular voice is quoted in the report, while maintaining anonymity.

3.3.2. Challenges and limitations

We note that many in minoritised communities find the issue of Taser and police use of force traumatising and, as noted above, there were several people who expressed concerns about the credibility of the research related to the project's funding, independence, and legitimacy, given its commissioning by the College of Policing and funding by the NPCC and MOPAC. It was felt by some that this was a missed opportunity to conduct research that was genuinely Black conceived and empowering for Black communities, and central to these were concerns about an apparent lack of diversity in the composition of the research team. Some questioned the need for further research given that, for them, the problem was self-evident and the issues at hand just needed to be addressed. Many of those who did choose to participate recognised many of these concerns but spoke about the necessity for inclusive

discussions and urgent change going forward. They emphasised the traumatic nature of an experience associated with Taser use and how reliving that was difficult but that they held the hope that this research could contribute to meaningful change. One participant noted:

> *"I was sceptical about coming in to this today, and I was dubious* [but] *I decided I can't ignore it. Yeah, I could not put myself through extra stress, but* [then] *it's going to carry on and on. I'd just like to see a change. I'd just like to see it not happen to any more family members, someone's loved one, they've still got a life and their life's valuable. That's what it boils down to; life."* (Carla Cumberbatch, the sister of Darren Cumberbatch).

3.3.3. Data collection and analytic strategy

Data was collected through a mixture of group and individual interviews that held both in person and online between May and November 2022. A semi-structured interview guide was used as a starting point for interviews (see the accompanying Qualitative Research Appendix). Interviews ranged in length, with the shortest being approximately 30 minutes and the longest taking approximately an hour and a half. Given the potential for trauma, we didn't ask directly about any incidents involving Taser in which participants may have been involved, but participants were able to share this information if they felt they wanted to. It should also be noted that no interviewees said they were younger than 18, meaning that the voices of children are missing from the research. Where permission was given, interviews were recorded via an audio recorder or video conferencing software. Multiple people were involved in conducting interviews, the subsequent analysis of the transcripts and the identification of key themes emerging from the evidence collected, using an approach drawing from Grounded Theory and Thematic Analysis (Glaser & Strauss, 2017; see the accompanying 'Qualitative Research Appendix' for further details).

3.4. Analysis

3.4.1. Discrimination, racism, and illegitimate policing

3.4.1.1. Taser in a context of routine police illegitimacy

A key theme evident in participant discussions was that Taser use was framed within the broader historical context of their relationship to the police. In other words, the use of Taser was not described in isolation but as an element of a wider everyday relationship with the police, framed in terms of disproportionality, racism, and illegitimacy (see also Harris et al., 2022). For example, discussions about Taser involved wider debates concerning the function of policing in society, as one participant noted.

> *"*[There is a need to ask] *much more fundamental questions about why the police are being called out in situations* [such as] *mental health care, the idea that you can Taser somebody in a hospital or in a social care setting. That really does beg questions* [about] *where have we possibly got to as a society where we think that's acceptable?"* (Deborah Coles, INQUEST).

In this sense, Taser was positioned as something which exemplified and underscored pre-existing police illegitimacy, racism, and oppressive methods. Another participant described Taser as:

> *"A continuation of a pain philosophy, a tool of punishment* [and] *another form of segregation. Police are an existential threat to Black boys and Taser compounds that fear."* (Participant 11).

For some, Taser was described as changing fundamentally the relationship between police and citizens within Black and other ethnic minority communities, even in cases where it is not deployed. For example, one person reflected on a personal observation of police practice that had the Taser at the centre of that experience, despite it never even being 'used' by an officer:

> *"I saw a Taser officer just walking around … happy, you know, not looking at it, and I saw other officers with the hand on the Taser. Just walking in with a hand on it. But why is your hand on the Taser? It doesn't need to be…I think that was the 3B's in operation again, big Black bad, because you got a load of Black people around you feel that you need to have that hand on that Taser. But what they did because then I notice other people say 'look at him with his hand on his Taser, what's he gonna do next?' Straight away, the escalation of the incident has been caused by the officer having his hand on the Taser… I went to the other side of the cordon and a couple of Taser officers were there and they were there chatting and laughing with the people who were there. No hand on no Taser, nothing, and they were able to have a conversation… where the officers were with their hand on the Taser, maybe innocently, there was more escalation of tension there than there was the other side of the cordon."* (Desmond Jadoo).

For some, such dynamics were inherently linked to race and pre-existing patterns of disproportionate policing. As one participant concluded, disproportionality statistics concerning Taser are:

> *"Just nothing new for us. We've been saying this for years before Taser… we've been saying it with stop and search, we've been saying it with… the brutality of arrest… People should stop acting like it's just starting to happen… and it's a new phenomenon that*

> *police abuse their powers, and that Black people bear the brunt of that abuse…* [Then] *we can start getting down to the real question; why do they think they can commit these atrocities against Black people?"* (Participant 20).

As another participant noted, for them, the question was less around why Taser use would be disproportionate, but more "*why would it not be disproportionate*?" (Participant 5). Hence, participants were keen to stress that the issues with Taser were not something occurring in isolation but a symptom of wider institutional, systemic issues within the police. For example, one participant talked of:

> *"Systematic racism, institutional racism. We know that that's the answer, because there's no other way to explain it."* (A family member of Oladeji Omishore).

It was therefore not just individual police actions that were described as important but inaction on the part of the police as an organisation, or rather systematic failure to stop disproportionate patterns of use, that was seen as a key problematic and symptomatic of a broader malaise. For example, one participant argued:

> *"How do you install an ethical aspect into policing when they've never had it. And the simple fact is when you have got a history of doing the wrong thing, with the police, and supporting people who are doing the wrong thing, that tells me that the policy that you're following is not fit for purpose. And what we will have to do is dismantle the system to actually… get a better result."* (Participant 29).

3.4.1.2. Lack of accountability

A second evident theme was the perception of there being a weak system of internal and external accountability for Taser use. Concerns included, but were not limited to, inadequate examination of Taser incidents and Taser trained officers by line managers, as well as officers continuing to carry Taser after serious incidents, including incidents involving loss of life. Moreover, as a participant noted, *"officers can write "accounts* [to] *talk their way through and talk themselves out of* [serious incidents]*"* (Carla Cumberbatch, the sister of Darren Cumberbatch).

In keeping with previous research (Baker & Pillinger, 2020), concerns were also expressed about the police misrepresenting Taser incidents to the general public. As one participant noted:

> *"You've also got the narrative that you see time and time again. Even when it's clearly obvious that the use of that Taser might be inappropriate, the police narrative that often leads, gets fed into the social media* [is] *generally not a true account. They generally will rubbish the victim or make the victim out to be some sort of criminal."* (Participant 26).

Indeed, in line with the theme of broader historical context, it was described by some as important not just to focus on the accountability of individual officers per se but to hold senior leadership and the police as an institution responsible for a failure to adequately hold individual officers to account. One participant noted, for example:

> *"There's day-to-day police officers who, on the individual level, I can accept probably feel like they're doing a very difficult job against very challenging circumstances. But the police as an institution* [are] *just very stubborn to accept wrongdoing and embrace change. It's at that institutional level where I have the most disappointment, because if the leaders were speaking up about these individual cases of wrongdoing, poor judgement, poor application of professional standards and calling it out at that level, I think a lot of the public, you know, would understand… Actually, what is happening is that these things are going on and being covered up and being brushed off and officers can have several disciplinary actions ongoing against them and still remain in their various forces… They need to change radically in order to serve the communities that they were meant to." (*A member of Oladeji Omishore's family*).*

Participants also raised concerns about the ability and willingness of external bodies to bring about effective scrutiny and accountability in cases where Taser had been used (see Chapter 4). While scrutiny groups were mentioned unfavourably by some, discussions focused on the failures of the Independent Office for Police Conduct (IOPC).[15] Some participants raised concerns about cases where the IOPC were said to treat officers as witnesses rather than suspects. Indeed, legal action on this point was being brought against the IOPC by some of our participants at the time of writing. There were also anxieties about a lack of understanding of the weapon, a reliance on the police and former police officers within IOPC investigations, and concerns about the long timeframe for cases. As one participant explained:

> *"From the family's point of view, what's really difficult is the delay in the process. If a Taser has been used even getting to the cause of that can take many, many weeks. And then getting an accurate account of exactly what happened, we're looking at least a couple of years. There are huge problems with the process in terms of accountability and learning. The delay has a huge impact."* (Selen Cavcav, INQUEST).

In group discussions, participants contrasted the consequences of police use of Taser for the member of the public, that are often immediate, with the lengthy process of trying to hold officers to account. One participant noted:

[15] See: https://www.policeconduct.gov.uk/about-us

> *"The IOPC process is from here to Armageddon, it's long, and all of these things, when you are a working person, they can just grind you down. This further stops families from engaging… People want instant results because they see the instant results that the police do. The damage that the police do when they Taser my son and it's the wrong identity is instant. So, they want the same things in return. We don't see it, and so there is no trust and confidence."* (Participant 13).

Concerns were also raised about the lack of follow up on IOPC recommendations. As one participant noted:

> *"When I read the IOPC's 2021 study I almost wept because it identified everything that went wrong in* [his] *case. And nothing was learned, and nothing has changed… How can you commission a study* [that finds] *things that just went wrong again and again… that Taser usage is discriminatory and it's racist... and yet, when these cases come on their desks, they fail families by not holding police officers to account…They're going to try and tell us that the officers didn't breach professional standards. Well, they breached your own recommendations."* (A family member of Oladeji Omishore).

Concerns about police accountability were also discussed in terms of structural biases due to issues with the law, the legal process and political will. For example, one participant described a criminal justice system that was inherently unwilling to prosecute police officers.

> ***"**A lot of this use of force and Taser, it really doesn't matter what an officer does at an individual level, because at a structural level and a systemic level…There is no political will to prosecute police officers. There just isn't any there. We've got the laws to prosecute them. They're not used because the police are protected constantly."* (Lisa Cole, the sister of Marc Cole).

Another described how families were systematically disempowered financially in terms of equal access to the legal process.

> *"Officers have unlimited resources of public, taxpayer money to get the best barristers in the country and then you've got the families who go to the inquest, we're scrabbling around for legal aid… You've got no chance as a family because you can see the jury – mainly White juries as well, quite often – being turned by the barrister. Even if you've got the footage* [from the incident]*, you haven't got a leg to stand on."* (Carla Cumberbatch, the sister of Darren Cumberbatch).

Others describe how such experiences of inequity fed into a lack of trust and legitimacy not just in the police but in the broader criminal justice system and in its ability to hold the police to account, with one participant describing a wider experience of systemic racism.

> *"I feel it's all part of the systematic racism that's inherent in the system that permeates the disproportionality in every avenue around the criminal injustice system, as I would term it. There's nothing balanced or justice that they're seeking, it's the injustice of being a marginalised group that we face every day and are told to suck it up."* (Participant 15).

As such, a key theme was a lack of accountability. However, this was not merely limited to the issue of individual police officer's use of Taser. Rather, it fed what appears to be a narrative of broader alienation from and distrust of policing and the criminal justice system which has long been documented (e.g., Bell, 2017). Similarly, the discussions evoked concerns of how a view of weak accountability fosters a breakdown of trust and legitimacy not just in the police but in the criminal justice system more generally. Thus, Taser, and its use by individual officers, seems to have become representative, or totemic of a broader context of failures not just in policing, but in police leadership, scrutiny, and the criminal justice system because of our participant's' experiences of their inability to adequately hold the actions of individual police officers to account when things have gone wrong.

3.4.2. Multiple forms of discrimination

Another key theme in participant accounts was Taser use being driven by colour, rather than as a proportionate response to the situation, and a sense that Taser was used less readily on people who were White. For example, a participant who had been Tasered described his view that there was no justification that he could see for why he was subjected to Taser other than his ethnic identity and age.

> *"I think it was because he saw a Black, a young Black man. You know? I'm not sure if he confused me with somebody else, I don't know, but it just felt personal … just felt directed ... That's why I said, "no I'm not getting on the ground". Because I'm a legal guy and plus I had my neighbours out vouching for me, which they would, because everybody sees I get up and go to work every morning, you know? I don't do nothing nefarious; you know. I'm just a dad."* (Participant 22).

Another noted their view that officers had different tolerance thresholds toward different communities.

> *"The threshold for, perhaps, a White person* [to be] *Tasered is a lot higher. It would take a lot more for a police officer to take out their Taser and use it on a White person."* (Participant 3).

For some, such differences were due to a lack of understanding of disparities in culture and communication styles. As one participant explained:

> *"Caribbeans are slightly different. They're more hands and shouting. They* [police] *think it's shouting but it's not, we talk quite loud and we talk aggressive, but it's not, yeah, it's in our nature from being brought up in the Caribbean like that. But they think it's us being aggressive, that's one of the main things because they* [police] *don't understand the culture"* (Participant 21).

However, for others, such police attitudes and behaviours were not just about single issues; rather they were the result of the way ethnicity interacted with other factors. Participants described dehumanising and adultification processes focused in particular on Black children:[ii]

> *"We have a ten-year-old where the Taser was drawn. The ten-year-old is over six foot… But he's in year five…. I feel that goes back to the adultification of Black children. The adultification comes from people being scared of people that they don't know… Officers say, "oh, they're big"... That's part of the obvious need for* [Taser] *deployment - that's how they* [the officers] *see it. Blackness is weaponised, but it was never of our making… The whole thing about us being bigger or stronger and angrier, that comes from racist slavery rhetoric, and it's still very much there in these Imperial systems, like the police force."* (Participant 13).

Germaine Phillips, the mother of Adrian McDonald, discussed her views of how being young, male, and Black whilst suffering a mental health crisis in a White social context, contributed to the death of her son.

> *"I've experienced that myself with my son, Adrian. The police knew that he was having a* [mental health] *crisis, they knew he was a big, Black man. As soon as they heard the word, 'big, Black man', they went in with excessive force … Adrian was in a place where he was the only Black one there, all his friends were White, all the area round there were White, and they just went in with excessive force. But* [it's] *not just Adrian, it's other people* [to whom] *… the exact same thing is happening."* (Germaine Phillips, the mother of Adrian McDonald).

Indeed, research has shown that police may be more likely to regard Black people in a predominantly White area with increased suspicion (see also Lautenschlager and Omori in Kramer & Remster, 2022 and Stewart et al., 2009). Relatedly, participants spoke about being judged negatively for living in a particular area. One participant described their experience.

> *"In my own encounter with the police, during lockdown as a key worker, being scrutinised and victimised for being in an area*

> *which is dominated by huge amounts of economic deprivation and sometimes, the high level of crime. To be scrutinised, and again, as I mentioned, victimised in relation to the area I was in… Even though I have my work badge present, etcetera, I was made to feel less than who I am and what I represent."* (Participant 2).

As the above quote from Germaine Phillips also indicates, another important intersection was identified between ethnicity and mental health (see also IOPC, 2021). A family member of Oladeji Omishore noted their views on how ethnicity and mental health interact with officer psychology to increase the probability that Taser will be used, and the subject will be exposed to lethal force.

> *"To speak to my* [family member's] *case a little bit, there's a perception, particularly with Black men of aggression, of this big Black man* [that] *there was no other way to subdue* [but] *to resort to Taser… I think it speaks to how othered Black bodies have become. So that when you are confronted with one, you kind of go to fight or flight mode. Black people aren't being given the compassion that potentially other people might be able to receive, particularly Black people in mental health crisis and that intersection of Black men and mental health crisis seems to spiral the lethalness of Taser."* (A family member of Oladeji Omishore).

Such tragic deaths were not described as isolated incidents, but as reflective of an inability of the police to understand and deal with the complexities of mental health issues. Hence, participants described how this lack of understanding combined with cultural issues creates misunderstandings among police officers of:

> *"Mental health conditions and how they present in people that aren't White. That plays into that psyche… Because when you are looking at mental health from a Eurocentric standpoint, as a White man you don't see those mental health episodes regularly that you might see with Black people that you see on the streets. And people fear that because they don't understand it. They are not looking from an Afrocentric or a centric point of view but thinking they are a threat to me. Whereas if that happens with White men, there's not that fear attached … Cultural bias is a big part of that."* (Participant 1).

Hence participants also expressed concern that there was often a lack of de-escalation from officers, and that other less forceful ways of handling situations were not being explored because officers lacked the necessary skills and life experience (see also IOPC, 2021), as one interviewee noted.

> *"I used to do mental health work and I remember being in situations where I have felt at risk…whether that's in police stations or whether that's in mental health units. Where you don't*

> *have a Taser, you have to rely on de-escalation, communication and body language and all those sorts of things. Those things can be trained, and I think giving more people Tasers takes away some of the responsibility of actually putting that as the first option."* (Participant 28).

3.4.3. Taser as a high level of force

Another key theme was participants' descriptions of the weapon as a high level of force option that was currently insufficiently regulated. While participants expressed some differences of opinion regarding the desirability and feasibility of a ban on the weapon, with - some called for CEDs to be banned outright while others disagreed - there was a common view that it was an extremely powerful weapon and a very high level of force. Those that didn't call for a ban argued that there was a need for a high threshold for its use and for it to be restricted to very limited circumstances. For example, one participant noted.

> *"Same as using live ammunition, it should only be used as a last resort or second to last resort. If the person is only armed with their bare hands, it's not going to be a life-or-death situation. It can be brought down before it gets to that situation. Its only where the person is armed with a sword or a machete or something really big, they can hurt the police with and they're coming towards the police, the police officer has told them to put it down three times and they're ignoring them, that's when they should use the Taser."* (Participant 24).

Other participants argued that the weapon was originally intended as an alternative to firearms and that guidance and practice should go back to that.

> *"We have gone long, long* [way] *away from the legislation as to why we needed Taser… The only purpose why we had the Taser* [was] *so people wouldn't be shot with a lethal weapon… So in that circumstance, as an alternative to the firearm, it* [should] *remain, but nothing else."* (Participant 12).

Relatedly, several participants commented that in their view officers were not being equipped with sufficient guidance and training that would enable them to understand risks associated with the use of the weapon, and to avoid its use where possible. As one participant noted.

> *"Currently there's not sufficient focus on providing officers, particularly new recruit officers as well, with sufficient training and support to be able to de-escalate things verbally and.. to work in a way that avoids Taser use."* (Participant 18).

Hence, for some, there was a marked contrast between the severity of Taser use and the seriousness with which its use should be treated and the permissive content of the guidance and training. This was described to have interacted with a skills deficit for some officers which made the roll out of Taser even more concerning. For example, one participant argued that such police officers lack basic skills.

> *"*[They] *can't handle the basic interactions, the basic interactions and respect aren't there. They can't handle that, and you are going to equip them with something really horrific."* (Participant 3).

It was not just firing that was seen as a high use of force; drawing and red-dotting were seen as a significant levels of force in their own right. It was noted that Taser is "*not only an issue when it's discharged. It is not only about the use* [i.e., firing] *of Taser, but red-dotting and using to threaten as well*" (Jessica Pandian, INQUEST). Other participants asked related questions.

> *"Why are weapons drawn if they can't see weapons on the person? If you can't see the harm with your own eyes directly, you can't see the person that you're dealing with being that harmful, why are you bringing out the Taser? Why are you deploying the red-dot?"* (Participant 4).

Similarly, a study of Taser use on children in England and Wales found that they saw the threat of their use "*really frightening*" and noting that "*even when Tasers are not actually fired, the threat of a police officer drawing a weapon is extremely disturbing for children and young people*" (CRAE, 2020, p. 2). Moreover, as discussed previously, Taser did not need to be drawn to be noteworthy to participants; even its mere presence was seen as significant and as having the potential to alter interactions between the police and members of the public. Indeed, it is to the consequences of Taser use that we now turn.

3.4.4. Individual and community level impacts

Although there is little research on the community impact and consequences of Taser use, quantitative and qualitative studies alike have found police violence to be associated with depression, mood and anxiety disorders, psychological distress, and suicidal ideation (Hawkins, 2022; Kramer & Remster, 2022). Nor do experiences of police violence need to be direct to have an impact (Stoudt et al., 2011), with Williams (2021) noting that representations of violent and fatal police encounters with Black Americans on social media inflict racial trauma on viewers. This points not just to individual-level effects but to collective ramifications. In our research, too, participants also discussed a range of consequences of Taser use, at the individual and community level.

3.4.4.1. Individual impacts

Participants spoke of deaths and serious injuries, including paralysis, following Taser discharge. Within this, a recurring theme was humiliation and dehumanisation associated with the weapon and the nature of these deaths, with one participant noting.

> *"I'll give you an example, the case of Dalian Atkinson. He was a friend of mine, the footballer, the legend. He doesn't deserve to die like that, at the hands of the police. That's what he'll be remembered for… I do not believe they should ever be able to Taser anybody. I think it is inhumane."* (Participant 6).

This theme of humiliation was not seen to be restricted to cases involving death or serious physical injury. One participant who had been Tasered described immediate, short-term and longer-term issues and implications of the experience. He referred to a fear in the moment, followed by the impact and shame of the incident being recorded and shared widely, and finally long-term impacts upon his own mental health and behaviours.

> *"I've seen things out, seen people get stabbed, seen people get shot. And I've never been as scared as I was that day. You know, that was scary because I had no control over my heart, my heartbeat. It was just scary. It wasn't nice. After* [being Tasered] *when the videos run viral, that's when the embarrassment, the shame kicks in. I'm a popular person, a lot of people know me and to some people it was funny to see you get dropped like a sack of potatoes. It's just embarrassing; my daughter's seen the video, you know. Since my encounter, I suffer with bad social anxiety. Even now talking to you guys. So, if I was to get stuck by a police officer now, I would probably have a panic attack at the side of the road, no doubt. That's why, apart from going to work and what not, I'm always with my missus because I have bad anxiety."* (Participant 22).

Another participant, describing an incident where they had been subject to multiple forms of force, stated later in the discussion.

> *"I was Tasered. I forgot to say that I was Tasered because I'm not actually… I was red-dotted but I really didn't acknowledge that I was Tasered, so to speak, but I was Tasered… It took me four years to realise that I'd been Tasered. I think it's to do with the trauma as well. I think in my case, I think I kind of shut down, like I definitely disassociated, in a sense, because it's a fight or flight response."* (Participant 10).

These experiences with Taser were therefore described as having multiple and long-lasting impacts on the person experiencing it, including but also extending beyond the immediate interaction with the police. In the first case, the lack of control over his own body and the sharing of the recording of the incident was described in ways which created psychological pain that combined with the physical pain of the Taser deployment itself. More broadly, participants in this and previous research (Dymond, 2022) told us about the psychological harms and the traumatising psychological effects that occurred following Taser incidents, and the ways in which their behaviour changed, even if no physical harm had occurred. These experiences, described as emotional and traumatic, were seen to have long-term impacts on those involved in ways that were rarely recognised or supported, leaving lifelong damage to those impacted.

> *"I think the important thing to feed to you guys is the lack of support to deal with the trauma that they have suffered. So there's no real support groups to talk to them, there's no signposting and importantly as well, there's no support to get them, get back on track with their lives because some people, it disrupts their lives immensely."* (Desmond Jaddoo).

3.4.4.2. Community alienation and trauma

The effects of such incidents were felt broadly, with another theme arising around community alienation and trauma. Participants spoke about the consequences of Taser use not only for those who had experienced it, but for their families, friends, acquaintances and 'everyone around them'.

> *"The effect on families I think can't be downplayed. You know, you're not just pointing the Taser at that person.* [You're] *potentially inflicting large amounts of damage on them, their future and all the people who care about them. It's not just the person that you're pointing the Taser at; it's everyone around them."* (A family member of Oladeji Omishore).

Participants talked about their fear and worries about loved ones, especially children and young people, being unnecessarily subjected to police use of force, including Taser. For example, one participant stated.

> *"To be a mother of Black men* [is] *that feeling of forever protecting your sons from the police institution…. even though I've engaged with the police, I feel like this."* (Participant 13)**.**

Indeed, some of our participants talked of 'racialised trauma' affecting whole communities.

> *"If you are in the policed communities, you will carry with you that fear that not only are you more likely to get stopped and searched, but if you stand up for your rights and you say something that you*

> *could be Tasered. Essentially Tasers will deepen that racialised trauma."* (Jessica Pandian, INQUEST).

Participants questioned whether the end result justified the harm inflicted on communities, especially given what was described as the police's focus on low level crime at the expense of crimes of other kinds.

> *"Black people are more presumed they are carrying drugs and it's only low-level crime really and the impact of that … Is it worth changing the policy from low-level crime to keep the relationship with communities more stable than dividing the communities and having them think bad of the police. They're not going to think positive if we're always getting stopped by the police in the street. They're only stopping you for minor offences, drugs, cannabis and all that. Is it worth it terrorising communities to bring down building that relationship?"* (Participant 23).

3.4.5. Disengagement from policing

As the quotes above indicate, a related theme was disengagement from the police and policing. For example, some expressed reticence to call the police in the event they were experiencing an emergency. One participant noted.

> *"*[I'm] *quite fearful. Not just for myself, but for my* [family members] *who are just going about their day-to-day business. Knowing that it just takes one officer to see one of their actions as potentially aggressive for the whole situation to escalate… it makes you wonder if sometimes the police are the best people to call in an emergency."* (A family member of Oladeji Omishore).

Others said they would not necessarily 'help' the police in situations where that would be requested. Participants were also reluctant to complain and raise issues about their treatment with the police. One interviewee described the following events after the death of Dalian Atkinson.

> *"The witness rang me, and I got the story first before everybody else. She wasn't going to go to the police, I convinced her to do that. She said she wouldn't go to the police because they wouldn't believe her, and nothing would happen. That was how deep it ran."* (Participant 25).

Participants stated that such dynamics ultimately made the police's work more difficult.

> *"If you don't have a relationship with the community you are policing, how are you going to do policing? If you are not respected and you are not showing respect, how are you going to get that respect? Because when something goes wrong, who are*

> *you going to depend on to solve that crime? So, for me it doesn't make any sense."* (Participant 1).

3.4.6. Totemic cases

Against this contextual backdrop, individual high-profile cases of Taser use come to be seen as totemic. Throughout the research, several incidents involving Taser – most, but not all, where people tragically lost their lives – were referred to regularly by different participants. Discussions around these incidents were invariantly how they encapsulated for participants the illegitimacy of their community's relationship to the police. One such incident was the death of Dalian Atkinson, on which one participant reflected:

> *"The police did themselves a lot of damage, I'm not even classing this a race issue, like a lot of people are, they just didn't do anything right. I'm sure there are racial connotations too, but I don't think they are the main issues, it is the fact that the police did everything wrong, so if they had dealt with it efficiently, they would have got praise for it. That was their time to do something right. And they tried to back their people, they tried to clear, cover it up as much as possible and it just gave them a bad reputation, and again, they insulted the community."* (Participant 27).

Other totemic incidents that were mentioned by interviewees included the paralysing of Jordan Walker-Brown and the death of Oladeji Omishore. Participants noted that, given this context, such incidents carried with them increasing likelihood of precipitating major incidents of civil unrest. For example, a family member of Oladeji Omishore noted that.

> *"We're seeing police wrongdoing live… Generation*[s] *who had different sets of feelings around the police…* [weren't] *exposed to their wrongdoing live on Twitter in the way that we are. Communities are able to engage with in a way that they haven't before. And so, I think if these stories continue. It's only a matter of time before there's public unrest."* (A family member of Oladeji Omishore).

However, participants also noted that this was not inevitable and spoke about the necessity for inclusive discussions and urgent change going forward. For example, one participant noted.

> *"I hope that this research prompts some urgent kind of reflection on how and why it's being used… What is also important is that the police aren't just talking to themselves. You won't be able to change any of the discussion and dialogue and a narrative around Taser without the involvement of those with lived experience. There* [needs to be] *an opportunity for those of us with another*

> *voice and another view of this to have the opportunity to contribute to the outcomes. There* [needs to be] *a healthy debate around all of this."* (Deborah Coles, INQUEST).

3.5. Conclusions

For many of the participants that we spoke to, Taser was talked about within a context of police illegitimacy and institutional and structural racism, within which Black and other non-White minoritised populations are over-policed and under-protected. The police, in turn, were seen as being part of a broader criminal (in)justice system that was thought incapable of delivering justice or of holding the police to account, both for their use of Taser and more broadly. Within this context, a second theme articulated by participants was multiple, connecting forms of discrimination, disproportionality and racism underpinning the use of Taser. Taser use was seen as driven by skin colour, especially Blackness. This was most pronounced with regards to Black children and young people, and those suffering a mental health crisis, with the socio-economic deprivation of the area also playing a role. A third theme was participants' descriptions of the weapon as an extremely high level of force (see also IPCC, 2014; IOPC, 2021). Within this, it was not just the firing of the weapon that was of concern. Drawing Taser and placing hands on the weapon without removing it from its holster were all seen as significant uses of force in and of themselves, with far-reaching consequences. However, police officers were often seen as lacking the de-escalation skills to handle situations without the use of the weapon. Relatedly, concerns were raised about the insufficient regulation of the weapon in terms of guidance, training, and accountability, leading some—but not all—to call for an outright ban on its use.

This speaks to a chasm between officer views of the weapon and the circumstances in which Taser was currently permitted on the one hand, and participant views about appropriate use on the other (for discussion of officer views on the weapon, please see Chapter 7). The consequences associated with Taser and the broader patterns of illegitimate policing identified to us by participants include not only physical pain and harm—up to and including death in tragic cases—but also psychological harm and 'racialised trauma'. This extends beyond the individuals directly affected to families and communities impacts their attitudes and behaviours towards the police. Into this backdrop, high profile Taser cases—often shared on social media—come to be seen as totemic. This is not because they are unique and exceptional, but because they reflect lived realities and fears for viewers. They illustrate the ways in which the police interact with Black communities and those in mental health crisis that are seen as illegitimate by many that we spoke to. Taser was seen as symbolic of, and as further contributing to, the increasing divide between minority communities and the police. Finally, while multiple participants emphasised the potential for unrest in this situation, they also emphasised this was far from inevitable. Indeed, many participants expressed a desire for the research to result in real change and for affected people and communities to be meaningfully involved in this process as a matter of urgency.

4. Scrutiny Groups and Taser

4.1. Chapter Summary

This chapter outlines our analysis of semi-structured interviews conducted with scrutiny group members (SGMs). Scrutiny groups are defined, for the purpose of this report, as formal organisations that involve members of local communities and other non-policing stakeholders in reviewing individual incidents, policies, practices, and other elements of policing. More specifically, our focus in this chapter is on scrutiny groups which pertain to police use of Taser. This includes groups which focus exclusively on the issue of Taser, as well as groups which may examine Taser use in the context of other issues (e.g., stop and search). In this section of the report, we explore how members of such groups described their ability to provide scrutiny, monitoring, and accountability in this area, including the challenges that they have encountered.

Given the evidence of community concerns about a lack of police accountability, the chapter suggests that community scrutiny can and should be an important vehicle for providing oversight of Taser use by police. SGMs we spoke to described taking their work extremely seriously, were concerned to safeguard their independence and were able to cite examples where they felt they had made a difference around incidents involving concerns about unnecessary, disproportionate police use of force. Yet they also described their systematic disempowerment in multiple ways. Their experiences were that their groups were under-empowered, under-resourced and lacked support. More specifically, they were often not set up to focus specifically on the use of Tasers, nor to address the broader disproportionality issues that surround it. As such SGMs also described how they were unable to provide adequate scrutiny of this important issue. SGMs also identified a range of structural, practical, and capacity issues which were felt to hamper the effectiveness of these volunteer-led structures, including their group's lack of representativeness of the wider community, difficulties experienced in accessing data, difficulty accessing officer's Body Worn Video (BWV) footage, defensive attitudes and little or no genuine engagement or support. Such issues meant it was difficult for groups to shift from individual cases to identify patterns across multiple cases, and to address systemic issues in police-community relationships as well as individual incidents.

All these factors appeared to amplify a sense of powerlessness and disempowerment that some SGMs feel which in turn may be fostering rather than alleviating a sense of police illegitimacy. Consequently, SGMs expressed important reservations about how much fundamental change they were able to bring about and were sceptical about the ability and desire of police to change.

4.2. Introduction

The focus of this chapter is on scrutiny groups. These are defined, for the purpose of this report, as groups which involve members of the local community and other non-policing stakeholders in reviewing individual incidents, policies, practices, and other elements of policing. More specifically, our focus in this chapter is on scrutiny groups which pertain to police use of Taser and disproportionality, and we aimed to understand how members described their ability to provide scrutiny, monitoring, and accountability in this area, including the challenges that they encountered. We start by providing some background to scrutiny groups in general, and to previous reports on this topic, before detailing the different types of scrutiny groups examined in this chapter. We then discuss the methods used and our analytical approach, before presenting our analysis.

Scrutiny groups are important for multiple reasons. They are often seen as a way in which affected individuals and communities can review individual incidents, as well as engage with, and impact on, policing policies and practices. Multiple reports have concluded that there is a need for policing to meaningfully involve and engage with individuals and communities affected by police powers, including the use of Taser (see the IOPC, 2021 and Angiolini, 2017, discussed in more detail in Chapter 6). For example, the UN Working Group of Experts on People of African Descent (2023, paragraph 11) concluded on their visit to the UK that: **"***Policing reforms* [including the] *disproportionality review* [and] *Race Action Plan should be evaluated according to feedback from the communities facing over-policing themselves*" and that "*the effectiveness of policing can only be accurately measured by local feedback and community sentiment, including from the specific communities of adolescents of African descent whose liberty is heavily impacted*".

The importance of community scrutiny is also recognised both in legal documents (such as Code A of PACE) and in Authorised Professional Practice (APP) issued by the College of Policing. While the APP on Taser does not discuss scrutiny groups, the APP on Stop and Search (College of Policing, 2020) states that "*independent scrutiny should: enable effective auditable community oversight, allow dialogue and challenge, inform changes to local policies, procedures and practices (where appropriate)*" and should be representative, independent, purposeful, supported, influential, transparent, and confidential. Yet previous research into scrutiny groups has documented a range of issues in practice. For example, The Baroness Casey Review (Casey, 2023, p. 13) into the standards of behaviour and internal culture of the Metropolitan Police Service found that:

> *"Speaking up is not welcome: Keeping your head down, looking the other way, and telling people – especially senior officers – what they want to hear is the way things are done in the Met. The culture of not speaking up has become so ingrained that even when senior officers actively seek candid views, there is a*

> *reluctance to speak up … and Independent Advisory Groups feel ignored".*

Beyond the Metropolitan Police, a report by HMICFRS found that, with regards to stop and search, and use of force in particular:

> *"Too few forces have good arrangements in place that help them benefit from feedback from external scrutiny … More than half of the forces we inspected had either no external scrutiny or very ineffective processes. For example, in some forces feedback was not acted on, while in others panel members did not have the training or information they needed to perform their roles effectively"* (HMICFRS 2021, p. 27).

In this chapter we seek to build on previous reports by looking, more specifically, at scrutiny groups that are concerned by, and intersect with, Taser. This is, perhaps, particularly timely given the IOPC (2021, p. 122) recommendation that:

> *"Police forces should establish and support mechanisms to ensure community members can oversee and scrutinise Taser use locally, particularly its use against certain groups, including people from Black, Asian and minority ethnic backgrounds, people with mental health concerns and children".*

4.3. Different Scrutiny groups

Throughout this chapter, we use the term 'scrutiny group' as an umbrella term to refer to a range of different organisations, including the National Taser Stakeholder Advisory Group as well as other Independent Advisory Groups and local community scrutiny groups (including Stop and Search Community Monitoring Networks). The remit of these groups varies considerably and includes the following.

4.3.1. The National Taser Stakeholder Advisory Group (NTSAG)

Their website describes their remit, specifically to:

> *"Oversee and comment on the police use of Taser, from all angles – the procurement of the weapon, which officers/staff can use the weapon including training in the use of the weapon... we also view from afar 'drawing of the weapon' (or red-dotting as it is called) to the discharge of the weapon."* (NTSAG, undated).

It states that it:

> *"Sit*[s] *on various groups, including the National Police Chiefs' Council (NPCC) Use of Force Group, and hold*[s] *4 meetings a year directly with the lead NPCC Chief Constable, Lucy D'Orsi.*

> *Whilst we are there to advise and comment on Taser to the Government, Chief Constables, politicians and the media, we are strictly independent and abide by the Nolan Principles."* (NTSAG, undated).

As the name suggests, the NTSAG operates nationally and isn't focused on any one force or force area.

4.3.2. Independent Advisory Groups (IAGs)

The College of Policing Engagement and Communication APP notes that:

> *"Independent advisory groups (IAGs) should reflect the diversity of local communities and can advise the force on policies and procedures. An IAG can help to build trust and confidence within the community, and can help the police to understand the implications or effect of policies and actions on different communities within the force area."* (College of Policing, 2020).

Some IAGs mention a lineage tracing back to the Stephen Lawrence Inquiry report (Macpherson, 1999) and its recommendation of the need to increase trust and confidence in policing amongst minority ethnic communities, eliminate racist prejudice and disadvantage and demonstrate fairness in all aspects of policing.

4.3.3. Community Scrutiny Panels

According to the Home Office, community scrutiny panels allow members of the community to review individual police interactions with the public (Home Office, 2023). They tend to operate at force or sub-force level, and often focus on specific powers. As such, they can be subdivided into various types, depending on the nature of the interaction they are reviewing. For our purposes, they include the following:

1. Groups that focus on stop and search. Amongst other documents, the College of Policing Authorised Professional Practice on stop and search states that "*all forces should have processes in place that allow members of the public to hold the chief constable to account for the use of stop search powers in their force area.*" For example, in London 'Stop and Search Community Monitoring Groups / Network' (CMGs) have been established. These are described by MOPAC as "*groups comprised of volunteer members of the community... (to) monitor all local stop and search issues including the legal powers, number of stops, arrest rates, disproportionality, complaints and Body Worn Video footage. CMGs can also identify and share best practice with other CMGs through their membership of the London-wide Community Monitoring Network (CMN)*" (MOPAC, undated). These groups would only focus on Taser in the context of stop and search.

2. *Groups that focus on use of force and / or Taser.* While community scrutiny is perhaps most advanced around stop and search, in some areas groups have been set up in order to provide a similar function for the use of force and / or Taser. For example, in one force, scrutiny group members described the operation of a panel that "*looks at use of force, including Taser*", with a remit to "*check not only individual outcomes but… the* [use of force] *form… look at videos…*[and] *provide comments to be fed back to the officer*" (all Participant 12) and to receive further action where necessary.
3. Groups that focus on policing encounters more broadly. For example, the Metropolitan Police describes Police Encounter Panels (PEPs) as: "*being created to give communities an opportunity to feedback on policing encounters, by watching Body Worn Video (BWV) footage and offering their views on what went well or what the Met could improve. The panels will be set up across 12 geographical Basic Command Units (BCUs), and will comprise of independent community members, senior police officers and the Met Federation or appropriate staff support associations*".[16]

As such, while these groups share an emphasis on 'independence', they differ in some crucial respects. These include; geographical remit; composition, chairing arrangements and reporting structure (whether to the police and / or other bodies); area of interest, including the degree to which they focus on Taser and disproportionality; whether they have a role to look at individual incidents and, if so, whether they focus on use of force forms, BWC footage and / or other information; whether they have a role to look at policies and procedures; and links with, and role in regards to, local communities. Importantly, for our purposes, these groups also differ to the extent to which they focus on Taser. While some, such as the NTSAG, are focused entirely on Taser, other groups are focused on stop and search, or on community relations more broadly. As they were not designed to look specifically at Taser, they would only be expected to do so to the extent to which it intersects with their main area of interest (for example, stop and search incidents involving Taser).

4.4. Methods

4.4.1. Recruitment and Participants

We aimed to recruit participants from members of scrutiny groups whose remit included police use of Taser. This included groups that provided scrutiny nationally (i.e., the NTSAG) and groups that provided scrutiny locally (i.e., were focused on police

16 https://www.met.police.uk/police-forces/ed-police/areas/about-us/about-the-met/pep/police-encounter-panels/#:~:text=What%20are%20Police%20Encounter%20Panels,what%20the%20Met%20could%20improve.

forces, or areas within police forces). To enhance triangulation with the other strands of the research, we focused on West Midlands, West Mercia, and the Metropolitan Police. Given the size of the Metropolitan Police, we focused on the 5 London boroughs with the highest rates of Taser use, as well as seeking to speak with members of force-wide groups.

We sought to prioritise those groups who had a remit to focus most closely on Taser. Where necessary, we then broadened out to groups that would come across Taser as part of their role, but for whom this was not necessarily a central part of their remit. For example, in London we sought to speak with members of the Metropolitan Police's Firearms and Taser Reference Group and the Use of Force Oversight Group; however, members of these groups told us that they were not currently operational. We then sought to speak with members of IAGs, CMGs and other groups.

Using publicly available information, the research teams' existing contacts and introductions from contact points within police forces and other stakeholders, we contacted scrutiny group chairs and co-ordinators in the areas of interest and asked them to circulate the invite to interview amongst their members. We also used 'snowballing' techniques, asking participants and other contacts to circulate the invite to interview amongst their networks.

These methods resulted in interviews with 23 scrutiny group members, of which:

- 5 participants were members of the NTSAG.
- 13 participants were members of London based scrutiny groups, including Stop and Search Community Monitoring Groups (N = 11), Independent Advisory Groups (N = 3) and Police Encounter Panels (N = 2).
- 5 were members of scrutiny groups in other forces (predominantly the West Midlands and West Mercia).

This chapter also draws on two interviews conducted with a former Police and Crime Commissioner and a representative from the IOPC. Please note that numbers add up to more than the total number of interviewees, in some cases, as some participants were in multiple scrutiny groups.

4.4.2. Challenges and Limitations

There are several challenges and limitations. First, we recognise that scrutiny groups are only one part of a complex scrutiny and accountability web around policing, and the use of Taser more specifically. As such, while this discussion touches on, and has implications for accountability, it is important to note that we did not research the broader accountability and scrutiny processes around Taser (an area which future work could usefully focus on). This involves several other groups, statutory bodies, and institutions, going beyond the scrutiny groups which are our focus here.

Second, as discussed above, it should also be noted that many of the groups we spoke to did not have a specific remit to look at Taser exclusively. This is an important finding in its own right (to which we return later), but also has implications for the sample of people we were able to speak to. Many participants were members of groups focused on stop and search and, in at least one case, interviewees were reticent to express opinions on Taser, feeling that it wasn't in the groups mandate and that they weren't sufficiently knowledgeable about it to be able to comment. For the avoidance of doubt, this does not imply an individual failing, or a failing of the scrutiny groups we spoke to, as many of these had terms of reference that were focused on other issues.

Third, while we attempted to sample in three force areas, the majority of our participants were involved in scrutiny of the Metropolitan Police, which limits the representativeness of the sample. That said, there were no marked differences between the themes discussed by participants involved in scrutiny of the Metropolitan Police and participants from other force areas; all participants raised similar issues and concerns. We also note the value of focusing on scrutiny arrangements in the Metropolitan Police, as the force with the largest number of Taser incidents.

4.4.3. Data Collection and Analysis

Data was collected through a mixture of group and individual interviews that were held both in person and online throughout 2022. A semi-structured interview guide was used as a starting point for interviews (available in the accompanying 'Qualitative Research Appendix'). Interviews ranged in length, with the shortest being approximately 30 minutes and the longest lasting over an hour. Where permission was given, interviews were recorded via dictaphone and / or video conferencing software. Multiple people were involved in conducting interviews, the subsequent analysis of the transcripts and identification of key themes emerging from the evidence collected, using an approach drawing from Grounded Theory and Thematic Analysis (Glaser & Strauss, 2017). This process aimed to see the world from the perspectives stated by the participants; to identify key passages and themes arising from the material; and to select quotes which exemplified particular themes (please see the accompanying 'Qualitative Research Appendix' for further details).

All participants were given anonymity as standard, however a small number of participants asked to waive this right and, as such, have been identified in the report. Where participants had requested to waive anonymity, they were contacted prior to publication to ensure they were happy for the extracts from their transcripts to be included, and to double check that they still wished to waive anonymity. To protect anonymity for the other participants, we have allocated them a unique number to allow readers to identify how often a particular voice is quoted in the report, while maintaining anonymity. To further protect anonymity, we do not identify which scrutiny groups participants belong to and, instead, combine and analyse the data from scrutiny group members as a whole. This also enables us to draw connections and themes across scrutiny groups and to provide a collective analysis of scrutiny groups**.**

4.5. Analysis

4.5.1. Representativeness and links to communities

A key theme discussed by participants was concerns about a lack of representativeness on scrutiny groups. As one participant noted.

> *"The people that they need to have on these groups are the ones who will not engage with the police. The young specifically Black males or females who need to be in there to see why these things are being done…* [to] *show them the Body Worn Video, discuss it through. Find out where things went wrong, where they were handled correctly."* (Participant 11).

Another participant cautioned, however, that it was for the police, not scrutiny groups themselves, to ensure conditions were put in place to increase representation.

> *"We need greater representation from communities who are currently underrepresented but* [these] *also happen to be those who have the worst experience of policing in London…* [responsibility for this lies with] *the Met and MOPAC. Don't hoist the responsibility of that onto a load of volunteers. Monitoring groups are voluntary structures, people* [do] *not get paid for their time, and you have to… avoid a scenario where you get the impression where the fault lies with those voluntary structures. That clearly is unfair and really does take away the responsibility from the likes of the Met and MOPAC."* (Participant 18).

Participants raised related points about the degree of engagement and relationships that scrutiny groups had with local communities, and how community views were represented. The processes group members used were described as informal and reliant on personal connections and reputations. As one participant described.

> *"There are two people on our group who are very much elders in their communities and people will ring them up or knock on their door. One of our members is a 'go to' person on* [a particular police power]*, so he's contacted as well by people who have concerns."* (Participant 13).

In the absence of broad representation on scrutiny groups, and in the absence of more formal mechanisms to hear and represent the voices of communities, there was a risk that their views could be misrepresented within meetings. As one participant stated.

> *"Personal opinions, can* [be expressed] *under the banner that 'this is what the community thinks' and that's disingenuous."* (Participant 9).

As this participant continued, this linked to broader challenges around recruitment.

> *"To get people that can stick to the rules of independence, objectivity and being a critical friend, it's quite a challenge. And you're recruiting those people from within the community of the borough that you're in, you know, and you can't always guarantee that the people you'll get becoming members will maintain those principles."* (Participant 9).

4.5.2. Independence

In line with the quote above, a second theme related to concerns about independence. Interviewees described that they took this aspect of their role very seriously and took active measures to maintain it. For example, one participant noted:

> *"As an organisation and as an individual we are not paid by the police, number one. Number two, that nobody involved in the process knows a person who is subject to those coercive powers* [in the video]*... Number three, there is no serving police officer who is involved in the process. Number four, members of the PCC's office, who I invite to oversee the actual process, their role is not to get involved in the conversation but just to do the admin…* [Further] *if anybody thinks they've got a conflict of interest they declare it in the beginning… I also recommend, and… I do* [practice this] *personally, that the chair facilitates and doesn't steer the conversation."* (Participant 12).

However, maintaining the independence of scrutiny groups—from both the police and from other bodies—was seen as a challenge and something in need of constant maintenance.

> *"We get there, it gets better, then it slips. Then it gets better, and it slips* [again]*. And so, we've got to keep ahead of it all the time… It's yet to be teased out, if you like, how much independence we have, and I think that's a question."* (Participant 17).

> *"MOPAC* [the Mayor's Office for Policing and Crime] *have tried to actually say what we can and can't do. We've kicked them back into touch saying no, you don't control us."* (Participant 19).

This was further complicated by the need to engage with the police for the information and data needed for the groups to do their work.

> *"We are independent, and we can decide our own priorities. But we are beholden to the Police, NPCC, College for information… and it's very hard to get to know what is going on in the background. We have been treated as an after-thought but that is beginning to change."* (Participant 6).

Alongside these structural issues, interpersonal factors were also seen to play a key role in independence. Indeed, the risk of scrutiny groups feeling intimidated by the police was noted.

> *"People might be intimidated. If you're faced with an experienced Detective Chief Inspector or Assistant Commissioner, they're people who are experienced police officers and quite capable of steamrolling anybody. That's how they got to where they are."* (Participant 5).

This was felt to be compounded, at times, by the mechanics of Chairing.

> *"I quite often see Chairs dismissing other member's views and backing the police when they shouldn't do, they should be neutral, and their role is to ensure the system works."* (Participant 12).

Moreover, participants noted that remarks had to be phrased in a particular way to be listened to by the police. They discussed a need to downplay their critique to maximise their influence, and described how the need for the group to maintain a working relationship with the police can undermine their independence. For example, one participant noted.

> *"The advice that I give the Borough Commander on a given topic, say, he will take it on board because he trusts me as somebody that is objective, somebody that is independent and that comes as a result of building that relationship. If I was, on the other hand, somebody that was coming across as aggressive and radical and all the time slagging off the police, the advice that I would give he can choose to just ignore it because he would say 'well he would say that wouldn't he'."* (Participant 9).

4.5.3. Effectiveness

Another theme evident in our interviews was limits to the effectiveness of scrutiny groups, which were for various reasons. First, and fundamentally, some groups were described by their members as quite simply not operational. As previously noted, we attempted to speak with members of the Metropolitan Police's Firearms and Taser Reference Group and the Use of Force Oversight Group. However, members of these groups told us that they were not currently meeting. For example, a member of the Firearms and Taser Reference Group explained their understanding.

> *"Apparently it got disbanded over COVID, we're all waiting for an invite* [back]. *As far as I can see, no one's been notified, so the whole thing just collapsed. So, it's no wonder that the Taser stuff in London is such a mess."* (Participant 7).

As this quote indicates, this raises substantial concerns about community oversight in the force with the largest number of Taser incidents. It also speaks to concerns about

process and a lack of clear communication with group members as to the status of the group. Where scrutiny groups were operating, their remit and terms of reference often did not include a specific focus on Taser and disproportionality, perhaps unsurprisingly in the case of groups focused on stop and search, leading to a comparative lack of attention given to the topic. As one participant noted.

> *"There isn't enough focus on Taser. Stop and search monitoring, which is where it should be, has been the driver. There's a huge deficit in the area. A lot of work needs to be done. But I can't emphasise this enough, they're volunteer structures really working on a shoestring to carry out this really critical function."* (Participant 18).

Even amongst groups with a remit to focus on Taser, participants described concerns about a lack of information and transparency, as well as concerns about differing practices and levels of effectiveness.

> *"In terms of the Independent Advisory Groups, and specifically looking at Taser, it is very piecemeal across the country…I don't think anybody knows exactly how many there are…There might be some groups that are doing some quite good work, and others that are really struggling … We've been told by the National Police Chiefs' Council they* [all force areas] *should have* [a group with] *at least an item on their agenda that looks at use of force, which, of course, should also include Taser use. But how much that really happens is very hard to gauge."* (Participant 6).

A former PCC similarly told us.

> *"Nationally it is a real mixed patchwork … About 50% of PCCs - including me* [when I was a PPC] - *have a use of force, public panel who view Body Worn Camera video, look at the use of Taser… Obviously, I'm gonna parade that as good practice. But depressingly, that's only about half of the country. The other half is either an IAG or in about four cases, which I find amazing, they're police-led public groups viewing the use of Taser. And I say it's amazing because I can't believe that a publicly elected official who's there to hold the police to account hasn't set up their own panel, is letting the police* [do it]*. The big question I suppose, is do those panels hold the police to account? I don't know."*

Participants cited examples where they felt groups had been effective in addressing issues around disproportionality in the use of force (although not necessarily Taser). Yet this coexisted with a broader scepticism about their effectiveness in holding police forces to account and the sense of scrutiny groups being a vehicle for legitimising without achieving meaningful changes. As one participant bluntly commented.

> *"It's a make-believe world that they* [the police] *are accountable and we can hold them to account. We don't hold anybody to account."* (Interview with Dr Nicodemi).

For some, this was expressed in terms of scrutiny groups being merely a way that police can be seen to be allowing the community to hold them to account without doing so. As such, while pockets of good practice existed these remained peripheral making little impact on the organisation as a whole.

> *"There are micro-level projects – but they can't just be little islands of good practice. You know it's, really, how does all this knit together in terms of real culture change within the organisation? What I think needs to happen is that we need to see the Met actually embracing accountability structures. At the moment the Met is an organisation that ticks boxes as far as accountability structures go and isn't really embracing processes around reflection, self-analysis and then some kind of change."* (Participant 18).

As another participant explained, this difficulty in making a meaningful impact was because of the defensive attitude of the police toward scrutiny.

> *"Instead of actually listening as much as they can, they defend and justify, instead of being able to just, sort of, step back."* (Participant 6).

As such, scrutiny groups risked being counterproductive; not only unable to hold the police to account but inadvertently enabling and legitimising disproportionate practices. For example, one participant stated.

> *"What I experienced… is a classic point about what can be set up with very good intentions can quickly become an absolute waste of time – and actually counterproductive because all that's happening is you're providing… a group that backs the police rather than holds them to account."* (Participant 7).

Indeed, it is worth noting that several members of the National Taser Stakeholder Reference Group, including representatives from Liberty, Inquest, StopWatch (including policing expert Dr Mike Shiner) and the Open Society, all left the group in 2020, issuing a joint resignation letter stating.

> *"We are increasingly concerned that the National Taser Stakeholder Advisory Group (NTSAG) is now regularly sidestepped, while the group's existence is relied on to legitimise current use of Taser. This is not something we can support … Police representatives have not valued our expertise, treated the issues we have raised with the level of seriousness they warrant, followed through on commitments made to the NTSAG, or*

> *constituted the group to engender meaningful consultation. Accordingly, we can no longer continue as members."*[17]

For those that chose to stay involved with scrutiny groups, there was a sense of participants feeling disenchanted, disempowered, and insufficiently listened to – but nevertheless feeling like they needed to be there to try to enact change, despite these issues. Participants noted, for example.

> *"If* [the police] *can ignore those who are closer to you and those who are meant to be trusted then help the rest of the community. I have members saying 'why do we bother? Nothing gets changed'. I say, if we don't do it now, then when will we do it?"* (Participant 17).

4.5.4. Access to information

Another theme pertained to accessing relevant information, including Body Worn Camera (BWC) footage of Taser incidents and Taser data. Viewing BWC footage was described as an important way of monitoring Taser usage, in theory, but was beset with difficulties in practice. For example, one participant noted.

> *"As a monitor I would love to have a situation where, you know, we were routinely given access to every single Body Worn Video where a Taser was used in order to be able to scrutinise them and say whether we felt that was justifiable or not … We're definitely as a group not getting access to that information in order to be able to look in and decide for ourselves."* (Participant 13).

This participant continued that, having to randomly select footage, instead of being able to request all footage pertaining to a particular issue, restricted the ability of groups to monitor and address cross-cutting themes. This was further hampered by their inability to triangulate Taser footage with other sources of information around the weapon.

> *"We're only allowed to randomly select* [footage]. *You know, we might see four or five* [cases] *a month and they're just going to be random, so even if all four or five of these were Black people it wouldn't tell us anything because these are just randomly chosen. We need to be looking at a bigger dataset. Not just a random selection which is not an evidence base for anything. We don't have access to the data so we can't monitor disproportionality in*

17 https://www.theguardian.com/uk-news/2020/apr/17/rights-groups-quit-uk-police-body-stun-gun-use-bame-people

> *relation to the use of force or where Tasers were used."* (Participant 13).

Moreover, participants described situations where they were unable to view footage they had selected, noting that practice seems to vary across groups. A participant who was a member of two different scrutiny groups described how this varied across groups.

> *"*[For one group] *we selected an encounter by consensus of opinion. The Metropolitan Police said, 'we've not allowed you to see that one, we can't get the videos and all that together in time'. Now that to me doesn't sound very open and honest from the police… Whereas* [in the other group] *we go 'I want to see that one' – and we see it, in its entirety."* (Participant 19).

A related issue pertained to limits for retaining footage, which under certain circumstances, was deleted after a month (see the next Chapter for a detailed exploration of the use of BWC footage for research purposes). This prevented scrutiny groups from tracking officers over time, and from scrutinising more closely officers that frequently used Taser. As one participant noted.

> *"What I find looking at the data is there's a small number of officers who are more trigger happy than their colleagues …* [so] *we then have to check every individual Taser use to see if that was a lawful use. However, the data is only kept for 30 days, the actual recording …* [so] *we can only test this for the past month. Now, his past month it may be okay. So, all we can do is recommend that the supervisors check every single one".* (Participant 12).

This was compounded by difficulties scrutiny groups faced in accessing data and policies around Taser. One participant expressed this issue succinctly.

> *"We don't know enough because the data isn't there to give us the information that we'd really like. For years our group* [has asked] *for use of force statistics in relation to stop and search, how often it's used, what kind of force is used, the ethnicity of the people involved, and we've been unable to get that information. There is use of force data supplied online but it isn't disaggregated into areas or ethnicities or anything like that so, as a scrutiny group it's very difficult to know exactly how force is being used. Most of my comments are to do with specific* [incidents] *rather than data; my experience is just of actual incidents in which force has been used and Tasers have been used."* (Participant 13).

4.5.5. Monitoring systemic issues

As the above section indicates**,** disproportionate Taser use is typically considered within the context of individual interactions and individual officers. A lack of access to data, combined with constraints placed on scrutiny groups' ability to access and sample BWC footage from Taser incidents, undermines their capacity to shift from the individual case to identify patterns across cases, and address systemic issues in police-community relationships. Hence scrutiny operationalises the problems with use of powers, such as Taser, in very specific ways. The focus is often more on 'bad apples' than addressing more systemic issues; scrutiny groups are forced to focus on police officers, rather than the police as an institution. As a result, their ability to enhance organisational accountability, and hold the police to account for their use of Taser as a whole, rather than in individual incidents, is limited. As one participant stated.

> *"We cannot hold police to account on the use of Taser locally in* [name of area] *because we don't even know if they're using it or when they're using it."* (Participant 22).

Moreover, when groups try to focus more squarely on organisational matters, and to analyse broader policies pertaining to Taser, this comes with its own difficulties. As one participant noted.

> *"*[We face] *a deluge of requests. We have the group* [meeting] *itself, then we can sit on working groups, then papers, policies, that sort of thing that are sent. We would also like to totally review the authorised professional practice to unpick it and, ideally, we'd like to do that with the training. There are so many processes ongoing in the use of Taser that it's very difficult to find the time. It's almost a full-time job, it could easily be. We are small and it's an enormous amount of work … It's a long list and everything on it is really important."* (Participant 6).

Monitoring the response to, and take up of, comments and recommendations made by group members across these various work strands is no easy task – especially when faced with limited feedback from key stakeholders. As one participant stated.

> *"There seems to be a problem in that when we do make comments, they vanish in the sense that nothing happens to show that those comments have actually been read and whether they had any value."* (Participant 5).

4.5.6. Resource constraints

A final way in which participants described their disempowerment was through the resource constraints faced. As the quotes above indicate, participants were limited by the finite amount of time they were able to spend on these groups, which was

compounded by a description of an almost infinite amount of work that needed to be done. Participants also noted their relative lack of training for this work and expressed a need for training.

> *"Not by police officers...* [but by] *independent trainers, including people from communities who are most affected by the disproportionate use."* (Participant 12).

Travel expenses, or the lack of them, was also raised by multiple participants across multiple groups. While, at least on paper, volunteers should – at a minimum – be reimbursed for their expenses, they explained that the processes were so time-consuming that they were often put off. Issues were also faced getting expenditure approved for important group activities. Participants explained that this was a pressing issue in its own right, particularly given the scale of the problem with regards to police use of force and trust in the police. Yet it also spoke to a broader reticence to value scrutiny groups and fund them appropriately which, in turn, meant the police were not understanding the scale of the issues faced. As one participant noted.

> *"We'd love to do more because I think there is a huge unmet need, particularly in relation to excessive use of force on young people, young Black people in particular. And I don't think honestly, they've got the access to help and support they need, and they don't complain to the police because they don't trust the police and they don't think it's worth complaining because nothing is going to change. That's why more communication and more support, more resources are needed to address that because I think unless that happens the police will just say, 'oh, we don't get that many complaints about excessive use of force' when, actually, it's a constant complaint from people, young people on the streets… We really, really want to do more but it's lack of resources and it's always been a problem for us. We're not talking about volunteers being paid, we're just talking about getting funding to do basic things like leaflets, hold meetings, upkeep a website… Our members aren't well off, some are unemployed so there's no way we can afford money like that just out of our pockets."* (Participant 13).

4.6. Conclusions

Given the evidence of community concerns about a lack of police accountability, this chapter suggests that community scrutiny can and should be an important vehicle for providing oversight of Taser use by police. SGMs that we spoke to described taking their work extremely seriously, were concerned to safeguard their independence and were able to cite examples where they felt they had made a difference around incidents involving concerns about unnecessary, disproportionate police use of force. Yet they also described the systematic disempowerment of scrutiny groups in multiple

ways. Their experiences were that their groups were under-empowered, under-resourced and lacked support. Specifically, they were often not set up to focus specifically on the use of Tasers, nor to address the broader disproportionality issues that surround it. As such SGMs also described how they were unable to provide adequate scrutiny of this important issue. SGMs also identified a range of structural, practical, and capacity issues which were felt to hamper the effectiveness of these volunteer-led structures, including their group's lack of representativeness of the wider community, difficulties experienced in accessing data, difficulty accessing officer's BWV footage, defensive attitudes and little or no genuine engagement or support. Such issues meant it was difficult for groups to shift from individual cases to identify patterns across multiple cases, and to address systemic issues in police-community relationships as well as individual incidents.

All these factors appeared to amplify a sense of powerlessness and disempowerment that some SGMs feel which in turn may be fostering rather than alleviating a sense of police illegitimacy. Consequently, SGMs expressed important reservations about how much fundamental change they were able to bring about and were sceptical about the ability and desire of police to change.

5. Body-worn video

5.1. Chapter summary

This chapter examines how police Body-Worn Video (BWV) may be leveraged to explore the interactional dynamics between officers and 'subjects' in incidents involving Taser and how these dynamics may contribute to patterns of racial and ethnic disproportionality. While BWV use has expanded to unprecedented levels, research involving BWV is still in its infancy. Based on interviews conducted with 14 police staff across nine police forces from England and Wales, we provide an analysis of the current accessibility, usability, and suitability of police BWV systems for sampling and coding footage of police-citizen interactions including use-of-force incidents and Taser. We report upon the complexities and barriers to future work involving external researchers (e.g., University-based staff), including access to BWV systems, security clearance, data protection impact assessments and data sharing agreements that will need to be established with every police organisation involved. Despite the limitations associated with sampling and coding BWV data, we argue that the analytical potential of systematically observing BWV footage, even a small sample, should not be underestimated. However, based on our analysis, there are challenges that will need to be overcome including a lack of standardised techniques for gathering and storing BWV meta-data, particularly when using ethnicity as a variable; and the labour-intensive process of BWV footage due in part to the lack of automated and specially designed tools for pseudonymising BWV.

We then reflect on our own experiences of trying to gain a sample of BWV showing incidents involving Taser use to try and better understand the escalation and de-escalation dynamics and processes. In this respect, we sought to explore the usefulness of structured coding approaches such as those based in Procedural Justice Theory (PJT; see Nawaz & Tankebe, 2018) and the Observing Rapport-Based Interpersonal Techniques (ORBIT) model (Alison et al., 2013). We encountered difficulties with respect to unlocking access to BWV, despite the best efforts of force SPOCs. Accordingly, due to the limited nature of our available dataset, our observations and analysis are necessarily partial. Nonetheless, our exploratory review corroborated some of the challenges surrounding data quality, accessibility, and sampling. We argue that BWV footage itself is not sufficient and that it would need to be cross referenced with other datasets (e.g., use of force forms, incident logs, etc.) – a highly labour-intensive process, if it was to be rendered analytically meaningful. We also explored the utility and complexities of using structured coding schemes to analyse video footage of Taser deployments (e.g., firearms incidents where officers offering 'voice' to subjects is not really a feasible option). Finally, and importantly, our limited review of BWV revealed multiple instances where Taser was used in ways that appeared counter to training and doctrine.

We conclude by drawing out several cross-cutting themes and briefly reflect on the opportunities afforded by emerging data integration capacities, like the cloud-based system being used by West Midlands Police, to enable BWV to become a useful analytical and scrutiny tool. We argue that a mixed method approach, in all likelihood, including a case study approach able to take a 'deep dive' into local particularities, is likely to be best placed to generate useful and actionable knowledge from BWV data. However, we point out that such research would still have to overcome the substantial sampling and data extraction issues that this chapter has highlighted before it would be in a position to meaningfully address complex questions.

5.2. Introduction

Technology has become central to policing. With complex surveillance systems, citizens behaviours and their interaction with frontline officers are increasingly surveilled (Joh, 2016). A fast-growing addition to this panopticon is the Body Worn Camera (BWC), the portable device that fits visibly onto police officers' uniforms to digitally record their encounters with the public. Their use by police forces in England and Wales has increased exponentially across the last decade (IPCC, 2016). The proliferation of BWCs is propelled by the dual benefits brought about by these small, relatively unobtrusive, devices. On the one hand, footage from these cameras (Body Worn Video, BWV) is used for evidential purposes, primarily because it provides direct visual footage of incidents or records verbal utterances from witnesses and those involved. On the other hand, BWV opens officer conduct to scrutiny (though see the previous chapter), as the footage is used to investigate complaints, thus, it is assumed, empowering public trust and confidence in policing (IPCC, 2016).

From a scientific perspective, however, BWV opens significant research opportunities and capacities that allow for detailed analysis of police-citizen interactions. Specifically, BWV may aid our understanding of the potential role of interactional dynamics in contributing to the patterns of ethnic disproportionality. However, while BWV use has expanded to unprecedented levels, research involving BWV is still in its infancy. Thus, while tackling disproportionality in the criminal justice system is a central priority for both government and police in the UK, there are very few studies using BWV data to study the issue. Moreover, while many forces are accumulating a growing corpus of video data of their everyday interaction with citizens, the question of how to utilise BWVs to study police-public encounters remains opaque.

Accordingly, Part 1 of this chapter focuses on gaining a general understanding about how different police forces utilise BWV, and how external researchers may use the footage as data. Based on interviews conducted with 14 police staff across nine police forces from England and Wales we provide an analysis of the current accessibility, usability, and suitability of police BWV systems for sampling and coding footage of police-citizen interactions, including use-of-force incidents and Taser. The analysis highlights the complexities of data sharing in this process that we conclude will be a considerable barrier to future work.

In Part 2 of this chapter, we then reflect on our own experiences of trying to gain a sample of BWV showing incidents involving Taser use. Our intention was to explore the data to begin to understand the extent to which racial disparities in Taser use can be explained by factors and processes at play during use-of-force incidents. Accordingly, we aimed to analyse BWV footage of incidents involving the police use of Taser to try and better understand the escalation and de-escalation dynamics and processes. In this respect, we sought to explore the usefulness of structured coding approaches such as those based in Procedural Justice Theory (PJT; see Nawaz & Tankebe, 2018) and the Observing Rapport-Based Interpersonal Techniques (ORBIT) model (Alison e al., 2013).

However, mirroring the experiences of some community scrutiny groups outlined in the previous chapter and the barriers we identify in Part 1, we report upon the considerable difficulties we encountered accessing BWC footage. Moreover, when undertaking an exploratory analysis of a limited sample of BWV, it was evident that the footage itself was not sufficient to make adequate sense of what was happening within the police-public interactions that were occurring. To render it analytically meaningful, it was necessary to cross-reference the footage to other police data sets (e.g., use of force forms, incident logs, etc.).

Finally, and importantly, our limited review of BWV revealed a few instances where Taser was used in ways that appeared counter to training and doctrine. Whilst it is impossible to generalise given the small sample of BWVs we obtained, the fact that we observed these examples in such a small body of BWV examples is notable. It highlights a potential disconnect between Taser training, doctrine, and everyday policing practices.

Part 3 concludes by drawing out several cross-cutting themes and briefly reflects on the implications. We focus on the opportunities afforded by emerging data integration capacities, like the cloud-based system being used by West Midlands Police, to enable BWV to become a useful analytical and scrutiny tool. We also argue that a mixed method approach, in all likelihood including a case study approach able to take a ‘deep dive’ into local particularities, is likely to be best placed to generate useful and actionable knowledge from BWV data.

5.3. Part 1: Interviews with police staff

In this section we provide an analysis of the current accessibility, usability, and suitability of police BWV systems for sampling and coding BWV footage of use-of-force incidents for research purposes. To achieve this, we interviewed force Single Points of Contact (SPOCs) and data analysts with knowledge of BWV processes and systems within their own organisations. Within our analysis of these interviews, we first contextualise police BWV in the England and Wales. We next outline the complexities of BWV data access for, and sharing with, third parties such as universities. Finally, based on the interviews, we consider the suitability of BWV data for sampling and coding use of force incidents including Taser.

5.3.1. Data overview and analytic strategy

We interviewed fourteen police staff located within nine different police forces across the UK. Interviews began with force Single Point Of Contacts (SPOCs) identified by the College of Policing. In addition, we then held follow-up interviews with five data analysts from five different forces who were identified by their respective force SPOCs as having relevant knowledge within their own organisation[18].

The interviews were semi-structured and began with questions focused on understanding how each force approaches BWV footage. Discussions revolved around (a) the IT systems employed and data storing processes and practices, (b) data access and whether analysis is possible both within and beyond each individual organisation, and (c) whether data can be cross-referenced to others forms of data (e.g., officer written use of force forms) within each organisation.

Interviews were subject to thematic analysis (Bruan & Clarke, 2006, 2019; Glaser & Strauss, 2017). Accordingly, like Radburn et al. (2022), each researcher listened the audio-recording of the interviews, noting down any salient exchanges. Having done this, the research team then transcribed relevant passages based on their meaningfulness to the aims outlined above, and their recurrence as important issues. The research team then conducted a series of analysis sessions together to discuss the pertinent episodes highlighted from the recordings. From these sessions, an initial thematic structure was developed. This was then refined and nuanced by the research team in light of each member re-listening to the interviews. This process continued until there was consensus that the thematic structure identified best represented the dataset (Henwood & Pidgeon, 2003). Thus, in the following analysis section, we present a composite narrative account (see Radburn et al., 2023; c.f., Willis, 2019) arranged thematically based on the 14 interviews conducted.

5.3.2. Analysis

5.3.2.1. Uptake and use of BWV

All the interviewees confirmed the significant uptake of the use of BWCs across all forces in England and Wales in recent years. Police policies provide the authority to

[18] Whilst we feel that a purposive sampling approach was appropriate given the exploratory nature of this element of the project, we acknowledge the potential limitations. For example, police forces usually choose Single Points of Contact (SPOCs) based on expertise, communication skills, and specialisation to enhance coordination, collaboration, crisis management, and public trust. These designated individuals streamline information dissemination, allocate resources effectively, and ensure consistent procedures, ultimately optimising the force's operations and community engagement. However, limitations of this sample could include selection bias due to their specialised roles, limited generalisability to the broader police force, potential homogeneity and availability issues, and the risk of social desirability bias. Their higher expertise and specific responsibilities might not fully represent the entire force. Yet on the other hand, it is precisely this expertise we were looking to document, and it is for this reason that we proceeded with the purposive sampling approach outlined, interviewing a cohort of subject matter experts.

use BWV in the lawful execution of officer's duties for the purpose of the prevention and detection of crime. Consequently, forces nationally now require that under specific conditions officers activate BWV in their interactions with the public. Our interviewees judged that frontline officers have become more accepting of and some now embrace BWCs as an essential piece of equipment. As a result, the interviewees all described formal processes of BWV evidence gathering and use for scrutiny purposes in their forces, but this did not relate directly to analysis of the general issue of ethnic disproportionality across multiple interactions. It was apparent that BWV is used routinely and primarily in criminal justice proceedings for investigation, evidential purposes and for processes of service standard control, particularly relating to issues such as public complaints and individual incidents involving police use of force.

5.3.2.2. BWV systems

The BWC system is now part of the broad police ICT ecosystem with most forces we spoke to subscribing to a single ecology IT management system, which were either Axon or REVEAL systems, for both hardware and associated software. The use of these systems has enabled the construction of a workflow process that moves BWV data easily from collection to storage to disposal. Using Axon's ecology as an example, officers with Axon BWCs start collecting BWV footage as soon as they switch the record button on. The camera will continuously record video into clips for a maximum duration of 30 minutes. Returning to the station after duty, officers plug the camera into its charging station and the footage automatically uploads to the Axon 'cloud', Evidence.com. Officers then log on to Evidence.com to review the clips, tag them with labels (e.g., Evidential, Use of Force-Taser), and add relevant case references such as 'Use of Force-Taser', some of which have legal implications for data retention (see below).

5.3.2.3. BWV data structure

The interviewees describe how across both systems BWVs are recorded and stored as individual clips that are labelled and organised by meta-data (data that provides identifying and other information about the BWVs). The meta-data comprises system-generated codes, including device identification numbers that connect the device to individual officers and add date and time stamps allowing for the subsequent tracking of the specific incidents. The meta-data is created from officer-defined codes, such as case references (i.e., dispatch number, incident number or custody number) and other categorisation tags, which are a set of labels predefined by specific needs within criminal justice proceedings and internal scrutiny processes. These case references allow for BWVs and their related written records to be traced and extracted.

Predefined labels include 'evidential', 'Stop and Search', and a set of categories related to use of force, such as 'Use of Force-Taser'. These labels are important as they were understood by interviewees to define the retention period of BWV footage; and the retention period appears to vary between forces if the clip is marked as 'non-

Evidential'. A non-evidential clip without any tag appears to be normally retained for approximately a month but then subsequently deleted. Non-evidential footage tagged 'Stop and Search' or 'Use of Force' is kept from between 28 days to 12 months. In contrast, if a clip is marked as Evidential, it will be retained for at least 6 years to be available for the courts if needed. These retention protocols are important when considering the implications for disproportionality and accountability – if 'non-evidential' footage is deleted any subsequent complaint or review will not be able to make use of this important evidence (see the previous Chapter). Moreover, if non-evidential footage containing interactions where there is no use of force is routinely deleted then it will make it difficult for researchers to access a sample of such incidents to use as comparators to those where force has been used in some capacity. As such, there is a need for researchers to understand and specify the legal and ethical basis for retaining BWV (e.g., can the need for research data supersede the legal requirement for the police to dispose of the data?).

5.3.2.4. Linking BWV data to other systems

For BWV, the single police ecosystem is designed to maximise security and organisational control, therefore BWV systems in each police force are tightly closed internally integrated systems, usually only accessible from within the organisation's rigid and robust IT system firewall. The interviewees described how the closed nature of police data systems poses problems even within a single police organisation in terms of linking BWV footage to other datasets, such as officers' written use of force records and calls for service. For example, for several of the police organisations we spoke to there currently there appears to be no systematic link between their BWV platforms and their other internal police data storage systems, such as dispatch and custody data. In the absence of integrated IT systems, to connect BWC footage with other data that would help contextualise and generate a fuller analytical picture of police-citizen interactions would be highly labour intensive.

Interviewees also reflected on the challenges of linking different officers' BWC footage involved in the same incident, which requires the matching of multiple camera perspectives and written reports. This process is invariably manual, and therefore labour intensive, hampered further through the use of non-standardised formats. This would be especially challenging when dealing with a large volume of data across multiple police officers as would be necessary to study broad patterns of policing.

5.3.2.5. Accessing and sharing data

Interviewees suggested that one of the central issues facing analysis of BWV will be that research organisations external to the police may need to process the data. Therefore, all our interviewees anticipated significant and highly challenging barriers for external researchers accessing police BWV for use as data. For example, the online data hub – Evidence.com – is designed and used as a highly secure closed system and is consequently not currently amenable for sharing data with IT systems

outside of that specific organisation including, other forces, research organisations and community stakeholders. However, we also note that some organisations are moving toward third-party cloud solutions for storing and sharing their BWVs. One reference point for this type of project is in the US, where the Complex Social Interaction Lab[19] has obtained its own version of Evidence.com and can archive and annotate unredacted video. Whilst the legal protections in England and Wales are clearly not equivalent to those in the US (see below), this approach could potentially be shown to regulators and research boards as a potential model for addressing BWV as a research tool.

5.3.2.6. Complying with GDPR legislation

After the enactment of the General Data Protection Regulation (GDPR) in the UK under the Data Protection Act (2018)[20], the legal landscape for sharing digital data containing personal data changed significantly. GDPR clearly defines a legal pathway for the lawful sharing of personal data for research purposes, as well as specifying the organisational duties in handling it. BWV data is in one of the most sensitive legal categories, as it invariably contains detailed personal information (e.g., images of faces). In principle, police forces can only collect, store, process, and share BWVs for legitimate policing purposes, and they are therefore legally obliged to establish a comprehensive procedure and infrastructure to protect the personal data it contains.

Under GDPR, personal data should not be used beyond the purpose which is stated by the collector at the time of collection. Therefore, a key legal and ethical controversy regarding sharing BWVs is whether researchers should be allowed to access the BWV data that was originally obtained and then retained by police for potentially evidential purposes. Furthermore, the Police and Criminal Evidence Act 1984 (PACE) states that it is illegal for police to store data beyond a limited time frame unless that data relates to a criminal prosecution. Therefore, some interviewees suggested that all ‘evidential’ BWV data are retained according to PACE and should only be used within its scope. Correspondingly, large amounts of data involving police-citizen interactions would not be available for research and scrutiny purposes because by law it must be destroyed.

Some of those we interviewed were open to the idea of allowing researchers to access ‘evidential’ BWVs marked as ‘inactive’ in criminal justice systems. According to interviewees, GDPR does offer a pathway to repurpose evidential BWVs for research purposes, but only once they become ‘inactive’ in the criminal justice system. Thus, the legal principles in GDPR do not entirely preclude sharing BWV data with other parties for purposes other than for which it was collected provided it is mandated and the scale of the data sharing is proportionate. What is evident is that data sharing arrangements for research purposes will be highly complex, possibly taking months to establish. The necessary Data Protection Impact Assessments (DPIAs) will need to

[19] See: https://labs.wsu.edu/csi/
[20] https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted

be completed to access the data, with careful consideration given to how personal data will be handled and protected. The DPIA will need to ensure that the scale and category of personal data is minimised, mitigate any identifiable data protection risks arising from the data sharing agreement and costs will need to be factored into any funding arrangements to ensure this work is undertaken appropriately in ways that do not unnecessarily delay the onset of the research itself.

5.3.2.7. Anonymising / pseudonymising data

Depending on the lawful basis for sharing statistical or handwritten records with third parties, police forces may anonymise or pseudonymise the data before sharing it by redacting personal information, such as name and addresses, that could otherwise allow individual people in the dataset to be identified. Aspects of data captured in BWC footage may need to be pseudonymised before it can be shared with third parties.

Interviewees suggested that currently, footage must be pseudonymised on a one-by-one basis by a data protection or information technology officer. Any research to analyse a significant amount of BWV will impose a considerable workload on the police in this regard, hampering the sharing of data to other agencies and policing researchers. According to our interviewees, BWV pseudonymisation could be achieved within police forces using video editing software to pixelate video content (Axon offer a specialised software for editing BWVs). Larger forces with their own Cybercrime unit may be able to resource their own support. The technology to pseudonymised footage is available and is used with data generated with AI facial recognition, but it has not been designed to be used with BWCs and therefore is likely to be unreliable. In any case, it is evident there are considerable barriers that need to be addressed before large BWV data sets can be transferred by police forces to external organisations.

Pseudonymisation can also pose challenges for analysis because of the way important data is precluded. There are several practical and analytical issues in masking personal identifiable features in video footage (e.g., faces), which need to be addressed prior to sharing BWVs. One challenge will also relate to the verbal content of footage which may convey important personal data that may need to be masked. For example, facial expressions convey emotional perceptions that will be of importance in the analysis of police-citizen interactions, racialised features will be important in analysing disproportionality, and nuances in verbal interaction - such as an officer using someone's name - can be pivotal in understanding how interactional dynamics played themselves out. Therefore, there needs to be careful consideration of how to balance the needs of data security with those of analysis, to allow enough 'appearance' and verbal interaction data to remain in the shared BWV footage for research purposes. Such issues are amplified when the data sets in question are likely to be large and therefore involve multiple interactions.

According to the interviewees, data with identifiable personal information, including pseudonymised personal information, would need to be transferred and stored

securely appropriate to its risk level. Some police forces have begun to experiment with data sharing via third party cloud services, such as 'Box'. However, such cloud services should be used with caution as providers seldom disclose their server location and the transfer and storing of personal data outside the UK requires strong justification and comprehensive risk mitigation under GDPR. If a sharing police force opts to transfer BWVs to a recipient organisation digitally, a better way would be a direct transfer to the recipient organisation's ICT infrastructure, physically located within the UK via a secure connection. The receiving organisation should establish a level of security on par with police systems so that BWV data can be transferred and stored securely.

5.3.2.8. Summary

To summarise, interviewees recognised the complexities of data sharing and saw these processes being a considerable barrier to future work. We suggest that at the very least, for external researchers (e.g., University-based staff) to access BWV systems security clearance, data protection impact assessments and data sharing agreements will need to be established with every police organisation involved. If data is to be shared, based on our interviews, it should be in accordance with the following guidance:

- The sharing police force and recipient organisation should jointly assess the data protection risk and develop a corresponding data sharing framework that balances the risks against the benefits of sharing BWV footage for research purposes.
- The recipient organisation should have secure facilities to receive, store and process the data. Processing personnel should have restricted access to the data proportionate to their role in achieving the stated purpose. The access arrangements should be explicitly stated in the data-sharing agreement.
- The police force sharing BWV should minimise the categories of personal information revealed in the data. In principle, data to be shared should be pseudonymised (the masking or deletion of unnecessary categories of identifiable details from the data) or anonymised.
- BWV footage should only be transferred from police forces once it has been sampled and pseudonymised using clearly defined scientific criteria and the above issues should be addressed nationally.

5.3.3. Sampling

As discussed above, despite the continuously expanding volume of BWV footage on police force systems, access to third parties will be limited because 'evidential' BWVs will be excluded and therefore available samples are likely to be low in number. Moreover, a BWV in isolation will be difficult to interpret and sample without reference to other police data sets which help contextualise the footage.

Adding to this complexity, our interviewees suggested that defining use of force 'incidents' within the BWV dataset alone will not be feasible, as they are not categorised in this way. The basic data unit is not defined by 'incidents', but by 'clips' of duration of up to 30 minutes. It is possible for there to be multiple clips that relate to a single incident, which may not be linked. A more feasible way to sample use of force incidents is through using use of force forms and extracting the relevant BWVs and other pertinent reports from different police systems. In other words, BWV data needs to be linked to other police datasets. For example, if the research is oriented toward understanding the dynamics of interaction potentially driving disproportionalities in police use of force it will be necessary to utilise use of force forms to sample incidents and code some of the variables for analysing the interaction (e.g., racial identities of citizens if this is difficult to interpret from the BWV).

Thus, the interviewees suggested that a way to overcome sampling challenges is to link the metadata of accessible BWV footage from use of force incidents with their corresponding use of force forms, as a means of identifying samples based upon ethnicity, gender, and age. According to the force interviewees, the forms are mandatory. Correspondingly, the most common format for use of force data is the National Use of Force Monitoring Form that contains relevant standardised variables, such as the type of force used, officers' ethnicity, and the perceived ethnicity of the subject. Random sampling can be achieved based on the variables recorded in the forms and the BWVs corresponding to the forms can be traced and linked. In this way, sampling can be done anonymously, thus avoiding the release of actual BWV footage before they are sampled and selected for observation.

However, it is important to note the limitations of the use of force form described by the interviewees. Firstly, the form records only the highest level of force used. Secondly, the way that police categorise 'ethnicity' is problematic because forces rely on a combination of officer defined and self-defined ethnicity – the former can be subject to human error, the latter often missing due to members of the public refusing to self-define their ethnicity or the officer not asking them.

According to the interviewees, there are additional technical challenges for sampling BWVs in conjunction with the use of force forms, as not all BWVs are tagged with a use of force reference, requiring them to be traced manually. It is also possible that one police-public encounter involving use of force generates more than one use of force form. In principle, each officer present should fill in a form for one use of force incident. In encounters where multiple officers use force against multiple subjects or where officers use force against the subject at different stages of an encounter, multiple use of force forms can therefore be generated.

Moreover, our interviewees suggested that segregated sampling by citizen ethnicity can only be done by the categorisation recorded in the form. The master form uses the 5+1 categorisation to record subject ethnicity as perceived by the officers. Accordingly, interviewees intimated that disaggregation to finer categorisations of ethnicity may not be possible with use of force forms alone unless the forces record

ethnicity using more complex forms of categorisation. In theory, it is possible to link BWVs to other police databases (beyond the use of force form data) to cross-check the subject demographic data and extract variables for improved segregation in sampling.

However, our interviewees suggested that with their current IT systems and processes the challenges here go beyond the time-consuming process of manually matching BWV with other records. It is apparent that recording practices often differ between police forces, and even within forces across different datasets. Consequently, methods for linking police datasets (e.g., by using a common identifying variable across datasets) are poorly developed. For example, suspect ethnicity may be recorded according to generic ethnic groups (e.g., White, Black, Asian) in one dataset and disaggregated (e.g., Indian, Pakistani, Bangladeshi, Asian Other) in another dataset. Likewise, location, ethnicity and other data may be omitted in a significant percentage of cases.

5.3.3.1. Summary

Despite the limitations associated with sampling and coding BWV data, the analytical potential of systematically observing BWV footage, even a small sample, should not be underestimated. Compared to participant observations, one can tell much more about an interaction by looking at its BWV footage repeatedly. By defining the unit of analysis at a granular level, such as utterance or bodily movements, even a small body of BWVs clips could yield a large quantity of micro data points of police-public encounters. The analysis of this 'big data' could potentially elucidate the endogenous structure of use of force incidents (e.g., factors associated with escalation and de-escalation) and facilitate the development of empirically informed strategies for reducing conflict.

However, based on analysis of the interviews, there are challenges that will need to be overcome to use BWV for research purposes including:

- A lack of nationally standardised techniques for gathering and storing BWV meta-data. This issue impacts upon the ability to achieve a standardised and robust sample for use of force incidents, particularly when using ethnicity as a variable.
- Gaining access to pseudonymised BWV footage that has enough 'appearance' and audio data to remain open to meaningful analysis. The method of pseudonymisation is a labour-intensive process due in part to the lack of automated and specially designed tools for pseudonymising BWV.

5.4. Part 2: Exploring racial and ethnic disproportionality

Considering the issues and opportunities outlined above in terms of accessing police BWV data for research purposes, the next part of this chapter relates to our exploratory review of police BWV footage of specific incidents involving the use of Taser. Our initial

aim was to obtain a small sample of BWV footage from participating police forces to explore the extent to which racial disparities in Taser use can be explained by the factors and processes at play during use of force incidents. Accordingly, we sought to analyse BWC footage of incidents involving the police use of Taser to try and better understand the escalation and de-escalation dynamics and processes. In this respect, we sought to explore the usefulness of structured coding approaches such as those derived from Procedural Justice Theory (PJT; e.g., Nawaz & Tankebe, 2018) and the Observing Rapport-Based Interpersonal Techniques (ORBIT) model (Alison et al., (2013).

However, mirroring the experiences of some community scrutiny groups outlined in the previous chapter, the research team encountered acute difficulties accessing BWC footage. Therefore, having outlined our methodology, we begin our analysis by describing some of the challenges of accessing BWV that corroborate some of the issues identified in Part 1 of this chapter. We then offer some observations based on the BWV that we obtained. We focus particularly on the application of structured coding frameworks and their potential for exploring racial and ethnic disparities in relation to Taser use. Finally, in Part 3, we conclude by drawing out several cross-cutting themes and reflecting on the implications of these issues.

5.4.1. Method

5.4.1.1. Data access and sample

We were provided with a data sharing brief from the College that set out a lawful basis for forces sharing BWV footage and related data handling responsibilities. This made it clear that there was no legal obligation for a formal Information Sharing Agreement to be in place between the research team and each participating police force. Yet, we still encountered difficulties with partner forces with respect to unlocking access to BWV, despite the best efforts of their respective force SPOCs.

Nonetheless, we did manage to observe a small sample of BWV from three forces, with varying degrees of access. For one force, two members of the research travelled to their HQ and observed several examples of police-public interactions that involved the use of Taser. A second force allowed a serving officer to show the research team 10 incidents involving Taser via a work laptop. Finally, a third force pseudonymised 10 incidents and allowed us to download the BWV onto our secure servers. Additionally, the first and third force provided an information pack for each interaction which included redacted incident logs, officer witness statements and Use of Force forms.

5.4.1.2. Data analysis framework

The framework adopted revolved around a series of analysis days where the research team converged to assess and discuss the BWC footage. Our approach was inductive and highly exploratory. For each BWV clip, we first played the footage in its entirety to allow each researcher to form initial impressions of the incident. We then discussed

the footage as a group to try and draw out meaningful exchanges, and issues of theoretical and practical relevance. These conversations primarily revolved around rationalising the relative appropriateness of the Taser deployment. We also explored the usefulness of PJT and the ORBIT based approaches by attempting to code the interactions based on their structured criterion. Group discussions were initiated about our experiences of trying to apply these coding frameworks. Each researcher was also afforded the opportunity to highlight specific parts of the footage and where possible we re-watched the relevant segments (often multiple times) to facilitate our collective discussions. The following analysis outlines the salient consensual issues that were the product of this process.

5.4.2. Analytic observations

5.4.2.1. Sampling

With regards to sampling, we were heavily reliant on the force SPOCs to identify and process BWV footage incidents and so we had relatively little to no control over what clips we were able to review. Since the majority of uses nationally are non-discharges it seems essential to explore the dynamics of these incidents. This is especially salient given the fact that these types of uses are where the racial and ethnic disparities are most pronounced (c.f., Quinton et al., 2020). As it transpired, the scenarios we were presented with tended to show uses of Taser where it was eventually discharged.

Moreover, with regards to sampling, one of the three forces that supplied us with clips where the officer perceived ethnicity of the subject was ‘White British’ in nine out of ten incidents. The remaining clip was defined as from ‘Any other Asian background’. Whilst this is understandable given the demographics of the force area in question, it rendered it impossible to compare interactions in ways that allowed the researchers to assess why racial or ethnic disparities exist in Taser use. Again, this points to the value of utilising non-discharge scenarios – which are far more voluminous – to explore patterns of interaction that may or may not be underpinning ethnic disproportionality.

5.4.2.2. Pseudonymisation, linking and GDPR compliance

Echoing the pseudonymisation issues highlighted in Part 1 of this chapter, two forces provided completely unredacted footage while another judged it necessary to heavily redact aspects of the audio within the supplied BWC clips. Accordingly, large sections of what may have been critically important verbal exchanges that occurred prior to the use of Taser were not audible, severely undermining meaningful analysis.

For instance, one clip we reviewed depicted a domestic incident involving one female and two males. Throughout the 8 minutes 22 second clip essentially all speech from the three individuals was redacted meaning that only the speech of the officers present was audible. For example, the officer is initially shown walking into a property and asking: “*what’s going on*?”. The entire response from one of the males is completely redacted. Whilst witness statements from officers provide snippets of what the subject

was saying (e.g., "*I'll punch this officer*"), the lack of audio meant that we were having to infer the tone and content of conversations rather than being able to explore what was actually said and how.

Moreover, in some of the videos provided it was difficult, if not impossible, to ascertain the ethnicity of the subjects. This issue was variously caused by one or more of the following: redactions completely blurring out the faces of people involved; subjects wearing gloves and/or balaclavas; the darkness of clips of incidents that took place at night; obscuration due to people or other aspects of the environment blocking a clear view.

This issue was alleviated by supplementary materials (e.g., officer witness statements and use of force forms) that described the subject's perceived ethnicity. For example, one clip shows a male in a hallway that goes into a kitchen and puts a knife to his own neck. The officer responds straightaway by firing Taser as the subject did not drop the knife as instructed. The subject was heavily blurred through redactions and the research team judged this to be a White male, but the use of force form indicated that the officer perceived the male to be of Asian origin.

This kind of redaction therefore further undermined any ability to provide meaningful analysis of the interactive dynamics between officers and subjects. The contrasting positions taken by the three forces expose the lack of clarity and need for coherent guidance such that a standardised and functional position can be determined before any large-scale research is undertaken.

Thus, in accordance with Part 1, our evaluation stresses the need for BWV footage to be viewed not in isolation but rather as part of a wider array of materials. It also emphasises the fine balancing act in forces providing data to researchers that is analytically meaningful whilst also conforming to contrasting legal advice regarding their obligations around protecting personal data, including the need to pseudonymise and to be compliant with GDPR legislation.

5.4.2.3. Structured coding frameworks

Notwithstanding the issues with accessing BWV clips and the data issues outlined, we assessed the application of structured coding frameworks and their potential for exploring racial and ethnic disparities in relation to Taser use. This draws on work by researchers who have developed coding frameworks with the aim to be able to systematically code and quantify the escalatory and de-escalatory dynamics within specific use of force incidents captured on BWV.

For example, Nawaz and Tankebe (2018) who utilised 100 stop and search encounters recorded on BWCs by Greater Manchester Police between 1st January and 31st August 2017. They examined whether these interactions adhered to the main dimensions proposed by Procedural Justice Theorists (i.e., voice, neutrality, respect, dignity). Their technique involved applying scores from 0 to 100 as a standard metric for each encounter used as a total index score of 'procedural justice'.

Their study suggested that the majority of observed Stop and Searches were characterised by officers allowing citizens to express their voice, followed by police demonstrating respect and offering explanation. The lowest scores were given to 'conveying trustworthy motives'. This analytical approach enabled a very fine-grained coding of the interactions, rather than merely relying upon a simple binary nominal category of 'good' or 'bad'. Such a technique also opens up the data to using more powerful forms of statistical analysis.

However, when we sought to apply a PJT coding framework to the BWV incidents involving Taser an immediate issue was the complexity of coding interactions where there are multiple officers and/or subjects (c.f., Radburn et al., 2022; Savigar-Shaw et al., 2022). This was compounded by the issues of audio and visual redactions, highlighted earlier. For instance, one incident depicts a break in by two masked intruders. Officers had been sent to a report of an abandoned 999 call.

On arrival, both officers discovered the glass on the front door of the property had been smashed and two masked men were in the house with the homeowner present in one of the ground floor rooms. The BWV shows the officers enter the house. Officer 1 enters the property shouting "*Hello, it's the police*" whilst walking through the front door. He then turns into the doorway on the left and says, "*Oh hello, what the fuck's going on here?*" as he spots the two masked men standing over the homeowner.

Officer 1 immediately starts grappling with Intruder 1, attempting to arrest him. Simultaneously, Officer 2 shouts "*Police officer with a Taser, get on the floor now, get on the floor now, get on the floor*" whilst red-dotting Intruder 2. The audio is then redacted whilst Officer 2 handcuffs Intruder 2 and places his Taser on a nearby table whilst doing so. Meanwhile, Officer 1 is still grappling with Intruder 1 and Officer 2 picks up his Taser from the table and fires it at Intruder 1 shouting "Taser, Taser" which achieved Neuro Muscular Incapacitation.

Within this scenario, it is difficult to see what value can be placed on simply assigning this situation a score between 0-100 based on its adherence to Procedural Justice principles. The nature of the live incident means that the primary objective is to arrest the intruders, keep themselves and the homeowner safe. Thus, given the high threat and risk posed to officers and the homeowner in this situation, 'voice' and 'trustworthy motives' do not seem to be useful indicators of evaluating how the officers handled and resolved the encounter. Moreover, given the multiple non-police actors it is difficult to understand whether the procedurally fair aspects of the encounter would be assessed from the perspective of the homeowner or the two masked assailants.

Accordingly, a notable limitation was the fact that a framework such as the one employed by Nawaz and Tankebe (2018) is in danger of stripping the behavioural dimensions of interactions between officers and subjects away from the contextual and situational complexities of these encounters. Our analysis questions the utility of merely coding video (e.g., the presence or absence of giving subjects 'voice') within

use of Taser incidents at the expense of drawing from other important contextual data (e.g., incident logs, Use of Force forms, witness statements).

For example, one clip shows officers driving slowly towards another stationary car in the middle of a residential street. Upon swiftly exiting their vehicle other officers can be seen and heard shouting instructions to the subject ("stand still, put your hands on your head"; "get down on your knees"; "knees now, hands on your head"; "keep them where they are, no sudden movements").

The BWV footage then shows the subject on his knees with his hands on his head. An officer shouts "cuffs, cuffs, cuffs" and a police dog can be heard barking. An officer then shouts, "do not move, put your hands where we can see them". Meanwhile the subject is red-dotted, and an officer comes in close to handcuff the subject. There is then a struggle where the subject moves and an officer shouts, "stay where you are, stay on the floor". Another officer is then heard saying "Taser's your first primary [tactic], Taser's your primary boys, we're armed officers". An officer then shouts "get your arm round the back now" towards the subject as he still struggles. It is at this point where an officer can be heard shouting "Taser. He's got a handgun, Taser him". One officer fires Taser but it is ineffective, but whilst the struggle continues another officer fires and it achieves NMI, and the subject is subsequently detained under power of the device.

At face value this may well appear as a procedurally unfair interaction where there is an apparent disproportionality in the use of force. Whilst there is mention of the handgun toward the end of the interaction, it is only by reviewing supplementary material that a fuller picture of the incident can emerge. For instance, it is apparent from the incident log and witness statements that this was assigned as a job for specially trained firearms officers due to the fact it had already been categorised by the call centre as high threat and risk. The original call for service had informed the police that the subject in question was in possession of a handgun and had earlier threatened to kill his neighbours.

Therefore, the sudden movement by the subject was deemed an immediate threat to life and hence officers used their primary less lethal option of Taser to neutralise the risk. It did subsequently materialise that the subject was in possession of a firearm. Our assessment is that without this contextual information, it is hard to form an adequate analytical assessment of factors driving the behavioural dimensions of the interaction. Moreover, it is difficult to see how the principles of Procedural Justice relate neatly to this type of interaction which was all about forcing the subject to comply in a situation of high risk and threat both to police and other members of the public. This again may highlight the utility of sampling scenarios where Taser has been used in some capacity but not fired, as these may represent scenarios of lower risk and potentially situations where de-escalatory alternatives to Taser may be more apparent or where Taser is itself the de-escalatory tactic compared to a live firearm.

Beyond PJT based coding frameworks, there is also the ORBIT model. This was developed in the context of exploring how rapport between interrogators and terrorist suspects may lead to improved intelligence gathering (see Alison et al., 2013).

Key to this approach is the notion of the 'wheel within a wheel' to codify the interactional dynamics within police-public encounters. As **Figure 1.** shows below, this revolves primarily around coding behavioural indicators arranged into octants. The outer layer depicts a set of octants indicating maladaptive behaviours (e.g., octant 1's outer layer is 'demanding, dogmatic, pedantic, and rigid'). These characteristics are then counterposed by adaptive behavioural indicators within the inner octants (e.g., octant 1 is 'in charge, sets the agenda, advises'). For each BWV interaction, a coder records the presence or absence of these characteristics.

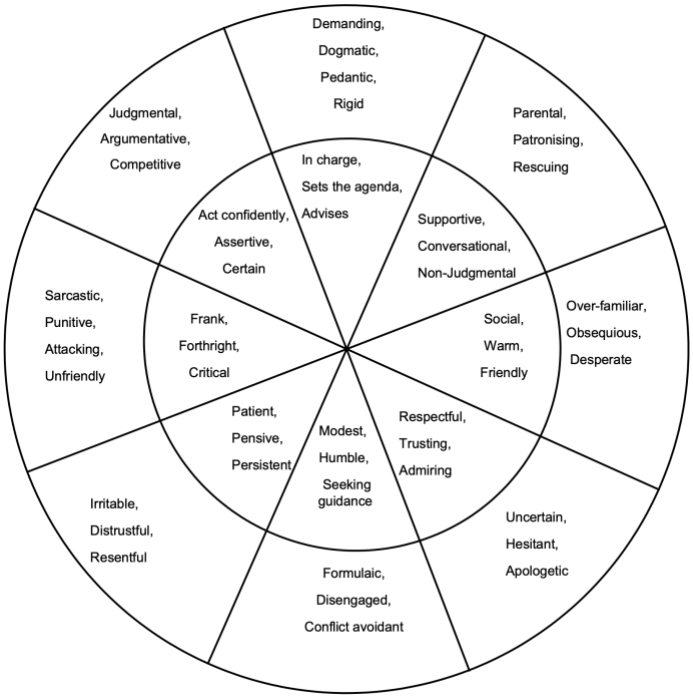

Figure 1. The ORBIT model (Alison e al., 2013) as the basis to code BWV footage of police-public encounters

Additionally, there are a series of individual and situational factors that are also coded. These include: the demographics of the officer and citizen, the length of service of the officer, the number of officers and citizens present, time of day, luminosity, the suspected influence of drugs/alcohol, weapons among other variables. We found this approach more appealing because it provides a more comprehensive framework for coding the nature of police-citizen interactions. Whilst this approach opened BWV incidents to more nuanced and detailed coding (not least by including maladaptive behaviours), similar issues applied. For example, we still found it necessary to go beyond the BWC footage and explore supplementary materials such as use of force forms to contextualise the BWV beyond the ORBIT's structured behavioural indicators.

Moreover, the complexity of coding interactions that involved multiple subjects or police officers was evident. A related complication was the changing nature of interactions meant that it was hard to fix on one behavioural category to describe an officer's behaviour. For instance, throughout a situation that was over 20 minutes in duration an officer often displayed multiple behavioural dimensions across the ORBIT's octants (e.g., judgemental, supportive, patient, pedantic). Accordingly, we often found it challenging to determine how we should code interactions and it was difficult to fully capture the fluid and changing de-escalatory and escalatory dynamics with this structured coding approach. This was especially the case in situations where one officer presented with 'adaptive' behaviours and others 'maladaptive'.

5.4.2.4. Contrasts to doctrine and training

Beyond our experiences of structured coding, it was significant how Taser was used in many of the BWVs that we observed which seemed to us to be counter to basic Taser training and doctrine. For instance, in the example given in the previous section, whilst struggling with the two masked assailants, one of the officers places their Taser unattended on a table. This is in direct contradiction to the training (see chapter six) that emphasises the importance of weapon retention to prevent subjects from gaining control of the Taser. In another scenario, several officers are in a protracted stand-off between a man who is standing directly in front of a large open window on the first floor of a house with one leg on the windowsill, threatening to jump out of it. An officer enters the house, climbs the stairs, and enters the room with a Taser drawn and shines its lasers on the man. It appeared to us that if he had fired the Taser and achieved NMI it could well have led the man to fall from the window. Luckily the lasers were enough to subdue the man who moved away from the window and was arrested. As we indicate in chapter six, Taser training specifically highlights the dangers of using Taser in situations where subjects can fall from heights, so this interaction appeared to us to be contrary to that guidance. Additionally, we were also viewed BWV that showed a male subject running away from a stolen car that had crashed during a chase with the pursuing officer firing a Taser fired at his back. The Taser connected and the subject fell to the ground and was detained. Again, such use of Taser is explicitly emphasised as dangerous and inappropriate in the training.

5.4.2.5. Summary

Our observations and analysis of issues relating to BWV are necessarily limited. Nonetheless, our exploratory review of BWV of Taser incidents corroborated some of the salient issues identified in Part 1, including data quality, accessibility, and sampling. It was our conclusion that BWV itself is not always sufficient to make adequate sense of what is happening within specific police-public interactions. To render some footage meaningful, it was necessary to cross reference it to other data sets (e.g., use of force forms, incident logs, etc.).

Moreover, when we explored coding schemes that have previously been applied to police-citizen interactions (i.e., PJT based or ORBIT model approaches) we encountered difficulties. These included accounting for the complexity of the encounters (e.g., multiple subjects/officers) and the relevance of procedural justice elements when considered in the context of certain Taser deployments (e.g., firearms incidents where officers offering 'voice' to subjects is not really a feasible option).

Finally, and importantly, our limited review of BWV revealed multiple instances where Taser was used in ways that we judged were counter to training and doctrine. For instance, there were examples where Taser use was seemingly used to secure control or compliance, or in some cases a fast resolution to the situation, rather than addressing an explicit and immediate risk to secure the safety of the public, the subject, or the officer. Whilst it is impossible to generalise given the restricted sample of BWVs that we obtained, the fact that we observed these examples in such a small data corpus is notable. It is suggestive of a potential gap between doctrine, training, and the actual practice of officers on the street (see the chapter six for an in-depth exploration of Taser training).

5.5. Part 3: Conclusion

To conclude, Parts 1 and 2 have both emphasised a series of cross-cutting themes.

First, it is apparent that sharing police BWV data for research purposes is fraught with difficulties due to numerous legal, ethical, and practical barriers. For example, university-based researchers must navigate gaining clearance to access BWV systems, as well as negotiating data protection impact assessments and data sharing agreements with each police organisation involved. Second, there is a lack of standardisation relating to how BWV footage is stored and categorised by English and Welsh police forces. This means that achieving a sample based on the ethnicity of subjects and/or officers is difficult, since it involves matching BWV footage to other police datasets such as use of force forms. In most cases, this matching would need to be done manually which would take considerable time and resource. Accordingly, access to large samples of BWV and cross-force comparisons is challenging, if not presently unfeasible.

Third, BWV transferring data to third party research organisations (e.g., universities) may need to be pseudonymised by the police. This means that there needs to be clearly agreed and defined scientific criteria applied to how incidents are sampled and pseudonymised. Our experiences suggest that with regards to exploring the dynamics of interactions that may contribute towards ethnic and racial disproportionality in relation to Taser use, non-discharge uses including drawing should be sought. This is because a) they are more voluminous compared to incidents where Taser is discharged, b) non-discharge incidents (e.g., drawing the weapon only) may be scenarios of 'lower risk' whereby alternatives to Taser may be more viable and, importantly c) previous research has indicated that non-discharge uses are where the largest racial and ethnic disparities exist (c.f., Quinton et al., 2020). This also opens

up a series of complex legal and ethical issues regarding data retention by police that would need to be resolved as this footage is often currently destroyed within a matter of routine when it is not marked evidential.

Fourth, the necessity of supplementary material such as use of force forms and incident logs. This extra contextual information was crucial to gain and adequate understanding of what was happening within the BWV and to explore officer decision-making with regards to their use of Taser. Given these key points, first we assert that improved consistency regarding how BWV footage is stored and categorised as well as better integration with other sources of data. This would allow for easier sampling of footage to enable a more detailed understanding of the (de)escalatory dynamics that may be contributing to the patterns of ethic disproportionality within police uses of Taser. For example, during the project we were given a demonstration by West Midlands Police (WMP) of their Qlik data analytics software. The Qlik system is a significant multi-million-pound investment that enables WMP personnel access to live and detailed data dashboards. The system integrates data from a variety of sources to produce interactive data visualisations. For instance, using Qlik it was possible to focus on specific policing teams and view a breakdown of Taser use by each officer. It was also possible to delineate different types of use (e.g., drawing, red-dotting etc.). Moreover, the Qlik system enabled much more efficient links between data sources (e.g., use of force forms, BWV, location data, patterns in Taser use, officer statements etc.) that can enable a much richer picture of specific interactions.

Relatedly, it appears to us that presently it would be very difficult, if not impossible, to undertake a large-scale structured coding on BWV data in the UK. Accordingly, it may be necessary to take a staged analytic approach. Any future research will be restricted by the level of funding that can be generated to support it. Thus, in the first instance it is more likely to be the case that a limited approach is all that is possible. A key element of the research will be engineering the Data Protection Information Agreements (DPIAs), and data sharing agreements and ethical approvals required to access the data. Moreover, there will be considerable challenges in getting police organisations into a position whereby they can locate and extract the footage. The relevant research organisations will need to be secure and ready to receive that data. All these processes will take time and incur costs. Given the level of uncertainty involved it would make sense to treat these issues as stage one of the research process and suggest that in the first instance data transfer may be quite narrow and focus upon a single or small number of police forces as per Nawaz and Tankebe (2018).

In the absence of a large data sample the primary purpose of structured coding becomes less clear. When this is added to the absence of a clear theoretical frame and questions this suggests that a more inductive method is much more appropriate. In contrast, when drawing on research outside of the structured coding tradition but focused on police-citizen encounters involving violence, criminality, and use of force there appears to be some considerable utility in a less structured and more qualitative approach, that draws more on the Conversational Analysis, Discursive Psychology,

and micro-sociological frameworks. All these programmes of work have extremely strong track records of well-funded and ongoing research with high impact within which video analysis of police-citizen encounters and use of force plays a central role (e.g., Lindegaard & Bernasco, 2018; Mosselman et al., 2018; Philpot et al., 2020). These approaches and their associated methods would allow a 'deep dive' approach that uses a smaller sample of BWVs but examines them empirically in granular detail. This approach does not preclude quantification and coding; it merely moves beyond relying merely upon it to embrace a 'mixed method' approach. For example, extracts of BWV could be offered in combination with a reflective interview tool, used to interview participants. This could be engineered with and cross referenced with localised data on the background and context to the interaction (e.g., intelligence, radio communications, participant histories, use of force report forms, outcome data, etc) for each encounter.

In much the same manner as some forces undertake scrutiny, BWV data can be used, in a safe space, to encourage more open subjective post-hoc reflection from the police officers and members of the public. Such an approach would help to build an understanding of the potential subjectivities that contributed to the dynamics observed within the interaction. It would also encourage discussion and associated learning on the extent to which Taser training and doctrine is apparent in the routine practices of officers on the street. Our review, whilst limited in scope, highlighted that this may not always be the case. Furthermore, using this approach, BWV data can also be used as a starting point to reflect on the broader organisational drivers that took the officer to the interaction in the first place (see chapter 7). Officers can be shown their own clips and asked to reflect on these (e.g., by asking, in this situation what was going through your mind, what led you to do this?). These intra-organisational deep dives could occur simultaneously across a sample of forces to allow some forms of comparison to emerge. Thus, to conclude, we suggest that a mixed-method framework, in all likelihood first including a case study approach able to take a 'deep-dive' into local particularities, is likely to be best placed to generate useful and actionable knowledge from BWV data. However, such research would have to overcome the substantial sampling and data extraction issues that this chapter has highlighted to meaningfully address racial and ethnic disproportionality questions.

6. Taser Training

6.1. Chapter summary

This chapter addresses police Taser training programmes as they are delivered by a sample of forces in England and Wales. The broad research objective was to understand the content and delivery of these courses and assess their potential impacts and effectiveness. Specifically, we sought to identify where improvements could be made in respect to provision relating to the issues of racial and ethnic disproportionality, as well as highlight the existing strengths of the course content and delivery. Accordingly, the chapter begins with a brief overview of the national context of Taser training in England and Wales, including an outline of the national minimum standards. Additionally, we draw upon previous national reports (e.g., Angiolini, 2017; IOPC, 2021) and coroner's conclusions that related specifically to the issues of racial and ethnic disparities in terms of police treatment and Taser use. We highlight several important recommendations from these reports and coroner conclusions that have already emphasised the need for a greater focus on disproportionality in police training, including the recommendation to involve the voices and perspectives of affected communities.

The chapter then outlines the findings from our observations of Taser training, including classroom-based sessions, weapons handling, and assessment in both the initial and the refresher training paradigms. We utilise our data to argue that Taser training sits within a national curriculum, produced, and regulated by the College of Policing. We point out that this syllabus has evolved over time in response to the previous reports (e.g., Angiolini, 2017; IOPC 2021), and coroner conclusions to improve inputs on de-escalation, disproportionality, vulnerability, the risks of prolonged exposure, as well as the need to involve the voices and perspectives of affected communities. However, our observations suggest that these earlier recommendations are not yet being adequately realised. We contend that this is because trainers lack the time, resources, and opportunity to incorporate the deep and reflexive discussion necessary to address these complex issues. The chapter concludes that these time constraints are leading to a series of missed opportunities to develop key skills among Specially Trained Officers. We also argue that, in practice, there is an imbalance in the training towards utilising the weapon in contrast to developing parallel and equally important de-escalation skills. While we concluded that additional training time is necessary, we also indicate that this will not be sufficient. It will also be important to address the problematic working assumptions observed in the training environment. This includes normalising the use of CEDs by conveying the weapon as the lowest use of force within a tactical hierarchy and downplaying some of the risks associated with its use.

6.2. Introduction

This chapter explores the initial and refresher police Taser training programmes across several forces in England and Wales. The broad research objective was to assess the impact and effectiveness of the content and delivery of these courses. Particularly, we sought to identify where improvements could be made in respect to Taser training provision relating to the issues of racial and ethnic disproportionality, as well as highlight the existing strengths of the course content and delivery.

Accordingly, we start with a brief overview of the national context of Taser training in England and Wales, including an outline of the national minimum standards. We then highlight several important recommendations from national reports and coroner conclusions that emphasise the need for a greater focus on disproportionality, including the need to involve the voices and perspectives of affected communities. Considering this context, we outline the findings from our observations of Taser training, including the classroom-based sessions, weapons handling, and assessment.

6.3. National Minimum Standards

Taser was introduced in England and Wales in 2003 and initially made available only to authorised firearms officers in 2004. In 2008, Taser was available to non-firearms officers who could be equipped with the device after undertaking specialist training. This transition was particularly important because it meant that training for Taser moved from delivery within the specialist world of firearms into a more generic police training framework. Thus, whilst the training curriculum for Taser remained the same the background and experience of those delivering the training changed considerably.

Taser training courses are delivered across England and Wales either by individual forces or via regional cross-force collaborations. In all cases, the core curriculum of the training is standardised via the College of Policing's National Curriculum which specifies minimum length and mandatory content. Candidate officers in each force are trained by 'in-house' trainers, but all forces in England and Wales have a Lead Taser Instructor, with some having more than one, who is trained by a small team of National Instructors overseen by the College of Policing. At the time of writing, further standardisation is being introduced via a national Taser licencing scheme which aims to provide further quality assurance and oversight procedures via an inspection framework managed by the College of Policing.

Under the current national framework, to carry Taser an officer in England and Wales is required to undertake a minimum of 18 hours initial training (typically delivered across 3 days). Once accredited, these Specially Trained Officers or STOs, must then undertake refresher training of a minimum of 6 hours or 1 day every 12 months. This

has been described by the NPCC as "*one of the most comprehensive packages offered anywhere in the world"* [21] and forces do have discretion to allow more time.

According to the NPCC, on completion of the course, and to pass the assessment, officers are expected to discharge a CED accurately, competently deal with role-play scenarios, justify its use using the National Decision Model (NDM), and demonstrate understanding when dealing with vulnerable person [22]. More specifically, the PowerPoint materials provided by the College cover several topics and intended learning outcomes from the course, incorporating:

- Guidance and roles in relation to Taser (including authorised professional practice (APP) relating to Taser and describing and applying the NDM).
- Taser use and safe handling (including naming and identifying the component parts, characteristics, effects, capabilities and limitations of Taser and its cartridges, demonstrating safe handling, function checks and accurate discharge).
- Dealing with vulnerable people, (including discussing factors to consider when dealing with vulnerable people and specific risk factors).
- Operational and tactical skills (including the safe carriage of Taser, appropriate tactical positions, applying tactical considerations, demonstrating appropriate oral and visual warnings, discharging Taser safely, accurately, and appropriately, identifying risks relating to Taser use and applying a dynamic risk assessment).
- Post-deployment (including correct aftercare, probe removal, identifying when subjects should be referred to hospital, post-use procedures, effective scene management and evidence recovery and guidance (APP) in relation to the use of Taser in custody.

Both initial and refresher courses are pass or fail. Candidate officers are assessed on their ability to recall a range of classroom-based content via a paper-based knowledge check. Officers are also examined on their ability to demonstrate basic competency in using the device. This is assessed via an accuracy test where officers fire at a human silhouetted target ensuring that the probes of the device hit within the body frame with sufficient pre-set parameters. Failure to achieve an adequate quality of handling and accuracy on this qualification shoot test will result in the officer automatically failing the course. Finally, officers are evaluated on their ability to utilise Taser within two or three role-play scenarios where they are assessed by the trainers in terms of their actions and justifications using the NDM. If the trainers judge that the officer has acted

[21] https://news.npcc.police.uk/releases/police-chiefs-blog-iopc-taser-review-is-vague-lacks-detail-and-ignores-extensive-pieces-of-work-already-underway

[22] https://www.npcc.police.uk/ThePoliceChiefsBlog/NPCCQuestionsandAnswersonTaser.aspx

inappropriately or not provided adequate justifications for their actions within the scenario, they can fail the course.

There are processes through which the National Curriculum for Taser gets regularly reviewed by policing stakeholders. This includes the National Practitioner Group which involves, among others, a selection of Taser Lead instructors. The College of Policing also takes recognition of recommendations from Independent Investigative Authorities including the IOPC, as well as from the Scientific Advisory Committee on the Medical Implications of Less Lethal Weapons (SACMILL). SACMILL "*provides independent advice to UK government departments and organisations on the biophysical, biomechanical, pathological, and clinical aspects of less-lethal weapon systems"*[23], including Taser. Finally, there is strategic direction from the National Lead for Taser and Less Lethal Weapons within the NPCC[24].

Taser training does not occur in isolation but is seen as part of a broader package of police training and guidance. In terms of the former, it is expected that officers will receive training beforehand on first aid, acute behavioural disturbance, and officer safety. However, a survey of officers by the College of Policing found that twenty six percent of officers felt that not enough time was spent on their officer safety course training essential communication skills and forty eight percent claimed that their training had not taught them how to defuse confrontation.[25] Consequently, a new Officer Safety Training package is being rolled out at time of writing which, together with the College of Policing's Conflict Management Guidelines, is intended to address these deficits while increasing standardisation.[26]

In terms of the latter, guidance on the weapon is provided by the College of Policing's Authorised Professional Practice (APP). This notes that Tasers are classified as "*work-related equipment (in the same way as firearms) and not as personal safety equipment (e.g., batons and irritant spray)*".[27] It states, in part, that Taser is "*one of a number of tactical options available when dealing with an incident with the potential for conflict… only after application of the NDM*".

[23] https://www.gov.uk/government/organisations/science-advisory-committee-on-the-medical-implications-of-less-lethal-weapons/about#:~:text=The%20Scientific%20Advisory%20Committee%20on,of%20less%2Dlethal%20weapon%20systems.

[24] The College of Policing has further noted that they "have recently commenced a review (of Taser training) with stakeholders including police forces, the NPCC Less Lethal Weapon group and the National Taser Stakeholder Advisory Group... The new training material will be extant as of 1st April 2022' (in IOPC 2022) meaning that all our observations are of this new material, following this review.

[25] https://assets.college.police.uk/s3fs-public/2020-09/200818-National-police-safety-survey-Final-results-1.0.pdf

[26]https://www.college.police.uk/article/npcc-and-college-policing-pledge-improve-officer-and-staff-safety

[27] From: https://www.college.police.uk/app/armed-policing/conducted-energy-devices-taser

A section of the APP also explicitly deals with risk factors, although this is relatively brief. This section totals less than 180 words[28] (although risks are also mentioned elsewhere in the document and it does signpost readers to sources of further information) and consists, mainly, of a list of bullet points of factors for officers to consider. Factors include 'repeated and/or prolonged application' and 'vulnerable people' and are listed as bullet points, with no additional information provided about each factor. However, this section does, in turn, refer to Taser training. As such, it is difficult to consider the training without considering the broader guidance around the weapon, and vice versa.

6.4. Findings from previous reports

Since its roll out in 2008, there have been several significant reports that have had implications for Taser use and its associated training in England and Wales. For example, the so-called Angiolini (2017) report was the result of an independent review of deaths in and serious incidents in or shortly after police custody established by the then Home Secretary, Theresa May in 2015. This wide-ranging review recommended that police training should better enable officers to understand the nature of racial discrimination and to "*confront discriminatory assumptions and stereotypes*" (p. 244). It concluded that:

> *"Training should take the form of a two-way dialogue allowing officers to hear the experiences of people from* [Black and minority ethnic] *backgrounds and include participation of bereaved families. This content should address institutional racism, the Macpherson report, the social context of Black deaths in custody and the impact they have on public confidence."* (Angiolini, 2017, p. 244; Recommendation 88).

Following on from this, an IOPC (2021) report was more specifically focused on police use of Taser. It was commissioned because of the roll out of the weapon and following a series of controversial incidents involving Black men and people with mental health concerns. The IOPC reviewed 101 cases involving Taser that the Independent Office for Police Conduct (IOPC), or its predecessor organisation the Independent Police Complaints Commission (IPCC), investigated between 2015 and 2020. It made seventeen recommendations aimed at improving guidance and training, particularly as this related to communication, risk, de-escalation, and scrutiny.

On this basis, the IOPC (2021) recommended that representatives of the communities most impacted by racial disparities should provide input into training and its delivery. They also recommended that the Association of Police and Crime Commissioners (APCC) and NPCC should "*support a culture in which local communities, particularly*

[28] APP is essentially a policy document and offers a summary of risk and it is the case that this material is intended to be expanded upon on in the training curriculum. We explore this further in our observational analysis of training sessions in the following sections of this chapter.

those which historically have lower confidence in the police, are regularly engaged on force decisions around Taser use and provided with opportunities to inform force policy, practice, guidance and training" (p. 17) such that these communities understand how their input has influenced change. This builds on previous recommendations from the Angiolini Review (Recommendations 88 and 95), including the participation of, and experiences from, bereaved families[29].

The IOPC also recommended that content on dealing with vulnerable groups (including mental health issues and children), the risks associated with Taser, as well as when it is appropriate to use the weapon more broadly, should be reviewed both in the guidance and in training. It recommended that Taser "*should not be used to elicit compliance with instructions or procedures, where there is no threat, or the threat has been substantially reduced*" (p. 13). The report also suggested that new conflict management guidelines should be evaluated "*to understand whether guidance places sufficient emphasis on communication and de-escalation techniques, particularly when dealing with people from vulnerable groups including children"* (p. 13).

The IOPC recommendations were therefore made in the wake of the Angiolini report which made broader proposals around training on mental health and de-escalation[30] and the risks of restraint[31]. In a later investigation, published on the IOPC website, the IOPC made an additional 'learning recommendation' to include in national training consideration of the potential impact of the Taser upon the child, as part of the officer's overall risk assessment.

Beyond these publications, there has also been the Regulation 28 report to prevent future deaths issued by the coroner following the death of a young White male called Marc Cole, who died in circumstances involving Taser. The coroner expressed concerns about, and recommendations pertaining to, the police use of Taser[32]. Specifically, the Coroner stated that:

[29] E.g., Recommendation 95: "*Police forces, the IPCC, CPS, Coroners offices and the College of Policing should consider how family experiences can be brought into training and awareness packages. As a result of the tragic experience of the loss of a loved one in police custody many next of kin have become experts on a range of issues following a death in police custody and exposing officers to these families and listening to them is an invaluable training resource for all levels of command*" (p. 245).

[30] See also (HMICFRS, 2021) for recommendations on de-escalation. Available here: https://assets-hmicfrs.justiceinspectorates.gov.uk/uploads/disproportionate-use-of-police-powers-spotlight-on-stop-search-and-use-of-force.pdf

[31] E.g., it recommended that "*National policing policy, practice and training must reflect the now widely evident position that the use of force and restraint against anyone in mental health crisis or suffering from some form of drug or substance induced psychosis poses a life-threatening risk*" (p.235, Recommendation 5).

[32] Methodological note: we reviewed all cases published on the IOPC website since the publication of the IOPC Taser report in August 2021 to capture learning recommendations for Taser training that would not have necessarily been captured in the report.

> *"It was clear that there is no understanding about the potential for incremental risk with multiple Taser activations and no training provided as to the maximum number of activations nor of their duration which is appropriate or safe. The evidence was that the training given to police officers in this aspect is as set down by the College of Policing and that it is silent as to the potential incremental risk of multiple and or sustained activations (the so called 'detention under power')."* (p. 2).

He continued:

> *"I am concerned, based upon the evidence that was led before the jury, that there is insufficient independent data as to the lethality of Taser use and that, therefore the advice and training provided to police officers may be deficient or incomplete."* (p. 2).

Furthermore, at the global level, there have been publications by international bodies, including UN and Council of Europe Committees, who have also made statements relating to Taser in England and Wales. For example, the UN's Committee Against Torture has twice commented on the UK's Taser guidance, recommending more specificity, including the need to "...*provide detailed instructions and adequate training to law enforcement personnel entitled to use electric discharge weapons, and to strictly monitor and supervise their use*"[33] (UN's Committee Against Torture, 2013, p.10).

Finally, relevant here is a recent review from the President of the National Black Police Association. Within it, George (2023)[34] recommended a higher threshold for Taser use in England and Wales to "*break the over reliance on Taser and ensure it is part of a wider response to resolving violent incidents*" (p. 2). George (2023) also argues for longer initial training and more frequent refresher training "*to allow for better decision-making, de-escalation and deployment*" (p. 2), as well as the need to further embed human rights into Taser training[35]. Finally, George (2023) also suggests that there needs to be a more rigorous selection process for Taser officers, a topic to which we now turn.

6.5. Selection criteria

The NPCC has stated that all officers involved in Taser training must satisfy a minimum requirement. Some forces may introduce other requirements including raised fitness levels depending on an officer's core role within that police service. The STO must

[33] Available here: https://digitallibrary.un.org/record/751256?ln=en#record-files-collapse-header
[34] Thank you to Andy George for providing us with a copy of his report.
[35] Additionally, to the material referenced in this section, at the time of our observations, the so-called W80 case - which concerns the correct test for self-defence in police disciplinary proceedings and hence has implications for Taser and police use of force more broadly - had an appeal ongoing, which was yet to be heard before the Supreme Court. This was heard in 2023 and the judgement is available here: https://www.supremecourt.uk/cases/docs/uksc-2020-0208-judgment.pdf

either: have been confirmed in the rank of constable, (or equivalent agency rank / grade), or be a student officer having met the requirements for student officers wishing to access CED training or be a special constable having met the requirements for special constables wishing to access CED training[36]. Accordingly, in "*line with national guidance and training, the CED user should possess sound judgement, a knowledge and understanding of the NDM to resolve incidents involving conflict, have demonstrated maturity of action in the workplace, demonstrated an ability to use legitimate force in a proportionate manner and have an acceptable Professional Standards / Complaints and Misconduct record. There is no requirement for psychological profiling to be used for selection*"[37]. The STO will be signed off by an officer of at least the rank of Superintendent and is expected to undergo a biennial eyesight test to the same level as authorised firearms officers.

6.6. The policy environment

In sum, as we have highlighted, Taser training at a local and regional level sits within a national curriculum which has evolved over time. This provides a mechanism to take into consideration the key findings and recommendations of the reports and coroner Regulation 28 conclusions we discuss above. As we have shown, these previous inquiries and reports have already emphasised the need for better levels of training for de-escalation, a fuller appreciation of the issue of disproportionality and involvement of affected communities in the training. More specifically, that Taser training provides officers with an understanding of the nature of ethnic discrimination, the social context of racism and involves genuine engagement with communities affected by Taser including bereaved people. These reports have also recommended that Taser training has a focus on vulnerability and the risks of prolonged exposure. Based on the above, it is apparent that the working assumption held by those involved in policing is that Taser training sits within a coherent suite of other training packages where officers arrive with a pre-existing set of skills. However, it is evident that the College of Policing has already recognised and been working to address the findings of its own research about the gaps in officer safety training, particularly related to communication and de-escalation skills[38].

6.7. Observational analysis

In this section, we provide an analysis of the data we gathered on the status of the delivery of Taser training in a small sample of forces. In total, we attended sessions from four initial courses and three refresher courses which contained candidates from seven police forces across England. For each of these sessions, we had between one

[36] It is also important to note that it is the individual force Chief Constables decision on who/how many they train based on their CED Strategic Threat and Risk Assessment (STRA).
[37] From NPCC (2020). *Frequently Asked Questions about TASER*.
[38] See: https://collegeofpolicing-newsroom.prgloo.com/news/college-of-policing-rolls-out-new-safety-training-for-officers

and three observers who examined the delivery of the training and engaged in ad-hoc conversations with the candidates and Trainers where appropriate[39]. The research team produced written field notes during and following each session to capture theoretically and practically meaningful episodes and exchanges. We also draw on the interviews that we conducted with police officers which are discussed in detail in the next chapter. Where we draw on these interviews, we assign each participant a number. In line with previous chapters, we include this number in parentheses after each extract to demonstrate the fact that quotations were derived from multiple sources[40]. Alternatively, where we use verbatim quotations from trainers or others within the sessions that we observed these extracts are followed with 'fieldnote' in parentheses.

6.7.1. Infrastructure

We visited four training facilities, three of these were single force facilities and one a regional centre delivering training for four regionally co-located forces. One of the single force facilities was a new purpose-built facility designed for a broad range of training requirements but was being used primarily for public order and Taser. It was a relatively new building that was reasonably well equipped to accommodate the three major components of Taser training: that is, the classroom-based sessions, passive target shoots and live play scenarios. However, others we visited were less well located and equipped. For instance, the regional collaboration facility we observed is located on a former RAF base. The old hangars are collapsing so are unsafe to use. Consequently, all the training takes place in several portacabins. The training we observed at the regional centre occurred during a hot sunny period and the classroom had poor ventilation and no air conditioning and so it was not a comfortable learning environment. The lack of financial investment in the training infrastructure was palpable to us and surprising given this centre serviced the needs of several forces. In another force, training was conducted in a range hired from the army due to a lack of suitable premises in force. While the range itself was used only by Taser training participants, at times shared spaces such as corridors, which were utilised during scenario exercises, became cramped due to others using the facilities.

The trainers we met and spoke to were all very welcoming and appeared candid. It was clear they were all highly motivated and very competent individuals with a comprehensive depth of background knowledge about Taser and its policy environment. We want to stress that it is our judgement that the trainers we met and observed took a professional approach to their work and were very conscientious and reflexive about the training they delivered. They were generally both Taser and public order trainers but as far as we were aware none were firearms trainers. They were

[39] Ad-hoc conversations referred to in this chapter and the next took place during observations of either training or officers on duty, with the consent of the officers involved.
[40] For further details on the analytic approach, please see the accompanying 'Qualitative Research Appendix' document.

often able to give highly impactful accounts of occasions where they felt Taser had been beneficial to themselves and their colleagues and tended to be highly positive about the weapon. They were often less enamoured with the environment they were being asked to deliver that training in and had much to say about the limitations they were regularly forced to confront. For example, it was the case that during our conversations with trainers that they too recognised that officer safety training was deficient in the areas outlined above, which had knock on effects for them because many of the candidate officers they were educating lacked these basic skills.

For most of our observations, it was apparent that the firing range was a relatively small space. Correspondingly, when several candidates were practising the different stances and verbal instructions the environment became congested and loud and it was our conclusion that it was not an effective learning environment. Sometimes the basic resources available for trainers were also inadequate meaning they often had to improvise by mimicking activity because they lacked props or basic equipment. Trainers in the regional centre we observed were also reliant on Taser batteries that had been discarded from operational use because they could no longer hold an adequate charge. Consequently, the trainers and candidates were frequently having to interrupt and break away from their training to change their batteries.

6.7.2. Candidate Officer Selection

It was notable that our sample of candidate officers described an array of reasons for being on the course, ranging from self-motivated volunteering to being put forward based on supervisor approval or recommendation.

As examples, one response officer we spoke to described taking the course because he had been assaulted twice in the last year and was individually motivated to access Taser due to its potential protective benefits. Another officer was part of a force wide unit and was accessing the training because he wanted to move across to Response and saw being Taser trained as an opportunity to help achieve this. In other words, the motivation for being present on the course was more a form of career progression. In contrast, two neighbourhood officers we spoke to worked in a busy urban centre where there was high prevalence of incidents involving knives. At the time we spoke to them there were only two officers in their team trained with Taser which was not sufficient for the unit to deal with the number of circumstances where STOs were required. In this respect, their primary motivation was about stepping forward to fill a tactical gap for their unit. Others spoke of selection as an acknowledgement of officer competency or even a reward for good endeavour. As one supervisor put it:

> *"When I was a Sergeant, … you would just generally pick people who were maybe performing well, working hard. It was almost a bit of a bonus I suppose because it was an additional piece of training. So that was often the case as well if you work hard, you get your training, you get your Taser course, and that was basically it."* (Participant 1).

It was evident that several candidate officers had experienced a significant delay in accessing the training, with some waiting up to two years. Consequently, once officers have been selected to attend the course, whatever the underlying motivation, their presence on it meant that there was an apparent pressure to become qualified. Nonetheless, small numbers of candidates attending the courses that we observed did fail or voluntarily withdrew and trainers made clear that there was no shame or negative career implications from doing so. For example, on one of the initial training courses we observed, a candidate officer voluntarily withdrew on the first day after feeling uncomfortable with using Taser. On another initial course, an officer was failed on the third day. Finally, on a refresher course that we observed an officer had previously failed and had returned to take specific aspects of the course again.

As with any training and educational context, we also assume that the high demand and requirement for STOs creates significant pressures for the trainers to achieve consistently high pass rates. Moreover, the selection processes, the limited spaces on the courses, the operational demands, and the perceived professional status that Taser carrying affords, all function in combination to create a significant normative pressure and an associated professional stigma attached to failing the course. As one Taser trainer succinctly put it:

> *"There's the stigma of going back to where you work, having failed, which nobody wants to do, and what are your peers going to think about you? What's your management going to think about you? So, there is an extra bit of pressure on a cop that's carrying Taser."* (Participant 2).

6.7.3. Classroom based inputs

6.7.3.1. Description of course content

The classroom-based aspect of the course is where most of the input is provided on the policy, police powers, technicalities, and risks of Taser use. The first session of both the initial and refresher courses that we observed began with a video input from the NPCC lead reassuring and reaffirming the legitimacy of responsible Taser use in policing. This was followed shortly afterwards by a video input from a representative of Amnesty International that was used in one session we observed as a basis for a discussion of the relative merits and legitimacy of Taser use in relation to other tactical options of baton, cuffs, and irritant spray. It was made explicit that the working assumption underpinning the training was that Taser is one of the least harmful uses of force options that officers will have available to them once they become STOs. Such assumptions and views contrast markedly with the community voices presented earlier on in this report (see also IPCC, 2014).

The first classroom-based session on the initial course then provided basic information on how Taser functions when correctly fired to create Neuro Muscular Incapacitation (NMI). The session moved on to deal with safe handling and introducing the officers

to the basics of how the weapon functions including the cartridges. The session then discussed negligent discharge and standards of professionalism in handling and operating the device, covering issues such as holstering, drawing, arcing, laser dotting, firing, contact mode and automatic activation of BWV. The clear implication here was that Taser posed considerable risks to the officers themselves through lax handling of the device. Candidate officers then undertook their first weapons handling practical session.

In one of the initial courses that we observed, day two began with another classroom-based session which began with a focus on the NDM. The trainers then introduced concepts and acronyms such as Identity, Capability, Intent, and Immediacy (or ICII) as a framework for making assessments of any threats that members of the public might pose. Such assessments would then flow into their rationale for why use of Taser could be justified. Course content in this section also covered the European Convention of Human Rights (ECHR) and the Human Rights Act (1998)[41], where the focus was on Articles two and five of the Convention, the right to life and prohibition of torture. Minimal use of force, officer fitness for work and individual officer accountability were also covered. Moreover, the College of Policing Code of Ethics and four core roles of a constable were referenced. The slides then explored minimal use of force.

Day two of the course also covered dealing with vulnerable people. In the session we noted that BWV footage was shown of a woman holding a knife suffering a mental health crisis. The situation in the video rapidly developed and culminated with the officers firing Taser to successfully incapacitate the woman as she pulled the knife towards her throat. As the discussions continued, people with autism were highlighted and candidate officers were given a list of behavioural indicators and effective strategies to manage interactions. The slides emphasised severe medical conditions including Acute Behavioural Disorder (ABD) and the impact that physical disabilities may have on officer encounters with members of the public (e.g., someone who has hearing difficulties). There was also a video input from an NHS Trust in London where a mental health professional, who had previously suffered from an acute mental health crisis, talked about their experiences. The video contained key messages of how officers could deal with a person suffering from mental distress: effective communication and information on the appearance and behavioural indicators for officers to look out for.

A second video, again presented by an NHS mental health professional, then covered de-escalation, and using verbal techniques to bring someone who is in a heightened situation back to baseline. This included a monologue on how people perceive officers when they are drawing a Taser at them and more generally emphasising the need for officers to be reflexive. Tips for officers included addressing barriers to effective communication (e.g., language). A key aspect of both video inputs was the importance of time to help to effectively de-escalate situations. This was formalised in the session

[41] See: https://www.legislation.gov.uk/ukpga/1998/42/contents

by the use of the BUGEE mnemonic to help officers understand the basic principles they should consider in Taser use: **B**e prepared to back off, **U**se of effective cover, **G**ive space and time if possible, **E**arly negotiation and **E**vacuate the immediate area. The session then explored potential environmental and situational factors and dealing with 'subjects' deliberately trying to provoke a use of force response. The final part of the session on vulnerable people revolved around children and people of small stature, the medical issues in using Taser in these contexts and the psychological impacts of using it while in the presence of children.

The last component of one of the classroom-based sessions we observed focused on the safe carriage and use of Taser. For example, the importance of carrying the weapon on the non-dominant side to aid drawing the Taser was emphasised. There was then a section relating to risk factors that influence and sometimes preclude the use of Taser (e.g., flammable materials, explosive materials, water hazards, falls from heights were all highlighted and discussed). It was also stressed by the trainers that Taser should not be used as a capture or compliance tool against a fleeing subject. This discussion of risks was reinforced by showing and critiquing an incident captured using BWV footage where a person was subject to Taser despite being at a height and therefore at considerable risk of a fall. Multiple firings and the potential for having to reenergise the device were then briefly discussed. Reasons for ineffective firings were considered, including the probes being too close together to produce an effective circuit and the maximum and optimum ranges to achieve NMI being between 7-15ft away from the subject. A final aspect of the classroom-based sessions included topics such as probe removal, monitoring and review, forensic considerations, custody aftercare and scene preservation in the context of a Taser firing.

6.7.3.2. Analysis of the classroom-based sessions

The College of Policing has stated, in response to the IOPC's recommendations, that "*existing training… already covers the assessment of risk, including some common examples (and) in the absence of specific gaps being identified this point is already well covered in training*" (IOPC, 2022, p. 118). However, as noted above, within the sessions we observed, a key issue was the lack of time available for important topics, including but not limited to risk, and for discussions of these.

For example, in one of the refresher courses we observed the slides on Taser's impact on the body, medical issues and risk factors, vulnerable people, mental health, children, autism, de-escalation and BUGEE, disproportionality, repeated and prolonged exposures, warnings, where to aim, how to handle weapons, disconnects and features of the Taser X2 model, use on animals, how to handcuff people while Taser is used on them, after-care, medical assessment and use of force reporting were all covered in approximately one eighty minute session, with many slides displayed for less than a minute.

As several Taser trainers argued in their conversations with us, the mandated content they cover has recently expanded in response to national incidents or important

thematic inquiries, such as those discussed above. Yet the minimum contact time for the course had not increased accordingly. In other words, the range and depth of issues they were required to cover within the mandated curriculum had increased but the time available to deliver that material in the classroom had not. Trainers described how they struggled to balance this new classroom-based content – focused on disproportionality and vulnerability – against their requirement to also teach core practical skills. This led several to express some cynicism, not because they did not want to deal with the new content, but because they judged they were not provided with sufficient time to do so. As one Taser trainer argued:

> *"So, something will happen. It will be centred around, let's say it's mental health, or disproportionality, or people at height, or whatever it is. And the College's reaction to that is, quite often, to go, 'right, we need to put that into the package'. Well, putting that into the package decreases the time around actually the physical doing, because there's a give, isn't there? So, that awareness is great, but there's never. So, let's say that we want we want an extra hour on disproportionality into the package. We've lost an hour of something then, because the minimum time never increases in the exact same amount."* (Participant 2).

While in theory the College training package is a 'minimum standard', and there is nothing to stop forces increasing the amount of time given to Taser training, it can be challenging for forces to go beyond this and run longer courses, given the difficulties in removing officers from availability for shifts as Taser has become more widely available. The risk then is that what is intended as a minimum standard too often becomes the accepted, overall standard.

While the content of the classroom-based sessions provided input on a range of mental health issues and de-escalation, these revolved primarily around video inputs that lasted over 20 minutes. Due to the format for this component of the session, the trainers were less involved in the delivery and these sections of the course were notably less interactive. Some trainers we spoke to expressed concerns about the potentially patronising tone and lack of value of this form of delivery. For instance:

> *"There are a lot of things in there, there are a lot of things in that package that are quite insulting, actually, to different police officers. Because they're preaching about things, and this is these guys' and girls' bread and butter. They deal with people day in, day out. They know how to de-escalate. They know what mental health triggers are. They know what certain behaviours look like. But I know why it's been put in, because the College of Police can go to scrutiny groups and independent advisory groups and say we've put this into training. But there's never any trade-off for it, as well. So, yes, we're really well-informed, but we're actually rubbish at the actual practical side of it. So, I'm a well-informed*

> *driver, but I'm worse at driving. It just doesn't make any sense, does it?"* (Participant 2).

This risked a situation whereby the material was too basic and 'insulting' for those officers that already 'know how to de-escalate' – missing opportunities to develop their skills further – while at the same time not sufficient for those officers that did not have such skills.

The issues we observed were not limited to time, however, but also reflected working assumptions and beliefs around Taser (both implicit and explicit) that were, in turn, conveyed to candidates. As we note above, during these classroom-based inputs, a wide-ranging array of dangers associated with using Taser were covered – but our observations record that discussion tended to focus on the conclusion that when used in the right way the weapon poses low risk to members of the public and police officers when compared to other use of force options (see also previous research in the USA: De Angelis & Wolf, 2013; and in the UK: Dymond, 2022). This was even in the case when incidents were discussed where members of public had died. For example, in two of our observations, discussion focused on a high-profile incident involving the death of a Black male, where the officer involved had subsequently been convicted of a criminal offence in relation to the incident. During these discussions the trainers emphasised that the primary issue causing death – and subsequent conviction – was not Taser but other uses of force.

We also note, that underpinning these discussions was an emphasis not so much on the risks to the subject but on the importance of officers being able to adequately justify Taser use when they deploy it. Correspondingly, we observed relatively little input on the issue of racial disproportionality, or on the wider threats to police legitimacy posed by Taser use. We note that the government's 2021 update on progress in implementing the Angiolini report stated that the College of Policing "*has developed a national curriculum on stop and search…* [which] *covers the historical context of the relationship between the police and minority groups (including the Lawrence Inquiry) and practical skills (including how to manage encounters and identify and challenge biased decision-making). These are also addressed in the curriculum for new recruits as part of the Police Education and Qualifications Framework*" (Section 2.56) [42]. This notwithstanding, in the Taser courses we observed, we witnessed inadequate take up of recommendations from the IOPC and Angiolini reports to provide training on the nature of racial discrimination, discriminatory assumptions and stereotypes, institutional racism, the Macpherson report, the social context of Black deaths in custody and the impact they have on public confidence, or of their recommendations to include inputs and experiences from representatives of the communities most impacted by racial disproportionality and bereaved families.

[42] Available here: https://www.gov.uk/government/publications/deaths-in-police-custody-progress-update/deaths-in-police-custody-progress-update-2021-accessible

Moreover, while there was some input from external groups on the training course (including videos from Amnesty International and an NHS Trust detailed above), the opportunity for such stakeholders to input into the training was described by a representative from the College of Policing as done on an "*ad hoc basis, but not necessarily on a routine basis*" (Participant 3). The representative from the College further noted, with regards to including lived experience on the course that:

> *"There's no immediate plans to but, again, it's something we would perhaps consider. I mean you do get a flavour of that. But whether we could do more of that but it's trying to do that in an objective way if that makes sense".* (Participant 3).

Indeed, as a senior officer with responsibility for Taser noted:

> *"I think we're making strides, but I don't think we're there yet. I don't think we get enough first-hand experience from; you know, people with lived experience of being Tasered. People with lived experience of being from a diverse community and having, you know, maybe a preconceived distrust from the police or similar. And I think these kinds of inputs are really, really important for potential candidates for Taser and for officers in general".* (Participant 4).

Such reflections concur with our observations. For example, during the two-hour classroom-based session on one of refresher course we observed there was one slide given over to Home Office Statistics on racial and ethnic disproportionality. While these served as a basis for a short discussion, the fact that they were national statistics meant the conversation was abstract, lacked any conclusive focus and was concluded in just a few minutes. This is perhaps not surprising, given the relatively limited content provided to the trainers to generate in-depth discussions, coupled with the lack of time to facilitate this dialogue. This is a problem made particularly acute given the assumption within the national curriculum is that the slides should act as a basis for such extended discussion. As a representative from the College made clear:

> *"All we've done* [at the College of Policing] *is put the raw headlines into the PowerPoint to say this is the problem. That was mainly to provoke a classroom-based discussion, if you like, to get officers talking about it and to put it on their radar. So that they can recognise that there's a potential issue here. Now, that's not to prejudge what the potential causes are, but it's to say right, you need to, you need to be aware of this, you need to be conscious of this".* (Participant 3).

The classroom sessions in the courses we observed were relatively standardised and we noted missed opportunities to critically reflect on the topic of disproportionality due, in part, to the time constraints. For example, one police force had recently dealt with a high-profile incident involving Taser where public concerns about prolonged and

repeated discharge were salient. However, this incident was not mentioned at all to the officers in the training we observed at that force, even when general issues around prolonged and repeated discharges were discussed. Moreover, during our observations, both candidate officers and trainers sometimes misinterpreted the concept of disproportionality. More specifically, the discussions we observed tended to explore disproportionality in the human rights sense (i.e., discussed it as a matter of force being proportionate within a specific interaction) rather than in a statistical sense (i.e., that Taser is used to greater extent against some minority populations relative to their overall presence in the population) and as such the discussion ended up challenging the validity, and ultimately dismissive, of the national statistics. It was evident that some trainers themselves needed to be better informed about what racial and ethnic disproportionality is, and the extent of Taser disproportionality in their force, so that they are more equipped to facilitate in-depth discussion and field the challenging questions candidate officers raise about this highly complex issue. Moreover, reflecting the standardised, prescriptive and time-limited content, the candidates were presented with national statistics rather than more localised data. Consequently, the discussions during the training we observed rarely explored the impacts of Taser on public trust and confidence and police legitimacy. Perhaps a better approach would be to invest more time and, as the College guidance dictates, include statistics and relevant incidents for the force in question such that matters could be grounded by local contexts, drivers, and issues[43].

6.7.4. Weapon handling

6.7.4.1. Description of the practical course content

Despite its apparent technological simplicity, Taser is a complex device that is not straightforward to handle or to use. As one trainer colloquially described it "*Taser is a thinking person's tool*" (Fieldnote), in part because of its many applications (e.g., visual deterrence, drawing, aiming, red-dotting, multiple types of discharge, etc.). There are also multiple technical aspects to the device and safety checks that must always be considered by an officer when taking it from the armoury (e.g., checking for fractures in cartridges, test arcing, etc). Therefore, developing the officer's familiarity with the device and the protocols for handling it is a key aspect of both the initial and refresher training. While some of this knowledge is delivered in the classroom, most is delivered during practical sessions involving handling of the weapon. Indeed, day one of the initial courses we observed involved practical sessions with trainers introducing the candidates to the weapon and its basic functions. This included loading and safe handling, as well as rote learning important formal tactical positions (e.g., a discreet safety position that involved placing their hand over the Taser and placing the device

[43] It should be noted that the trainer notes provided to forces require that training does include localised data to better inform the discussion. Whilst it was not a feature of the observations undertaken, many forces will no doubt utilise such an approach.

on their breastbone). This section of the course aimed to provide officers with the foundational confidence and competence in using Taser. Particularly, that they can operate the device's various controls and settings in the context of it being deployed in earnest.

Having covered the basics of handling the Taser, the candidates were then introduced to firing the weapon at static silhouetted human targets. These exercises involved officers following the trainer's commands and becoming comfortable in engaging 'subjects' from a variety of positions (e.g., kneeling behind cover). Aspects of these drills were designed to introduce a level of pressure, cognitive load, and decision-making. For example, in some courses, candidates were ordered to physically exert themselves through star jumps and undertake difficult mental tasks before firing quickly at the targets. Throughout these exercises, trainers provided detailed individual feedback on aspects of handling and accuracy to each candidate and provided demonstrations about how the weapon can and should be deployed. On one of the observed courses, day one then ended with a series of role-playing scenarios designed to examine how officers responded to pre-defined encounters with members of the public. Although these reactions were not formally assessed, they did appear to us to be part of the rounded assessments that trainers were making of all the candidates as they progressed through the course.

Day two introduced more practical sessions that added further complexity, with the first practical session revolving around shooting a moving target. This involved a trainer in a protective suit playing the role of a member of public who emerges through a door demonstrating a clear and obvious threat (e.g., moving towards the officer at pace whilst wielding a bat). The candidates were again informally assessed by the trainers on the extent to which they handled the Taser safely and appropriately and candidate officers were provided feedback on the accuracy of their probe placement. Day two then moved on to a session on arrest and restraint tactics. Here the trainers emphasised the importance of clear and concise verbal commands, or strong 'tactical communications', as well as the need for STOs to command the situation physically and psychologically. Accordingly, one trainer explained that a key objective within this context was to "*get them* [the 'subject'] *into a position of disadvantage*" (Fieldnote). Finally, day two ended with four complex role-playing scenarios. These were designed to test the candidates' theoretical and practical knowledge, skills under pressure and mimic part of the formal assessment on day three. For each scenario, the candidate entered the firing range and was instructed by the trainer to stand facing a wall with their eyes closed. The trainer then provided a quick briefing on the scenario before shouting 'exercise live'. Following this command, the candidate had to turn, and act based on the information they had received and their evolving interaction with another trainer who was role-playing a member of the public.

Thus, throughout the practical side of the course, there was a graded and linear progression in the use of force from tactical communications to unholstering to red-dotting and firing. This was then combined with increasing complexity in terms of

introducing situational decision-making under increasing amounts of pressure (i.e., when and if so in what form to use Taser).

6.7.4.2. Analysis of the practical course content

According to our observations, the practical elements of the course had four primary objectives. The first was to ensure that candidates were competent and confident handlers of Taser, particularly under conditions of stress. In this regard, it was notable that the trainers were skilled and proficient in introducing increasing levels of complexity and decision-making. Yet our observations also indicated that despite this logical progression, some candidates struggled with the physical handling elements and in combining these fine motor skills with decisions around when and in what form Taser should be deployed in the practical scenarios. This was particularly pronounced when considering the refresher courses that we attended. For instance, our observations suggested that there was remarkable variation in the extent to which officers remembered foundational tactical positions or basic operational functions. This was compounded by contrasting the candidates with the confidence and competency of the trainers. For instance, a question posed by a trainer in one of the refresher sessions was whether any of the cohort remembered how to put the Taser into stealth mode, with no candidate being able to answer correctly.

This lack of knowledge and confidence may partly reflect the fact that a lot of officers simply do not use the device between training courses. Reflecting this when a cohort of the refresher training was asked, only one officer had used the device in the last twelve months, and even then, only to draw it. As a STO remarked:

> *"For the refresher, it's just good to get used to using it again, because all you'll do is get the Taser out, do a spark test, put it in your vest, and that'll be it. That's the most you do with it for the whole year sometimes* [between training courses]*."* (Participant 5).

A second key objective seemed to revolve around providing a level of reassurance to candidate officers regarding the risks of Taser; to promote the use of the device as a viable and often primary tactical option in conditions of risk, threat, and stress. It was our conclusion that the course functioned, both explicitly and implicitly, to (re)assure officers that the firing of Taser is safe and that types of use that may carry enhanced risk – such as prolonged and / or repeated discharge – are both acceptable and justifiable under specific circumstances.

For example, while slides about the issues of prolonged exposure were briefly covered in the classroom sessions, and this is mentioned briefly as a 'risk factor' in the guidance, it is our view that the way in which the practical sessions operated risked normalising prolonged use**.** Officers were given training on how to over-ride the 5 second cut-off of electricity and how to extend the cycle for a longer period. When practising this skill on the range, candidate officers often kept the electricity flowing for

well over 10 seconds on several occasions. On one, we noted a trainer commented "*when do we stop extending? Not necessarily once we have picked up the weapon, we might want more space from the subject to get to a safe place before we stop the cycle"* (Fieldnote)*.* On another occasion, officers were advised by trainers to keep the electricity flowing until the person was handcuffed – a comment which also underscores the importance of officers having competent handcuffing skills if the duration of the discharge is to be minimised; a skill which was not practised, or assessed, on any of the courses we observed. During this session no reference was made to the risks of repeated exposures, the coroners' findings detailed above, or the IOPC's finding that Black people are more likely to be Tasered for prolonged periods.

Relatedly, officers were given messages that minimised the impact of laser-dotting and which risked implying it was not a significant form of force. For example, one trainer told participants that *"if you red-dot you avoid any form of conflict*. *The alternative is using higher force"* (Fieldnote)*.* In this regard, as one trainer put it, candidates were taught to "*sell the device*" (Fieldnote) and to use it to present a "*positive first impression before you have to use any of use of force*" (Fieldnote). In many ways, the training context was functioning to deliver an understanding that Taser was an effective, useful, and safe device – for both those subjected to it and the officers involved – compared to the other tactical options. As one Trainer put it: "*why use* [irritant spray]*, an imprecise weapon, when you have a precise weapon to hand* [Taser]"? (Fieldnote).

Indeed, the training we observed often seemed to us to imply that it was the non-use of Taser that was problematic and potentially dangerous across a relatively broad range of situations. For example, when faced with a scenario involving someone with a knife who had stated their intention to self-harm, officers were told by a trainer; "*if you don't intervene, you could be criticised if the self-harming person died*" (Fieldnote). Another trainer noted the underlying rationale for such assertions.

> *"They* [the candidates] *could be in coroners court and asked, 'could you have taken action to stop him killing himself?', family are saying 'why didn't you do something?'. We have a duty of care to him, he is self-harming, vulnerable, potentially if you use it, you have saved his life. We've had examples of people talking* [instead of using Taser] *and then they've killed themselves."* (Fieldnote).

This was a particularly striking statement given the existence of cases in the coroner's court which have involved Taser. Nonetheless, as one Trainer succinctly put it, "*it is easier to justify the use of it* [Taser] *than to justify inactivity*" (Fieldnote) in certain contexts. In this way, during our observations risk around the use of force was often framed in such a way that not using Taser was portrayed the risky option, and the decision not to utilise it becomes the decision that officers must justify. Accordingly, part of the reassurance that the trainers provided to the candidates was to convey the fact that it is the reasonable assumptions by officers which are not just necessary but

also a sufficient basis to use Taser (e.g., it is the belief that someone may be holding and about to use a weapon that is required regardless of whether a weapon is present). Indeed, during the assessment on one refresher course a candidate officer fired a Taser at the actor in the scenario when he was merely looking inside his bag. Even though the trainers were concerned about the fact that this firing took place too early because no weapon had been visible, the candidate passed because they were able to articulate that they had assumed a weapon was present. Nonetheless, in the training courses that we observed, such examples and discussions were rarely accompanied by any explicit recognition or exploration of the ways in which assumptions may, themselves, be impacted by ethnicity and other factors.

A third key objective seemed to us to be about teaching the candidate officers how to take control of interactions through Taser. In effect, by having and deploying Taser officers can take a dominant position in the interaction with 'subjects' using it alongside 'tactical communications' in ways that are proportionate to situations of high threat and risk. For example, trainers on one course we attended suggested that "*Taser is designed for a reason … to alter people's attitude towards you*" (Fieldnote). Therefore, whilst it was emphasised within every session that Taser is not to be used as a 'tool for compliance', candidates were taught to use it in ways that leave 'subjects' with little choice but to adhere to the commands of officers.

This was visibly difficult for some officers who struggled to transition from the way in which they are used to policing without Taser. For instance, one Response officer we spoke to on an initial training course suggested that she usually negotiates and "*talks her way out of trouble*" (Fieldnote), including getting knives off suspects in the past. Accordingly, she found it difficult to 'overwrite' her communications to the more assertive and domineering style taught on the course. Another candidate officer attending an initial course we observed decided to leave at this point because she apparently felt uncomfortable with the way the device changed how she might need to interact with members of the public.

Correspondingly, de-escalation was not a prominent feature of the training and where it was evident this was very much about achieving compliance to police instruction by the subject. As suggested above, there was a sense of a linear progression in the use of force with Taser (i.e., from tactical communications to unholstering to red-dotting to firing). Accordingly, as the course progressed there was less emphasis on de-escalation within interactions. This related to the fact that the trainers we spoke to did not always see it as their role to teach or assess candidate officers' de-escalation strategies or tactical communications but rather to teach the competent use of Taser. Indeed, the types of scenarios that candidates faced almost invariantly culminated in the use of Taser whilst only on a few occasions were candidate officers critiqued for firing. In this respect, de-escalation and doing 'something else' to manage situations

in a way that did not involve the deployment of Taser were effectively precluded[44]. As one Taser trainer explained:

> *"The scenarios are difficult. So, if you imagine when an officer comes on a course, we have to assess them. Now, it might seem strange to you, but I'm not there to assess how they talk to people. I'm not there to assess how they stand. I'm not there to assess their uniform. I'm there to assess Taser. So, in a way, I have to write a scenario that puts their arm up their back that makes them use a Taser. So, they're very, much what I would call, gift scenarios. It's not a big thinker. It's basically, you versus somebody else, and that somebody else is going to be presenting a really obvious threat. It's going to be a big threat to us, so it's going to force you to go to that tactical option. They're told they must use that."* (Participant 2).

However, scenarios that can be resolved without discharging Taser – and, indeed, without the weapon even being drawn – can play an important role in ensuring that officers are assessed not only on their ability to use the weapon, but on their ability to refrain from using the weapon, and to de-escalate situations without using force (see also Dymond, 2022 for similar findings on Taser; Cushion, 2020 and Rajakaruna et al., 2017 for studies on the importance of scenario-based training in use of force more broadly).

Relatedly, a fourth objective seemed to be to teach the officers how to justify and defend its use. In this regard, while the APP refers to the use of the NDM in decision-making, the focus on the NDM during discussions between candidate officers and trainers seemed to us to be not merely about its role as a live decision-making tool but also its utility in legitimising, defending, and justifying the use of Taser. In other words, the NDM was a way to protect officers who have used Taser. For example, one trainer on a refresher course noted: "*Take whoever is reading your* [NDM] *statement on a journey and you won't go to court ever. If you go to court a lot, you are not good at writing statements*" (Fieldnote). In other research, Taser trainers referred to the NDM as "*a get out of jail-free card*" (Dymond, 2022, p. 136; see also Buttle, 2007, for a discussion of similar dynamics in officer safety training).

A final point of note is that the key issues explored in the classroom-based sessions were often not sufficiently featured within the practical aspects of the course. For example, the depiction of mental ill-health within the scenarios was not nuanced but reliant on relatively stereotypical portrayals (e.g., a person with a knife to their wrists).

44 The College, in their response to the IOPC recommendations stated that "*we believe this point (on compliance) is already clear in training but will... seek opportunities to reinforce training and guidance where necessary*" (IOPC, 2022, p. 118) and these observations suggests there are further opportunities to ensure that this message is further underscored in the practical parts of the course.

This was highlighted as problematic by one STO that we spoke to who had previously worked for the NHS in a psychiatric secure unit:

> *"My background prior to policing was mental health. So, I talk to people and it's one of those where there was a scenario where he's got a knife to his wrist and it's just superficial cuts. And I'm standing talking to him and he was like* [the Trainer]*, it's a Taser course. He's got a knife. He's cutting his wrists. And I'm like, yes but that's superficial. If he was gouging his veins out, I'd probably be a bit more, and he's like* [the Trainer], *just Taser him. But, for me, if somebody is literally just tiny little cuts and it's attention-seeking rather than anything else, if they've got a knife to their wrist and you Taser them, they suddenly lose all control. Whereas if you can just keep talking to them, my tolerance with mental health is probably higher than that of some of my colleagues."* (Participant 6).

Additionally, issues of racial and ethnic disproportionality in Taser use did not feature within the practical element of the course we observed at all. A Senior officer with responsibility for Taser noted:

> *"The training guidelines have recently changed. There is loose mention of unconscious biases, of implicit biases… there's mention of race relations and the importance of that and making decisions based on the NDM. My view is we could do more. I think we need to challenge ourselves in the operational context. Scenario-based training should mandatorily involve unconscious bias training* [and] *look to mitigate disproportionality. We should use stooges of different minorities when we're doing simulation-based training. We should mitigate risks with simulation training, by testing unconscious biases, potential unethical decision-making. We should promote better reflection when we're training. And I've certainly tried to push our organisation along those lines."* (Participant 4).

Indeed, this reflects a broader point, that there was very little contextualisation within the scenarios presented to candidates. Instead, officers were taught to react to certain behaviours (often clear and obvious threats) within relatively abstracted situations. This reflected a broader difficulty of creating a training environment that bears resemblance to 'real-life' scenarios, particularly within the resource constraints mentioned earlier. As one STO argued:

> *"It's very in your face* [the training]*, as in, everybody's going to be carrying a knife and everybody's going to be a threat, when that's actually not the case. So, they say to you, you should be the required distance away from somebody when you're talking to*

> *them. But that doesn't happen out there* [in 'real-life' situations]. *Because you get into conversations with people. And it's just not really, it's not polite. And it's not what happens and not everybody is a threat. But when you're on the training, you have to assess everybody as a threat. So, even somebody walking towards you. Like the one scenario was somebody walking towards you with a map, and they had a knife underneath which they were going to hand in. So, they were holding the blade and giving you the handle. Now, if somebody was doing that out there* [in a real-life situation]*, yes, it's a little bit dodgy. But I'd allow somebody to walk up to me holding a map because that's not threatening. So, it's that sort of sense where everybody is a threat during the training. And I can see their mindset of where they're coming from but that's not applicable to the outside world."* (Participant 7).

6.7.5. Assessment

6.7.5.1. Description of the assessment

The assessment of Taser training comprises three distinct but interrelated components: 1) a written knowledge check; 2) a qualification shoot; and 3) assessed scenarios.

The knowledge check component aims to assess key aspects of the curriculum that are primarily delivered through the classroom-based inputs described above through a written test. Day 3 of the initial course largely revolves around the latter two practical aspects of the assessment. For example, our observations of one course assessment began with function check, as well as a run through the formal tactical positions. The candidates were then afforded time to practice their qualification shoot. On one course we observed, this part of the assessment was split into four 'details' that all took place in the firing range, utilising a static silhouetted human target board. The first detail was a function check. The second was a 'stealth' detail three metres from the target where the candidates had to shoot and extend the charge (i.e., reenergise the device) without the aid of the red-dots. The third detail involved a shot from two metres, a 'tactical withdrawal' back to the three-metre line and then a second firing and re-energising). The final detail was from 4 metres with an initial timed shot (the candidates had to accurately hit the target within three seconds). The candidates then had to accurately fire a second shot on the leg of the other side of the target which was not timed. Within this process, those candidates who failed a particular detail were afforded a second and final opportunity to pass.

Candidates who passed the qualification shoot then progressed to the assessed scenarios where they had to successfully navigate two different role-play situations. If they did not meet the required standard in one of the two scenarios, then a third and final opportunity was given.

6.7.5.2. Analysis of the assessment

According to our observations, the 'knowledge check' seemed to be a formality with there being little scope to fail this part of the assessment. For instance, on one course we observed, candidates were explicitly directed towards what was going to appear in the written exam (e.g., "*you might need to know at least half of these*", Fieldnote). Furthermore, the knowledge checks were not conducted under strict exam conditions. For example, on one course we attended the test was taken during lunch, with officers marking their own papers.

By contrast, the qualification shoot seemed to be an objective measure suiting the 'pass/fail' course assessment. Accordingly, there was very little room for discretion for the trainers to view this aspect of the assessment within the wider context of how the candidate has performed across the course. Indeed, as one trainer remarked "*If you miss* [the qualification shoot] *there's nothing I can do for you*" (Fieldnote). Therefore, from our observations, while trainers were comfortable failing candidates who did not meet the required standards on the qualification shoots, it became evidently more difficult to fail candidates on other elements of the course, including on their decision-making around the use of the weapon and their ability to de-escalate, and handle situations without the use of Taser.

With respect to the scenarios, the normative context was all about the use of Taser. In this regard, de-escalation and to think about doing something else to manage the situation in a way that does not involve the deployment of Taser in some form was precluded. For instance, in one course that we observed the first scenario involved officers responding to a brief that they were attending a call single-crewed where the subject is possibly armed with a knife. Within this scenario – conducted outside in inclement weather – the subject is holding a knife and says he is going to 'end it all'. He advances towards the candidate officer with Taser. At this point, each candidate officer fired and, irrespective of their aim, the Trainers declared the shot 'ineffective' to force the officer to fire again. For the second scenario – again held outside in inclement weather – officers were briefed that they were single-crewed and attending a call of someone appearing drunk, swearing, and upsetting residents. Accordingly, the subject is shouting and pacing around. He has a knife in his pocket which is not initially visible to officers but is revealed as the situation unfolds. Regarding this scenario, trainers suggested to our observer that they want officers to identify the weapon and red-dot quickly and that most of the time this is a 'no-fire' situation. Trainers also noted that the 'subject'/ stooge is instructed to follow the officers' instructions when he is red-dotted without any escalation, and this is indeed what happened in all the scenarios we observed.

Therefore, participants had to use Taser in at least some, if not all, of the summative assessments to pass the course. In practice, then, it was more difficult to assess officers on vital skills around de-escalation, dealing with mental health and their ability to refrain from using the weapon. Moreover, the trainers talked about the complexity of assessing scenarios, noting that there were multiple ways to complete them and

that, for example, firing Taser in a scenario intended to result in simply drawing the weapon, would not result in failure if the officer could justify their actions. This should be understood in the context of the College of Policing's Authorised Professional Practice[45] (discussed above), which states, in part, that Taser "*is one of a number of tactical options available when dealing with an incident with the potential for conflict*" and that "*it is not practicable or possible to provide a definitive list of circumstances where a CED would be appropriate*". Even then, a trainer stated to candidates "*try to stick to guidance but you will go outside it*" (Fieldnote). Faced with such broad guidance, with perceptions of 'threat' and 'potential for conflict' varying, and without a list of circumstances where a CED would be appropriate - and, by extension, inappropriate - it can be difficult for trainers to fail officers on their decision to use the weapon. Trainers noted, for example, that "*people will have different thresholds about when to use the weapon*" (Fieldnote) and made comments such as "*never say never* with Taser" (Fieldnote) and "*it's your perception, we can't say you need do this or that*" (Fieldnote).

6.8. Conclusions

This chapter has examined the initial and refresher police Taser training programmes. The broad research objective was to assess the impact and effectiveness of the content and delivery of these courses Particularly, we sought to identify where improvements could be made in respect to Taser training provision relating to the issues of racial and ethnic disproportionality, as well as highlight the existing strengths of the course content and delivery.

Beginning with an overview of the national context of Taser in England and Wales, we highlighted that Taser training sits within a national curriculum, produced, and regulated by the College of Policing which evolves over time. Additionally, previous reports (e.g., Anglioni, 2017; IOPC 2021), and coroner conclusions have identified, amongst other issues, the need for improved inputs on de-escalation, disproportionality, vulnerability, the risks of prolonged exposure as well as the need to involve the voices and perspectives of affected communities. Yet, our observations of both the initial course and refresher Taser training suggest that these recommendations are not being adequately realised. For example, communities heavily impacted by Taser use do not seem to be given sufficient input into the design or delivery of the training. This seems, in part, due to time constraints that lead to a series of missed opportunities within the classroom-based sessions. While the course notionally covers topics such as vulnerability, de-escalation, mental health and the dangers of prolonged exposure, these topics and others were not approached with sufficient depth or nuance. The disproportionality inputs that we observed tended to rely on national Home Office statistics as opposed to localised data. Our observations suggested that the conversations generated from these figures were relatively abstract

[45] https://www.college.police.uk/app/armed-policing/conducted-energy-devices-taser

and were often not grounded in local context or experiences. This reflected a broader point: that the discussions during the training we observed rarely explored the impacts of Taser on public trust and confidence and police legitimacy.

Under-resourcing and time constraints applied not only to the initial training but, equally as importantly, to the refresher training which occurred only once a year. Moreover, in some cases, the apparent lack of financial investment in the training environment and infrastructure significantly reduced the immersion for candidates and hindered the Trainers' ability to provide an adequate learning setting. While important, we suggest that resourcing alone is not sufficient to address the sometimes problematic working assumptions and objectives that we observed in the training environment which function to promote the (over-)use of, and over-reliance on Taser. These included, first, a push towards normalising the use of Taser, positioning the weapon as the lowest use of force – and sometimes not a use of force at all – and aiming to overcome hesitancy with the use of the weapon. Issues associated with the use of Taser (including prolonged use) were sometimes downplayed, while the training context functioned to deliver an understanding that Taser was an effective, useful, and safe device – for both those subjected to it and the officers involved – compared to the other tactical options. Indeed, the training we observed often seemed to us to imply that it was the non-use of Taser that could be problematic and potentially dangerous. Secondly, the emphasis was on ensuring the safety of officers, both physically and legally, rather than prioritising the safety and well-being of the public. For example, officers were encouraged to act based on assumptions, without reflecting on these sufficiently.

A third and related objective was to promote the use of Taser to achieve control psychologically and physically of the subject. Therefore, whilst it was emphasised that Taser is not to be used as a ‘tool for compliance’, candidates were taught to use it in ways that leave ‘subjects’ with little choice but to adhere to the commands of officers. Correspondingly, de-escalation was not a prominent feature of the training and where it was evident this was very much about achieving compliance to police instruction by the subject. Furthermore, a fourth objective was to teach the candidates how to justify and defend the use of Taser through the application of the NDM. Accordingly, the focus on the NDM seemed to us to be less about its role as a live decision-making tool and as much about post-hoc justification and ensuring officers ‘do not go to court’; the inference was that almost any use of the weapon was acceptable if officers can justify it afterwards. Not only are many of these working assumptions and objectives highly controversial, and at odds with the recommendations of previous reports, they are also in marked contrast to the community voices discussed earlier on in the report and are reflective of the lack of inputs from Black and minority ethnic communities, people that have been Tasered and bereaved families.

Another observation concerns selection and assessment. In theory there are multiple checks and balances and stages that occur before officers can carry the weapon but, in practice, these are less robust than they may first appear. One such check is that

officers must be volunteers and are able to withdraw from the course at any time; however, in practice, it may be difficult and seen as professionally damaging for officers to refuse a place on the course, to withdraw or fail. Another check is the assessed nature of the course. It appeared nearly impossible to fail the 'knowledge check' section of the assessment, as the process appeared to be structured to maximise the pass rate. Moreover, our analysis highlighted that candidates had to use Taser in at least some, if not all, of the summative scenarios to pass the course. In practice, then, it was more difficult to assess officers on vital skills around de-escalation, dealing with mental health and their ability to refrain from using the weapon. Indeed, some of the trainers that we spoke to argued that this was not a core feature of their remit.

Such difficulties in assessment may be due, in part, to the current guidance being vague with regards to what constitutes (in)appropriate use and the very low threshold for the use of weapon. Indeed, the UN's Committee Against Torture (2013, 2019) has twice commented on the UK's Taser guidance and recommended more specificity. In its 2019 Concluding Observations[46], it stated that the UK "*should provide clear presumptions against the use of Tasers on vulnerable groups, such as children and young people, investigate the causes for their disproportionate use against members of minorities and prohibit their use in drive stun mode*" (Paragraph 29). This follows on from the Committee's Concluding Observations in 2013, which stated that the UK: "*should revise the regulations governing the use of such weapons with a view to establishing a high threshold for their use and expressly prohibiting their use on children and pregnant women"* (Paragraph 26). Yet, when faced with guidance offering such broad, permissive wording on use, it can be difficult for trainers and others to critique officers for their use of the weapon.

Ultimately, our observations indicated that there is insufficient input in the training that was designed to encourage reflective thinking by officers to discourage discriminatory outcomes. In highlighting these issues, our analysis concords with the findings of previous reports around the content and length of Taser training and, like George (2023), recognises that the classroom and practical sessions should place greater emphasis and be fully-oriented within a Human Rights framework. Finally, our findings also highlight the importance of regular independent oversight of training, capable of bringing about meaningful change where necessary. This is especially salient in a context where the response to previous reports has been mixed, with take up of recommendations inadequate.

[46]https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CAT%2fC%2fGBR%2fCO%2f6&Lang=en

7. Police officer interviews

7.1. Chapter summary

This chapter outlines an analysis of semi-structured interviews with 97 police officers sampled from six forces, most of whom were Taser trained. These included officers operational within CID, Disruption Teams, Diversity and Inclusion, Dog Handlers, Firearms, Operational Support Units, Mental Health Triage, Neighbourhood, Response, Serious and Organised Crime, Taser leads, Traffic, Roads, and Motorway. Most of the officers we interviewed were Male, White, the rank of Constable, Taser trained and currently 'in ticket' (i.e., currently carrying Taser operationally). Additionally, we draw on data from another participating force who afforded us the opportunity to observe a control room and undertake ad-hoc interviews with staff who are responsible for deploying Taser officers to specific incidents. We address three broad research objectives. First, we sought to explore how officers talk about the police use of Taser including the benefits, drawbacks, and the training that they received. Second, we asked officers to identify and discuss specific scenarios where they or their colleagues had used Taser. Third, we sought to obtain officer accounts of the potential causes of the racial and ethnic disparities evident in the Home Office statistics relating to the police use of Taser.

We demonstrate several themes. Our observations of the control room suggest that it is important to move beyond merely an analysis of individual officer decision-making and recognise the contribution of the organisational patterning of policing. Consequently, we argue that Taser is increasingly an institutionalised response to risk which in turn is creating an operational gap for Taser Specially Trained Officers (STOs). In this respect, entering the training and becoming an STO has become an important career development opportunity and milestone. We identify that a key benefit of the device for the STOs that we spoke to is its capacity to act as a potent visual deterrent, which is effective at forcing behaviour change or compliance from members of the public, often without any need to draw or discharge it. Correspondingly, officers were keen to highlight that a key aspect of their policing role is that they may need to take control of situations that are posing a threat of harm. Given this utility, officers described drawing, laser-pointing or firing Taser only on rare occasions. STOs resisted the idea that they ever made judgements based upon race. Instead, they invariantly argued that if they were ever required to use Taser these were, or would only be, in circumstances of high threat and risk. These situations usually involved a weapon and often concerned people suffering from mental health issues threatening to either harm themselves or others. Nonetheless, in such contexts Taser was described in ways that portrayed it as the 'go to' device because it helped achieve policing objectives in ways that posed little if any risk of harm, particularly when compared to their other tactical options (e.g., irritant spray, baton). Moreover, officers described Taser as a tool rather than a weapon and utilising Taser as a 'fast-track' resolution in situations where verbal instruction had proved ineffective.

The analysis then focuses on the explanations officers put forward about the Home Office disproportionality statistics relating to Taser. Here our predominantly White interviewees reiterated that race was never a factor in their decision-making on whether to use a CED, which they reasserted was always dependent on the threat and risk of that specific situation. However, it was the case that several officers misunderstood the statistics and interpreted them as a measure of the proportionality of use of force within individual interactions, rather than a reflection of patterns of police use of force across multiple encounters. Therefore, and given their view that race was never a factor in decision making, several questioned the validity of the Home Office statistics simply because they made no sense of their own experiences. In contrast, several highly experienced officers working in specialist units suggested that the statistics could be explained in terms of their own and their colleagues working practices which they argued were concentrated in economically deprived and ethnically diverse urban areas. They asserted that this pattern of force priorities and tasking led them to have disproportionately high levels of contact with people from minority ethnic backgrounds. Finally, a few of the ethnic minority officers that we were able to speak to also offered powerful accounts of their first-hand experiences of discrimination from colleagues and that in their view organisational crime priorities in their force were sometimes racially biased.

7.2. Introduction

This chapter seeks to explore officer perspectives on Taser and why ethnic disparities in its use persist. There is a paucity of research that has sought to achieve this aim, though previous work has focussed on officer accounts for other disproportionate policing outcomes (Bonnet, 2014; Bonnet & Caillault, 2015; Deuchar et al., 2019; Quinton, 2011, 2020; Welsh et al., 2021; Whitehead, 2015). For example, Kammersgaard et al. (2022) interviewed Danish police officers to explore how they make sense of ethnic disparities in stop and searches. They reported that officers argued against the notion that they stopped people based on their race or ethnicity, instead maintaining that their policing practices are ‘colourblind’. Their interviewees proposed three primary explanations for the disproportionality statistics.

Firstly, demographic rationalisations revolved around the idea that officers will stop more ethnic minority people because they patrol areas where there is a relatively large ethnic minority resident population. Accordingly, their disproportionately stems not from individual officer bias or racism but from organisational priorities pulling officers into certain locations and not others. Secondly, and relatedly, availability explanations (see Waddington et al., 2004) were put forward. Correspondingly, interviewees argued that young ethnic minority individuals were more likely to be ‘available’ to officers since they spend more time in public places than do those with a ‘Danish background’. Officers sometimes suggested that this is connected to socioeconomic status - that young ethnic minority individuals were more likely to be homeless, unemployed, or otherwise disadvantaged and that these factors render it more likely that they are on the streets and ‘available’ for being stopped. Thirdly, interviewees argued that ethnic

minority people were more likely to arouse their suspicion by the way that they dress and/or behave.

Irrespective of the veracity of these accounts from Denmark, research suggests that officer psychology is important not least of all because the success of organisational interventions can be dependent on whether they gain 'frontline' support and legitimacy (MacQueen & Bradford, 2017). However, research from England and Wales focused on Taser tends to be quantitative and focused on exploring broad patterns in how the weapon is used. For example, Quinton et al. (2020) analysed the 2017-2018 use of force records from 16 police forces. Their analysis suggested that Taser officers were more likely to draw their weapons on Black people relative to White people, but were no more or less likely to discharge Taser on Black subjects when compared to their White counterparts. Similarly, Dymond (2020) explored the associations between ethnicity and Taser discharges between 2007 and 2015 for one anonymous police force in England and Wales. The analysis also suggested that there was no association between ethnicity and Taser discharge but that significant correlates existed with mental health, with those having reported mental health issues being involved in 44% of recorded discharges. The analysis pointed to the potential reasons why this pattern occurs with 77% recording discharges of Taser to protect either the officer or others suggesting significant levels of threat and risk was at work.

Beyond this, there is little by way of research exploring officer perspectives on disproportionalities that exist within police use of Taser in the UK. A notable recent exception is Dymond (2022) who conducted 50 interviews with Taser trained officers and trainers. These focused on officers' views and experiences of using Taser, the training they had received or conducted and of national guidance. Dymond's analysis demonstrated that officers tended to talk about Taser as a device that enhances their safety. For instance, the interviewees suggested that the mere presence of the weapon acted as a potent visual deterrent, as did 'red-dotting' (i.e., the colloquial term use to describe the pointing of the device laser onto the subject). Moreover, officers emphasised that Tasers provide extra distance away from individuals relative to other use of force options (e.g., baton, physical strikes). Building on this work, this chapter aims to further explore officer perspectives on Taser, and specifically focus on their views on the racial and ethnic disparities that exist in the statistics relating to Taser use in the UK.

7.3. Methodology

7.3.1. Overview and data collection

We worked with a Single Point of Contact (SPOCs) within each force to identify 97 participants across 6 police forces. We wanted to achieve a sample where we had a mixture of operational roles, genders, and officers from different racial and ethnic backgrounds. With these criteria, we adopted a purposive sampling approach where SPOCs identified Taser trained officers who were willing and able to participate. These

officers were then invited to participate and if willing rostered into a single location across the course of the day so that they could be interviewed. Since most of the interviews were conducted face-to-face in police stations it was often possible to supplement our initial sample of participants from each force with other Taser trained officers, dependent on availability and operational demand [iii]. The roles of the interviewees included the following: CID; Disruption Teams; Diversity and Inclusion; Dog Handlers; Firearms; Operational Support Unit; Mental Health Triage; Motorway; Neighbourhood; Response; Roads; Serious and Organised Crime; Taser SPOCs; Traffic. Most of the officers we interviewed were male, White, the rank of Constable, Taser trained and currently in ticket (carrying Taser operationally)[47]. The interviews which were transcribed were usually between 20 and 60 minutes in duration and sought to achieve three broad research objectives:

1. Explore how officers talk about the police use of Taser (including the perceived benefits, drawbacks and their perspective on the training they received);
2. To identify and discuss specific scenarios and police decision-making within these use of force incidents and, wherever possible, Taser deployments (including verbal warnings, drawing, red-dotting, and firing incidents);
3. Officer perspectives on the racial and ethnic disparities that exist in statistics relating to the police use of taser (including what they consider to be potential 'drivers' of these differences).

Additionally, we draw on data from another participating force who afforded us the opportunity to observe a control room and to undertake ad-hoc interviews with staff who are responsible for deploying Taser officers to specific incidents.

7.3.2. Analytic approach

With respect to the police interviews, one researcher read through all the transcripts to allow for a detailed overview of the dataset. The other researchers were assigned five transcripts each. Ahead of the analysis session, each researcher undertook an inductive coding approach where they read through their allocated transcripts and highlighted sections of interest. In this way, the objective was to try and see the world from the officer's perspective through their talk and try to make sense of where Taser sits in relationship to how they define their role and identities. Through this process, the objective was to explore and understand the drivers of ethnic disproportionality in police use of Taser. Within the analysis day, we took a sample of interviews from each researcher and collectively reflected upon each of them by visiting each of the highlighted sections and discussing their interpretation. This allowed us to inductively bring together the themes within the data which was again aided by audio recording the session for further refinement and consolidation. The quotations within the analysis

[47] See the accompanying 'Qualitative Research Appendix' for more details on the sample of interviewees.

section below were taken directly from the interview transcripts. These extracts were judged by the research team to be the best exemplars of the final themes presented. For each quotation 'IE' denotes interviewee and 'IV' is shorthand for interviewer. Where there is more than one interviewer or interviewee within an extract this is demarcated by a number to distinguish the speakers (e.g., IE1, IE2 or IV1, IV2). Each interviewee was assigned a number from 1 to 97. In line with previous chapters, we include this number in parentheses after each extract to demonstrate the fact that quotations were derived from multiple interviewees.

7.4. Analysis

Accordingly, the following analysis is split into three main parts: the police role and the institutionalisation of Taser, benefits, and drawbacks, followed by a section on racial and ethnic disproportionality.

7.4.1. Police role and the institutionalisation of Taser

Our interviewees were all police officers and as such are sometimes required to question, detain, or arrest people as a function of their roles. It is the case therefore that some of the people they encounter in this capacity will react confrontationally. It is also the case that officers are regularly deployed to situations involving people in a mental health crisis where they are threating to harm themselves or others often with a weapon such as a knife. It should not be surprising then that many of the officers we spoke to depicted circumstances where the people they were dealing with behaved in ways that were judged to pose threats to officers or to others, including the subject themselves[48]. For instance, one Sergeant on a Response team described how a routine traffic stop quickly became aggressive as he and his colleague realised that they needed to conduct an arrest.

> IE: *"*[The subject] *got out and he was initially compliant and then it turned out he was a disqualified driver. He'd got a French Pitbull thing in the passenger seat, and he just went up, we were in fairly close proximity to him. I can't remember whether we were arresting him for drugs or whether he just went up about the idea of being found out to be a disqualified driver. I can't remember what the catalyst was. He just went up in the air and we were on the road sort of between the car and the van and he ran off and my colleague grabbed hold of him, and he tried to headbutt my colleague and he was trying to get to the van. And my concern was that he'd let the dog out or he'd get in the car and drive. I pulled Taser. Red dot. And he complied.*

[48] In this chapter we use the term 'subject' to denote the individual toward which policing is focused.

> IV: *So, would you say the 'red-dot challenge', as it were, was successful because it got him to comply?*
>
> IE: *Yes, he complied, and therefore, my colleague can put cuffs on him, and he was arrested.*
>
> IV: *And again, I suppose that was essentially getting the situation under control with minimal physical injuries, is that how you'd see it?*
>
> IE: *Yeh. And that is the use of force principles. You know, can I, should I, and how much? What's the least impactive use of force that I can do to achieve the goal that I need to achieve?"* (Participant 34).

Thus, whilst officers only occasionally used Taser in some form, as the above demonstrates, when they did so these were invariantly depicted as high threat and risk situations. Indeed, when asked to talk about scenarios involving their use of Taser, the examples given almost always involved the management of people who were suffering from a mental health crisis, those who were carrying a weapon or some combination of both factors. Accordingly, mental health incidents involving weapons were often those where the officers described using Taser to regain control of what they saw as a high-risk situation. For example, an STO who works on a mental health triage team recalled an incident she dealt with and explained the general patterns of Taser deployments within her policing unit.

> IE: *"Yes. So, I think one that I can remember was someone that's actively self-harming with a knife. And that's quite common. A lot of the officers on my team, I think they've probably used Taser in this role more than they ever have before, and that's for people that are self-harming or trying to slice their neck, their arms, all sorts. Trying to stab themselves. They'll use it in that capacity more than people that are actually committing offences."* (Participant 82).

As both extracts illustrate, all the officers we spoke to who had used Taser in earnest described it as a device that had helped them to achieve what was in effect their primary objective in the circumstances, enforcing compliance with the officers' directives to bring the situation to some form of resolution in ways that prevent harm.

Given this relatively routine professional reality, our interviewees also described how the deployment of a Taser STO has increasingly become an institutionalised response to circumstances judged beforehand as posing high threat and risk. In other words, following a call for service it is routine practice for police call centres across England and Wales to risk assess before officers are deployed. Thus, in situations understood to pose a specific level of threat, STOs carrying Taser will be considered by the organisation as a necessary and required tactical option.

By way of example, our observations of a control room across two shifts in a participating force gave us a unique insight into how these institutional dynamics worked in practice. At this force, the process for the deployment of Taser STOs was explained to our observer as working as follows. Instances where call handlers receive a report of a weapon, or a situation that is 'unusually violent' will go to the Sergeants to assess if it is suitable for Taser officers to attend. A positive decision is then put before the Force Incident Manager (FIM) for consideration and final approval. If Taser officers are to be sent[49], the Resource Deployment Officers are then tasked with handling the logistics of this and looking at which STOs are best placed to be tasked to the incident. On occasion, calls that Resource Deployment Officers are already dealing with may also need to be re-assessed and escalated up to Sergeants and FIMs, should new information become apparent.

Our observations indicated that, in practice, at every level in these processes it was judged as safer to send a Taser officer than not to do so. The process around the deployment of the weapon was structured in such a way that passing calls up the chain of authorisation, and ultimately authorising the deployment of Taser officers, was seen as the responsible, risk adverse course of action. This suggests an institutionalisation of Taser has occurred to such a degree that if the incident involves tangible perceived risks the question becomes not 'can we justify sending Taser officers' but, rather, 'can we justify *not* sending Taser officers'[50]. It was also noteworthy that those making decisions around the deployment of Taser officers sometimes lacked an understanding of the current data on disproportionate Taser use within their jurisdiction. Senior officers with responsibility for Taser made some similar points in this regard. For example, one such officer noted:

> IE: *"I actually do feel that we design in right from the beginning, a higher probability of Taser being present at an incident with violence, which can then obviously mean there's a higher probability of it being used. And I wonder what the impact of that is on the system. So, by that I mean you know call comes in 'male seen brandishing a knife'. Immediately people will make a risk-based decision in the control room to deploy officers that are carrying Taser. Now that didn't happen when it first started because the probability of that would have been negligible. So, I'm interested in how that is brought into the to the system... I definitely think, from Response policing, we immediately right*

[49] While the precise wording used when contacting Taser trained officers may differ slightly, the observer was provided the example of the following wording: "*This incident meets the criteria for the deployment of Taser equipped resources. The decision whether to deploy Taser sits with individual officers and is subject to their DRAs (dynamic risk assessments). Consider whether the subject / offender is EMD or ABD and consider de-escalation tactics – time, space etc. Activate BWV*". (Fieldnote).

[50] Cf. The College of Policing/NPCC (2020, p. 87) Officer and Staff Safety Review: https://assets.college.police.uk/s3fs-public/2020-09/CoP-NPCC-Officer-Staff-Safety-Review.pdf

> *from the beginning, raised the probability of Taser being present... I don't know why that then manifests in the disproportionality stat for young Black men."* (Participant 90).

In line with this data, other interviewees also described how being a Taser STO was becoming increasingly necessary to fulfil the roles being ascribed to them as operational police officers. As one officer described about his motivation to carry Taser:

> IE: *"I just wanted something additional because I felt that when I was responding to jobs that had a greater level of threat, i.e., a knife, I felt like I couldn't react appropriately. I would need a Taser officer to be with me or I'd have to wait for a Taser officer. And I thought, blow that, I want my own so I can actually deal with this. I felt, what's the right word? I don't know what the right word to use, but I just felt like I wasn't the appropriate resource and I wanted to be the appropriate resource."* (Participant 21).

Thus, given that Taser deployments appear to have institutional level drivers, being an STO offers an important career progression opportunity or milestone because it enables them to fulfil specialist operational gaps. For instance, some PCs we talked to described becoming STOs as part of a broader aspiration toward other more specialised operational roles:

> IE: *"So, for me it was a natural progression anyways to go, look, I wanted to achieve Taser. I wanted to achieve becoming a* [Police Support Unit] *officer and I don't know if you're aware of that riot police... So those were all the skillsets you can get whilst being on Response. And that's what I wanted to achieve before I looked to move on to a different unit."* (Participant 41).

Therefore, it was evident in the data that becoming an STO provided opportunities for some officers to take on a role responding to high-profile and high-risk incidents and through this to develop portfolios that would open up opportunities to move on to specialised policing units. Indeed, it was argued by some officers that Taser STOs were being used in situations that would otherwise have been dealt with by specialist firearms officers[51]. This in turn gave STOs unique opportunities to exercise and demonstrate leadership in ways that otherwise would not be available. Accordingly, one officer talked about the command-and-control primacy that Taser carriers are exposed to in situations characterised by extreme danger.

[51] Again see the College of Policing/NPCC (2020, p. 87) Officer and Staff Safety Review: https://assets.college.police.uk/s3fs-public/2020-09/CoP-NPCC-Officer-Staff-Safety-Review.pdf Here forces were criticised for authorising 'Taser deployments' short of a firearms deployment and there was a corresponding recommendation that "*Chief constables should end the practice of Control Room Supervisors or Force Incident Managers granting 'Taser authorities'*" (p. 92).

> IE: *"A prime example would be, in* [place name], *there was an example where it should have been a firearms deployment but due to the lack of armed response vehicles, it topped up, and I gave this example the other day. It was a bunch of gangs fighting in the middle of* [place name]. *Knives, machetes, things, CCTV had picked it all up, I was the only available unit as a Taser contingency. As a less lethal option but Taser. So, I think the exposure of those types of jobs came with carrying Taser. Had I not been Taser trained, I would have maybe been sat on the periphery, awaited a Taser unit to turn up. And for them to take the lead whilst I go support them. But as a Taser officer, the expectation is for me to take the lead, regardless of rank because there might be an Inspector on scene or Sergeant on the scene who's not Taser trained. But because it's a Taser job or likely to be Tasers used, with a threat of harm and risk. I'm expected to take the lead. I'm expected to say, right, this is our plan. This is what we're going to do. So that level of exposure came higher, carrying Taser."* (Participant 41).

7.4.2. Benefits and drawbacks

7.4.2.1. The symbolic deterrent

Perhaps unsurprisingly the STOs we spoke to were very positive about what they saw as the advantages of Taser. Indeed, officers explained how it was merely by carrying Taser that, what was for them its primary advantage of creating compliance and engendering control, could be realised. Accordingly, several commented that it was the mere sight of the Taser that leads people to become acquiescent in, what might otherwise become potentially confrontational scenarios[52].

> IE: *"I've noticed a massive difference in just carrying it alone. Makes all the difference. I've been assaulted less, if at all, since carrying it. I can see cogs whirring in people's heads when I'm dealing with them, and they're agitated. You can see them sizing you up, and they look at this* [the Taser], *it's visible and you can see them going, yes, I'm not going to. Even if I never draw it, I'm happy just carrying it. Just because it makes a huge difference to people's attitudes towards you."* (Participant 21).

Several officers were explicit that this psychological and behavioural effect of Taser was brought about because it is bright yellow and therefore instantly noticeable. One

[52] This is similar to Clark-Darby's (2022) findings who focused on Authorised Firearms Officers (AFOs). See: https://link.springer.com/chapter/10.1007/978-3-031-13013-7_15#auth-Oliver-Clark_Darby

officer described the way in which just the sight of the Taser would provide a way of resolving situations much more effectively than would have been possible without it.

> IE: *"I found that when you had X2* [Taser] *on your vest, it's obviously bright yellow in the UK. And people tend to see that straight away. And that normally would diffuse the situation quicker than when you didn't have it, because if we rocked up second, they'd see the yellow. And they'd be like, whoa, okay, I don't want any of that. And then that would tend to diffuse the situation nine times out of ten."* (Participant 70).

Indeed, some officers described how they purposefully choose to wear the Taser on their chest rather than holstered to their side in an effort to deliberately enhance the perceived deterrence effect of the device.

> IE: *"I noticed when I started carrying it for night-time economy, straight away it's a visual deterrent, straight away, I think because I have it on my chest. I notice a lot of people with it on their belts. People don't even seem to notice it. But because I've got it my chest and it's there, you notice that people will just start looking at it straight away. So, when you're approaching a situation, you've almost got one up on them straight away because they know that you've got that extra capability. That is a big benefit, I think."* (Participant 57).

Thus, STOs described the symbolic value of Taser, to visually signify the officer's underlying capability to control the situation with overwhelming force, should they need to. Such accounts revolved around the ability of the device to act as a deterrent without any direct suggestion it was going to be deployed. Beyond this emblematic effect, officers also described how the verbal threat of using Taser, what was often referred to as tactical communication, was also a potent means of controlling a situation. As one Taser trainer described:

> IE: *"I've used it on a couple of occasions, where technically, it won't be recorded as a use anywhere, I've literally just said to a person I've got a Taser here and I am prepared to use it, if you carry on behaving or doing whatever that, sort of. I'm essentially threatening them with it, aren't I? But it's a lawful threat, because I'm saying to them, I will use force on you, because I've got powers and policy that support me to use force. So, don't. Because you can see that I've got it. So, it does become like a de-escalation tool almost, in the right circumstances."* (Participant 63).

Thus, given that the role of police officers was often to require members of the public to comply, it follows that for these officers the level of subject compliance becomes a direct measure of escalation and de-escalation and thus a primary rationale for using

a Taser. Correspondingly, as and where STOs described drawing a Taser, their ability to aim it and shine its lasers on the subject was portrayed as a highly effective means to exert control, or 'de-escalate', situations. Indeed, as in the opening extract, several officers referred to the success of the 'red-dot challenge', where the Taser had been drawn, its lasers activated and 'subjects' would acquiesce. As one Inspector suggested:

> IE: *"The feeling from the officers is that the red-dotting is a huge de-escalation, and I've witnessed that before where officers have red-dotted, and it has calmed people down. Sometimes I've witnessed red-dotting where I think, have you just lost your patience and you've chosen to red-dot? But it ultimately led to compliance because the red-dot is almost quite powerful. So that's the general feeling that people feel, the officers feel, that it does de-escalate things really quickly because of the red-dot response from someone."* (Participant 64).

Thus, the core benefit described by the majority of STOs we spoke to was Taser's ability to enable them to exercise control over situations without the device being fired. In their experience, its advantage was that it enhanced their ability to deal with situations without deploying what they described as other potentially more harmful use of force options.

> IE: *"The job will tell you Taser is the lowest use of force, because if you get hands-on with someone you could break an arm while trying to restrain them, whereas Taser, it's meant to stop all that."* (Participant 57).

Sometimes the experienced benefits were described in relation to the mitigation of other 'impact factors' that were thought to affect decisions to use force, such as being single-crewed or being smaller in stature relative to a physically larger subject. For example, a female officer described their motivations to carry Taser in the following terms:

> IE: *"When I first joined as a substantive PC, I was often single-crewed in* [place name]. *Now I know my own strengths. I'm not the biggest person in the world. But unfortunately, you don't know what you're walking into. If that's whether or not it's going to protect me or someone else from a safer distance, then that's why I went for that* [Taser training]*."* (Participant 83).

Accordingly, officers described Taser not as a weapon but as a 'tool', just one of a range of tactical options they could utilise if they needed to control situations.

> IE: *"It's just another tool. It's just another thing on my belt. And even now, I still haven't got the mentality where even if it is an instance of where you know violence is going to be used, I still*

> *don't walk in, nine times out of ten, with that out because I never have to."* (Participant 58).

Another key advantage expressed by STOs for using the device relative to their other use of force options is that it functions to help them maintain distance from the perceived threat. Accordingly, officers argued that once force was deemed necessary Taser represents one of the safer alternatives, for both officer and subject, relative to other options within their PPE.

> IE: *"So, you've got your distance with it. With anything else, you need to be relatively close to use, which then poses more risk to the officers and to the person that you're dealing with. When you talk about different sorts of weapons, knives, etcetera. I don't want to be getting that close if I don't need to."* (Participant 6).

Thus, according to our analysis, for STOs Taser is device that meshes with the unique aspects of the role of the Constable, that in the performance of their duties they are required to deal with situations in ways that oblige people to comply with instruction. The key benefits of carrying Taser for the STOs we spoke to was that it represented a versatile and graded way of forcing such compliance from members of the public who are or might otherwise resist or ignore police directives, be it through its visual deterrence effect, tactical communication option, red-dotting or if judged necessary actually firing, although the latter was very rare.

7.4.2.2. Situational limitations and dealing with the vulnerable

While the officers we spoke to describe several benefits to carrying Taser, they also talked about some limitations and drawbacks. Officers pointed to certain situations that would preclude the use of Taser and necessitate other tactical options. For example, a non-Taser trained officer described a call for service that he attended involving a subject experiencing a mental health crisis. Within this context, the officer reflected that a Taser would have been ineffectual and unsafe due to the proximity of the subject and their young child:

> IE: *"There was this 19-year-old lad, and he's calm as anything. And then all of a sudden, he went up like a bottle of pop because he heard my colleague talk to the paramedic and say, 'attention 136 in'.*[53] *So, then he heard that and went off like a bottle of pop. So, I grabbed him, and he was about to head-butt me, so I'm trying to stop his head and I couldn't get a better grip, so I got my spray out. I'm going to spray you, just calm down, calm down. And he wasn't, so that's when I sprayed him.*

[53] '136' referring to someone detained under section 136 of the Mental Health Act 1983.

> IV: *Do you think, under those circumstances, Taser might have been a useful tool?*
>
> IE: *It could've, but then with the Taser you have to have that distance. So, because I was already in close proximity with him, having that Taser wasn't going to be ideal to try Taser someone. Also, we were in a smaller room than this, in the living room, and it wouldn't have been practical if you did have a Taser for it to be used, especially with the prongs and things. And then there was his young son was there in the living room, and there was a danger where that prong could go. If it goes missing and he picks it up and swallows it."* (Participant 66).

Furthermore, some interviewees also described how carrying Taser could accentuate difficulties when dealing with vulnerable people suffering from an acute mental health crisis. For example, one officer talked about how the visual prominence of the device may add to a person's distress and make resolution more difficult.

> IE: *"The other issue I find is when I'm going to jobs where it's not appropriate to be carrying a Taser, such as a mental health job where people are frightened. And turning up in a uniform with this strapped to you, you can see them looking at it and they're scared. And sometimes I'll cover it or I'll say to them, look don't worry, I've got this, we carry it all the time, it's got no bearing. They feel like you've turned up especially with this for them kind of thing. So yes, sometimes it's not appropriate but I don't find that happens a lot. But there are times where I feel really awkward with this."* (Participant 21).

7.4.2.3. Contrasting approaches to policing and early resolution

More broadly, some officers described an objective tension between carrying Taser and their role within policing. For example, for those officers we spoke to who had chosen not to become Taser STOs, the device was described as clashing with their vision of what policing needed to 'look like' to achieve what they described as their objectives. By way of an example, one Neighbourhood officer argued that their role was to develop community relations based upon legitimacy and trust and that they judged that carrying a Taser would undermine their capacity to fulfil this objective[54].

> *IE: "I think as long as I'm in community policing, I probably wouldn't want to be Taser trained because I think it looks quite aggressive to members of the public. We get a lot of intel with our*

[54] Whereas other Neighbourhood officers suggested that they wanted to be Taser trained so that they could augment their role with the ability to attend and deal with emergency call outs usually reserved for officers in Response teams.

> *PCSOs* [Police Community Support Officers] *because they're non-confrontational, they don't carry handcuffs or PPE, and I think I have to work that little bit harder to get in there and talk to the community because I have those powers of arrest. So, I wouldn't actually want to be trained in Taser at this time because I think it would make it difficult for my community to speak to me."* (Participant 54).

These contrasting engagement versus force-led approaches to policing could be juxtaposed, for some officers even within the same incident as one interviewee described in their account of a situation where a Taser had been fired.

> IE: *"I've experienced where some people have used their Tasers. One was this guy in a GP clinic and he's being aggressive with the staff there. So, myself and my colleague attended, but we did have our Tasers, and he was a big chap and we weren't sure if we was on drugs or anything like that. It was a White lad, but the doctor did say he had some mental health problems and because he was about six foot one and I'm five seven and my colleague was five two, so we're going to end up getting our heads beaten up and we'll be on CCTV and it'll go viral. So, my colleague, when he Tasered him, I don't think he gave him that opportunity to try and calm down. It was more of you've got to calm down now and then he's got the gun out. Taser, Taser, bang. Whereas, from my experience you have to give them the time to try and calm down."* (Participant 66).

The extract above highlights another theme evident in officers' accounts of Taser, where it was described as 'fast-tracking' resolution when verbal instruction had been ineffective. Indeed, the fact that Taser offered a proportionate resolution to an otherwise 'stalemate' situation was highlighted by some interviewees as one of its key benefits. For instance, one officer described an incident where they were deployed to a railway station with reports of an early morning burglary in progress in a platform side coffee shop. Additionally, information suggested that the man had a set of knives and that he had barricaded himself inside of the shop. Within this context, the deployment of Taser was conveyed as effective because it successfully and quickly resolved a situation allowing officers to regain more immediate control and detain the individual in question.

> *"About 20, 25 minutes into it, he* [the 'subject'] *starts to become quite agitated, starts trying to come to the door. Tell him to get back, tell him to stay away. Officers had deployed* [irritant spray]*, wasn't effective. It hit him. Hit him in the face but it just wasn't effective. You know, when you look and you think, all that did was piss him off. It was one of them kind of days where I'm like, great. All that's done is just make him angry. And he was coming again,*

> *he was back towards the door. And at that point, it was a case of try again so I told him I'm a Taser officer, stay back. And when you just don't get a response, he's still coming towards the door. I've now got members of the public out on the platform ready to board trains for the day. The reality is, is that he's got three decent sized knives and there's just no, we've got no backup. We've got no hard cover... So yes, I gave the warnings, tried to negotiate. Tried to even just reason with him. But yes, it didn't work. So, I deployed Taser, effective immediately. And officers went in and detained him whilst I've got him. I've got the Taser connected, still, but hadn't got it on arc or anything. But he was connected, still, should he start to continue to fight and resist officers."* (Participant 34).

7.4.3. Racial and ethnic disproportionality

7.4.3.1. Experiences of police discrimination and institutional racism

When we talked to officers about the Home Office statistics regarding ethnic disproportionality, some offered powerful accounts of their own first-hand experiences of discrimination from their colleagues. For example, one Asian officer described a traffic stop that he was subjected to whilst off duty that they felt were to product of unconscious bias on the part of the officer.

> IV: *"So, you do see some sense in which these are biased judgements?*
>
> IE: *Yes, it's an unconscious bias that I got stopped. I was in my car, about ten years ago, I missed a turning, so I went into this cul-de-sac, trying to do a three-point turn, and then all of a sudden a police car comes up, blocks me, lights are flashing, and I shit my pants... There's this chap, and he goes, what are you doing out this late? And I said I've just finished work and I just got lost. He said is this your car. I had a BMW then, and I said yes. And then he did the PNC check, got my details, checked that, and then left without giving me any justification of why I was stopped."* (Participant 66).

In another example, a mixed-heritage officer described having to openly challenge the racial stereotypes and prejudice of his colleagues, particularly the view that young Black males are more aggressive.

> IE: *"We're acutely aware that there is a disparity in force used against minorities with a prevalence around young Black males. And I know I've challenged a lot of officers when they've turned*

> *around and said, well, that's because young Black males are more aggressive. I mean, my partner's Jamaican, both my boys, therefore, are young Black males and they're soft as anything... So, the worrying thing for me is if a bobby says, or an officer says, young Black males are more aggressive. Well, that's saying my boys are more aggressive, that's just frankly not true. It's clearly not true. It's evidential. Now have I dealt with aggressive Black males? Yes. I've dealt with aggressive White males. I've dealt with aggressive Asian males. Bobbies can't understand the difference in that very sort of language that you can't say young Black males are aggressive. You can say I've had aggression from young Black males, of course, you have, can't judge that because that that's your life experience. But you can't judge every young Black man you see as aggressive because already you're switching on to, I might need to go up here with it and that's where you can perceive another person's actions incorrectly."* (Participant 67).

As well as recounting personal experiences of discrimination, another Asian officer we spoke to argued that their organisation was institutionally racist, pointing toward organisational crime priorities which were, to them, racially defined and patterned.

> IE: *"You're tackling particular crimes; you're looking at particular crimes. You're looking at knife crime, stabbings, robberies, you're focusing on that particular crime. Because the organisation thinks this is a crime that's of importance. Okay, let's look at our slavery, human trafficking, I think that's a lot worse. But what focus are we giving there? Are we putting offenders up? No. What about paedophiles? Surely that's a lot more, but we're not putting those pictures up, are we? No, we're going to keep focusing on stabbings, because we think stabbings is worse, we think drugs is worse. I dealt with a modern slavery investigation for three years, it was horrific, 90 victims, but did they put any of the offenders' pictures up? Okay, they were Eastern Europeans but, no, because Eastern Europeans would still be classified as White males, wouldn't they, if you look at a picture? But we never put their stuff up, did we? But if that was a drugs ring, full of young Black males, we would."* (Participant 65).

7.4.3.2. Contesting the statistics

Yet the principal theme expressed by our predominantly White interviewees was that race was never a factor in their decisions to use Taser, which were described as decisions entirely dependent on the threat and risk that a person presents. Therefore, when asked about the racial and ethnic disparities that exist in Home Office statistics

relating to the police use of Taser, some interviewees questioned their validity. A key aspect of these arguments was to assume that disproportionality was referring to individual-level isolated interactions and the extent to which use of force *within* specific incidents was proportionate. In other words, the judgement to use Taser was about threat and risk, not race. However, such accounts exposed how these officers' understood disproportionality in terms of a human rights-based definition, focusing attention on isolated events, rather than as a systemic pattern *across* interactions.

> IE: *"If someone's running at you with a knife, or has a gun, or has a weapon. You know, then whatever ethnicity they are is completely irrelevant. That individual has a weapon, has run at you, therefore you've deployed Taser. Sometimes I find it hard when things are bought in. 100% think equality, and everyone should be treated as individuals. I just would hate the thoughts of anyone having a perception that. I can't speak for every police force, would have the perception that anyone would ever use a Taser based on someone's ethnicity because that is. That blows my mind."* (Participant 87).

Another way that officers contested the disproportionality statistics was to suggest that they were a product of the demographics of crime hotspots. That is, the statistics are a result of 'where we police'. In other words, that it was crime and place, not race that drove Taser use. For example, one strategic-level leader argued that their organisation was targeting organised crime activity in areas where there is a high resident Black population. This in turn meant that many of the groups they were trying to disrupt were themselves ethnically diverse, so this patterning was not disproportionate to the resident population in that area.

> IE: *"I do not agree with the term 'disproportionality' in the use of Taser because it's prejudicial. Which surprises me because you are academics not starting with a neutral term. It immediately suggests we are trying to prove a hypothesis: that is, police disproportionately use Taser on certain groups. I prefer 'environmental proportionality' as a term. In Northern Ireland, you are more likely to Taser a White person because environmentally that is your client base. If I put you in* [place name] *and ask you to patrol a local gang, high violence, hot spot, you are more likely to Taser young Black men. That does not mean that the officers are in any way less than neutral in their thinking; it is environmental proportionality."* (Participant 91).

A third way the statistics were contested was to argue that the decision to deploy Taser is not taken lightly and that STOs confront a whole series of powerful considerations before doing so, including the perceived high levels of external and internal scrutiny. Thus, in talking about the Home Office statistics relating to disproportionality, officers often explicitly made references to high profile incidents in the media where members

of the public have died or received serious injuries having been subject to the police use of Taser. Some argued that the narratives within the media were biased heavily toward extreme examples, not representing the fact that most Taser usage are non-discharge events (e.g., drawn, red-dot, etc.). But nonetheless this media coverage left them exposed to very high levels of negative scrutiny.

> IE: *"They mess figures up as well* [relating to use of Taser] *because you'll get the media jumping all over it and saying, officers have used Taser on these people. The reality is we've just drawn it near them, but the public will read it as, they've just zapped a 15-year-old kid, when that's probably not happened at all."* (Participant 21).

These incidents were drawn upon to explain their reluctance to use Taser, a reticence described in terms of the threat it might pose to their career, livelihoods, and pensions because they could subsequently be exposed to protracted post-incident procedures. Indeed, interviewees regularly described how internal scrutiny left them feeling isolated and exposed.

> IE: *"We're always taught in our personal safety training, any fight you go into in the job, you're fighting three things. You're fighting yourself, as in your doubts, the other person, and the job. So, you've got three fights to get through in your head every time you go to an incident, a violent incident. And the people who don't want to do the Tasering generally don't want to fight the job on this. They'll believe that they're going to get punished. They won't get backed if they were to draw a Taser."* (Participant 45).

Indeed, internal scrutiny and devolving accountability for Taser use to the operational level was highlighted by one officer. The STO recounted a powerful example whereby all Taser officers in their force had received an email from a senior manager seeking to address disproportionality. The interviewee describes the anger felt at this directive because of the way it contradicted their aspiration not to make use of force judgements based on ethnicity.

> IE: *"All Taser units just got an email from someone ranking that said, effectively, 'don't Taser Black people'. And I don't think there wasn't one officer that didn't get angry reading that email. I think the wording was, 'if you're going to Taser someone, just have a think about their race before you do it'. It was just to give you an example of what I said. You're fighting the job because if you pull a Taser, the level of threat you're facing is so severe that you're considering electrocuting someone to the point where they're going to lose control of their body and at that point management warn us to think of racial issues. As a Taser operator, that's the*

> *kind of example of what we're dealing with on the job."* (Participant 45).

Therefore, the decision to deploy Tasers were described by STOs in terms of confronting a whole series of powerful considerations. Consequently, the high levels of external and internal scrutiny around Taser use were used as a defence by some STOs who argued that the oversight processes put in place provide evidence of the fact that they are would not act disproportionately. As a Sergeant from a Dog Support Unit argued.

> IE: *"If that scrutiny's taking place and they're not saying that we're just randomly going around pulling triggers on people. I think there is a real justification for what people are doing then there can't be another answer, can there?"* (Participant 81).

Indeed, one officer described how as a function of this high-level scrutiny they would even opt to use other tactical option even though they judged them to pose more risk of harm.

> IE: *"I know Taser's less lethal, hundred percent, but am I likely to go straight to it? I know it's better for me and I know it's better for you, but I like my job because it pays the mortgage. It pays me a pension hopefully in ten, 15, 20 years when they want to give it to me. I'm not going to risk all that because I know my Taser's less lethal. No, probably not, that's the honest truth. I'm probably going to go, hmm, 'bang'* [physical strike]*, and let's just hope it works, and I'll take you to the floor and hope you don't know better groundwork than me."* (Participant 67).

7.4.3.3. Explaining the statistics

As well as contesting the statistics, officers also sought to offer explanations for why they occur. In line with the previous section, a dominant perspective in this regard was to suggest that the statistics could be explained in terms of a concentration of policing in economically deprived areas where there is a relatively large minority resident population. For example, one officer from a Serious and Organised Crime team suggested:

> IE: *"If you're working in* [place name] *and the majority of the communities that you're working with are of an ethnic minority of whatever description, then you are going to come across more of them. And I think that plays a massive part in the statistics. I would also say that places of poverty have a massive play in it as well. But no one talks about that. They talk about it as an ethnic problem. It's not ethnic, is it? Don't get me wrong. I get what they're saying and the statistics are probably correct. But that's*

> *not the issue. The issue being is that you will find a higher usage of it in areas of poverty or…*
>
> IV: *Homelessness?*
>
> IE: *Homelessness or areas of where the mental health service is in such disarray that you… Do you see what I'm saying? I don't disagree in the fact that the statistics are probably correct. But I think it's very easy to give it a one-line title than actually address the issue itself. That's my personal opinion. I don't look at somebody and think, because you're Black, you must be carrying a knife. I'm going to draw my Taser in order to be able to have a communication with you. That's absolutely barbaric. I've never had that opinion. I've never been with an officer that's had that opinion. And if I had been with an officer with that opinion, they'll be hearing from me. Because I don't think that's the issue."* (Participant 83).

Accordingly, interviewees argued that the statistics could be explained in terms of police demand and tasking which are concentrated in what are designated by the police as 'high impact' or 'high crime' areas. As far as we could ascertain from the interviews, these are almost invariantly economically deprived and ethnically diverse locations, relative to other areas. Some officers described how they would be deployed into 'high impact' locations, provided with intelligence about organised crime groups and tasked with disrupting them. Often this would direct them specifically toward minority ethnic populations in these areas. Officers argued that policing activity and, by implication, Taser use would inevitably be higher against ethnic minorities in these locations.

> IE: *"Generally speaking, that is why I think Taser use is higher in those communities, not because we're going out there going, there's a Black guy, let's stop search them. It's because we're in* [Location A]. *We know there's drugs there in that area, we know there's gangs formulating in that area and 90% of them might come from the Black African or Black Caribbean background. The same with* [Location B]. *Go to* [Location B]. *We know there's a lot of drug dealers out there that use that area. It's all alleyways. It's easy pickings for them. And 90% of our stops in that area may be of Asian background because that's that community that is. Like I said,* [Location A], [Location B], *drugs, gang violence, yes. Where knives, weapons are used. If I was to go patrol in a nice area in, let's say,* [Location C] *in* [Location D]*, the top crimes we're going to experience there are shoplifting and burglaries, for example. Nice areas, nice residential homes, burglaries."* (Participant 42).

Thus, the disproportionality statistics were also depicted as a direct consequence of tasking decisions undertaken by senior officers designed to deliver the organisational strategic priorities. For example, one Taser SPOC described Level 2 tasking meetings which involve all the area police commanders making a case for extra resources to help solve local crime issues (e.g., car key burglaries, violence, organised crime group activity, etc.). A corollary of these tasking meetings is that Taser trained officers from specialised policing teams (e.g., Firearms, Traffic, etc.) will be directed to these areas to proactively tackle these force priorities. These units are then further directed within such locations through the development and dissemination of intelligence packages. For example, as one Traffic officer, who had previously been a Firearms officer, suggested, the force priority given to addressing 'county lines' drug dealing activity and undertaking pre-planned arrest warrants often meant specifically targeting Black and minority ethnic individuals. Because of the risk of violence that those taking part in organised crime were understood to present, use of force – including Taser – was more likely.

> IE: *"We have, in the past, had issues in* [place name] *with gang county lines, and we do have a lot of White people that come down, but we do have also, a lot of Black and Asian communities that are impoverished in other areas, and it's almost like modern-day slavery. I've been to a number of warrants where there is Black males, Asian males, and that's across the force, where they're in an address we are finding drugs, etcetera and there are knives and all sorts of weapons in the house. So, in those situations, am I more likely to deploy Taser or consider Taser? In that particular scenario, yes because you know that they don't want the drugs to be found, and they're going to do anything to try and get rid of it."* (Participant 40).

Therefore, according to the officers we spoke to the disproportionality statistics were best explained not as the outcome of individual biased judgements, rather they were better understood as the inevitable outcome of how the organisation they worked for prioritised and targeted crime. As one Taser SPOC powerfully put it:

> IE: *"It's almost like the disproportionality is what drops out at the other end. It's not driving the activity. It's the outcome of the activity."* (Participant 68).

7.5. Conclusion

Our analysis suggests that officers tended to characterise their role in terms of the need to manage high levels of threat and risk that pose considerable potential for harm. Accordingly, Taser was conveyed as an institutionalised response to these situations. Therefore, officers described Taser as a quick, versatile, and graded way of gaining compliance from members of the public who might otherwise resist or ignore

police instruction, be it through its visual deterrence effect, tactical communication option, red-dotting, or firing.

Through the control regained by carrying Taser, officers argued that a major advantage was the enhanced ability to protect themselves and others. Sometimes this was described in relation to mitigating 'impact factors' (such as being single-crewed or being smaller in stature relative to a physically large 'subject'), which officers said they took into account when deciding whether to use force. Due to it being what was often referred to as a 'distance control tool', officers argued that once force was deemed necessary to regain control of an interaction, Taser represented a safer alternative for both officer and 'subject' relative to other parts of their PPE. Moreover, Taser was also conveyed as 'fast-track' resolution in situations where verbal instruction had proved ineffective. This was variously described as a drawback in that it represented a failure of patience and tactical communications but also by others as a key benefit of the device where Taser was depicted as offering a proportionate resolution to an otherwise 'stalemate' interaction.

While the officers we spoke to describe several benefits to carrying Taser, they also talked about some limitations and drawbacks. Officers pointed to certain situations that would preclude the use of Taser and necessitate other tactical options. For instance, some interviewees described how carrying Taser could accentuate difficulties when dealing with vulnerable people who are suffering from an acute mental health crisis. More broadly, some officers described an objective tension between carrying Taser and their role within policing.

When we talked to officers about the disproportionality statistics, several offered powerful accounts of their own first-hand experiences of discrimination from their colleagues that they understood were the product of biased judgements by individual officers. For instance, one officer suggested that he has had to challenge colleagues who suggested that there is an intersectionality between subject 'impact factors' (e.g., physical size, aggressiveness) and race and the idea that this may account for disparities in police use of force, including Taser. In other words, that Black men are viewed by some officers as more aggressive and threatening than White subjects (c.f., Hester & Gray, 2017) and are consequently more likely to have Taser used against them by officers who perceive a greater threat to their safety. As well as recounting personal experiences of individual-level discrimination, others argued that organisational crime priorities were themselves racially defined and patterned.

Yet a far more pervasive argument from interviewees was that officers tend to treat people equally regardless of race or ethnicity ('as they find them' was a repeated phrase). Therefore, when asked about the racial and ethnic disparities that exist in statistics relating to the police use of Taser, interviewees often contested the accusation of police disproportionality.

Consequently, the major theme in the arguments expressed by the predominantly White interviewees was that race or ethnicity was not a factor in their decisions to use

Taser. Instead, Taser use was presented as being entirely dependent on the threat and risk that a person presents in the situation they are confronting. A key aspect of such arguments was to assume that disproportionality was referring to individual-level interactions and the extent to which use of force in specific incidents was proportionate. In other words, officers described disproportionality in terms of a human rights-based definition, focusing attention on isolated interactions rather than being a systemic pattern *across* interactions. Another way the statistics were contested was to argue that the decision to deploy Taser is not taken lightly and that STOs confront a whole series of powerful considerations before doing so, including the perceived high levels of external and internal scrutiny. Indeed, some officers argued that the perceived enhanced scrutiny processes provide evidence of the fact that the police are not acting disproportionately.

As well as contesting the statistics, officers also sought to offer explanations for why they occur. The dominant perspective in this regard was to suggest that the statistics could be explained in terms of a concentration of policing in economically deprived 'high impact' or 'high crime' areas where there is a relatively large minority resident population. The increased policing activity within 'high impact' areas were described by interviewees as an important consequence of tasking decisions undertaken by senior officers designed to shape and tackle force priorities. A salient consequence of these tasking meetings is that Taser trained officers from specialised policing teams will be 'proactive' in these areas to tackle these force priorities. These units are then further directed to certain locations through the development and dissemination of intelligence packages. Accordingly, explanations for disproportionality revolved around a combination of demand, area deprivation, police tasking and deployment.

To surmise, it is important to acknowledge that it is impossible to confirm or deny the importance of individual officer biases based on interviews with officers alone. It may well be the case that in conditions of stress and uncertainty, officers can act unwittingly and automatically based on misguided but prominent cultural stereotypes (Spencer, et al., 2016), such as the notion that Black people are more violent and aggressive (Correll et al., 2002). Yet our analysis suggests that disproportionality is instead, at least in part, an outcome of organisational priorities in a context of inequality and societal racism. Taken together with findings in the remaining chapters, this means that whilst individual officer decision-making may well often be neutral or 'colour blind' (Kammersgaard et al., 2022) in respect to race, the overall patterning of policing activity and the intersection of this with race and poverty can still result in racialised outcomes.

8. Analysis using statistics: Some considerations

8.1. Chapter summary

The purpose of this chapter is to provide the groundwork for the statistical analysis that follows in chapters 9 to 12. To do this, we first outline our initial plans for analysis and the data that would have been required to fulfil them. We then describe the data we requested from participating forces, and the process involved in obtaining it. The nature, extent and quality of the data collected and collated by forces, and what could therefore be passed on to us, varied enormously. This limited our ability to conduct robust analysis, which in most cases was restricted to analysis of the use of force forms alone. There were multiple challenges involved in accessing relevant data from participating forces, which were often so severe that appropriate data were simply not available to us. These challenges fell into the several broad categories. There was a lack of data at the point of collection. All forces struggled with their existing data infrastructure to provide us with relevant data. Variables collected and held by forces varied significantly, and some did not hold data in ways that allowed it to be transferred to us. There were missing geographic identifiers. Only a very small number of forces retained data allowing Taser and other uses of force to be placed even in the general area (e.g., the city) where they took place. There was limited integration across police databases, and so it was usually impossible to link use of force forms with data retained in other databases. It proved impossible to obtain data on officer ethnicity from most participating forces. Forces were unable to supply us with appropriately anonymised complaints and misconduct data relating to Taser and the use of force more generally. Poor institutional memory meant forces often found it difficult to provide relevant metadata or the reasons why reporting and recording changes had occurred. There seem to be real, but hard to quantify, issues with duplicate records, or ‘double-counting’, and also missing data. Considering the issues outlined above, we suggest several improvements that could be made to data collection and management in the future. These include improving the use of force forms, for example, with better location data. There is a need to enhance police data collection and collation strategies, most importantly with a single transferable identifier that makes different records linkable. There should also be the construction of an anonymised complaints and misconduct database.

8.2. Introduction

In the following chapters we present statistical analysis of a substantial body of routine police data as this relates to Taser use[55]. Beforehand, though, in this chapter we outline our initial, ambitious, plans for analysis and the data we requested to address these. We then highlight the obstacles encountered and discuss what lessons might be learned for future projects. Please note that the Tables in the following chapters are numbered according to the order that they appear in the text and that some (e.g., **Table 1.** and **3.**) are included in the accompanying 'Quantitative Research Appendix' rather in the main body of this report to provide interested readers with further detailed information.

8.3. Our initial plan for analysis

At the outset of the project the College and NPCC had canvassed several forces who had already expressed a willingness to participate. Once the project was commissioned a data request document for data between 1st January 2018 and 31st December 2021 was sent to all participating forces via force Single Points of Contact (SPOCs) who had been identified for us by the College.

Our ambition was to access use of force forms, incident logs, calls for service data bases, and complaints and misconduct data to create multiple databases. These different sources of data have unique strengths which we anticipated could complement each other through combination. The use of force forms provide holistic data with multiple components about the nature and activities of the people involved. Incident logs tend to have rich narrative information on what transpired, and usually good geo-location and reliable time-stamping information. Crucially, incident logs would also include calls for service where force had *not* been used. Calls for service data would include operational information, such as initial risk-assessment by the call centre and other relevant deployment information, whilst also permitting us to distinguish between proactive and reactive police action. Finally, complaints and misconduct data could have highlighted the cases that had generated complaints from the public or were deemed problematic or questionable by the police force in question.

These newly created databases would then have served dual purpose. First, we would create a single large database that would have allowed powerful comparative analysis across the various forces. In addition, we also envisioned several force-specific databases which would have included variables only available for the particular police force in question. This approach would have allowed us to both carry out analysis that was generalisable but could have also answered more localised questions.

[55] See the accompanying 'Quantitative Research Appendix' section 1.2.1 for descriptive statistics for Taser and other uses of force across participating forces (e.g., **Table 1.**), and additional details on the question of missing data.

The primary goal of the analysis was to explore the use of Taser and its disproportionality at the neighbourhood (or 'meso') level. To achieve this, it would be necessary to aggregate results at the level of Lower Layer Super Output Area (LSOA; a Census-based area classification which typically includes around 1500 people). If this was not feasible, we would have chosen the smallest possible meaningful area (i.e., Middle Layer Super Output area, MSOA). It is relatively common in such cases to use electoral wards as the unit of analysis. Our preference for LSOAs over wards or MSOAs is because they provide a relatively consistent population size, rich information from the Census and are readily comparable with other publicly available data sets on the same level (e.g., footfall data, traffic data from Google and Apple devices, public health statistics, etc).

Our data analysis would have been inductive and exploratory in nature, with a particular emphasis on considering the associations between area-level characteristics. At a minimum, the planned variables of interest ('dependent variables') included Taser use as the proportion of all uses of force and ethnic disproportionality in the use of Taser in the given LSOA. We hoped to consider creating other dependent variables once we had a clear picture of the available data. We planned to start with 'static' analysis of the data by considering how the incident information gained from the use of force forms varied across geographical areas using multi-level regression techniques. Depending on the area-level granularity of the data, we wanted to conduct analysis which would have considered how the physical distance between incidents might have influenced the outcomes of use of force encounters, which is only possible in the case of high geographic precision. Finally, time-stamps would have allowed running geo-temporal analysis or dynamic regression models which would have permitted mapping how certain events such as calls for service led to particular uses of force.

A final contribution would have been considering the data generation process at each force. In particular, we wanted to model the missing data patterns in the use of force forms to identify their potential sources. With this analysis, we wanted to help improve police reporting practices, highlighting potential omissions and how these could be remedied. However, as we will outline below, there were multiple challenges at all stages of the process outlined above which meant that most of our ambitious plans were not realised.

8.4. The data requests

We began by requesting data from our SPOCs relating to all use of force incidents captured by the use of force forms with geo-identifiers and time-stamps. Specifically, we requested the full use of force form, not just the subset of the data that is routinely sent to the Home Office, as this excludes certain data such as the level of resistance or aggression offered by the member of the public. We requested incident data linked to the use of force forms where Taser was mentioned. We wanted to consider this data as a quality check on the use of force forms but also because these data tend to

have some geocoding attached. We also asked for information on officer ethnicity as this is not routinely recorded on the use of force form (i.e., the officer's age, gender, previous training, and length of service are captured on the forms, but not their ethnicity). Other data requested were daily calls for service with broad categories for the reason of the call and the location (i.e., geo-identifiers), with time-stamps and any information on whether these calls were responded to. We also asked if we could get data that would indicate where officers were located routinely on each day (i.e., patrol and deployment data) or any data on incidents with the potential for conflict to which Taser officers were and were not dispatched (provided that there were any general guidelines in place for this).

Another set of indicators we requested were force-level variables (on a yearly basis, should these change over time), which included: the proportion of officers within the force who are Taser trained, length in hours of officer safety training across the time-period in question, length of Taser training across the time-period in question. We asked for information about any organisational changes and changes in senior leadership since 2018 that could have affected Taser strategy, as well as any Equality Impact Assessments that had been conducted on Taser. We were also interested in public engagement and accountability perspectives and asked for geocoded and time-stamped complaint data and officer misconduct cases, especially if they were use of force related, from each of the forces. Finally, we also requested any additional data that may be gathered by forces on the use of Taser on those from Gypsy, Roma, and Traveller communities and on the use of Taser on people detained under the Mental Health Act, if these were captured elsewhere other than the use of form form).

8.5. Challenges encountered

Before proceeding further, we would like to state that we are extremely grateful to all forces that volunteered to take part in this study and spent their limited time and resources to contribute to the research. We appreciate the challenges they encountered in extracting the requested data and will discuss below the reasons why certain forces ultimately could not deliver data that could be included in subsequent analysis. For the sake of transparency, we will discuss our experiences with each force in detail in section 1.2.2 of the accompanying 'Quantitative Research Appendix'. What should be noted here is that securing the data from each force took a considerable amount of time, often with long email-based discussions supported by a series of online meetings with several individuals from each force. The SPOCs supporting our efforts usually needed to rely on sign off from more senior members of the organisation, their data protection team, and needed the help of analysists in identifying and extracting the relevant data sets. As an extreme example, in one force, we spoke to 13 different people before the data has been shared with us six months after we first contacted them. In some cases, the demands of extracting the data were insurmountable.

8.5.1. Lack of data availability at the point of data collection

All forces struggled with their existing data infrastructure to provide us with relevant data. An example of this was Cumbria, where thousands of records would have needed to be browsed manually to identify the right observations for the research. In the case of British Transport Police (BTP), their data collection system did not include much of the data that was needed, because the standard use of force forms had not been adopted for the period of interest (as this was not required of them). Devon and Cornwall Police had data architecture that meant that most of the variables of interest could not be integrated into a single dataset, as they were presented to us on multiple sheets of Excel files that did not perfectly overlap.

These three examples speak to issues regarding how forces record and keep track of their routine data. Their methods might be sufficient for operational purposes within their own organisations but could not support research-based analysis to examine racial disparities in the use of Taser. Encouragingly, some forces have taken up the feedback provided by us through this process. For instance, BTP has made changes which means that collating and sharing data of this type is likely to get easier in the future. Nevertheless, the lack of data availability at the point of data collection indicates that there are serious shortcomings in how some of the volunteering forces have been managing their data capture, which can make it impossible to carry out even fairly basic descriptive analysis.

Even among forces that were able to provide us with data, not all could be included in subsequent analyses. For instance, use of force forms in West Mercia did not record some of the impact factors key to the comparative analysis presented in chapter 9, and thus had to be excluded. In another example, the way West Midlands Police (WMP) adopted the use of force forms resulted in missing data on several key variables. Surrey Police could only provide data from 2019 onwards, whilst Sussex only provided use of force forms when Taser had been used. Gwent data was missing the variable for the gender of the subject. Due to these types of limitations, reluctantly, we could not include several of the forces who did provide us with data in most of our subsequent analyses. In one case, an emailing error on the part of one of the universities led to a breakdown in communication with one participating force meaning their data could not ultimately be included.

With all the issues described above, we were successful in accessing workable data from seven police forces to the extent that they could be included in the comparative analysis report in chapter 9. These were Bedfordshire, Derbyshire, Greater Manchester Police, Hampshire, the Metropolitan Police Service (MPS), Warwickshire, and West Yorkshire. The rest of this chapter will focus on common issues we encountered when collating and analysing these datasets. As most of these were recurrent issues, we will only mention particular forces when they significantly differed

from the rest. More detailed information on each dataset is available in section 1.2.2 of the accompanying 'Quantitative Research Appendix'.

8.5.2. Missing geographical information

Among the workable datasets, the main issue we encountered was the lack of geographical information about where each use of force took place. To be clear, the location of the use of force is not required on the current use of force forms, this was therefore not an oversight on the part of the forces involved, but an omission created by the current reporting requirements. Therefore, most forces did not have any data on this recorded in the form itself. Some forces recorded partial information for a small minority of cases. This took the form of partial qualitative information that was often imprecise, information that could be linked to some but not all instances of use of force, or information on larger geographical areas such as towns or cities but not at the LSOA level. This meant that the focus of the research (i.e., considering neighbourhood-level influencers of use of force) could only be studied in a very limited number of cases.

8.5.3. Limited integration across police databases

The problem of geographical information in the use of force form was then amplified by a lack of capacity to integrate or link across different databases, which made it either laborious or impossible to link incident logs or calls for service data to use of force forms. This likely represents a systemic issue across policing in England and Wales where data is collected and stored in different IT systems that do not interface with each other. Nonetheless, we hoped to be able to analyse incident data where Taser was mentioned or used. Unfortunately, most forces did not have a 'Taser tag' that would have made such cases easily identifiable. Without any way to link use of force forms to incident logs other than manually, neither we nor the participating forces had the capacity to link the data sets. This meant we could rarely move beyond analysis of the use of force forms in isolation, seriously curtailing the analysis as it limited us to comparisons between Taser to other uses of force rather than of police actions in general. In other words, in keeping with other studies, we are only able to compare incidents where Taser was used to other use of force incidents, not to circumstances where use of force did not occur. Thus, if other uses of force were already disproportionate, and the use of Taser was in keeping with this general pattern, then factors such as ethnicity may well be relevant but would not have shown up as statistically significant. In this case, a non-significant finding would indicate only that Taser use was no more or less disproportionate than other uses of force, not that Taser use is not disproportionate in comparison to another baseline, such as the composition of the resident populations. It should also be remembered that, as use of force forms are completed by the officer using force, they only provide an account of what happened from the officer perspective.

8.5.4. No data on officer ethnicity

A further issue we encountered with some forces was that they either did not record officer ethnicity, or they were not willing to share that information on data protection grounds. As demonstrated in chapter 10, the overlap between officer and subject ethnicity may contain valuable information regarding the nature and outcome of use of force encounters. Another officer related variable that was not captured by almost any force was an individual (officer) level identifier that could be tracked across other use of force incidents. It is self-evident that linking each use of force incident to the same police officer could be a powerful analytical tool. However, we were only able to undertake such analysis with data from one participating force, as outlined in Chapter 11.

8.5.5. No complaints or misconduct data on use of force

Although we requested it, we could not access data regarding complaints or misconduct cases with any details regarding what these instances were about. Most forces rejected our request on data protection grounds or supplied only summary tables. It became apparent that the forces involved do not have anonymised ways to report on the details of the complaint or misconduct cases to third parties: for instance, to determine whether the complaint or misconduct proceedings mentioned use of force. This lack of data prevented us from exploring how Taser use might compare to other uses of force when it comes to complaints and misconduct.

8.5.6. Imprecise institutional data

There is also something to be said regarding how forces log changes being implemented regarding certain practices, such as a new type of training being rolled out, changes to organisational structures, and so on. The force-level variables we requested tended to be fairly imprecise, and often did not go back to the start of 2018 due to SPOCs not being in role long enough and not knowing whom to ask for such information. Issues regarding institutional memory in policing are not new but should be revisited and highlighted. In privately owned organisations (such as banking or IT), it is not rare to have clearly outlined mandatory handover documents. Although similar practices would add to the bureaucratic burden in the short run, they could save time in the long run, as it would be clear where to turn to for information about changes in the not-so-distant past. Perhaps the Taser Strategic Risk Assessments may serve this purpose in future.

8.5.7. Data management processing and ‘duplicate’ records

Finally, the lack of unified data framework meant that it took considerable time and effort to transform each dataset we received into an analysable format. The details of what had to be done with each force’s dataset is discussed in section 1.2.2 of the

accompanying ‘Quantitative Research Appendix’. However, it is necessary to highlight the potential for ‘over-reporting’ use of force. By the nature of the use of force forms, it is expected that, when multiple officers are present, and use force on the same person, all of those who did so will submit a form. This likely leads to duplicate submissions of the same incident due to the forms being officer-centric instead of being incident- or subject-centric. After screening for such over-reporting, the details of which are discussed in the next chapter, a large proportion of use of force forms appeared to be singular. The exception was the MPS dataset, where we found a great number of records that had been submitted by multiple officers to account for their own uses of force on the same person; an issue that warrants further discussion given the numbers of use of force incidents that occur in London.

Some of the multiple records on uses of force on the same person could be identified in the MPS data thanks to the availability of information on the custody record. These records tended not to be identical, due to some mismatch on one or more variables, despite clearly referring to the same uses of force in particular circumstances. This, however, means, that we could only identify multiple records for individuals who had been taken into custody, but not for others on whom force had been used. Finally, we also had borough-level information, and we found that there was a large degree of variation in the number of multiple records across different boroughs, with some having produced almost none and others a very high share.

Overall, it seems that there is reason to believe that a certain degree of ‘over-reporting’ might be present in the MPS compared to other forces. We do not believe that the source of this would be reporting cases that did not take place. We think that it is more likely that certain boroughs have taken to logging all use of force cases (even very minor ones, such as ones with tactical communication only), which stands apart from the practices pursued by other boroughs and forces. It may also be the case that in reporting, identical cases are not necessarily screened for (at least in some boroughs). Although this issue only arose in the MPS, it speaks to a wider problem of multiple officers reporting their own uses of force on the same person which are not tied together in any way in the system. This is something that we would advise remedying in the future, as it creates confusion in reporting and analysis. In our analysis, we addressed this conundrum by controlling for borough-level fixed effects in the MPS data.

8.6. Improvements to data collection and management

In the previous section, we listed the main challenges that we encountered when accessing data for this project. We assert that significant reforms to data collection practices are needed. Some of these are likely to be easier to implement (e.g., adding more questions or fields to the use of force forms, such as geo-location), whilst others are likely to be more challenging, due either to issues with the non-integration of various databases, workforce constraints, or data protection regulations.

8.6.1. Improving use of force forms

First and foremost, we would encourage changes to the use of force forms. The forms should ask for information on the ethnicity of the officer who carried out the use of force. It is also crucial to record information on the specific location of the use of force that is geo-coded or otherwise tied to the LSOA and thus readily offer itself for further neighbourhood-level analysis. Another issue is the missing data on the distinction between pro- and reactive use of force, where proactive use of force would mean that the initial contact was police-initiated (i.e., officers came across a situation or used force whilst fulfilling their duty without having been directed to the situation), whilst reactive would mean officers were deployed to an incident reported to them (i.e., so they would have some prior knowledge or initial expectations regarding the encounter).

8.6.2. Improving data collection and collation practices

Improving data collection and collation practices that sit above individual use of force forms and similar recording media would seem a much more difficult task. This would require significant investment into how forces collect and organise data to reach a situation where use of force forms could be integrated with incident and calls for service data and other uses of police powers (such as stop and search; see chapter 5 for a discussion of West Midlands Police's Qlik system). This could be done by a single transferrable identifier being available in all databases, making the various records linkable, or by creating a single log for all of these. This would be useful not only from a data analysis perspective but also operationally, as officers could see the details of the incident alongside the information on calls for service and use of force (if any). This identifier would also help to identify use of force forms which refer to the same incident. Once an officer submitted the first of such forms, they could tag their colleagues and send them an automatic prompt to do the same. This way, the potential 'overreporting' of cases could be mitigated.

Considering that all force areas are expected to use the same use of force form, it is reasonable to expect a consistent and coherent provision of data across forces that would meet a consistent standard with similar formatting guidelines. However, some individual forces, particularly those in smaller and more rural geographical areas, faced challenges in providing the data due to resource constraints, including limited capacity and inadequate specialised expertise. An increase in the number of people providing analytical support would thus be desirable. Other forces did not record certain items of data otherwise required of them, and hence should be encouraged to change their data collection to capture the use of force forms in full.

We also believe that a review of data collection principles and practices of use of force forms is needed. Our analysis indicates that potential under-reporting varies across different forces, which implies that the currently available data is likely to be biased.

8.6.3. Anonymised complaints and misconduct database

We would also urge each force to put together an anonymised complaints and misconduct database. We acknowledge the data protection challenges surrounding this recommendation, but basic information regarding these proceedings (e.g., information on the demographic characteristics of the officers and citizens; the type of force used in the encounter, if any; injuries to the parties; the outcome of the encounter; investigation carried out – if any – and the results of the investigation) could help to illuminate whether certain uses of force are more or less likely to lead people to complain about how they were treated.

8.6.4. Conclusions regarding improving data collection

Despite all the above limitations, we will evaluate the available evidence in subsequent chapters. Nevertheless, we also believe that our collective aim ought to be about setting up clear data collection guidelines with proper monitoring and quality assurance. Furthermore, in an age of big data, the data collected should be fully integrated with the other databases maintained by the police, including incident records, deployment patterns, and calls for service. This new data source would not only help with police accountability but also could advise and influence police strategy permitting the identification of spatial and temporal patterns in the data that had been elusive.

Finally, we also believe that the process of setting up this new integrated system would need to be led from the top. Our difficulties with securing, clearing, and analysing the use of force forms demonstrates that despite notionally having the same data collection requirements, large variations in how and what kind of data is collected often meant that the data provided could not inform our analysis. New data collection requirements need to go hand-in-hand with central support for the implementation of new data collection practices. This should go beyond guidelines and suggestions, and ought to involve hands-on support with setting up quality assurance schemes and crucially, must involve IT support regarding how the new data being collected could converse with the legacy systems available at each force.

We acknowledge that all above suggestions require additional investment and might take years to be implemented. Nevertheless, if the ambition is to increase transparency and police accountability and base police decision-making on actionable evidence with the goal of monitoring outcomes, this must be the next step.

9. Cross-force comparison

9.1. Chapter summary

This chapter explores the difference between Taser and other uses of force across all eligible police forces in our sample. When police use force, are there factors that make it more or less likely that this will involve deploying Taser? To address this question, the analysis compared data from seven police forces, with the ethnicity of the citizen as the main variable of interest alongside other explanatory variables which included citizen and officer demographics, police-reported impact factors, and other contextual factors. The outcome variables that we focused on was Taser use (compared to other force modalities).

The results from the comparative analysis indicate that the relationship between ethnicity and Taser use versus any other use of force often goes in unexpected directions. Compared to White people, Asians were less likely to be Tasered even considering all other factors. Although Black and Mixed background had a positive association with Taser use, this relationship became statistically non-significant once police recorded impact factors (such as prior knowledge of officers, the citizen having a weapon on them, etc.) are accounted for in the analysis. Nevertheless, when data on citizen ethnicity was missing (i.e., was not recorded by the police), this had a positive association with the use of Taser.

Beyond ethnicity, Taser was more likely to be used compared to other types of force when officers had longer service and when citizens had weapons on them. Influential, but smaller effects could be found for the citizen being female (negative association) and the police having prior knowledge on the individual.

9.2. Introduction

This section of the report focusses on cross-force comparisons. We used data from use of force forms provided to us by different forces to, most importantly, we consider the association between the ethnicity of subjects and the probability of Taser being used during a use of force incident. Use of force forms were rolled out across police forces in England and Wales in 2017 and 2018 to provide a unified and comparable picture of the use of force practices of each force area. While ten forces provided us with data that could be used in some form, and all are included in some of the analyses presented below, we focus on seven forces that provided fully comparable data. This full comparability meant that we could merge those databases and fit a single statistical model to all the data. We have added further analyses to section 1.3.3 of the accompanying Quantitative Research Appendix where the modelling sought to compare the results of a force-by-force analysis, with Taser use as the outcome variable and various sets of explanatory variables alongside ethnicity as the explanatory variables. By scrutinising forces with very different characteristics, we are

able to assess whether the emerging associations are similar to each other or are more likely to be force specific.

9.3. Research questions

We had two primary research questions:

Q1. Is there a statistical association between ethnicity and Taser use (compared to other force modalities) across the different forces?

Q2. Can any association between ethnicity and Taser use be explained by other factors, or, to put it another way, does any such association persist even after we control for demographic, situational and other variables?

9.4. Data and methods

9.4.1. Outcome variable

We used one dichotomous outcome variables in this section. Taser use was coded as 1, regardless of how it was used (e.g., drawn, arced, fired, etc.) and no recorded use of Taser was coded as 0. As elsewhere in this report, since we only had the use of force forms for this analysis, we were only able to compare Taser use to *other* uses of force (0, the reference category), rather than to incidents where force was not used at all. We also considered using a second outcome variable for this analysis that considered Taser use *with* other uses of force. Unfortunately, as we will demonstrate by looking at the descriptive statistics, we could not devise a straightforward way of carrying out such an analysis due to a lack of overlap with Taser use and most uses of force other than handcuffing.

9.4.2. Explanatory variables

When choosing the list of explanatory variables, we were limited by data availability. Therefore, we included all explanatory variables which were available for all forces. These were the following.

Citizen demographics as perceived by the officer:

- Ethnicity: Asian, Black, Mixed, Other, Missing/unknown, and White (which was the reference category).
- Gender: female or male (with male as the reference category).
- Age group: 18-34, 35-49, 50+ years (with 17 years and under as the reference category).
- Mental disability/mental health problems (the wording varied depending on the force used).

Officer characteristics:

- Ethnicity: Asian, Black, Mixed, Other, Missing/unknown, and White (which was the reference category).
- Age group: 30-39, 40-49, 50+ years (with under 30 years as the reference category).

Impact factors that officers recorded as having affected their decisions to use force were also included, such as:

- The subject being under the influence of alcohol or drugs.
- Police prior knowledge of the subject (i.e., the subject had a record of prior involvement with police).
- Gender, size, and build of the subject.
- The presence of a weapon.
- Other contextual factors included the three coronavirus lockdowns (first 'lockdown': 26/03/2020 – 23/06/2020; second lockdown: 05/11/2020 – 02/12/2020, third lockdown: 06/01/2021 – 19/07/2021) and the time of day when the force was used (morning, afternoon, evening, night).

9.4.3. Analytic approach

We start with some general descriptive statistics to give a sense of how the various forces differed from each other. This is followed by binary logistic regression analysis, where we pooled the data from seven police forces: Bedfordshire, Derbyshire, GMP, Hampshire, MPS, Surrey, West Mercia, and West Yorkshire. We fitted five iterative statistical models and in each we considered the changes in the association between ethnic minority membership and Taser use. Model 1 contained only ethnicity as the explanatory variable; Model 2 also added other citizen demographics; Model 3 entered officer demographics; Model 4 added police recorded impact factors; Model 5 included other contextual factors; finally, Model 6 incorporated all variables. Technical notes on the analysis and robustness checks can be found in the endnotes of the report.[iv]

9.5. Results

9.5.1. General patterns of Taser use

To better understand how Taser is being used across the UK, we need to have a better sense of which usage is most common: 'Drawn' (1), 'Aimed' (2), 'Arced' (3), 'Red-dot' (4), 'Fired/angle drive-stun/drive-stun' (5). **Table 2.** provides data for each police force, including the corresponding percentages. To account for the relatively low individual counts of Taser use in some areas, the highest level of Taser use, which encompasses discharge uses such as fired, drive-stun, and angle drive-stun, is presented as an aggregated value. The following analysis of levels of Taser usage is discussed in order

of overall frequency across force areas. However, this order may vary when considering individual force areas. From the descriptive analysis discussed in detail below, it is evident that Red-Dotted is the most prevalent category of Taser usage, underscoring its significance in training as an effective visual deterrent and 'de-escalation' tactic that visually demonstrates an officer's readiness to employ force (see chapter 6). We also find that Drawn is the second most common Taser usage level, which suggests that the mere display of the device without discharge is relatively common. It is also the case, of course, that this is the initial step in the sequence of Taser usage.

Next, the analysis revealed the Aimed category as the third most prevalent level of Taser usage, although it is almost absent in certain force areas such as Hampshire and West Mercia. This notable variation among different force areas could suggest potential differences in officers' training and reporting practices, which are also likely to be the case with some other categories of use too. The Fired/Angle Drive-Stun/Drive-stun category was identified as the second least employed level of Taser use. This corresponds to national data that confirms that Tasers are only actually discharged in a relatively small proportion of incidents. Finally, Arced emerges as the least employed level of Taser use. Notably, Bedfordshire did not report any incidents under the Arced category throughout the four-year analysis period, despite officers having the option to record such incidents. This prompts questions as to why this category is maintained, and what arcing is meant to achieve if so few officers actually record using it.

In most force areas, red-dotted was the most prevalent category for Taser usage, indicating instances where the Taser is partially activated to project a red laser dot onto the targeted person without discharging the device[56]. In descending order, the red-dot category of Taser usage across the different force areas is as follows: Bedfordshire (63%, of all uses), Hampshire (59%), MPS (59%), Derbyshire (57%), GMP (55%), West Yorkshire (54%), Surrey (53%), West Mercia (52%), and Gwent (10%). The range of this measure is striking, from 63% in Bedfordshire to just 10% in Gwent. The second most prevalent category for Taser usage is Drawn, representing incidents where the Taser is removed from the holster and visibly displayed. The order of Taser usage in the Drawn category across the different force areas is as follows: Gwent (36%), West Mercia (34%), West Yorkshire (30%), Surrey (28%), Derbyshire (24%), MPS (21%), GMP (18%), Bedfordshire (17%), and Hampshire (14%).

Aimed was the third most prevalent category, involving instances where the Taser is pointed at a specific individual. In terms of the Aimed category of Taser usage across the different force areas, the proportions are as follows, Gwent (43%), GMP (12%),

[56] We understand that later versions of the devices are using a green laser, so the colloquial terminology is likely to change.

MPS (11%), Bedfordshire (10%), Surrey (9%), West Yorkshire (8%), Derbyshire (6%), Hampshire (2%), and West Mercia (1%).

The fourth most prevalent category is Fired/Angle Drive-Stun/Drive-stun, encompassing the use of Taser with live cartridges or direct contact with the person's body. The proportions for the fired/angle drive-stun/drive-stun category of Taser usage across the various force areas are as follows: Hampshire (14%), GMP (14%), Bedfordshire (10%), MPS (10%), Gwent (9%), Derbyshire (9%), Surrey (9%), West Yorkshire (7%) and West Mercia (5.%).

Finally, Arced was the least prevalent category, indicating the activation of the Taser to produce sparks without aiming or firing it. The order of Taser usage in the Arced category across the different force areas is as follows: Hampshire (11%), West Mercia (8%), Derbyshire (4%), Gwent (2%), West Yorkshire (1%), GMP (1%), Surrey (less than 1%) and MPS (less than 1%). Note that in half of the force areas that provided information on the Arced category, less than 1% of Taser incidents could be attributed to this level.

Table 2. Taser usage levels across the force areas

Force area	Drawn	Aimed	Arced (3)	Red-dotted (4)	Fired/angle drive-stun (5)	TOTAL
Bedfordshire	214 (17.24%)	120 (9.67%)	-	783 (63.09%)	124 (9.99%)	1,241 (100%)
Derbyshire	264 (23.6%)	69 (6.2%)	41 (3.66%)	641 (57.3%)	103 (9.2%)	1,118 (100%)
GMP	976 (18.44%)	611 (11.54%)	31 (0.59%)	2,934 (55.43%)	741 (14%)	5,293 (100%)
Gwent	332 (35.58%)	397 (42.55%)	21 (2.25%)	95 (10.18%)	88 (9.43%)	933 (100%)
Hampshire	194 (14.35%)	21 (1.55%)	144 (10.65%)	801 (59.25%)	192 (14.20%)	1,352 (100%)
MPS	8,145 (24.11%)	3,903 (11.55%)	145 (0.42%)	18,411 (54.49%)	3,178 (9.40%)	33,782 (100%)
Surrey	579 (28.20%)	185 (9.01%)	10 (0.48%)	1098 (53.48%)	181 (8.81%)	2,053 (100%)
West Mercia	562 (33.55%)	10 (0.59%)	138 (8.23%)	876 (52.29%)	89 (5.31%)	1,675 100%
West Yorkshire	802 (29.67%)	213 (7.88%)	20 (0.74%)	1,466 (54.24%)	202 (7.47%)	2,703 (100%)

9.5.2. Taser with other uses of force

We were interested to learn how often Taser was used in combination with other types of force. **Table 3.**, available in section 1.3.1 of the accompanying 'Quantitative Research Appendix', displays detailed information on the combined use of Taser with other tactics for using force in various police force areas. For the ease of analysis and based on data availability, we have grouped certain use-of-force tactics together. We combined Taser usage with:

- non-compliant and compliant handcuffing
- ground restraints and body/limb restraints

- spit guards, dogs, shields, and irritant spray (such as PAVA) because of relatively low number of incidents for each type of force.

Additionally, it is important to note that although some force areas provided information on the sequence of tactics used (i.e., the order in which each tactic was applied), this was not true for the majority of forces, therefore, this aspect falls beyond the scope of this investigation. The subsequent analysis focuses on overall patterns with variation across the force areas. The variation in counts across different force areas highlights the diverse approaches adopted by police officers when combining Tasers with other available tactics. The analysis reveals that, in all but two forces (out of nine), the primary use of Taser is usage without any other use of force. This suggests that it is quite common that Taser deployment on its own is judged sufficient without requiring any further uses of force. This finding is strange as one would assume that an arrest is usually made if Taser is deployed because there needs to be a threat for its use to be justified. Correspondingly, the most prevalent combination involves handcuffing. The frequent use of the Taser-handcuff combination can be attributed to training programmes emphasising the simultaneous application of these techniques (see chapter 6 for a detailed analysis of Taser training). For instance, Taser may be deployed to gain control over the situation, followed by handcuffing to ensure the individual remains restrained.

The combination of Taser use with Unarmed Defence Techniques (UDT), various restraints, and improvised tactics appeared to be common in some but not all forces. This shows the great degree of variation across force areas which could probably be explained by differences in training, institutional culture, and reporting practices. The main takeaway from this is that, other than handcuffing, there is no other use of force that is typically used alongside Taser. We identified the combination of Taser, including firearms, as the second least common tactic. The rarity of Tasers used in conjunction with firearms aligns with national trends, considering that firearms are already involved in a relatively small number of cases. On the other hand, the least common combination of Taser usage includes the combination of batons. One rationale given for the introduction of Taser is to bridge the operational gap between firearms and close-contact tactics like batons. The low count suggests that officers rely more on the Taser's ability to incapacitate targets from a distance, potentially reducing the need for close-contact techniques such as baton strikes (see chapter 7 for officer perspectives on this). Overall, **Table 3.** demonstrates the difficulty of analysing Taser use in conjunction with other uses of force: for the most part, there is no sufficient overlap with commonly used techniques (other than handcuffing), which makes large-scale multivariate analysis very difficult in most forces.

9.5.2.1. Taser use in isolation

In all, but one force area (Hampshire), Taser use on its own, without any other use of force, was the most common. In fact, in five out of nine forces, more than half of the incidents where Taser was used did not require any other use of force: Derbyshire

(64%), West Yorkshire (61%), MPS (60%), Surrey (57%) and Gwent (54%). In Bedfordshire (48%), West Mercia (45%), and GMP (41%), this was over 40%. In Warwickshire, over a third of Taser use happened on its own (34%) and in Hampshire, over a quarter (26%)

9.5.2.2. Taser with handcuffing

The most common combination of Taser use involves handcuffing. Across the different force areas, the prevalence of Taser and handcuffing combinations, listed in descending order, is as follows: Hampshire (37%), Warwickshire (34%), Bedfordshire (33%), Gwent (29%), GMP (27%), MPS (23%), Surrey (21%), West Yorkshire (18%), Derbyshire (13%), and West Mercia (10%). Again, the range of this measure and some of the others reported here is striking: in Hampshire, 37% of all Taser incidents comprised a Taser use and handcuffing combination, but this figure was only 10% in West Mercia.

9.5.2.3. Taser with UDT, restraints, and improvised tactics

The second most common combination of Taser includes Unarmed Defence Techniques (UDT). Across the different force areas, the prevalence of Taser and UDT combinations is as follows: Hampshire (18%), West Yorkshire (14%), Surrey (13%), Derbyshire (13%), Gwent (13%), Bedfordshire (11%), Warwickshire (10%), GMP (10%), MPS (8%), and West Mercia (2%).

The third most common combination of Taser involves Ground/Limb/Body restraints. These combinations are distributed across various force areas as follows: the highest was GMP (19%), then Hampshire (15%), Warwickshire (8%), MPS (7%), West Mercia (7%), Bedfordshire (5%), Gwent (3%), Surrey (3%), Derbyshire (2%), and finally West Yorkshire (2%).

The fourth most common combination of Taser includes other improvised tactics. Across the different force areas, the prevalence of Taser and other improvised tactics combinations is as follows; West Mercia (32%), Derbyshire (5%), Warwickshire (3%), Surrey (2%), MPS (1%), GMP (1%), Hampshire (1%), West Yorkshire (1%) and Bedfordshire (1%).

9.5.2.4. Taser with spit guard, dog, shield, irritant spray, firearms and baton

The fifth most common combination of Taser involves Spit guard/ Dog/ Shield/ Irritant Spray. These combinations are distributed across various force areas as follows: highest in Warwickshire (3%), then West Yorkshire (3%), Hampshire (3%), Derbyshire (3%), Surrey (2%), GMP (2%), West Mercia (1%), Gwent (less than 1%), MPS (less than 1%), and finally Bedfordshire (less than 1%).

The sixth most common combination of Taser includes firearms. The distribution of this combination across various force areas is as follows: highest was Warwickshire

(8%), and then West Mercia (3%), West Yorkshire (2%), MPS (1%), Surrey (1%), Bedfordshire (1%), Derbyshire (less than 1%), GMP (less than 1%), and finally Gwent (less than 1%). Although the proportion of Taser incidents also involving firearms was 30 times higher in Warwickshire than in GMP it should be noted that the absolute number of Taser incidents was much lower in the former force. Hampshire did not report any instances of Tasers being used alongside firearms, and Gwent had only one recorded incident.

Finally, the least common combination of Taser includes Baton. Across all the reporting force areas, this combination accounts for less than 1% of incidents. This suggests that using Tasers in conjunction with batons is relatively infrequent across those force areas.

9.5.3. Statistical analysis of Taser

In this chapter, we are focussing on our analysis of a pooled dataset of seven police forces: Bedfordshire, Derbyshire, GMP, Hampshire, MPS, and West Yorkshire. The outcome variable is Taser (versus any other use of force) with the following six statistical models applied:

- Model 1: only ethnicity as the explanatory variable;
- Model 2: ethnicity and other citizen demographics;
- Model 3: ethnicity and officer demographics;
- Model 4: ethnicity and police recorded impact factors;
- Model 5: ethnicity and other contextual factors;
- Model 6: all variables from Model 1-5.

In addition to the above, we also added the results for the final Model 6 which were robust to the various weighting approaches taken (as discussed in the analytic approach section). The write-up of the narrative results is in **Table 4. (**with the technical details available in section 1.3.2 of the accompanying Quantitative Research Appendix). Overall, our results indicate that only two ethnic categories had robust relationship with Taser use: all else considered, being Asian reduced the odds of Taser being used, whilst Missing ethnic category increased the odds. However, the strongest positive association emerged with officer length of service (with longer service being more indicative of Taser use vs less than 2 years of service) and a citizen having a weapon on them. Further notable robust factors included the gender of the citizen (negative association with female), mental health (positive association) and prior knowledge (positive association). Other contextual variables had a weak(er) relationship and are discussed in detail below.

9.5.3.1. Ethnicity and Taser

Our main finding is that the only statistically significant and robust results for the association between ethnicity and Taser use emerged for not recorded/missing ethnicity, which had a positive (partial) association, and being Asian, which had a negative (partial) association.

Being from a Black or Mixed background also increased the probability of Taser use, all else being equal, but this result ceased to be statistically significant as soon as police recorded impact factors were accounted for (Model 4 and Model 6). Being from 'Other' ethnicity had a negative association with Taser use across the modelling, but this relationship disappeared after having considered the weighted models.

9.5.3.2. Citizen demographics and Taser

Considering other citizen demographic factors, being female had a strong negative association with Taser being used on them and being older also had a consistent positive association. Mental health, which some forces recorded as an impact factor, others as a citizen characteristic, also had a robust positive association in all models.

9.5.3.3. Officer demographics and Taser

From officer demographics, we could only consider their age and their length of service as gender and ethnicity were not readily available/consistently recorded in all forces. Here, the strongest positive partial association emerged for length of service, with longer service increasing the odds of Taser use. For age, being 30-39 instead of younger had a consistent positive association with the use of Taser. By contrast, the association with being older age groups appeared to be spurious and changed direction or became non-significant after the robustness of the results were considered.

9.5.3.4. Impact factors and Taser

From the impact factors, having a weapon on the citizen had the strongest association with the magnitude of the other relationships dwarfing in comparison. Nevertheless, prior knowledge and gender, size, and build maintained their positive partial association with Taser use vs any other use of force across the modelling. Although, being under the influence of alcohol and drugs had a significant negative association in some models, these were weaker and ultimately disappeared once the robustness checks were carried out.

9.5.3.5. Other contextual variables and Taser

We also considered other contextual factors, among which Taser use compared to any other use of force seems to have increased during the first lockdown compared to other time periods. In addition, we also found that, compared to the evening, the odds of Taser being used reduced in the afternoon, whilst they increased in the evening.

Table 4. Qualitative summary of binary logistic regression analysis for Taser use vs any other use of force (with fixed effects for Bedfordshire, Derbyshire, GMP, Hampshire, MPS, West Yorkshire).

Model 1 (citizen ethnicity)	Increased: Black, Missing, Mixed Decreased: Asian, Other
Model 2 (citizen ethnicity and other citizen demographics)	Increased: Black, Missing, Mixed, aged 18-34, Mental health Decreased: Female, being 50 and over
Model 3 (citizen ethnicity and officer demographics)	Increased: Black, Mixed, Missing, officers aged 30-39, short police service, medium-length police service, long police service Decreased: Asian, Other ethnicity, officers aged 40-49, officers aged above 50
Model 4 (citizen ethnicity and impact factors)	Increased: Ethnicity missing, impact factor weapon, Impact prior knowledge, Impact gender, size, build Decreased: Black, Asian, Other ethnicity, impact factor alcohol, impact factor drugs
Model 5 (citizen ethnicity and other contextual factors)	Increased: Black, Mixed, Missing, first lockdown, night Decreased: Asian, Other ethnicity, second lockdown, third lockdown, morning, afternoon
Model 6 (all variables) – robust results	Increased: Ethnicity missing, aged 18-34, aged 35-49, being over 50, mental health, officers aged 30-39, short police service, medium-length police service, long police service, impact factor prior knowledge, impact factor gender, size, build, impact factor weapon, first lockdown, night Decreased: Asian, Female, afternoon

9.6. Discussion

The descriptive statistics demonstrated the great degree of variation in Taser use across our sample of police forces in England and Wales. The most common use of Taser in those forces seems to be red-dotting followed by Taser being drawn by the officer. Other uses of Taser (aiming, firing, and arcing) were less common, again, showing relatively large disparities. These findings are in line with training and guidelines. In the case of arcing, we believe that there is evidence that its exclusion from the use of force forms might be warranted due to the lack of reporting. When it comes to Taser use alongside other uses of force, we found that, in most forces, it is most common that Taser is being used on its own without any other uses force accompanying it. The second most common usage is alongside handcuffing, which appeared to be largely universal across the forces. There were certain other tactics, such as the use of UDT, restraints, and improvised tactics, which were reported much more commonly in some forces compared to others. In all other use of force cases, Taser was rarely used. We think that some further research is needed to explain why, in certain forces, Taser goes together with particular use of force modalities which are

largely absent in other forces. Two ethnic categories had consistent and robust association with Taser use. These were Asian, with a negative relationship, and missing, with a positive relationship, compared to being from a White background. For Black and Mixed the association was positive, until police recorded impact factors were accounted for, whilst for Other, the negative association disappeared after considering the robustness of the results. These findings indicate that for Black and Mixed other explanatory variables, can more accurately account for the relationship between ethnic minority background and Taser usage. This is perhaps unsurprising because the use of force forms are used by officers to account for their decisions to use force. Our analyses in the next chapters will test several alternative hypotheses why this might be the case, including the possibility that the recorded impact factors may be affected by the ethnicity of the member of the public. In other words, it should also be remembered that a lack of a significant association does not indicate a variable is not important; it merely indicates that there is no statistically significant difference between the use of Taser and other types of force, i.e., that patterns of Taser use are similar to patterns in other use of force modalities, regardless of what those patterns may be.

We also believe that further research is needed to explain why 'missing' information on ethnicity has a relatively large positive association with Taser use. The missing category can refer to police officers choosing 'don't know' for the ethnic category, as well as opting not to answer this question. Although we inquired at each force, none of them could tell us whether answering this question was optional in their forms. Nevertheless, this missing category accounted for less than 2% of cases in most forces with the highest percentage being 3.8%, which means that this is unlikely to be a major factor influencing the overall patterns.

Beyond the perceived ethnicity of the person subject to police force, the findings have pointed to other important intersectionalities which future studies should focus:

- Citizen demographics: older males with mental health problems appeared to have increased odds of Taser used on them compared to other use of force instances.
- Officer demographics: longer police service had a significant positive association with Taser use.
- Police reported impact factors: having a weapon on the individual, prior knowledge, and gender, size, and build had a positive partial association with Taser use versus other uses of force. Crucially, these impact factors seemed to have accounted for the association between ethnicity and Taser use therefore, these deserve further consideration, and we will explore some of these in the next chapters.
- Contextual factors: Taser usage versus other use of force use seemed to have increased during the first lockdown, and all else being equal, Taser use is likely to increase at night and decrease in the afternoon compared to evenings.

10. Demographic match and reporting practices

10.1. Chapter summary

This chapter uses data from Greater Manchester Police (GMP) which provided information on (1) the demographic characteristics of both citizens and officers and (2) the larger geographical areas within the force. We will demonstrate how both these aspects may complement our understanding of the nature of Taser use. To foreshadow the analysis, we find that when an officer who has recorded a use of force has the same gender and ethnicity as the citizen they encounter, they will be less likely to use, red-dot or fire their Taser compared to any other use of force. In short, we argue that this data supports the idea that a gender and ethnic similarity, or 'match', may have a de-escalatory potential. We also find that, even after controlling for all other factors, officers in the City of Manchester are more likely to use Taser compared to other geographical areas in GMP. We suggest that this speaks to the need to record the geographical areas where the use of force took place. We also consider whether patterns within the police-reported impact factors might capture some of the variation in suspect ethnicity. Here we find that although ethnicity does not have an association with the use of Taser after we control for police recorded impact factors in the modelling, it becomes clear that some impact factors are more likely to be present with certain ethnicities. In particular, the effect of being Black or from a Mixed background is being channelled by the reporting of having prior knowledge of the individual or the sex, size, and build of the subject. In short, we find evidence that one reason for the lack of direct association between ethnicity and Taser use is because of the 'racialised' pattern in the recording of certain impact factors.

10.2. Theoretical rationale

One important question in criminology is whether disproportionalities identified in police actions such as stop and search or use of force, specifically those pertaining to ethnicity, would be different if police officers were more alike to the people they policed. In the social sciences, theories of 'representative bureaucracy' or 'community accountability' go back decades (c.f., Mosher, 1968, but see Trochmann & Gover, 2016 for a more recent overview). According to these theories, the primary reason bureaucracies should aim to be representative of the public is an expected alignment in values and lived experiences between representatives of the organisations and the people they work for. This can lead to policy and service responses that are more tailored to community needs and demands, leading to improved relations and smoother functioning.

The literature distinguishes between three different ways bureaucracies can represent the public (Davies et al., 2021; Shjarback et al., 2017). Active representation is the most difficult to measure, as it means that the organisation makes decisions in the

service, and according to the priorities, of the communities they represent (even if they are not from the same community). The two other approaches, passive and symbolic representations, are easier to capture. Passive representation means that the bureaucrats (in our case the police) have the same demographic characteristics as citizens. In the case of symbolic representation, the goal of real or symbolic similarities is to engender trust, engagement, and conflict resolution in the community by building legitimacy. The latter does not necessitate 'police' and 'public' being from the same community. Rather, it envisions sending community-specific signals. The empirical evidence regarding the effectiveness of representative bureaucracy in policing is mixed, with a recent systematic review finding no effect on crime rates, arrest rates, or public satisfaction (Bullock et al., 2017). Notably, however, the study could only review eleven studies at the time, highlighting a huge evidence gap in the literature. A study by Hong (2017) (which was not part of the review) used UK data and estimated that increased diversity in the police between 1999 and 2009 (and, thus, strengthened representative bureaucracy) could have led to a 1.4-3.8% reduction in recorded crime rates.

For the police to be perceived as legitimate, they need to demonstrate to community members that they share their aims and values, and to foster a sense of shared identification. By appearing more similar to people in the community, the police can communicate inclusion and status and foster a sense of belonging, in turn increasing legitimacy and thus the chances that citizens will cooperate with the police and comply with the law (Bradford, 2014; Jackson & Pósch, 2019). This is akin to the core underlying assumption of the theory of representative bureaucracy, which posits that increased diversity enhances the perceived legitimacy of the police within the community, leading to improved police-public relations, because increased diversity strengthens a sense of shared identity, particularly of course among ethnic and racial minorities hitherto excluded from policing. Therefore, when it comes to police-citizen encounters, the 'dialogue' (Bottoms & Tankebe, 2012) between officers and citizens from which legitimacy emerges can be improved in two ways. From a citizen's perspective, similarity with the officer might lead to a greater willingness to engage in a conversation or resolve the situation in a less forceful manner, due in part to a 'trust premium' gained by an enhanced feeling of identification ('they are like me'). From a police perspective, there is an increased chance of de-escalation due to officers being more likely to see themselves in those they are interacting with or, at least, more likely to engage in perspective-taking due to perceived similarities.

A secondary goal of this chapter is to consider the geographic variation of the use of Taser within the force area. Geographic differences can emerge due to organisational features (command structures), differences in relative deprivation, the make-up of the areas, and so on. Unfortunately, none of these could be considered individually due to the nature of the area-level information that could be provided by GMP. Nevertheless, we will demonstrate how this information could be utilised and inform future studies and, perhaps, police practices. Based on the above, and informed by the theory of representative bureaucracy, we hypothesise that demographic

similarities in gender, age, and ethnicity will decrease the chances of both Taser being used relative to other uses of force in general and more severe use of Taser (i.e., red-dotting or being fired upon) in particular. With regards to the area level differences, we only include an exploratory research question asking whether police-recorded large areas are informative regarding patterns of Taser use. Finally, we will also consider an underappreciated aspect of the data from GMP, namely whether some proportion of the variation in ethnicity is captured by other police-reported aspects of each incident. Use of force forms require officers to note whether any of the following 'impact factors' played a role in the use of force: an individual being under the influence of alcohol; being under the influence of drugs; prior knowledge; sex, size, and build; and a weapon being carried by the subject. It is, however, yet untested whether any of these capture variation in the influence of ethnicity on particular uses of force. If that is the case, then these categories might mask some racial disparities which are in fact present in the data. This goes beyond the question of whether the reporting of each of these impact factors is biased in nature. In fact, even if officer decisions are neutral when it comes to race, they could still result in 'racialised' outcomes due to structural factors and institutional practices as demonstrated for instance by Omori et al.'s (2022) excellent paper on institutional racism. Our focus, instead, will be on whether the effect of ethnicity on use of force is transmitted by the reported impact factors and how certain impact factors might carry the influence of ethnicity towards the use of Taser.

10.3. Research questions

We consider three research questions in this deep dive by focussing on GMP's use of force forms:

Q3. Are demographic similarities between officers and the public associated with Taser use (compared to any other use of force) and the level/severity of Taser use?

Q4. Is there an association between geo-patterns within the force and Taser use (compared to any other use of force) and the level/severity of Taser use?

Q5. Do police-reported impact factors transmit the effects of citizen ethnicity on to Taser use (compared to any other use of force)?

Crucially, the analysis carried out below once again relies on one specific dataset, the use of force forms. This means that the comparison group is other uses of force instead of no use of force, which would be a more informative reference category regarding the potential beneficial effects of demographic similarities. Furthermore, the analysis is correlational in nature. Although theory would posit that demographic similarities are likely to *lead to* decreased or less severe use of Taser, this study can only report the presence or absence of *associations,* and no causal links can be established.

10.4. Data and methods

This study relies on data from use of force forms and other auxiliary information provided by GMP. From January 2018 to December 2021, 56,954 cases of use of force were recorded, of which 5,293 (9.4%) referred to Taser. Ethnicity data were missing for the officers in 590 of these cases which amounts to approximately 1% of the sample. These were re not included in the analysis, resulting in an effective sample size of 56,004. In this final sample, the share of Taser use remained virtually unchanged, at 5,282 cases or 9.4%. The use of force forms contained information on the gender, age, ethnicity of the subject, impact factors that led to the use of force (i.e., mental health, being under the influence of alcohol or drugs, sex, size, and build, possessing a weapon), the date the use of force occurred, and the outcome variables as described above. We also received additional data from GMP: the demographic characteristics of officers including gender, age, ethnicity, and the area the use of force took place of which there were 12 in total: Bolton, Bury, City of Manchester, Manchester Airport, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford, Wigan, and Outside GMP. Notably, these geographic areas do not correspond to official administrative areas, and their boundaries are unclear, including which smaller towns and villages belong to one particular area. Details about the analytical strategy and outcome variables are contained within the endnotes of this report.[v]

10.5. Results

10.5.1. Taser use in GMP

Table 5. contains the list of different levels of use from least serious to most serious and shows that the most common use of Taser was red-dotting individuals amounting to 5.2% of all cases. The next most common level of Taser usage was drawn at 1.7%, followed by aimed at 1.1% and arced at 0.1%.

Table 5. Taser use in GMP (number and proportion)

Taser use severity:	Other uses of force	Drawn	Arced	Aimed	Red-dotted	Fired
Number of uses:	50722	974	31	611	2926	740
Proportion of uses:	90.6%	1.7%	0.1%	1.1%	5.2%	1.3%

Taser use severity (newly created variable):	Other uses of force	Drawn, arced, or aimed	Red-dotted or fired
Number of uses	50722	1616	3666
Proportion of uses	90.6%	2.9%	6.6%

10.5.2. Demographic similarities of the police and citizens

First, we considered the overlap or 'match' of three main characteristics when it comes to the use of force in general, and Taser use in particular. On the face of it, in the majority of cases, there is a demographic overlap between the officer carrying out the use of force and the citizen on the receiving end (see **Table 6.**). The strongest match is with gender, and the weakest is with age. For ethnicity, around 7 out of 10 times, the ethnicity of the officer and citizen is identical.

Table 6. Proportion of overlap with certain demographic characteristics

	Gender	Age	Ethnicity
All uses of force	76.2%	62.6%	70.6%
Taser	86.2%	61.1%	69.1%

However, below these headline figures, there are strong disparities between the members of the various underlying groups. As demonstrated by **Table 7.**, if you are a White male in the youngest age group, then you have the highest chance of having a demographic overlap with the officer during the use of force encounter. If you are a woman, only four out of ten times will there be a match in general and only in 15% of the cases when it comes to Taser use (in other words, most women who are Tasered are Tasered by male officers). The ethnic disparities are also stark, with White people having a match in around 90% of the cases whilst Asian citizens only experiencing a match in 8% of the cases overall, and around 3% in the case of Taser; for Black people these figures were 1.4% and 0.3%, respectively, while for people with a Mixed background they were 2.3% and 0.5%. Note that the disparities when it comes to age could be as large or larger – these would be a hard issue to remedy of course, given most police offices are inevitably aged under 50.

Table 7. Proportion of overlap with certain demographic characteristics in subgroups

	All use of force	Taser
Gender:		
Female	40%	16.2%
Male	83.9%	90.6%
Age:		
18-34	68.4%	66.3%
35-49	22.3%	30.1%
50+	0.4%	0.5%
Ethnicity:		
White	89.6%	93.3%
Asian	8%	2.8%
Black	1.4%	0.3%
Mixed	2.3%	0.5%
Other	1.8%	1.3%

To what extent are these differences due to dissimilarities between the officers who have used force and the subjects whom they used the force on? The next **Table 8.**

looks at this in detail by comparing the gender and ethnicity of officer and citizen in all uses of force and in the case of Taser, specifically. It is important to note that these results are not merely reflective of the GMP workforce as a whole, as the data are made up only of officers who used force at least once (but also includes some who were more prolific force users). Based on **Table 8.**, the disparity in gender is not that large. However, ethnic disparities are much more striking. When it comes to all use of force, 9.2% of subjects are Black, but only 1.4% among the officers are Black. These numbers are even more uneven for Taser use, where only 0.8% of officers were Black, compared with 11.6% of subjects. For Asians, the difference in the case of all use of force is small (6.3% of officers and 7.3% if subjects), however, for Taser there is a wider gap with 3.7% of officers and 8% of citizens.

Table 8. Proportion of officers using force and citizens with certain demographic characteristics, in subgroups

	All use of force		Taser	
	Officers	Citizens	Officers	Citizens
Gender:				
Female	20.3%	17.4%	9.8%	6%
Male	79.7%	82.6%	90.2%	94%
Ethnicity:				
White	89.2%	77.9%	94%	73.8%
Asian	6.3%	7.3%	3.7%	8%
Black	1.4%	9.2%	0.8%	11.6%
Mixed	1.8%	1.3%	1.2%	1.4%
Other	1.4%	1.4%	0.8%	1.6%

10.5.3. Geographic distribution of Taser use in GMP

The second aspect considered in this study is the geographic distribution of use of force in general, and Taser use in particular. Unlike in the Hampshire deep-dive (see chapter 12), GMP could only provide a limited number of large areas, neither of which was matchable to precise official geographical boundaries (which meant among other things that we were unable to calculate pro-rata figures). Among these 12 areas, presented in **Table 9.**, around a quarter of all use of force happens in the City of Manchester, and around a third of all Taser use. In fact, of all areas, only the City of Manchester and Oldham has a considerably larger share of Taser use compared to their overall share of use of force.

Table 9. Proportion of use of force and Taser use across geographical areas

	All use of force	Taser
Bolton	9.8%	10.4%
Bury	6.6%	5.1%
City of Manchester	26.2%	32.5%
Manchester Airport	0.4%	0.4%
Oldham	5.5%	6.7%
Rochdale	5.3%	5.8%
Salford	12.6%	7.1%
Stockport	7.6%	7.5%
Tameside	8.5%	7.7%
Trafford	6.6%	6.5%
Wigan	10.7%	9.9%
Outside GMP	0.3%	0.5%

10.5.4. Taser use versus other use of force

In these models, it emerged that among the demographic match variables, gender and ethnicity were both relevant, having a negative partial association with Taser use, which suggests that these demographic similarities might lead to fewer uses of Taser compared to other uses of force. Adding the area-variables revealed that the main difference in GMP was between the City of Manchester and other parts of the force, with officers in the City of Manchester having higher odds of using Taser compared to other areas even after controlling for all else. These results are from the five models (binary logistic regression) that we fitted with Taser use as the outcome variable (see **Table 10.,** available in section 1.4.1 of the accompanying 'Quantitative Research Appendix'). Model 1 included only the demographic variables of the officers and citizens. Model 2 added the demographic match to the analysis. Models 3 and 4 included different combinations of the police-recorded geographical areas. Finally, Model 5 added the impact factors and other measures. Across the five models, some of the partial associations remained largely unchanged, with only small variations in their effect sizes. All else being equal, an encounter involving a female citizen, a female officer, and/or an officer from an ethnic minority background (instead of being White) reduced the probability of Taser being used, compared to another use of force. Conversely, adult subjects and older officers significantly increased the probability of Taser being used instead of another force.

10.5.5. Ethnicity and Taser use

Unlike the other demographic characteristics, the ethnicity of the citizen had varying partial associations depending on the model specification. In Model 1 (demographics only), Black subjects were significantly more likely to have Taser used against them compared to White subjects. This was a moderately strong but highly significant partial association ($p<0.001$). In the same model, being from a Mixed background or not having ethnicity data recorded also significantly increased the odds of Taser being

used, but these partial associations had a lower level of statistical significance ($p<0.05$). Once the demographic match variables were added in Model 2, these partial associations all disappeared. Between Model 2 and Model 5, being from an Asian instead of a White background significantly reduced the odds of Taser being used against someone, albeit this was a weak partial association ($p<0.05$). In the final model, being from an ethnic group other than White *reduced* the odds of Taser being used, but these were all weak partial associations ($p<0.05$). Given the number of new variables included in Model 5, it is hard to tell why these tenuous negative associations emerged. However, due to the high number of significance tests run across the various models, setting a higher bar of evidence of $p<0.01$ is likely to be prudent to reduce the chances of false positives. This being the case, we would conclude there is relatively little evidence of ethnic variation in the full model.

10.5.6. Demographic similarity and Taser use

The demographic match variables were included in Models 2 to 5, and the partial association shown by these remained consistent across models, with the effect sizes barely changing but the uncertainty around the estimates slightly increasing (p-values dropping to $p<0.01$ from $p<0.001$). All else being equal, if the officer of the same *gender* used force against a subject, the odds of it being Taser dropped by 24-28%, while an officer with the same *ethnicity* decreased the odds of Taser being used by 27-29%. Notably, in Model 2, adding these demographic match variables was sufficient to nullify the earlier partial associations emerging between ethnicity and Taser use. This implies that the ethnic dynamics captured by these 'match' variables were sufficient to partial out the ethnicity-Taser use conditional associations in Model 1.

10.5.7. Geographic areas and Taser use

Model 3 and Model 4 added the twelve geographical areas to the analysis. Model 3 used the City of Manchester as the reference category, compared to which all but four areas (Bolton, Oldham, Rochdale, and Salford) had a significant negative partial association with Taser use, all else considered.

Given the descriptive statistics shown in the earlier section, which indicated a disproportionately higher share of Taser use in the City of Manchester compared to other uses of force and the other areas, we were suspicious that, in fact, the meaningful difference when it comes to Taser use was between the City of Manchester and the rest of the areas. This hypothesis can be tested empirically by considering the difference between two nested models: one that has all the area-level variables (but one) included and the other which has only the City of Manchester as the explanatory

variable. The results from this test[57] indicated that including the City of Manchester in the model on its own is sufficient to capture the area-level variation in Taser use.

It is worth noting, that the association between area and Taser use (i.e., it was more likely in City of Manchester than elsewhere) persisted even after considering the influence of other factors in Model 5. Nevertheless, in Model 5, the partial association between the City of Manchester and Taser use dropped slightly from an expected 32% increase in the odds, compared to other areas, to a 22% increase in the odds. This implies that, the difference between the City of Manchester and the other areas is only partially explained by the types of situations police officers find themselves in there (e.g., encounters with more risk factors).

10.5.8. Other influential factors and Taser use

Model 5 shows that other variables had significant partial associations with Taser use. All else considered, the strongest positive partial association was the subject having a weapon on them, which increased the odds of Taser use seven-fold. This was followed by the mental health problem having been reported, and other impact factors such as prior knowledge of the police, and the sex, size and build of the subject. Other impact factors showed significant negative partial associations: being under the influence of drugs and alcohol. Finally, holding all else equal, during the second and third lockdowns, the odds of Taser being used dropped (although GMP was kept in prolonged lockdowns of various levels for extended periods, and we did not include this level of detail in the model).

10.5.9. Relative strength of the effects and model fit

Although odds ratios are more straightforward to interpret, as they are conditional effects, their relative influence compared to other effects can be difficult to credibly judge (although, see Kuha & Mills, 2020 for why cross-model comparisons are still feasible). Marginal effects help to make such an assessment and juxtapose the strength of various effects. As shown in **Table 11.** (available in section 1.4.1 of the accompanying Quantitative Research Appendix), having a weapon on the subject has the strongest partial association, which is followed by the officer being middle-aged and the citizen being female. Among our main variables of interest, ethnic match has a similar influence to the suspect being Black (but in the opposite direction), whilst the influence of gender match is slightly stronger than the subject being under the influence of drugs. Being in the City of Manchester instead of anywhere else has an identical impact to drugs, albeit in the opposite direction.

Finally, it is worth comparing these models by considering the overall fit of each of the regressions. **Table 10.** includes two measures to capture this: McFadden's Adjusted

[57] We ran the Likelihood-ratio test and found that indeed, there was no significant difference between the two models (LR-test: $\chi^2(10)=17.48$, $p>0.05$).

R^2 and Tjur's R^2. Explaining these indices is not a straightforward task and they are better suited for relative comparisons. Based on these estimates, adding the 'demographic match' in Model 2 only marginally improved the model fit and including the area-level information only enhanced the fit beyond the second decimal point. Conversely, adding the risk factors and other measures in Model 5 doubled or more than doubled the model fit indices. Finding ways to maximise model fit should never be the goal of any analysis. Nevertheless, they can speak to the relative contribution of each of the groups of variables added to the model, and based on this, the relative contribution of citizen and officer demographics with demographic match and area have a similar weight compared to the other factors added in Model 5.

10.6. 'Racialised' patterns in the reporting of impact factors

From the previous **Tables 10.** and **11.**, it appeared that most police recorded impact factors had relatively strong associations with Taser use. However, do these reported impact factors show an association with the ethnicity of the individual? And even more importantly: do these impact factors capture the variation in outcomes associated with ethnicity and then transfer its effects onto the outcome variable of Taser use? This process is referred to as 'mediation' in statistics, where the direct effect of ethnicity on Taser use can be separated from the indirect effect of ethnicity which 'passes through' the police reported impact factors to Taser use. For example, Black subjects may be more likely to be already known to police; being known to police increases the odds of Taser use compared to other uses of force, and prior knowledge may thus 'channel', account for, and even obscure and underlying association between ethnicity and Taser use. To explore whether such mediated effects were present, we fitted a set of models (i.e., semi-parametric mediation analyses, with the same set of covariates as in Model 5 in **Table 10. and 11.**), with a pathway going from ethnicity to Taser use and the impact factors simultaneously (as depicted by **Figure 2.**).

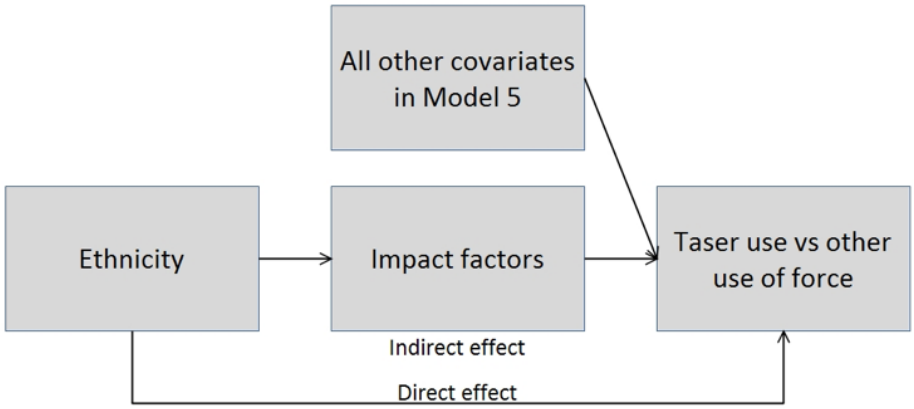

Figure 2. Estimated direct and indirect effects

10.6.1. Prior knowledge, sex, size and build, mental health.

The results for this analysis are presented in **Table 12.** (available in section 1.4.1 of the accompanying Quantitative Research Appendix), with a focus on the newly emerging indirect effects. We will start by summarising the results with the technical details to follow in subsequent paragraphs. There are at least three notable findings emerging from the analysis. First, impact factors only transmitted the influence of ethnicity on Taser use in the case of two ethnicities: being from a Black or Mixed background. For all the other ethnic categories, there was no significant indirect effects mediating the influence of ethnicity via the police reported impact factors. This implies that being from a Black or Mixed background instead of being White has a particular relevance in the case of Taser use. Second, these mediated effects were the strongest when having prior knowledge about the individual or when sex, size, and build was reported. This implies that the police were more likely to have prior contact with Black and Mixed individuals (this could emerge, among others, due to social, institutional, and situational reasons, Quinton, 2015) and that they were more likely to find such individuals more threatening due to their physical characteristics (racial threat theory, Blalock, 1967; Gray & Parker, 2020). Third, the impact factors of being under the influence of alcohol (for Blacks only) and drugs were also significant, albeit in the opposite direction compared to what was suggested in earlier models. This is due to the statistically negative association between being Black and being from a Mixed background and these particular impact factors. Black and Mixed subjects were less likely to be assigned these impact factors, but those who were, were more likely to be Tasered than their White counterparts.

10.6.2. Full results from the mediation analysis

Relying on the same standard of evidence as earlier (i.e. $p<0.01$), none of the direct effects (from ethnicity to use of force) are statistically significant. This chimes with the earlier findings of no association between ethnicity and Taser use (vs other use of force) in later models, and means that all significant indirect effects are fully mediated. Considering the indirect effects, controlling for all else, the influence of being a Black citizen appears to have a significant mediated effect going through being under the influence of alcohol ($IE_{alc}=1.184$, $p<0.01$), being under the influence of drugs ($IE_{drugs}=1.181$, $p<0.01$), prior knowledge ($IE_{priork}=1.299$, $p<0.001$), and sex size, and build ($IE_{ssb}=1.354$, $p<0.001$). All else considered, Mixed ethnicity also had significant indirect effects transmitted by being under the influence of drugs ($IE_{drugs}=1.224$, $p<0.01$), prior knowledge ($IE_{priork}=1.231$, $p<0.01$), and sex, size, and build ($IE_{ssb}=1.284$, $p<0.01$). For both Black and Mixed backgrounds, sex, size, and build showed the strongest indirect effect, followed by prior knowledge, and then drugs. Notably, none of the indirect effects of ethnicity passed through the carrying a weapon impact factor. The marginal indirect effects help revisit the idea of full mediation. While the main effect of prior knowledge and sex and build were 0.029 ($p<0.001$) and 0.025 ($p<0.001$)

respectively in Model 5, the mediated effects for people from Black (MIE_{priork}=0.015, p<0.001; MIE_{ssb}=0.018, p<0.001) and Mixed (MIE_{priork}=0.013, p<0.001; MIE_{ssb}=0.016, p<0.001) backgrounds had relatively strong effects amounting to around half or more than half of those effects. This gives some further indication how ethnicity and the prior knowledge and sex, size, and build impact factors jointly play a role in explaining Taser use vs any other use of force.

10.6.3. Severity of Taser

Another consideration when it comes to Taser use is the level or severity of Taser use. We were interested in the variation in these actions as having the Taser drawn, aimed, or arced are likely to perceived as less severe by citizens, compared to situations when they are being red-dotted or even fired upon. Crucially, we wanted to explore whether there is an underlying racial disproportionality of how Taser is being used. To foreshadow the results, the demographic match and area variables were not associated with drawing, aiming, or arcing the Taser instead of using other force. However, they were influential when it comes to red-dotting or firing the Taser: being from the same gender or ethnic group have a negative partial association with that level of Taser use, whilst being in the City of Manchester instead of any other area appears to have a positive partial association. This means these factors only seem to play a role in Taser use of higher severity. Further results are discussed in the upcoming sections. In this second set of multivariate models (see **Table 13.** which is available in section 1.4.1 of the accompanying Quantitative Research Appendix), we fitted three multinomial logistic regressions with the level of Taser use as the outcome variable. Model 1 only included the demographic variables of the citizens and officers; Model 2 added the demographic match and area variables; and Model 3 included all the other factors considered earlier. The baseline category remained other use of force, but we differentiated between showing intention to use Taser (i.e., Taser drawn, aimed, or arced) and being ready to fire or having fired the Taser as the most severe cases (i.e., Taser red-dotted or shot).

10.6.3.1. Drawn, aimed, or arced

When comparing drawn, aimed, or arced to uses of force other than Taser, most demographic variables had a consistent association across the three models. All else being equal, female subjects reduced the odds of Taser being used at this severity whilst an older subject increased them. An officer, who was female or from an Asian, Black, or Other ethnic background also reduced the odds of Taser being drawn, aimed, or arced, whilst an older officer instead of a younger one had a positive partial association with Taser use, controlling for all else.

As in the earlier multivariate models, the (partial) association between the ethnicity of the subject and the level of Taser use changed across the models. All else held constant, in Model 1, being Black or not having ethnicity recorded instead of being

White had a positive partial association with Taser use, but these associations disappeared in Models 2 and 3.

Of the demographic match and area variables, only gender match exhibited a weak negative partial association. All else considered, if the subject and officer were of the same ethnicity this reduced the estimated odds of Taser use by between 24-27%. This was only significant on the 5%-level which, again given the high number of comparisons, implies a somewhat tenuous relationship. Match on ethnicity and age, and area (i.e. City of Manchester), did not seem to have a partial association with the outcome variable.

Finally, in Model 3, all other influential variables were introduced. Holding all else equal, carrying a weapon had the strongest positive partial association, followed by prior knowledge, and mental health. Controlling for all else, the second and third lockdowns and having been under the influence of alcohol had the strongest negative association with the outcome variable, followed by being under the influence of drugs. Sex, size, and build and the first lockdown (compared to other time periods) did not show a significant association with this level of Taser use.

10.6.3.2. Red-dotted or fired

Comparing Taser being red-dotted or fired to other uses of force, being a woman and encountering a female officer for an officer from an Asian, Mixed, or Other background all reduced the odds of this level of Taser use in all three models, holding all else equal. Being older and encountering an older officer increased the odds in all three models, controlling for all else. Meeting a Black officer instead of a White one did not show a persistent picture, exhibiting no association in Model 1, a moderately strong negative partial association in Model 2 (OR=0.54, $p<0.01$) and a weak negative partial association in Model 3 (OR=0.66, $p<0.05$).

The association between the ethnicity of the citizen and the outcome variable changed meaningfully between Model 1 and Model 3. All else considered, in Model 1, subjects from a Black or Mixed background significantly increased the odds of this level of Taser use. In Model 2, Asian or 'Other' subjects had a weak significant negative partial association with the outcome variable. Finally, in Model 3, Asian or Black subjects had a (moderately) strong negative partial association with the outcome variable (Asian: OR=0.60, $p<0.001$, Black: OR=0.67, $p<0.01$), whilst coming from Other background held onto its weak negative partial association (OR=0.63, $p<0.05$).

For the demographic match and area variables, a fairly consistent picture emerged across all models. All else being equal, if the subject and officer had the same gender this reduced the odds of being red-dotted or being fired upon by 28-34% ($p<0.01$); having the same ethnicity reduced the odds by 32-33% ($p<0.01$); and being in the City of Manchester instead of any other areas increased the odds by 32-43% ($p<0.001$). Being from the same age group did not seem to make any difference, controlling for all else. As shown in the marginal effects table (**Table 14.**, available in section 1.4.1

of the accompanying Quantitative Research Appendix), the influence of gender match is comparable to the mitigating effect of being under the influence of alcohol; the magnitude of ethnic match to the influence of prior knowledge (albeit, in the other direction); while the estimate for the City of Manchester had a smaller coefficient closer to the partial association of drugs (but in the opposite direction).

Finally, among the other factors added in Model 3 carrying a weapon had the strongest positive partial association with this level of Taser use, followed by mental health, sex, size, and build, and prior knowledge. Conversely, all else equal, the third lockdown had the strongest negative correlation, followed by the second lockdown, being under the influence of alcohol and being under the influence of drugs. The first lockdown did not seem to have made a difference.

As with the earlier multivariate models, our primary explanatory variables of interest (i.e., demographic match and area) only improved the fitted model slightly (i.e., minor increase in the R-squared value from Model 1 to Model 2), and there was a much bigger jump between Model 2 and 3 when the rest of the variables were added to the model.

10.7. Discussion

10.7.1. Demographic similarities and Taser use

In the introduction, we hypothesised that demographic similarities would have a negative association with Taser use in general and more severe use of Taser in particular. Our results provided partial support for this idea. When the gender or ethnicity of the officer and the member of the public were the same, the odds that the officer would use Taser (and especially red-dotting and firing) were lower than when their gender or ethnicity were different. However, age similarity did not seem to have any association, and demographic match had only a tenuous or no association with Taser use of lesser severity (vs other use of force). Notably, the partial association of gender and ethnic match (when present) was consistent across the various models with an effect magnitude comparable to some of the impact factors, such as being under the influence of alcohol or prior knowledge regarding the suspect. These still were not as influential as some demographic characteristic, such as being female, having a weapon on the individual, or the second and third lockdown, but they remained moderately influential. We also believe that the effects could have been even more pronounced bar some imperfections of the variables we collected, which had to merge several ethnic sub-categories together. ‘Asian’ incorporated people from Bangladeshi, Chinese, etc., backgrounds, so a ‘match’ might not have been as close as expected. Furthermore, in diverse societies, people often have multiple parallel identities, which can make proper representation by the police especially challenging (Wiley et al., 2019).

Another issue, highlighted in the descriptive statistics section, was the low proportion of matches when it came to most ethnic groups and being female. Due to this low

overlap for female and ethnic minority participants, the variables largely stood for White male-on-White male encounters. Unfortunately, due to the low number of female and ethnic minority matches, we could not carry out separate analyses for these subgroups, which might have provided further insight into the relative importance of the gendered and ethnic overlap in certain encounters. With that said, by controlling for gender and ethnic minority membership, we have accounted for the relative importance of each of these factors in the multivariate models.

Q1. Overall, the response to our first research question is a qualified yes, as there appears to be a negative association between ethnic and gender similarities and the use of Taser and the level of Taser use.

10.7.2. Geographical differences and Taser use

Next, turning to the area-level variables, it is important for police forces to consider area-level differences when it comes to certain uses of force. Our analysis indicated that most of the variation in Taser use was captured by the difference between the City of Manchester and other areas. This remained the case when considering the level of Taser use. In particular, more severe use of Taser (red-dotting or firing) was more likely in City of Manchester, compared with other uses of force whilst Taser use of lower severity (drawing, arcing, aiming) was not. These results emerged despite controlling for demographics and other influential factors and suggest that the reason the City of Manchester is significantly different goes beyond these characteristics, which should be investigated further.

Q2. In conclusion, we could also give a positive response to our second research question, finding an association between geo-patterns and Taser use and the level of Taser use. We managed to identify that the there was a significant difference between a single area and the rest, which highlights the importance of recording area-level differences on use of force forms.

10.7.3. ‘Racialised’ reporting practices and Taser use

Finally, we carried out some further investigation into whether the reported impact factors in the use of force forms mediate the influence of ethnicity towards Taser use. This seems to have been the case for the most part for Black citizens – with the effect of being Black being channelled by being under the influence of alcohol and drugs, prior knowledge, and sex size and build. And it was also the case, to some extent, for Mixed ethnicity – with the effect of Mixed background being carried by being under the influence of drugs, prior knowledge, and sex, size, and build. The lack of direct effect from either of the ethnic categories suggests that the impact factors were fully mediating the influence of ethnic minority backgrounds.

Crucially, for both Black and Mixed backgrounds, sex, size, and build and prior knowledge appeared to be the most influential. This implies that there are likely to be two factors in play here: (1) the threat perceived by police officers due to the sex, size,

and build of the individual might be augmented if they are from a Black or Mixed background, and (2) prior intelligence might be more prevalent or readily available if they are from Black or Mixed background. The smaller effects for alcohol and drugs speak to a specific relationship, where the effect of being Black or being from a Mixed background increase the likelihood of Taser use compared to other uses of force, even though, on their own, they have a negative association between these impact factor and Taser use. Notably, the strongest impact factor in the full model – carrying a weapon – did not mediate the impact of either of the ethnic categories. One interpretation here is that, all else equal, in recorded use of force incidents Black individuals were no more or less likely to be carrying a weapon than White individuals, and this in turn did not influence their odds of Taser used on them.

Q3. Thus, we also found partial support for our third research question: the statistical effect of some but not all ethnic categories on Taser use is channelled by some but not all police-reported impact factors. This implies that the lack of ethnic disparities in multivariate Taser models can sometimes be ‘masked’ by ‘racialised’ reporting.

11. Frequency in officer use of Taser

11.1. Chapter summary

This chapter utilises a unique set of data provided by West Mercia which allows for the analysis of use of force incidents nested within officers. We will start by showing that a relatively small number of officers are involved for a large proportion of total uses of force and an even larger proportion of uses of Taser. This heavily skewed distribution of use of force in general and Taser use in particular suggests that, when discussing repeated use of force by the police, it is only necessary to focus on a relatively small population of officers. Then, we will consider two outcome variables: 1) Taser use versus any other use of force and 2) the frequency of Taser use by the same officer. By separating the impact of the specific circumstances, we can illustrate the extent to which each of these is relevant to certain outcomes. Our findings indicate that Taser use compared to other uses of force is associated with similar variables as discussed in the previous chapters, both incident specific and officer specific characteristics. By contrast, the frequency of Taser use whilst showing an association with the gender and age of the officer, incident-specific characteristics did not seem to play a role.

11.1.1. Multiple use of force and Taser

The purpose of a use of force form is to account for a police officer's use(s) of force on an individual citizen during an incident. It collects information on subject demographics, the considerations of the officer, the force having been used, and so on. In short, it attempts to capture what transpired during the event, with some information on who was affected and why the decision to use a particular type of force was made. Nevertheless, in most forces, other than some basic information, there is little information on the police officer that used force. Having the information on exactly who the force user was could help identify patterns and separate the influence of the particular circumstances and the potential effect of the officer evaluating and responding to the circumstances.

The differences between officers who used Taser and those that did not have been explored in previous studies, for instance Ready and White (2011) focussed on the early adoption of Tasers in one part of the United States. It has also been established that the reporting and likely use of force is contingent on both organisational pressures and officer characteristics (Skogan, 2013). Brandl and Stroshine's (2013) study from the United States distinguished between 'high use' and 'low use' officers, finding that 'high users' were more likely to be male, White, and work in high crime areas. This deep dive is a partial replication and extension of these earlier studies. First, it will use descriptive statistics to explore the distribution of use of force in general and Taser use in particular. It is expected that we will replicate the earlier findings, and that the data will be decidedly skewed, with many outcomes produced by a small number of officers.

We will go beyond the above studies, which were primarily descriptive in nature. Our analysis will distinguish between each individual use of force incident and officer characteristics. To do this, we will use two outcome variables. First, we will reassess the relationship between Taser use and the variables provided by the use of force forms alongside officer characteristics. Multilevel modelling will permit us such an analysis and can partition the effects of the individual circumstances of an incident and the person that used the force (whose characteristics remain constant across incidents). Second, we will also model the frequency of Taser use using the same set of explanatory variables. Here the question will be not whether the individual uses Taser, but rather to examine repeated use of Taser by the same officer.

Crucially, this investigation will be different from the analyses presented in previous chapters where we looked at the association between officer characteristics and Taser use. In all earlier cases, we considered these associations without being able to distinguish between particular officers. This also meant that, inevitably, some officers appeared in the data multiple times, yet we could not identify the potential influence of their attributes relative to those who appeared less often. The method used here will be able to partially account for officer effects. Nonetheless, it is important to emphasise the limitations of the analysis. First, it will only consider use of force forms and limited data on force users. We cannot compare the data to all incidents and all officers in the force which and who could have a significantly distinct profile. This analysis is also looking at a cross-section of data, which means that we will not be able to establish causal links and all relationships will be associations. Finally, we cannot geolocate the use of force nor can we examine the specific role the officers were deployed into when use of force was required.

11.1.2. Research questions

This deep dive will focus on three research questions:

Q1. Are a small number of officers responsible for a large proportion of use of force and Taser incidents?

Q2. Do variables captured by the use of force forms have an association with Taser use and the frequency of Taser use once the officer is identified and their characteristics are considered?

Q3. Do officer characteristics have an association with Taser use and the frequency of Taser use once the individual force user has been identified?

11.2. Data and methods

This deep dive utilises data from use of force forms and other auxiliary information on police officers provided by West Mercia Police. In particular, we received the collar number and other workforce and demographic information on each officer. As in earlier statistical models used in this report, the primary outcome of interest is a binary variable for Taser use, where 1 refers to Taser use and 0 to any other force modality.

The second main outcome variable was the number of times an officer used Taser. The frequency of officer use of Taser was assigned to each officer and associated with each instance of Taser use which meant that if the officer did not use Taser the value was 0, in all other cases it was the number of times they used Taser overall (i.e., 1-25). We primarily relied on use of force forms for the analysis. We extracted the demographic characteristics of the citizens (gender, age, ethnicity) and the impact factors recorded by West Mercia, which included those perceived to have a mental health condition, or being under the influence of alcohol or of drugs. Although there was an option in these forms to register other impact factors (sex, size, and build, prior knowledge, or a presence of a weapon) these were always 'no' which is likely due to either a guideline or an issue with the data. To complement the above, we received data on officers, such as gender, age, ethnicity, their rank (which we simplified to 'constable', 'sergeant', and 'other', due to the rare occurrence of ranks other than the first two), and whether they were carrying out their tasks in a uniform or not (approximately 90% of them were in uniform). We refer to these variables as 'officer characteristics'.[vi]

11.3. Results

11.3.1. Distribution of use of force

There were 2,329 different officers who could be individually and anonymously identified as having used force during the study period. As mentioned in the comparative analysis (see Chapter 9), on average, across the four years there were 4,399 officers in the force. This suggests that around 52.9% of West Mercia officers recorded use of force over the study window. There are reasons to believe that this number might be slightly inaccurate. On the one hand, it is likely that not all officers who used force stayed in West Mercia during the four-year period we have data for, which would indicate that this might be an overestimate. On the other hand, it might also be an underestimate, considering that it is possible not all instances of use of force were recorded and that, in some instances, use of force forms could not be tied to any single person. Nonetheless, it provides an approximate understanding of the proportion of officers involved and suggests that around half of police officers working for West Mercia police did not use force on *any* occasion during the study period.

Focusing on the officers who did use force during the study period, the overall number of use of force records made available to us was 35,956. The number of times an officer was recorded in this data skewed decidedly to the left, as shown by **Figure 3.** Most officers who used force only did so on a few occasions during the study period. As indicated above, it is likely that the largest category of officer excluded from the data would have been the officers who did not use any force in the four-year period.

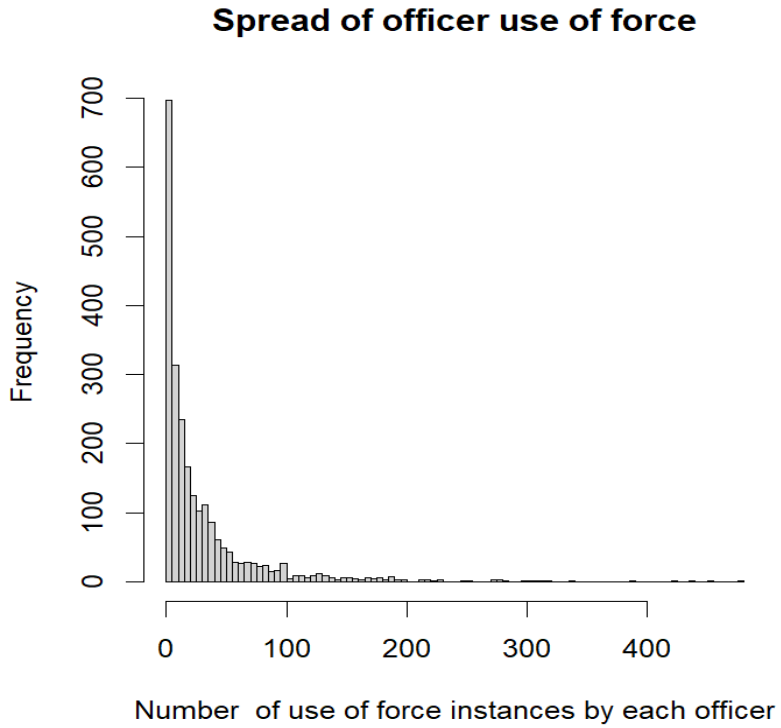

Figure 3. Number of times an officer used force in West Mercia (only officers with at least one use are included)

Looking more closely at those officers who did use force, mean frequency was close to 30, whilst the median was 14 (**Table 15.)**. This suggests that while there were more prolific force users (with a maximum of 479 uses by a single officer), the majority who used force did so less than 15 times during four-year study period.

Table 15. Descriptive statistics of number of times force was used by officers in West Mercia (only officers with at least one use are included)

	Mean	Median	Minimum	Maximum	Overall number
All use of force	29.6	14	1	479	69013
Taser	0.7	0	0	25	1552
Compliant handcuffing	3.9	1	0	99	9108
Non-compliant handcuffing	4.3	2	0	66	9994
Firearm	0.3	0	0	26	703

11.3.2. Frequency of Taser use by the same officer

The overall number of Taser use in West Mercia during the study window amounted to 1,552. The median of 0 (see **Table 15.**) indicates that, in fact, most officers who otherwise used force did *not* use Taser. The average number of Taser uses among the cohort of officers who used force was less than one (0.7) per officer, with a

maximum of 25 uses over the four years (i.e., there was one officer who used Taser 25 times over the period). The recorded use of Taser among force users in West Mercia was thus heavily skewed, as depicted by **Figure 4.**

We can also compare the use of Taser with other uses of force in the jurisdiction (see **Table 15.**). Officers who had used force were most likely to have used non-compliant handcuffing (mean=4.3, median=2, overall=9,994), closely followed by compliant handcuffing (mean=3.9, median=1, overall=9,108). Firearms were used least often (this included aimed and fired: mean=0.3, median=0, overall=703). Taser use (mean=0.7, median=0, overall=1,552 therefore sits somewhere in the middle in terms of how frequently it was used, but is closer to firearm use than handcuffing. Nevertheless, Taser use was more frequently than firearms, batons, and other uses of force aimed primarily at incapacitating the suspect. It was less frequently used than methods with the primary purpose of restraining the individual such as handcuffing or using ground restraint.

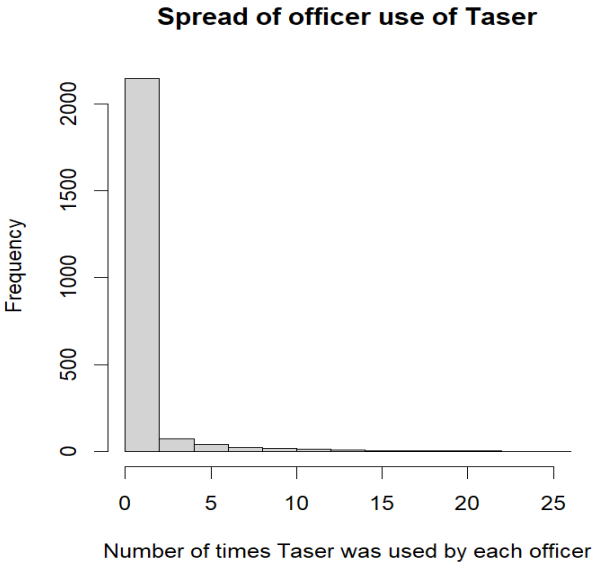

Figure 4. Number of times an officer used Taser in West Mercia (only officers with at least one use are included)

To gain a deeper understanding of the distribution of use of force across officers, we can consider the relative frequency of each modality. As shown in **Table 16.**, within all use of force records Taser was used by relatively few officers, and used more than five times only by around 4% of all force-using officers. In contrast, compliant and non-compliant handcuffing was used more than five times by around 21% and 24% of all force-using officers. In short, frequent use of Taser by the same officer was relatively rare, at least in comparison to other more frequent force modalities.

It is also notable how many officers used these different use of force modalities:

- Taser: used at least once by 377 officers (16% of force users)

- Compliant handcuffing: used at least once by 1488 officers (64% of force users)
- Non-compliant handcuffing: used at least once by 1655 officers (71% of force users)
- Firearm: used at least once by 149 officers (6% of force users)

Table 16. Frequency of force used by officers in West Mercia (only officers with at least one use are included)

	0	1	2-3	4-5	5+
Taser	1952 83.8%	124 5.3%	110 4.7%	51 2.2%	92 4.0%
Compliant handcuffing	841 36.1%	407 17.5%	396 17.0%	206 8.8%	479 20.6%
Non-compliant handcuffing	674 28.9%	406 17.4%	408 17.5%	278 11.9%	563 24.2%
Firearm	2180 93.6%	43 1.9%	37 1.6%	26 1.1%	43 1.9%

11.3.3. Distribution and frequency of use of force

Lastly, we consider the frequency with which each officer who used force used it on people from ethnic minority groups. It must be stressed that there is no implication that this is a measure of prejudice among police officers, as differential patterning here will result from a myriad of circumstances, such as being assigned to certain roles or being regularly deployed to locations with higher populations of ethnic minorities. Nevertheless, this comparison provides some context by examining the extent to which officers use force toward citizens from different ethnic groups.

Table 17. is based on all uses of force recorded by the officers involved. Among officers who used force, around 74%, 56%, and 79% recorded no use of force on someone from an Asian, Black, or Other background respectively. Among officers who used Taser at least once, these numbers increased to 87%, 70%, and 92% for the same ethnic categories. This is not surprising given the relative rarity of Taser use compared to the use of other types of force.

This pattern persists when we consider only those officers who used force more than five times during the study window. Specifically, in the case of all uses of force, 1.1% of officers had used force against people from Asian ethnic groups five times or more, 5.2% had used force against people from Black ethnic groups five times or more, and 1.5% has used force against people from Other backgrounds five times or more. For people from White ethnic groups this figure was 58% (i.e., among officers who had used force against White people, which was essentially all of them, 58% had used it five times or more). Among Taser users, not a single officer recorded use force on people Asian, Black, or Other background more than 5 times; for White people 22% did so. In conclusion, and based on the descriptive statistics in isolation, compared to all uses of force Taser appears to be *less* likely to be used on members of ethnic

minorities, and those few officers who use Taser more frequently are less likely to do so on members of ethnic minorities.

Table 17. Frequency of force used by officers in West Mercia (only officers with at least one use are included)

	All uses of force:					All Taser use:				
	0	1	2-3	4-5	5+	0	1	2-3	4-5	5+
Asian	1728	357	178	40	26	329	43	5	0	0
	74.2%	15.3%	7.6%	1.7%	1.1%	87.3%	11.4%	1.3%	0%	0%
Black	1298	472	331	108	120	265	77	34	1	0
	55.7%	20.3%	14.2%	4.6%	5.2%	70.3%	20.4%	9.0%	0.3%	0%
Other	1835	288	147	25	34	348	25	4	0	0
	78.8%	12.4%	6.3%	1.1%	1.5%	92.3%	6.6%	1.1%	0%	0%
White	45	359	369	210	1346	19	122	108	46	82
	1.9%	15.4%	15.8%	9.0%	57.8%	5.0%	32.4%	28.7%	12.2%	21.8%

Finally, we also considered how officers who used Taser at least once differed from officers who used types of force other than Taser. As demonstrated in **Table 18.** below, officers who use Taser are more likely to use force across the different ethnic categories. For example, among the non-Taser using officers, 2.4% used force against people from Black ethnic groups more than five times (and 52% used force against people from White ethnic groups more than five times). By comparison, among Taser using officers 19% used force against people from Black ethnic groups more than five times, and 90% used force against people from White ethnic groups more than five times.

Table 18. Frequency of force used by Taser vs non Taser using officers in West Mercia (only officers with at least one use are included)

	Officers who never used Taser:					Officers who used Taser at least once:				
	0	1	2-3	4-5	5+	0	1	2-3	4-5	5+
Asian	1542	278	109	18	5	186	79	69	22	21
	79%	14.2%	5.6%	0.9%	0.3%	49.3%	21.0%	18.3%	5.8%	5.6%
Black	1211	385	255	54	47	87	87	76	54	73
	62.0%	19.7%	13.1%	2.8%	2.4%	23.1%	23.1%	20.2%	14.3%	19.4%
Other	1612	213	97	16	14	223	75	40	9	20
	82.6%	10.9%	5.0%	0.8%	0.7%	59.2%	19.9%	13.3%	2.4%	5.3%
White	45	350	357	192	1008	0	9	12	18	338
	2.3%	17.9%	18.3%	9.8%	51.6%	0%	2.4%	3.2%	4.8%	89.7%

Using a t-test we found significant differences between the Taser and non-Taser using officers. On average, Taser using officers used force: a little over once on Asian citizens compared to only one-third of the time among non-Taser users (M_{Taser}=1.4; $M_{noTaser}$=0.3; t(2327)=15.9, p<0.001); a little over three times on Black citizens compared to little over once among non-Taser users (M_{Taser}=3.2; $M_{noTaser}$=0.8; t(2327)=19.4, p<0.001); a little over once on Other citizens compared to only one-third of the time among non-Taser users (M_{Taser}=1.2; $M_{noTaser}$=0.4; t(2327)=, p<0.001); and

almost 29 times on White citizens compared to around 11 times among non-Taser users (M_{Taser}=28.6; $M_{noTaser}$=10.9; t(2327)=, p<0.001).

One implication of the findings outlined above is that Taser-using officers use force more *in general* than non-Taser using officers. However, this does not necessarily translate into their use of Taser, specifically – indeed, one interpretation of **Tables 17. and 18.** is that officers who had used Taser were more restrained in their use of Taser during use of force incidents involving people from Black and minority ethnic groups than they were with those involving White people.

11.3.4. Models for Taser use and repeated use of Taser

11.3.4.1. Frequency by officer gender and age

Table 19. (available in section 1.5.1 of the accompanying Quantitative Research Appendix) contains the multilevel regression models for the two outcome variables: Taser use versus other uses of force and the frequency of Taser use. The results are presented in detail in the following sections, here we provide a narrative summary of our findings. The results for Taser use versus other uses of force showed largely similar partial associations as the earlier models. In other words, being female and certain impact factors such as mental health and being under the influence of alcohol or drugs explained the variation on the incident level. On the officer level, gender, age, and rank showed a significant relationship with Taser use versus other uses of force. By contrast, when focussing on the frequency of Taser, incident level characteristics did not seem to make a difference and only significant partial associations emerged for the differences among officers, where being male and older significantly predicted increased Taser use.

11.3.4.2. Taser versus other uses of force

Considering the multilevel linear regression model fitted for Taser use versus other uses of force, all else being equal, being female (p<0.001) or not identifying as either as female or male (p<0.001) had a negative partial association with Taser use, alongside with being under the influence of alcohol (p<0.01). Conversely, all else held constant, being 35-49 instead of under 18 (p<0.001) and having a mental health condition (p<0.001) both had a positive partial association with Taser use. Among the level 1 variables, being under the influence of drugs and ethnicity did not seem to make a difference after controlling for all else. While level 1 focussed on incident level factors (i.e., information from the use of force forms), level 2 scrutinised the between-officer differences in the probability of Taser use. Here, all else being equal, being a female instead of a male officer (p<0.001) and being a sergeant (p<0.01) or of other rank (p<0.001) was negatively associated with the probability of Taser use within a particular incident, whilst being an older officer (30+) was positively associated with the probability of Taser use (p<0.001). All else considered, the ethnicity of the officer and whether the officer was uniformed did not seem to make a difference.

11.3.4.3. Frequency versus no Taser use

The model fitted for the frequency of Taser use was a multilevel negative binomial model. As there are no widely accepted model fit estimates for these types of models, we did not include any in the table. This second model is strikingly different from the first one. None of the incident-level variables showed any significant partial associations with the outcome variable. Turning to officer-level variables, all else held constant, being a female officer reduced the number of times Taser was used ($p<0.01$), whilst being an older (30+) officer instead of a younger one increased it ($p<0.001$). None of the other variables seemed to have made a difference.[vii]

11.4. Discussion

Thanks to a unique feature of the West Mercia use of force forms, we had the opportunity to consider how reported uses of force are nested within officers. We started by showing that the distribution of use of force in general, and Taser use in particular, is heavily skewed. Whilst close to 50% of officers employed by West Mercia did not use force at all, there was a relatively small population of officers responsible for a relatively large number of recorded uses of force. In fact, once we decided to limit our analysis to officers who used force at least five times, we excluded around one-quarter (27%) of the officers who had recorded use force. Nonetheless, this only amounted to approximately 2% of all recorded use of force and less than 1% of Taser use.

Thus, we can give an affirmative response to our first research question that it is the case that a relatively small number of officers were responsible for most uses of force. We suspect that this finding will be true of most police forces in England and Wales and is a by-product of some officers being deployed into roles where using force is far more likely than others (e.g., firearms or public order specialisms). For Taser use versus any other use of force, on the incident level, familiar variables again showed significant association with the outcome variable. All else being equal, being female, from an ‘other’ background and being under the influence of alcohol or drugs all had a negative association. Whilst being older and with a mental health condition had a positive association. The newly introduced, officer-level variables also seemed to have made a difference, with officer gender, age, and rank showing a relationship with Taser use. Overall, these findings suggest that not only the situation (i.e., what happened) determines whether force is used but that also some of the characteristics of the officer (i.e., who was there) need to be considered. This suggests that collecting detailed officer information in a way that allows complex analysis of use of force cases nested in officers will be crucial for understanding of why and how certain encounters play out in the way they do.

Therefore, we can answer our second and third research questions with a qualified affirmation, some officer characteristics do seem to make a difference to Taser use versus any other use of force. Modelling the frequency of Taser use did not yield as

many significant findings. Of the officer characteristics, only gender and age indicated a negative and positive partial association respectively. This means that for the frequency of Taser use we can answer the second research question with a no, incident details captured by use of force forms do not seem to have an association with this outcome variable. For the third research question, the answer is a qualified yes, as some officer characteristics, in fact, showed a significant association with the frequency of Taser use.

On a closer look, these results are not surprising. Female officers are less likely to use force compared to males to begin with. Younger officers are also less likely to use Taser partly due to not necessarily having had the training and not having spent that many years in the force, which suggests both fewer chances to use force and a lower likelihood that they would be sent to more serious situations/assigned to riskier roles. Older officers have more experience and may be more likely to operate within these specialist roles which carry with them a higher likelihood that use of force will occur, and when it does it may involve high frequency (e.g., raiding a location occupied by an organised crime group to make multiple arrests).

Despite these findings, we would have expected multiple factors to play a role and think that further research and more fine-grained data is needed to understand why some officers are more prolific Taser users than others. Nonetheless, the relative lack of significance is also informative. It suggests that incident level considerations are less likely to play a role in the frequency of Taser use. This means that, based on these results, it is not merely citizen characteristics or the officer-reported impact factors that lead to multiple use of Taser by the same officer, but that officer individual characteristics may also play an important role (e.g., time in service, specific role, deployment area, etc).

12. The ‘social ecology’ of Taser in Hampshire

12.1. Chapter summary

In this chapter we switch from consideration of specific incidents where Taser may or may not be used to explore where these incidents take place. Research on the ‘social ecology’ of police activity has described a set of complementary processes through which the spatial distribution of police activity might serve to generate ethnic and racial disproportionalities. Most of this research relies in one way or another on the underlying idea that people from ethnic and racial minorities are more likely to live in more deprived and hence more disorderly and higher crime areas, something that multiple studies in the UK have confirmed. The ethnic and racial composition of an area thus correlates with deprivation and crime, and this may shape the way those areas are policed – and hence the use of Taser – in multiple ways. First, police activity may arise simply as a response to the geographical concentration of crime and disorder (i.e., where there is more crime there is more policing). Second, if crime and deprivation ‘attract’ police activity, and if Black people are more likely to live in higher crime and more deprived locales, then they are more likely to be exposed to police activity and thus, potentially, to Taser use. Third, it may be that it is the ethnic or racial makeup of an area itself that attracts police attention. These potential pathways linking the socio-demographic and crime-related characteristics of an area to police activity and thus, potentially, Taser use are mutually compatible. People who live in areas with more crime, more deprivation and larger minority populations may for all these reasons (and perhaps more) be more disproportionately exposed to policing.

The data from Hampshire Police was of sufficient quality to allow us to geolocate use of force data, which enabled us to consider the characteristics of the specific areas in which Taser is used, with a particular focus, naturally, on the ethnic composition of those areas. In this section we therefore combine geocoded Taser use data with stop and search, Census other data to answer a series of questions. Turning to the first we asked whether Taser use is associated with other indicators of police activity in local areas. Our analysis showed this is very clearly the case in Hampshire. Taser use is higher where use of force is higher and where stop and search is higher. We then addressed the question of whether police activity in general, and Taser use in particular, associated with the ethnic and racial composition of local areas. Again, the answer was affirmative. At the bivariate level, stop and search and the general use of force was higher in areas with larger Black and more diverse populations. Notably, stop and search was higher in areas with larger Black populations even after we considered other characteristics of those areas, including crime. Taser use, specifically, was associated with the ethnic and racial composition of areas, but this seems to be because police activity is higher in those areas. We then explored whether police activity in general, and Taser use in particular, was associated with levels of

deprivation in local areas. Again, the answer was affirmative. The level of deprivation in an area was a consistent predictor of police activity, and in most models, there was a statistical effect of deprivation that was independent of crime and the other variables included in the model. In addition, we found a similarly consistent association between mental health and police activity. We also identified that police activity in general, and Taser use in particular was associated with levels of crime in local areas. Perhaps unsurprisingly, police activity in general, and Taser use in particular, was indeed associated with levels of crime in local areas such that where crime was higher, Taser use tended to be more likely. Finally, we found that there was no association between ethnic/racial composition of a local area and Taser use once crime and deprivation were taken into account. However, we did find that, controlling for these variables, the 'general' use of force is higher in more diverse areas.

Thus, the bivariate and multivariate analyses presented here provide a relatively consistent picture which suggest that police use of Taser in Hampshire was more likely overall, and was more frequent, in places with higher proportions of residents who were Black, young, lived in greater deprivation, and had worse mental health. This pattern seemed in large part to be because the level of police activity overall was higher in those areas. In other words, Taser tended to be used where police were most active, and this activity was – of course – not evenly spread across areas but was concentrated in particular types of places characterised by the markers of socio-economic deprivation. The implications of this were that Black people living in Hampshire were more likely to reside in areas with higher levels of stop and search, greater deprivation, worse mental health, and higher levels of crime. This meant that they were more likely to be exposed to police activity in general and – as a consequence – Taser use in pariticular. At the very least, and perhaps crucially, it would seem that Taser was more likely to be used in areas with larger Black populations even if it was other factors that had initially 'attracted' police attention (i.e., crime, deprivation, and so on) to those places.

12.2. Introduction

Criminologists and sociologists have long recognised that police activity is not evenly distributed across space. Just as crime concentrates in small areas (Weisburd et al., 2012), so does much of policing (Neil & MacDonald, 2023). It would therefore be surprising if Taser use was not also concentrated in some places rather than others, if only for the simple reason that police need to be present in a place for Taser to be used there. Relevant to the topic at hand, however, is that research on the 'social ecology' of police activity has described a set of complementary processes through which the *spatial distribution* of police activity might serve to generate ethnic and racial disproportionalities in, here, Taser use. Most rely in one way or another on the underlying idea that people from ethnic and racial minorities are more likely to live in more deprived and hence more disorderly and higher crime areas, something that multiple studies in the UK has confirmed. Research using the 2019 Index of Multiple Deprivation, for example (see below), found that people from all ethnic minority groups

except the Indian, Chinese, White Irish and White Other were more likely to live in the overall 10% of most deprived neighbourhoods in England than their counterparts from the White British group.[58] Crime is consistently higher in these neighbourhoods than elsewhere. Fully one in five (19.8%) Black people lived in the most income-deprived neighbourhoods (compared to 8.7% of White people), while 16.3% of Black people lived in the 10% highest crime neighbourhoods (compared to 9.1% of White people).

The ethnic and racial composition of an area thus correlates with deprivation and crime, and this may shape the way those areas are policed – and hence the use of Taser – in at least three different ways. On the first account, police activity arises as a more or less organic response to the geographical concentration of crime and disorder. The use of stop and search powers, for example, is heavily concentrated in some areas rather than others (Ashby, 2021), which is at least in part because crime is so much higher in those places than elsewhere (although Chainey & Macdonald, 2012) found that stop and search hotspots are not particularly strongly correlated with crime hotspots).

Second, however, research in England and Wales and elsewhere has consistently shown that social deprivation (e.g., Bradford, 2017) and inequality (e.g., Suss & Oliveira, 2022) predicts police activity independently of crime rates – in other words, deprivation and inequality are 'drivers' or 'triggers' of police activity in local areas in ways that cannot be reduced to the level of crime in those areas. If crime and deprivation 'attract' police activity, and if Black people are more likely to live in higher crime and more deprived locales, then they are more likely to be exposed to police activity and thus, potentially, to Taser use. It is important to note that this does not mean that Black people are more likely to commit crime. This would be a form of ecological fallacy (see below) and, indeed, self-report offending surveys tend to conclude that Black people are no more, and very possibly less, likely to commit crime than their White counterparts (Home Office, 2019: Table 3.01; Sharp & Budd, 2005; see also Sohoni et al., 2021).

Third, it may be that it is the ethnic or racial makeup of an area itself that attracts police attention. US-based research regularly concludes this is indeed the case (e.g., Feldman et al., 2019; Roh & Robinson, 2009), finding that police activity is higher in areas with larger minority populations even when crime and other relevant variables are considered. Some UK-based studies have reached similar conclusions. Vomfell and Stewart (2021, p. 572), for example, concluded that minority communities in their study area (WMP) were "over-patrolled" – officers were more likely to be deployed to those areas, although this was difficult to disentangle from crime rates. Suss and Oliveira (2022) found that levels of stop and search in London were higher in areas

[58] https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/people-living-in-deprived-neighbourhoods/latest#overall-most-deprived-10-of-neighbourhoods-by-ethnicity

with larger non-White populations even after controlling for crime, deprivation and inequality.

As noted, the potential mechanisms or pathways that link the socio-demographic and crime-related characteristics of an area to police activity and thus, potentially, Taser use are mutually compatible. People who live in areas with more crime, more deprivation *and/or* larger minority populations may for all these reasons (and perhaps more) be more exposed to police activity and thus, potentially, more likely to encounter officers carrying and using Taser. In this section we explore these issues using data from one force that provided us with (partial) geocoded Taser use data. We combine this data with stop and search, Census and IMD data to answer the following questions:

1. Is Taser associated with other indicators of police activity in local areas?
2. Is police activity in general, and Taser in particular, associated with the ethnic and racial composition of local areas?
3. Is police activity in general, and Taser in particular, associated with levels of deprivation in local areas?
4. Is police activity in general, and Taser in particular, associated with levels of crime in local areas?
5. Does any association between ethnic and racial composition and Taser persist even when crime and deprivation are taken into account?

At the outset it is important to note that the analysis presented below is exploratory and descriptive in nature. It provides a sketch of the distribution of Taser use over geographical and social space, and of the association between Taser use and some key area level variables. It cannot tap into the causal processes that generated these associations. We can say something about 'what' is going on 'where', but can say little about 'why'. The potential for ecological fallacy is another important issue. The danger of the ecological fallacy is that one cannot assume that what is true for a group is true for individual members of a group: for example, that those who live in a high crime area are all offenders (or even that those who live in a high crime area are *more likely to be* offenders). Just because an individual lives in area where police activity is higher does not mean that they themselves are more likely to encounter police.

12.3. Data and methods

This study utilises data from police-recorded Use of Force (UoF) forms from Hampshire. The UoF monitoring forms, which are mandatory, provide information on the tactics deployed and subject and officer characteristics. This analysis uses data collected over four years, from January 2018 to December 2021, consisting of 19,136 observations. To examine Taser use at a neighbourhood level, the UoF data was merged with information on calls for service using a unique identifier provided by the force. This allowed for the acquisition of the necessary LSOA codes required for

analysis. However, only 52% of all use-of-force incidents (9,906) could be matched across the two datasets, as geo-data was only available for cases involving a call for service. Therefore, LSOA information is unavailable for incidents where Tasers were used without a call for service (i.e., they were proactive instead of reactive).

The Taser use data that could be coded to the Lower Layer Super Output Area (LSOA) in which the use occurred. LSOAs are a Census-based area classification designed to be similar in terms of population size. There are 32,844 in England, with an average of approximately 1,500 people or 650 households. The datafile provided contained 1,231 LSOAs; however, 81 of these could not be matched to some of the other data used in the analysis and were excluded on this basis (these 81 were distributed across the local authority districts with the Police Force Area). In the period under scrutiny, 833 Taser uses were recorded within the LSOAs included in the analysis (the LSOAs excluded all reported no uses of Taser).

12.3.1. Dependent variables

The main dependent variable is a binary indicator coded one if Taser was used at least once in a given LSOA over the period in question, where 'use' covers the full range from drawn to discharge. On this measure, Taser was used in 39% (n=452) of the LSOAs over the study period (or, to put it another way, in nearly two-thirds of areas Taser was not used *at all* between 2018 and 2021).

As an additional dependent variable, we also use the count of Taser use within LSOAs. **Table 20.** and **Figure 5.** summarise the characteristics of this indicator. The distribution of Taser use across LSOAs broadly follows the Pareto Principle (the Pareto Principle or 80/20 rule, states that for many events or outcome, roughly 80% of the effects come from 20% of the causes). Just 17% of LSOAs accounted for 70% of all uses; and while Taser was not used at all in most areas, even where it was used both the modal and median number of uses was 1. This distribution of similar to other measures encountered in criminology, such as many crimes, stop and search, and so on. Crime, and certainly policing, tends to be concentrated in a relatively small proportion of areas.

Table 20. Count of Taser use within LSOAs

	All LSOAs	LSOAs with at least one use
Mean	0.72	1.84
Mode	0	1
Median	0	1
Standard Deviation	1.22	1.31
Min. value	0	1
Max. value	10	10
N	1,150	452

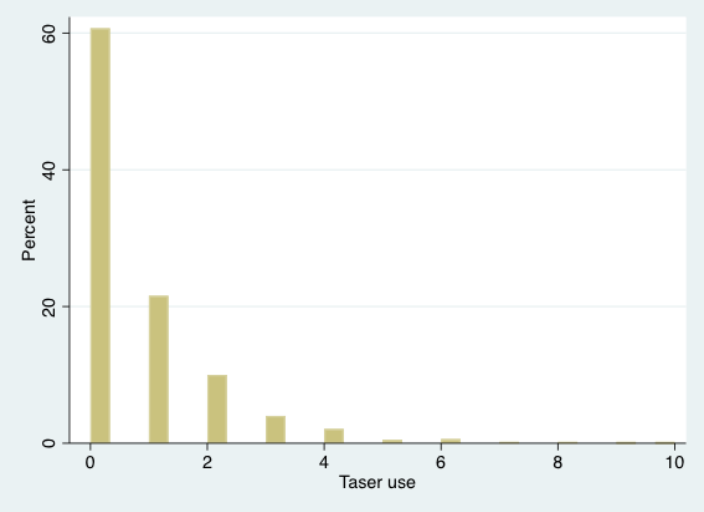

Figure 5. Count of Taser use within LSOAs

12.3.2. Independent variables

In addition to the Taser use data, we also obtained geo-coded *use of force excluding Taser.* This seemed certain to be a key measure in the analysis, since one would expect Taser use in an area to be strongly associated with the general level of force used there. The rate of use of force excluding Taser per 1,000 population was calculated for analysis (using Census 2021 population data). Descriptive statistics for this and the measures described below are shown in **Table 21.** Additional independent variables were drawn from four different sources. The 2021 Census provided a number of measures. The ethnic composition of the LSOAs in the dataset were represented by (a) the percentage of the population with a Black ethnicity (*Percent Black*), and (b) *Ethnic Diversity* as represented by Simpson's Index of Diversity[59], which provides a value that ranges between 0 and 1 for each LSOA, with higher values indicating greater diversity. A further Census-based indicator measured household deprivation. We used the Census 'dimensions of deprivation' to identify levels of household deprivation[60]. These are:

- Education: A household is not deprived on this dimension if no household member has at least level 2 education and no one aged 16 to 18 years is a full-time student.
- Employment: A household is classified as deprived in this dimension if any member who is not a full-time student is either unemployed or economically inactive due to long-term sickness or disability

[59] Simpson's Index of Diversity can be interpreted here as the probability that any two individuals randomly selected from an LSOA will belong to a different ethnic group.
[60]https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/demographyvariablescensus2021/householddeprivation

- Health: A household is classified as deprived in this dimension if any person in the household has general health that is bad or very bad or is identified as disabled.
- Housing: A household is classified as deprived if the household's accommodation is either overcrowded, in a shared dwelling, or has no central heating.

For each LSOA *household deprivation* was defined as the percentage of households that met three or four of the criteria above. Two further Census-based measures were used: the percentage aged 15-34 (to account for the inevitable focussing of police activity on younger people); and population density (people per square kilometre), as the latter is highly variable between LSOAs which are designed to be similar in population but not in the size of the area covered. The second source of data was the stop and search data stored at police.uk, which used to generate the average stop and search rate per 1,000 population for each LSOA over the 4-year study period (using the 2021 Census population figure)[61]. We treat this primarily as a proxy for overall levels of police activity in a given LSOA, reasoning that where stop and search is higher (per head of population) so too will be other forms of activity. Third, we used the crime domain index of the 2019 Index of Multiple Deprivation[62] (IMD) to generate a measure of crime at the local level. The 2019 IMD uses crime data from 2016/17 and 2017/18, i.e., before our study window. However, recorded crime is to a significant degree an outcome of police activity in an area, as increased police presence leads to increased crime detection. We already include measures of police activity in our models, stop and search and police use of force, and recorded crime is likely to be co-constituted (in other words, correlated with and generated by) police activity. We therefore reasoned it would be preferable to treat crime as a 'structural' characteristic of LSOAs that leads them to be more or less exposed to police activity. Using data from before our study window helps in this regard – moreover, we used the crime deciles reported in the IMD, where LSOAs are divided into 10 groups ranging from the lowest to highest crime areas. Among over things, this more clearly groups LSOAs into higher and lower crime type areas. Finally, as an important control variable (and indeed something of interest in its own right), we added an area level measure of mental health: the Small Area Mental Health Index (SAMHI). Given recent attention on the amount of time police spend on dealing with people with mental health issues, it seemed important to take mental health into account in our models. The SAMHI is a

> *"a composite annual measure of population mental health for each Lower Super Output Area (LSOA) in England. The SAMHI combines data on mental health from multiple sources (NHS-*

[61] Since LSOAs are designed to be similar in terms of population size calculating rates in this way is arguably redundant. However, doing so makes it easier to compare between the use of force and stop and search data.
[62] https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

> *Mental health-related hospital attendances, Prescribing data – Antidepressants, QOF – depression, and DWP – Incapacity benefit and Employment support allowance for mental illness) into a single index"*[63].

We use the 2019 SAMHI index. Higher scores on the index indicate that mental health is worse in the area in question.

12.3.3. Analytic strategy

After first presenting descriptive and bivariate statistics that map the use of Taser across different types of area, analysis proceeds in three accumulative stages. First, we consider the predictors of stop and search and use of force excluding Taser at the local level. Second, we consider the predictors of the binary indicator of Taser use, and third the predictors of higher levels of Taser use in an area (using the count measure described above). This strategy allows us to explore three inter-related questions: in what types of area is Taser used, as a matter of observational fact; what are the area characteristics that seem to attract police activity in general; and most importantly what is the interplay between area characteristics and police activity in predicting the use of Taser.

12.4. Bivariate analysis

Table 21. shows the correlation matrix for the continuous variables used in the analysis. As might be expected there are moderate to strong correlations between almost all of them, which means that deprivation, the presence of young people, large ethnic minority populations, crime and police activity all tend to cluster together. Notably, the number of Taser incidents tends to be higher where stop and search is higher (r=.47):

- in areas with larger Black populations (r=.33)
- in more deprived areas (r=.32)
- where there are more people with mental health problems (r=.24)
- where crime is higher (r=.35).

That said, only one pairwise correlation is at a level that would suggest potential problems with multicollinearity in the regression modelling,[64] that between ethnic diversity and percent Black (r=.80). We address this issue in the models below.

63 https://pldr.org/dataset/2noyv/small-area-mental-health-index-samhi

[64] Multicollinearity refers to cases where there is a strong correlation between two or more independent variables (i.e. ethnic diversity and percent Black) that makes it difficult to estimate the correlation between any one of those variables and the dependent variable (e.g. Taser use).

Table 21. Descriptive statistics and correlation matrix

	Mean	SD	Min.	Max.	1	2	3	4	5	6	7	8	9
Number of CED incidents (1)	0.72	1.22	0	10	1								
Average annual stop and search rate (2)	0.33	0.47	0	4.75	0.47	1							
Percent Black (3)	1.24	1.47	0	13.16	0.33	0.40	1						
Ethnic Diversity (4)	0.15	0.12	0.01	0.67	0.29	0.36	0.80	1					
Household deprivation (5)	2.98	2.54	0	15.90	0.32	0.32	0.35	0.24	1				
IMD Crime Decile (1=lowest) (6)	5.38	2.84	1	10	0.35	0.44	0.47	0.42	0.56	1			
Percent aged 15-34 (7)	22.99	8.25	7.27	75.80	0.30	0.38	0.63	0.68	0.30	0.45	1		
Population Density (8)	3911	3468	16.3	19,873	0.20	0.24	0.53	0.54	0.32	0.45	0.60	1	
SAMHI (9)	0.94	0.77	-0.94	4.46	0.24	0.22	0.14	0.02	0.62	0.53	0.07	0.18	1

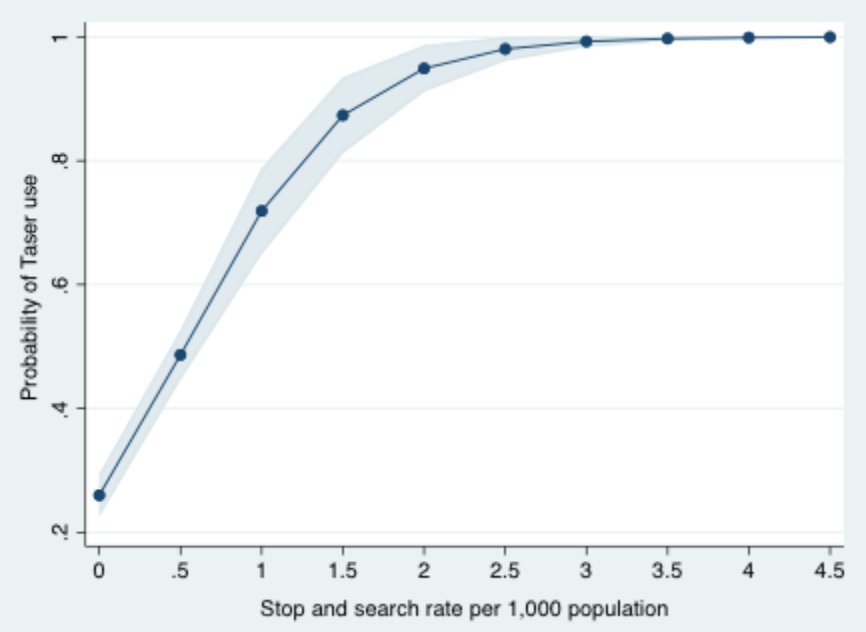

Figure 6. Probability of Taser being used at least once, by average annual stop and search rate

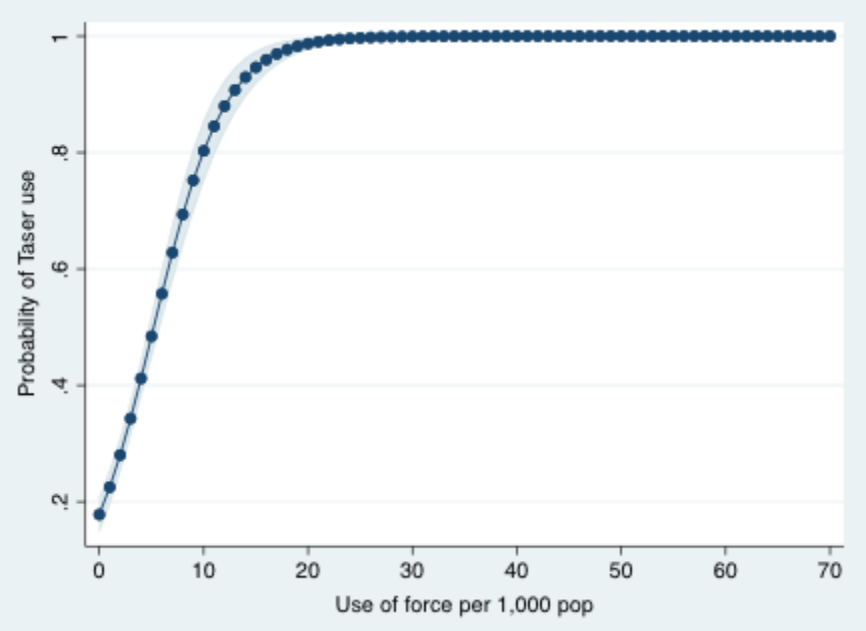

Figure 7. Probability of Taser being used at least once, by rate of other uses of force rate

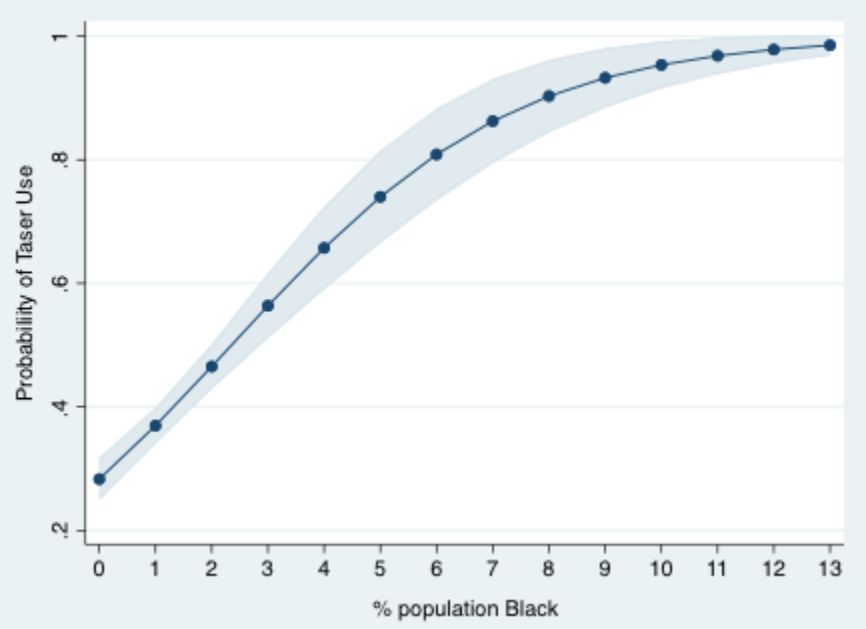

Figure 8. Probability of Taser being used at least once, by % population Black

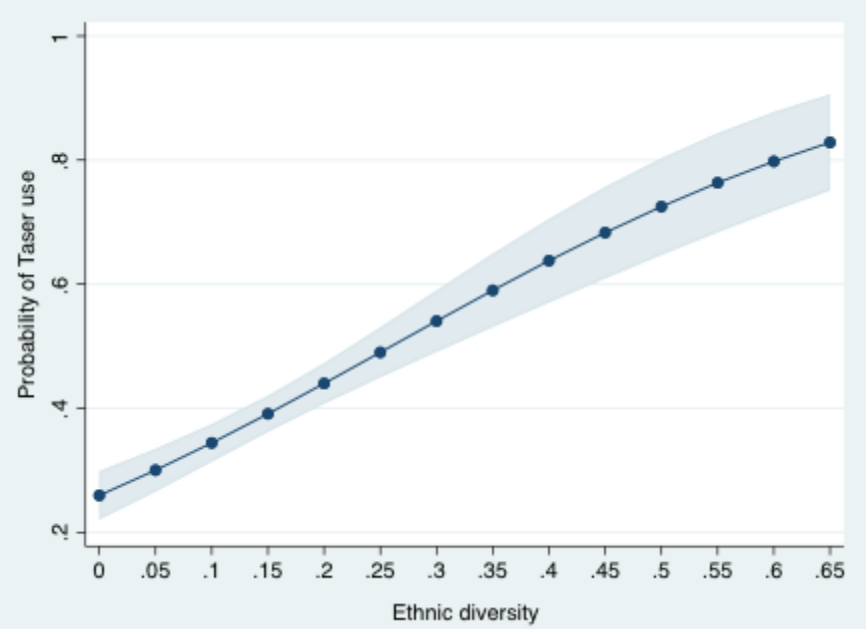

Figure 9. Probability of Taser being used at least once, by ethnic diversity

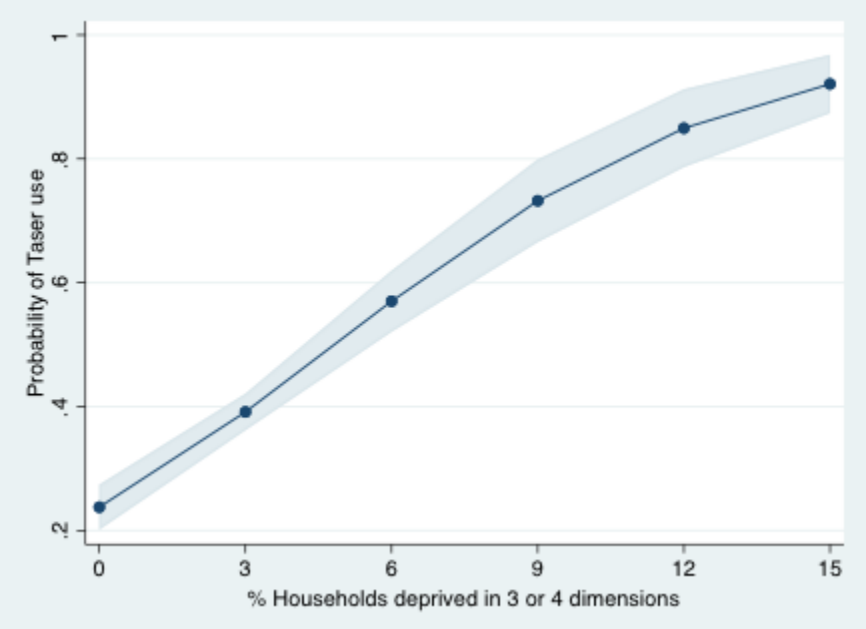

Figure 10. Probability of Taser being used at least once, by household deprivation

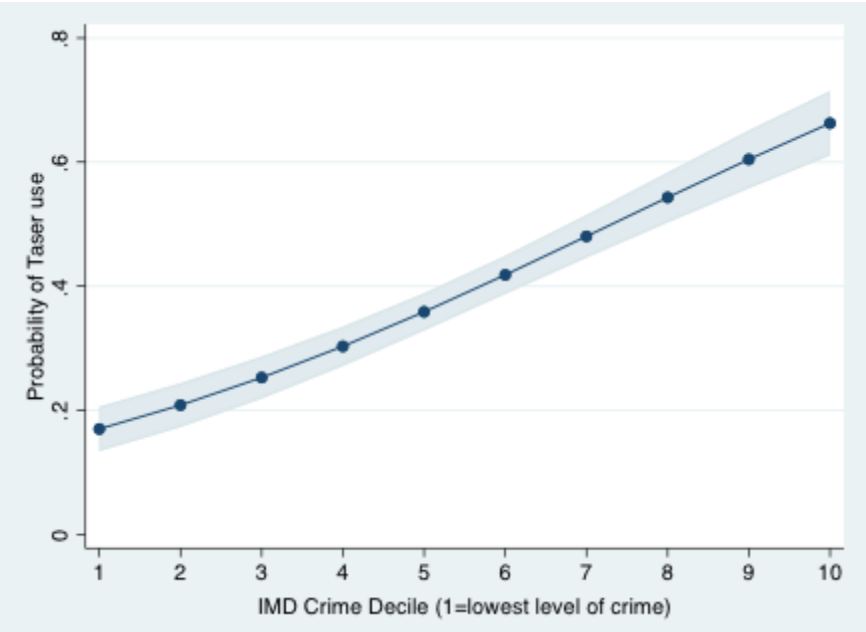

Figure 11. Probability of Taser being used at least once, by IMD crime decile

To complement **Table 21.**, **Figures 6. to 11.** show the association between key measures and the probability of any Taser use (i.e., yes/no) in an area.[65] The Figures indicate, first, the centrality of police presence in predicting whether Taser was used

[65] These were generated from a series of binary logistic regression models with Taser use as the dependent variable and each of the area characteristics, in turn, as the sole independent variable.

in an area or not. **Figures 6. and 7.** show that in the areas where stop and search and the use of force excluding Taser were highest, the probability of Taser being used approached 1 (i.e. Taser was almost certain to have been used there at least once), whereas in areas with the lowest levels of police activity the probability of Taser use was much lower, falling to .2 or less.

Second, however, the demographic and social characteristics of an area also seem to be important. Most notably, **Figure 8.** shows that as we move from the LSOAs with the smallest to the largest Black population the probability of Taser use increases from around .3 to, again, approach 1. On this basis alone we can conclude that many Black people living in Hampshire are likely to live in areas where Taser is used by police. A similar variation in use is shown across the range of ethnic diversity (**Table 24.**). Finally, **Tables 24. and 25.** show that, as expected, Taser use is higher in areas of higher deprivation and with higher levels of crime.

In sum, the bivariate analysis indicates that Taser use by police in this force area is much more likely to occur in some types of areas compared with others. People who live in areas with larger Black populations, more ethnic diversity, higher levels of deprivation and mental illness, more police presence, and more crime, were more likely to be 'exposed' to Taser. However, since all these variables are correlated with each over (see **Table 21.** above), the contribution each one is making to explaining the distribution of Taser use is unclear. For example, is the association between deprivation and Taser use in fact explained by levels of mental illness, which are higher in more deprived areas? We therefore turn to multivariate analysis to help better understand the correlates of Taser use.

12.5. Multivariate analysis

Given the strength of the association between our measures of police activity and Taser use, we start with models predicting levels of stop and search and use of force excluding Taser. To understand where Taser is used, we need to understand where police are active. To be clear, given the relatively high correlations between all the variables considered here, the aim in multivariate analysis is to explore which are most important in predicting police activity and, below, Taser use. For example, **Table 21.** shows that the proportion of Black residents in an area *and* its level of household deprivation are both associated with the level of stop and search. But the two are quite highly correlated – more deprived areas also tend to have larger Black populations. Is it percent Black, household deprivation, or some combination of the two, that is associated with the level of police activity in an area?

Table 22. shows results from a series of linear regression models predicting stop and search rate. To account for the high correlation between percent Black and ethnic diversity, Model 1 includes just the former, Model 2 just the latter, and Model 3 both. Here, results suggest that police activity, as represented by the level of stop and search, is higher in areas with larger Black populations, more ethnically diverse populations, with larger populations of young people, with higher levels of household

deprivation and with worse mental health. When both percent Black and ethnic diversity are included in the same model, percent Black emerges as the significant predictor of stop and search activity. Finally, when 'structural' levels of crime are added in Model 5 we find (a) that levels of stop and search are higher in areas of higher crime but also (b) even controlling for crime, stop and search is higher in areas with larger Black populations, more young adults, and higher levels of household deprivation.

One unexpected feature of these models is that, conditioning on the other variables shown, population density is negatively associated with the stop and search rate (i.e. all else equal stop and search tends to be higher in less densely populated areas). Since the pairwise correlation between these variables was positive (r=.24, see **Table 21.** above), this can probably be considered largely an artefact of the model, although it could also suggest that all else equal levels of stop and search in more densely populated areas are lower than might be expected.

Turning to the 'general' use of force, **Table 23.** repeats the above process with the use of force rate (excluding Taser) as the dependent variable. Results are very similar to those shown in **Table 22.** Model 4 in **Table 23.** shows that even controlling for levels of crime, use of force (excluding Taser) was higher in areas with more young adults, worse mental health and, here, ethnic diversity (rather than percent Black). Although the regression coefficients reduce in size, this pattern holds even when we control for stop and search in Model 5. Finally, once again, the conditional correlation between population density and use of force (excluding Taser) is negative.

Again, we can conclude that if we take two areas with similar underlying levels of crime and police activity (as represented by stop and search), use of force would likely be higher in the area with more ethnic diversity, more young people, and/or more mental health issues.

Table 22. Linear regression models predicting stop and search rate

	Model 1	Model 2	Model 3	Model 4
Percent Black	0.23***		0.17***	0.14**
Ethnic Diversity		0.21***	0.11*	0.08
Population Density	-0.08*	-0.07*	-0.10**	-0.13***
Percent aged 15-34	0.21***	0.21***	0.20***	0.16***
Household deprivation	0.20***	0.23***	0.13***	0.08*
SAMHI			0.12***	0.02
IMD Crime Decile (1=lowest)				0.27***
R square	0.22	0.21	0.23	0.27
N	1150	1150	1150	1150

All standardised betas
* p<0.05, ** p<0.01, *** p<0.001

Table 23. Linear regression models predicting use of force rate (exc. Taser)

	Model 1	Model 2	Model 3	Model 4	Model 5
Percent Black	0.18***		0.07	0.06	-0.02
Ethnic Diversity		0.22***	0.17***	0.15**	0.11**
Population Density	-0.13***	-0.14***	-0.14***	-0.16***	-0.09**
Percent aged 15-34	0.34***	0.30***	0.29***	0.27***	0.17***
Household deprivation	0.05	0.06	0.06	0.02	-0.02
SAMHI	0.21***	0.23***	0.22***	0.16***	0.15***
IMD Crime Decile (1=lowest)				0.16***	0.01
Stop and search rate					0.58***
R square	0.24	0.25	0.25	0.26	0.51
N	1150	1150	1150	1150	1150

All standardised betas
* p<0.05, ** p<0.01, *** p<0.001

Table 24. shows results from a series of binary logistic regression models predicting the binary (yes/no) Taser use variable. These are again specified in an additive fashion. Models 1 and 2 show that Taser use was more likely in areas with larger Black populations, more young adults, more household deprivation, and worse mental health. Ethnic diversity did not seem to be an independent predictor of Taser use (and we drop it from Model 4 onwards). Both levels of crime (Model 4) and stop and search (Model 5) also predict the probability of Taser use, with use being more likely in higher crime areas and areas with higher levels of stop and search. Notably, controlling for crime and stop and search the proportion aged 15-34 in an area, and household deprivation, remain significant in the model, whereas the coefficient for percent Black loses significance.

Finally, once use of force is entered in Model 6 all other factors lose significance. This suggests that Taser use is more likely in areas with larger young populations, higher deprivation, more crime and higher levels of stop and search because police use of force in general is higher in those types of areas (see **Table 23.** above). To put it another way, the general use of force mediates the association between population characteristics and Taser.

Table 24. Binary logistic regression models predicting probability of Taser use (odds ratios)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Percent Black	1.15*		1.12	1.09	1.06	1.03
Ethnic Diversity		3.66	1.45			
Population Density	1	1	1	1	1	1
Percent aged 15-34	1.06***	1.06***	1.05***	1.05***	1.04**	1.02
Household deprivation	1.13***	1.14***	1.13***	1.10*	1.09*	1.05
SAMHI	1.34**	1.36**	1.35**	1.14	1.14	0.99
IMD Crime Decile (1=lowest)				1.14***	1.09*	1.06
Stop and search rate					2.86***	1.39
Use of force rate (esc. Taser)						1.24***
N	1150	1150	1150	1150	1150	1150

* p<0.05, ** p<0.01, *** p<0.001

Finally, **Table 25.** shows results from a similar set of negative binomial regression models predicting the count of Taser use within LSOAs over the study period. Results are similar to those shown in **Table 24.** Levels of Taser use were higher in areas with larger Black populations, more diversity, more young people, more deprivation, and worse mental health. When diversity and percent Black are included in separate models both are statistically significant, but when in the same model neither are significant, suggesting multicollinearity. We proceed with only percent Black, as this is the measure of most interest in the context of this report. The association between percent Black and the number of times Taser was used seems to be accounted for by levels of stop and search (see Model 5), and when use of force is added in Model 6, all coefficients except crime decile lose significance. Again, use of Taser seems to be mediated by the general use of force.

Table 25. Negative binomial regression models predicting count of Taser use (odds ratios)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Percent Black	1.14***		1.08	1.10**	1.06	1.05
Ethnic Diversity		5.70***	2.62			
Population Density	1	1	1	1	1	1
Percent aged 15-34	0.03***	0.03***	0.03***	0.02***	0.01*	0.01
Household deprivation	1.04***	1.03***	1.03***	1.03***	1.02**	1.01
SAMHI	1.44***	1.46***	1.46***	1.27**	1.24**	1.11
IMD Crime Decile (1=lowest)				1.10***	1.08**	1.07**
Stop and search rate					1.58***	1.04
Use of force rate (esc. Taser)						1.06***
N	1150	1150	1150	1150	1150	1150

* p<0.05, ** p<0.01, *** p<0.001

12.6. Discussion

In this section, we return to our research questions posed above, and provide provisional answers to them based on the analysis presented above.

Is Taser use associated with other indicators of police activity in local areas?

This is very clearly the case – in Hampshire, Taser use is higher where use of force is higher and where stop and search is higher.

Is police activity in general, and Taser use in particular, associated with the ethnic and racial composition of local areas?

The answer is 'yes'. At the bivariate level, stop and search and the general use of force is higher in areas with larger Black *and* more diverse populations. Notably, stop and search is higher in areas with larger Black populations even after we take account of other characteristics of those areas, including crime. Taser use, specifically, is also associated with the ethnic and racial composition of areas, but this seems to be because police activity is higher in those areas.

Is police activity in general, and Taser use in particular, associated with levels of deprivation in local areas?

Again, the answer is 'yes'. The level of deprivation in an area is a consistent predictor of police activity, and in most models, there was a statistical effect of deprivation that is independent of crime (and the other variables included in the model). In addition, we find a similarly consistent association between mental health and police activity.

Is police activity in general, and Taser use in particular, associated with levels of crime in local areas?

Again yes. Perhaps unsurprisingly, police activity in general, and Taser use in particular, is indeed associated with levels of crime in local areas: where crime is higher, Taser use tends to be more likely.

Does any association between ethnic and racial composition and Taser use persist even when crime and deprivation are taken into account?

Finally, we do not find a statistical association between the ethnic and racial composition of an area and Taser use once crime and deprivation are taken into account. However, we do find that, controlling for these variables, the 'general' use of force is higher in more diverse areas.

The bivariate and multivariate analyses presented above thus present a relatively consistent picture. Police use of Taser is more likely overall, and is more frequent, in areas with larger Black populations, more young people, higher levels of deprivation and worse mental health, and this seems in large part to be because the level of police activity overall is higher in those areas. Taser tends to be used where police are active, and this activity is (of course) not evenly spread across areas but is concentrated in particular types of places.

The implications of this are illustrated in **Figures 12. to 14.** We saw above (**Figure 8.**) that Taser use was much higher in areas with larger Black populations. **Figures 12. to 14.** confirm that Black people living in Hampshire are more likely to reside in areas with higher levels of stop and search, more deprivation, and higher levels of crime. This means that they are more likely to be exposed to police activity, including Taser use – although, recall, the danger of the ecological fallacy. At the very least, though, and perhaps crucially, it would seem that Taser is more likely to be used in areas with larger Black populations *even if* it is other factors that are 'attracting' police attention (i.e., crime, deprivation, and so on) to those places.

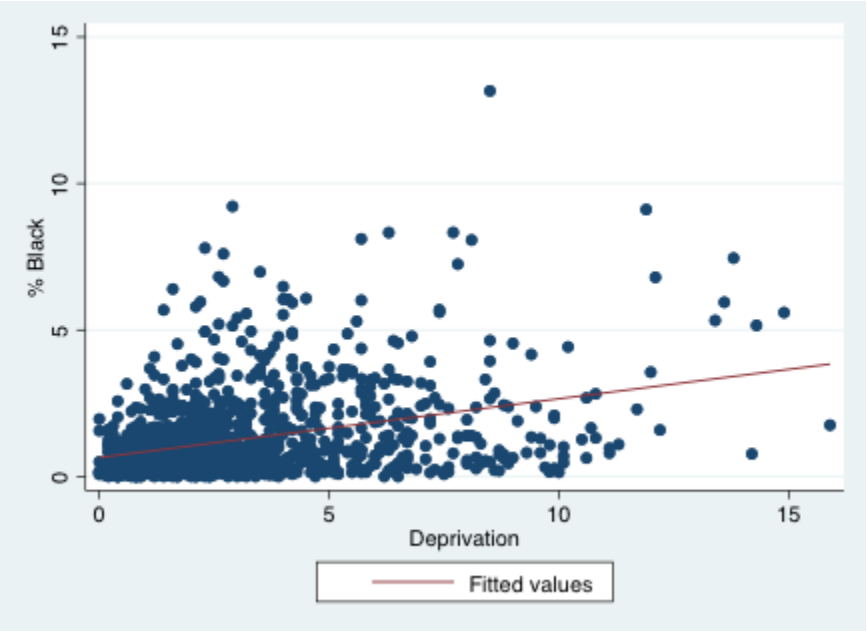

Figure 12. Percent Black by deprivation

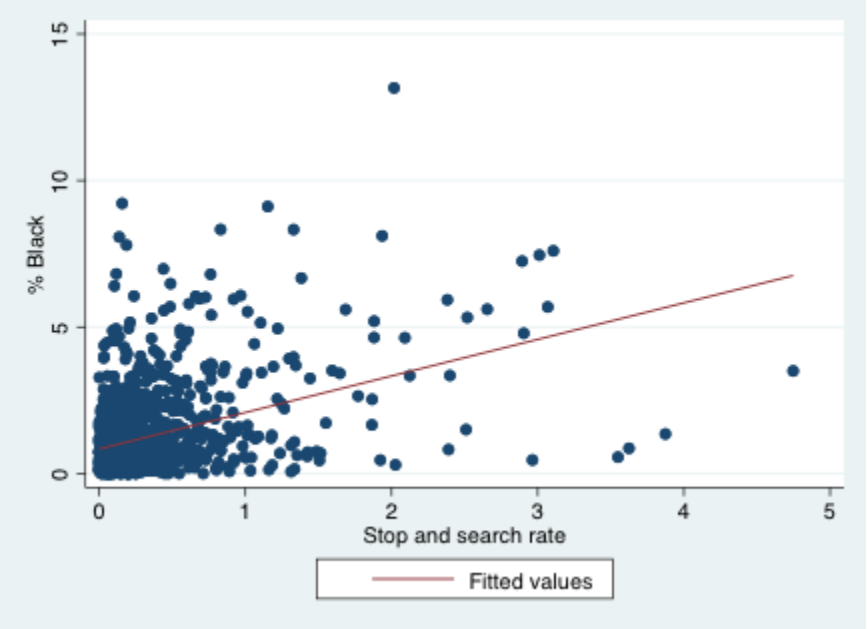

Figure 13. Percent Black by stop and search rate

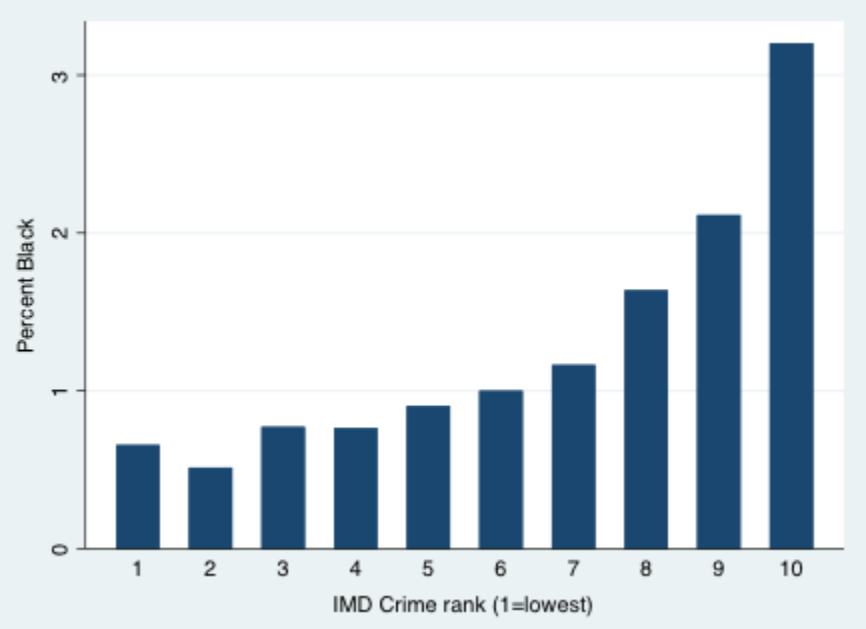

Figure 14. Percent Black by IMD crime

13. Conclusions

This report has presented findings from a programme of research, funded by the National Police Chiefs' Council (NPCC) and the Mayor's Office for Policing and Crime (MOPAC). It was commissioned and managed by the College of Policing and aimed to explore the potential causes of ethnic and racial disparities in the police use of Taser. The report was peer reviewed and our revisions overseen by an Independent Academic Advisory Panel.

A mixed methods approach was adopted. This included quantitative analysis of routine police statistical data from 7-10 forces in England and Wales, depending on the type of analysis. It also included qualitative analysis of over 150 interviews with community members, scrutiny groups, STOs, and others as well as observations and body worn video footage. We are conscious that, even in a report of this length, time limitations amongst other factors have prevented us from providing an exhaustive examination of all the issues at stake. We note that there are some salient gaps in, and limitations of the report. It is also important to note that the research team faced significant difficulties in accessing high quality routine police data, including body worn camera footage. Consequently, the capacity of this study to conduct a thorough and comprehensive analysis of the underlying factors driving ethnic disproportionality in policing across England and Wales was limited. Whilst such important caveats should be kept in mind, amongst other implications, this study clearly highlights the need for police forces in England and Wales to enhance, standardise, and integrate their data gathering and sharing practices. These should be centrally supported with quality assurance schemes put in place that would monitor both how the data is being gathered and processed, to allow further scrutiny of this and other important issues.

That said, there is much that we have been able to do. Individual chapters have focused, in turn, on affected community voices, the role of community scrutiny groups, body worn camera footage, Taser training, police officer interviews and observations, and have explored the results of statistical analysis of routine data. We do not seek to rehearse the key findings of each of these chapters here as these can be found in the conclusions to each and are summarised in the Executive Summary. Instead, we aim to highlight cross-cutting themes once again. We appreciate that we did not have a remit to produce recommendations, with this role being undertaken by others on the basis of this research, but we suggest here some key areas that our research suggests to us that it would be important to focus on.

Overall, the research supports the idea that the ethnic disproportionality evident in the annual Home Office statistics regarding the use of Taser is not attributable to a single cause but stems from complex interactions between multiple factors, structures, and processes, both within and external to policing. We find some evidence of effects at the level of individual officers, such as the finding that STOs from one case study force were less likely to use Taser when the ethnicity and sex of the officer and the person on whom they used force were the same. Our data also suggests that in some cases

Black people may be seen as more physically threatening, increasing the probability of Taser use within a use of force incident. Yet, more broadly, the data supports the idea that policing takes place within a societal framework that exhibits considerable amounts of economic inequality. As such, specific neighbourhoods have historically high levels of socio-economic deprivation and correspondingly relatively high levels of crime and mental health issues relative to others. Due to the historical racism evident within British society, such areas tend to have residential populations that are ethnically diverse. Ethnic minority populations are more likely to suffer from poor mental health and less likely to be able to access support.

It is evident that policing is concentrated into such areas perhaps because deprived neighbourhoods are on occasion defined by the police as strategically important 'hot spots'. This means that these locations are attracting police resources which are exposing people who live in these communities to more proactive enforcement activities. Moreover, our study suggests that the likelihood of Taser use flows from, and is predicted by, the intensity of police activity in a given location. Thus, it may be that a combination of societal issues and institutional policing priorities is culminating in practices that disproportionately affect Black and other ethnic minority communities relative to those populations in more wealthy surrounding, predominantly White, neighbourhoods. In other words, our study is consistent with the idea that the patterns of ethnic disproportionality evident in the UK Home Office statistics are being driven primarily by a combination of structural and institutional racism. Therefore, recommendations and actions could usefully focus on the following issues.

1. The prioritising and targeting of specific types of crime such as drugs and 'county lines' may be leading to a systematic focus on the activities of organised crime groups who are, and operate within, ethnically diverse neighbourhoods. Moreover, our study suggests that Taser tends to be used where police are active. Given police activity is not evenly spread, and police use of Taser is measured against a baseline residential predominantly White populations, such prioritising will inevitably increase the likelihood that Taser use will continue to exhibit patterns of ethnic disproportionality.
2. Our studies in combination suggest that deployments of Taser are not merely a function of individual officer decision-making but are part of a broader institutional response to situations perceived as posing a threat or risk. These deployment decisions may be influenced not only by call centre protocols but by formal guidance (i.e., APP on Taser). The training provided to officers also risks creating a further push towards the use of the weapon. In other words, Taser has become institutionalised as an organisational-level response. It follows that the use of Taser is now much more likely in situations that could have historically otherwise been resolved without its use.
3. Relatedly, Taser is seen by many officers as the primary choice for handling situations perceived as challenging and with the potential for conflict. This broadly consensual view appears to be reinforced through training and policy

which positions Taser as relatively low risk, highly effective and appropriate for use in a wide range of situations involving the potential for harm. Such a view stands in stark contrast to the perspectives of our affected community members who view Taser as a very high-level use of force with severe physical, psychological and community level impacts. Our observations indicated that there is insufficient input in the training that was designed to encourage reflective thinking by officers to discourage discriminatory outcomes or on the potential for CED deployments to generate significant legitimacy threats to the police.

4. We also identified a notable lack of attention to utilising dialogue, or tactical communications, to handle situations of potential conflict, and in terms of de-escalation strategies more broadly. Not only is limited time dedicated to discussions of the complexities of ethnic disproportionality during Taser training, there also seems to be limited understanding of disproportionality itself.

These findings imply the need to review multiple areas of Taser policy and practice, including guidance, training, deployment practices and community scrutiny groups. In terms of immediate steps, we encourage police forces and the College of Policing to move beyond the minimum standards of time currently recommended for training to enable a greater focus on developing de-escalation skills. Going beyond greater investment in Taser training, the research we present here points toward broader policy considerations based upon a fuller understanding of the drivers of the structural and institutional dynamics of discrimination and racism and how these relate to, and interact with, policing. Policing will continue to occur in a society marked by economic inequality and structural racism. It is this ongoing reality that provokes our emphasis on improving officer skills for de-escalation and engagement, particularly with people experiencing mental health issues. There is also a clear and obvious need to improve the involvement of affected individuals, families, and communities with policing including via scrutiny groups. We are conscious that we are not alone in pointing to some of these issues, and that recommendations from previous reports in this area have not, in our view, been adequately realised. Yet if left unchecked, the ramifications of the issues we have highlighted here are profoundly important, not least of all because of their continuing disproportionate effect on ethnic minority communities and correspondingly upon police legitimacy. This is particularly salient in the context of the stark differences of opinion we identified between the accounts of police and affected community members regarding the level of force inherent in the use of Tasers. Consequently, we encourage police forces across the UK to work on this chasm of understanding, read the detail of this report and use the evidence we present as a catalyst to move forward with a sense of urgency in addressing the complex challenges it raises.

14. References

Alison, L. J., Alison, E., Noone, G., Elntib, S., & Christiansen, P. (2013). Why tough tactics fail and rapport gets results: Observing Rapport-Based Interpersonal Techniques (ORBIT) to generate useful information from terrorists. *Psychology, Public Policy, and Law*, *19*(4), 411–431.

Ang, D. (2021). The effects of police violence on inner-city students. *The Quarterly Journal of Economics*, *136*(1), 115-168.

Angiolini, E. (2017). *Report of the independent review of deaths and serious incidents in police custody*. London: H M Government. https://assets.publishing.service.gov.uk/media/5a821d1040f0b6230269ae98/Report_of_Angiolini_Review_ISBN_Accessible.pdf

Ashby, M. (2020). *Stop and Search in London: July to September 2020*. UCL Institute for Global City Policing. https://discovery.ucl.ac.uk/id/eprint/10115766/1/2020-Q3.pdf

Baker, D., & Pillinger, C. (2020). 'These people are vulnerable, they aren't criminals': Mental health, the use of force and deaths after police contact in England'. *The Police Journal*, *93*(1), 65-81.

Bell, M. C. (2017). Police reform and the dismantling of legal estrangement. *The Yale Law Journal*, 2054-2150.

Blalock, H. M. (1967). *Toward a theory of minority-group relations*. Wiley.

Bonnet, F. (2014). How to perform non-racism? Colour-blind speech norms and race-conscious policies among French security personnel. *Journal of Ethnic and Migration Studies*, *40*(8), 1275–1294.

Bonnet, F., & Caillault, C. (2015). The invader, the enemy within and they-who-must-not-be-named: How police talk about minorities in Italy, the Netherlands and France. *Ethnic and Racial Studies*, *38*(7), 1185–1201.

Bottoms, A., & Tankebe, J. (2012). Beyond procedural justice: A dialogic approach to legitimacy in criminal justice. *The Journal of Criminal Law and Criminology, 102*(1), 119-170.

Bradford, B. (2014). Policing and social identity: Procedural justice, inclusion and cooperation between police and public. *Policing and Society: An International Journal of Research and Policy, 24*(1), 22–43.

Bradford, B. (2017). *Stop and search and police legitimacy.* Routledge.

Brandl, S. G., & Stroshine, M. S. (2013). The role of officer attributes, job characteristics, and arrest activity in explaining police use of force. *Criminal Justice Policy Review, 24*(5), 551-572.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589-597.

Bullock, K., Fielding, J., Fielding, N., and Lloyd, A. (2017). *What works: Crime Reduction Systematic Review Series: No 12. The Police Service, Diversity and Organisational Outcomes: A Report of a Systematic review.* https://library.college.police.uk/docs/what-works/SR12-Diversity-Organisational-Outcomes-2017.pdf

Buttle, J. W. (2007). A constructive critique of the Officer Safety Programme used in England and Wales. *Policing and Society*, *17*(2), 164–181.

Casey, L. (2023). Baroness Casey Review Final Report: An Independent Review into the Standards of Behaviour and Internal Culture of the Metropolitan Police Service. https://www.met.police.uk/SysSiteAssets/media/downloads/met/about-us/baroness-casey-review/update-march-2023/baroness-casey-review-march-2023a.pdf

Chainey, S., & Macdonald, I. (2012). *Stop and search, the use of intelligence and geographic targeting: Findings from case study research*. National Policing Improvement Agency. https://discovery.ucl.ac.uk/id/eprint/10072372/

Clark-Darby, O. (2023). Armed police in an unarmed country: Legitimacy and self-legitimacy of English firearms officers. In C. Farmer & R. Evans (Eds.), *Policing & firearms* (pp. 337–365). Springer International Publishing.

College of Policing. (2020). *Authorised professional practice: Stop and search.* https://www.college.police.uk/app/stop-and-search

College of Policing / National Police Chiefs' Council. (2020). *Officer and Staff Safety Review: A review of the arrangements to secure the safety of police officers and police staff engaged in frontline policing.* https://assets.college.police.uk/s3fs-public/2020-09/CoP-NPCC-Officer-Staff-Safety-Review.pdf

Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, *83*(6), 1314–1329.

CRAE (Childrens' Rights Alliance for England). (2020). Children's rights and policing: Tasers and children's rights. https://crae.org.uk/sites/default/files/uploads/CRAE_POLICING-TASER-PRINT-1.pdf

Cushion, C. J. (2020). Exploring the delivery of Officer Safety Training: A case study. *Policing: A Journal of Policy and Practice, 14*(1)*,* 166-180.

Davies, T., Bradford, B., Yesberg, J. A., & Pósch, K. (2021). Visibly better? Testing the effect of ethnic appearance on citizen perceptions of the police. *Policing and Society: An International Journal of Research and Policy, 31*(9), 1133-1148.

Davis, J. (2022). *Adultification bias within child protection and safeguarding*. HM Inspectorate of Probation. https://www.justiceinspectorates.gov.uk/hmiprobation/wp-

content/uploads/sites/5/2022/06/Academic-Insights-Adultification-bias-within-child-protection-and-safeguarding.pdf

De Angelis, J., & Wolf, B. (2013). Tasers and community controversy: Investigating training officer perceptions of public concern over conducted energy weapons. *Qualitative Report*, *18*, 1-20.

Deuchar, R., Fallik, S. W., & Crichlow, V. J. (2019). Despondent officer narratives and the 'post-Ferguson' effect: Exploring law enforcement perspectives and strategies in a southern American state. *Policing and Society*, *29*(9), 1042–1057.

Dymond, A. (2020). 'Taser, Taser'! Exploring factors associated with police use of Taser in England and Wales. *Policing and Society*, *30*(4), 396–411.

Dymond, A. (2022). *Electric-shock weapons, tasers and policing: Myths and realities.* Taylor & Francis.

Feldman, J. M., Gruskin, S., Coull, B. A., & Krieger, N. (2019). Police-related deaths and neighborhood economic and racial/ethnic polarization, United States, 2015–2016. *American Journal of Public Health*, *109*(3), 458–464.

George, A. (2023). *NBPA feedback on Taser training course.* Unpublished report.

Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research.* Routledge.

Gray, A. C., & Parker, K. F. (2020). Race and police killings: Examining the links between racial threat and police shootings of Black Americans. *Journal of Ethnicity in Criminal Justice, 18*(4), 315–340.

Harris, S., Joseph-Salisbury, R., Williams, P., & White, L. (2022). Notes on policing, racism and the Covid-19 pandemic in the UK. *Race & Class*, *63*(3), 92-102.

Hawkins, D. S. (2022). "After Philando, I had to take a sick day to recover": Psychological distress, trauma and police brutality in the Black community. *Health communication*, *37*(9), 1113-1122.

Henwood, K., & Pidgeon, N. (2003). Grounded theory in psychological research. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp. 131–155). American Psychological Association.

Hester, N., & Gray, K. (2018). For Black men, being tall increases threat stereotyping and police stops. *Proceedings of the National Academy of Sciences*, *115*(11), 2711–2715.

HMICFRS. (2021). *Disproportionate use of police powers–a spotlight on stop and search and the use of force.* https://assets-hmicfrs.justiceinspectorates.gov.uk/uploads/disproportionate-use-of-police-powers-spotlight-on-stop-search-and-use-of-force.pdf

Home Office. (2019). *Drug misuse: Findings from the 2018 to 2019 CSEW drug misuse appendix tables*. https://www.gov.uk/government/statistics/drug-misuse-findings-from-the-2018-to-2019-csew

Home Office. (2022). *Police use of force statistics, England and Wales: April 2021 to March 2022.* https://www.gov.uk/government/statistics/police-use-of-force-statistics-england-and-wales-april-2021-to-march-2022/police-use-of-force-statistics-england-and-wales-april-2021-to-march-2022

Home Office. (2023). *Draft Community Scrutiny Framework: National Guidance for Community Scrutiny Panels. https://assets.publishing.service.gov.uk/media/64f192d89ee0f2000db7bd52/Consultation-_Draft_Community_Scrutiny_Framework_August_2023_.pdf*

Hong, S. (2017). Black in blue: Racial profiling and representative bureaucracy in policing revisited. *Journal of Public Administration Research and Theory, 27* (4), 547–561.

Independent Office for Police Conduct. (2021). *Review of IOPC cases involving the use of Taser 2015–2020.* https://www.policeconduct.gov.uk/sites/default/files/documents/IOPC_Taser_review_2021.pdf

Independent Office for Police Conduct. (2022). '*9. Learning, Recommendations & Responses*'; addendum to Review of IOPC cases involving the use of Taser 2015–2020. Previously available on the IOPC website at https://www.policeconduct.gov.uk/review-iopc-cases-involving-use-taser-2015-2020 (accessed 05/08/2022).

Independent Police Complaints Commission. (2014). *IPCC Review of Taser Complaints and Incidents 2004 – 2013.* https://www.ipcc.gov.uk/sites/default/files/Documents/guidelines_reports/Taser_report_final_2014.pdf

Independent Police Complaints Commission. (2016). *IPCC position statement of Body Worn Video.* https://www.policeconduct.gov.uk/publications/ipcc-position-statement-body-worn-video

Isen, R. (2022). The contribution of social media toward racial trauma and post-traumatic stress disorder in Black Americans: A forensic perspective. *The Journal of Forensic Psychiatry & Psychology*, *33*(5), 692-707.

Jackson, J., & Pósch, K. (2019). New directions of research in fairness in legal authority: A focus on causal mechanisms. In E. A. Lind (Ed.) *Social psychology and justice* (p. 181-212). Routledge.

Joh, E. E. (2016). Beyond surveillance: Data control and body cameras. *Surveillance and Society*, *14*(1), 133–137.

Kammersgaard, T., Søgaard, T. F., Kolind, T., & Hunt, G. (2022). “Most officers are more or less colorblind”: Police officers’ reflections on the role of race and ethnicity in policing. *Race and Justice*.

Knifton, L., & Inglis, G. (2020). Poverty and mental health: Policy, practice and research implications. *BJPsych Bulletin, 44*(5), 193–196.

Kramer, R., & Remster, B. (2022). The slow violence of contemporary policing. *Annual Review of Criminology*, *5*, 43-66.

Kuha, J., & Mills, C. (2020). On group comparisons with logistic regression models. *Sociological Methods & Research, 49*(2), 498–525.

Lindegaard, M. R., & Bernasco, W. (2018). Lessons learned from crime caught on camera. *Journal of Research in Crime and Delinquency, 55*(1), 155–186.

Macpherson, W. (1999). *The Stephen Lawrence Inquiry, Cm 4262-I.* London: The Stationery Office.

MacQueen, S., & Bradford, B. (2017). Where did it all go wrong? Implementation failure—and more—in a field experiment of procedural justice policing. *Journal of Experimental Criminology*, *13*(3), 321–345.

Miller, J. (2000). *Profiling populations available for stops and searches*. Home Office Research, Development and Statistics Directorate, United Kingdom. https://library.college.police.uk/docs/hopolicers/prs131.pdf

MIND. (2023). *Race and mental health.* https://www.mind.org.uk/about-us/our-strategy/becoming-a-truly-anti-racist-organisation/facts-and-figures-about-racism-and-mental-health/

Mosher, F.C. (1968). *Democracy and the public service*. Oxford University Press.

Mosselman, F., Weenink, D., & Lindegaard, M. R. (2018). Weapons, body postures, and the quest for dominance in robberies: A qualitative analysis of video footage. *Journal of Research in Crime and Delinquency, 55*(1), 3–26.

Nawaz, A., & Tankebe, J. (2018). Tracking procedural justice in stop and search encounters: Coding evidence from Body-Worn Video Cameras. *Cambridge Journal of Evidence-Based Policing*, *2*(3–4), 139–163.

Neil, R., & MacDonald, J. M. (2023). Where racial and ethnic disparities in policing come from: The spatial concentration of arrests across six cities. *Criminology & Public Policy*, *22*(1), 7–34.

Omori, M., Lautenschlager, R., & Stoler, J. (2022). Organizational practice and neighborhood context of racial inequality in police use-of-force. *Social Problems*, 1-22.

Philpot, R., Liebst, L. S., Levine, M., Bernasco, W., & Lindegaard, M. R. (2020). Would I be helped? Cross-national CCTV footage shows that intervention is the norm in public conflicts. *American Psychologist, 75(*1), 66–75.

Quinton, P. (2011). The formation of suspicions: Police stop and search practices in England and Wales. *Policing and Society, 21*(4), 357–368.

Quinton, P. (2015). Race disproportionality and officer decision-making. In R. Delsol & M. Shiner (Eds.), *Stop and search: The anatomy of a police power* (pp. 57-78). Palgrave Macmillan UK.

Quinton, P. (2020). Officer strategies for managing interactions during police stops. *Policing and Society, 30*(1), 11–27.

Quinton, P., Dymond, A., Boyd, K., & Teers, R. (2020). *Police use of force: Tactics, assaults and safety. Exploratory analysis of police recorded data 2017/18.* https://assets.college.police.uk/s3fs-public/2020-09/200818-use-of-force-final-report-1.0.pdf

Radburn, M., Savigar-Shaw, L., Stott, C., Tallent, D., & Kyprianides, A. (2022). How do police officers talk about their encounters with 'the public'? Group interaction, procedural justice and officer constructions of policing identities. *Criminology & Criminal Justice*, *22*(1), 59-77.

Radburn, M., Stott, C., Bryant, R., Morgan, B., Tallent, D., & Davidson, L. (2023). Group processes and interoperability: A longitudinal case study analysis of the UK's civil contingency response to Covid-19. *Journal of Contingencies and Crisis Management*, *31*(1), 121-133.

Rajakaruna, N., Henry, P. J., Cutler, A., & Fairman, G. (2017). Ensuring the validity of police use of force training. *Police Practice and Research*, *18*(5), 507–521.

Ready, J. T., & White, M. D. (2011). Exploring patterns of TASER use by the police: An officer-level analysis. *Journal of Crime and Justice, 34*(3), 190-204.

Roh, S., & Robinson, M. (2009). A geographic approach to racial profiling: The microanalysis and macroanalysis of racial disparity in traffic stops. *Police Quarterly*, *12*(2), 137–169.

Rojek, J., Alpert, G., & Smith, H. (2012). 'Examining officer and citizen accounts of police use-of-force incidents'. *Crime and Delinquency, 58*(2), 301–327.

Root, C., Ferrell, J., & Palacios, W. R. (2013). Brutal serendipity: Criminological verstehen and victimization. *Critical Criminology*, *21*, 141-155.

Savigar-Shaw, L., Radburn, M., Stott, C., Kyprianides, A., & Tallent, D. (2022). Procedural justice as a reward to the compliant: An ethnography of police–citizen interaction in police custody. *Policing and Society, 32*(6), 778–793.

Sharp, C., & Budd, T. (2005). *Minority ethnic groups and crime: findings from the offending, crime and justice survey 2003.* Home Office. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=fb9113dfa31091cadb9b6c46317ad620b0629dd0

Shjarback, J. A., Pyrooz, D. C., Wolfe, S. E., & Decker, S. H. (2017). De-policing and crime in the wake of Ferguson: Racialized changes in the quantity and quality of policing among Missouri police departments. *Journal of Criminal Justice, 50*, 42–52.

Skogan, W. G. (2013). Use of force and police reform in Brazil: A national survey of police officers. *Police Practice and Research, 14*(4), 319-329.

Sohoni, T. W., Ousey, G. C., Bower, E., & Mehdi, A. (2021). Understanding the gap in self-reported offending by race: A meta-analysis. *American Journal of Criminal Justice, 46*, 770-792.

Spencer, K. B., Charbonneau, A. K., & Glaser, J. (2016). Implicit bias and policing. *Social and Personality Psychology Compass*, *10*(1), 50–63.

Stewart, E. A., Baumer, E. P., Brunson, R. K., & Simons, R. L. (2009). Neighborhood racial context and perceptions of police-based racial discrimination among Black youth. *Criminology*, *47*(3), 847-887.

Stoudt, B. G., Fine, M., & Fox, M. (2011). 'Growing up policed in the age of aggressive policing policies'. *New York Law School Law Review, 56*(4), 1331-1372.

Suss, J. H., & Oliveira, T. R. (2022). Economic inequality and the spatial distribution of stop and search: Evidence from London. *British Journal of Criminology*, azac069.

Trochmann, M.B., & Gover, A. (2016). Measuring the impact of police representativeness on communities. *Policing: An International Journal, 39*(4), 773-790.

United Nations Committee Against Torture. (2013). *Concluding Observations on the Fifth Periodic Report of the United Kingdom, Adopted by the Committee at its Fiftieth Session (6–31 May 2013).* United Nations.

United Nations Committee Against Torture. (2019). *Concluding observations on the sixth periodic report of the United Kingdom of Great Britain and Northern Ireland, Adopted by the Committee at its sixty-sixth session (23 April–17 May 2019).* United Nations.

Vomfell, L., & Stewart, N. (2021). Officer bias, over-patrolling and ethnic disparities in stop and search. *Nature Human Behaviour*, *5*(5), Article 5.

Waddington, P. A. J., Stenson, K., & Don, D. (2004). In proportion: Race, and police stop and search. *British Journal of Criminology*, *44*(6), 889–914.

Weisburd, D., Groff, E. R., & Yang, S.-M. (2012). *The criminology of place: Street segments and our understanding of the crime problem.* Oxford University Press.

Welsh, M., Chanin, J., & Henry, S. (2021). Complex colorblindness in police processes and practices. *Social Problems*, *68*(2), 374–392.

Whitehead, S. N. (2015). The specter of racism: Exploring White racial anxieties in the context of policing. *Contemporary Justice Review*, *18*(2), 121–138.

Wiley, S., Fleischmann, K., Deaux, K., & Verkuyten, M. (2019). Why immigrants' multiple identities matter: Implications for research, policy, and practice. *Journal of Social Issues, 75*(2), 611-629.

Williams, S. (2021). Stream of sadness: Young Black women's racial trauma, police brutality and social media. *Feminist Media Studies*, *21*(8), 1270-1284.

Willis, R. (2019). The use of composite narratives to present interview findings. *Qualitative Research*, *19*(4), 471–480.

[i] AD wishes to acknowledge that due to time constraints she was not able to review some edits that may have been made to the final version, where these occurred after 6th October 2023.

[ii] Adultification is defined by Davis and Marsh (in Davis 2022, p. 5) as occurring "*when notions of innocence and vulnerability are not afforded to certain children. This is determined by people and institutions who hold power over them. When adultification occurs outside of the home it is always founded within discrimination and bias*". Noting the previous research which shows that Black children are most vulnerable to adultification, Davis (2022, p. 5) extends this to define adultification as "*a persistent and ongoing act of dehumanisation, which explicitly impacts Black children, and influences how they are safeguarded and protected*".

[iii] We believe that a combination of purposive and opportunistic sampling was the right method to identify participants. It would have been difficult, if not impossible, to obtain participants without a subject matter expert within the police forces in question. This problem will have been especially pronounced given the fact that we were having to interview officers who were often unavailable to us due to shift patterns and operational demand. We believe the SPOCs gave us access to a sample of Taser trained officers (and non-Taser trained officers) that were as varied as was feasible, highlighted by the significant diversity in roles that we achieved. Using our SPOCs to arrange interview days within local police stations also enabled us to maximise the number of interviews that we could undertake on a given day.

[iv] We took several steps to guarantee the robustness of the results. First, and due to the large sample size and the high number of comparisons undertaken across various models, we increased the bar of evidence to the 1% significance level ($p<0.01$) and only findings with these (or smaller) p-values are going to be highlighted (n.b. the full results are available in section 1.3.2 of the accompanying Quantitative Research Appendix).

Second, and to bolster the accuracy of our data analysis, we conducted a robustness check to address the possibility of duplicate records in the datasets. As discussed in the Chapter 8, these duplicate records tend to arise due to a procedural matter: whenever an officer uses force, they are required to complete a use of force monitoring form. However, this process may lead to repeat records, particularly in cases where multiple officers are involved in an incident with a single individual. To mitigate the potential issue of double counting in such instances, we performed an examination of all datasets where we used a set of variables (i.e., incident time, date, location, citizen age, gender, and ethnicity) to identify

duplicate records. We carried out all modelling on two datasets: ones with the duplicates included and others where the duplicates were not included. In this report, we opted to discuss the models without the duplicate records. These appeared to be more 'robust', as excluding repeated records leads to smaller point estimates whilst the standard errors largely remain the same (i.e., the influence of this change in standard errors does not go beyond the expected change due to the lowered sample size). A third way of approaching this issue would have been to randomly include one of the several duplicate records in the analysis. We attempted this approach on a selection of forces, but the results would have remained largely the same and, thus, these models are not included in the appendices. We included police force area-level fixed effects which was borough-level fixed effects for the MPS. This was done out of concern that otherwise the independence assumption would have been violated (i.e., that incidents that occurred in the same area affect one another in some way) and due to differing use of force data collection patterns observed across the forces (as discussed in the previous chapter). Comparing Taser use with other uses force can be problematic, especially if those other uses of force include more severe uses such as the use of firearms. Although firearm usage only amounted to 0.65% of all uses of force and 0.95% of Taser use (i.e., when Taser and firearms were used in combination), we ran models with firearms excluded from the other uses of force. The results remained largely unchanged (as shown in section 1.3.2 of the accompanying Quantitative Research Appendix). Pooling datasets from different forces, even after adding the force (and in the case of MPS: borough-level) fixed effects can still be wanting in that forces with larger datasets can dominate the results. As the data we used was not a sample from a population of incidents, but all recorded incidents, it is not straightforward how weights should be calculated. We considered and implemented three concurrent approaches and used them as a further robustness check of the results: Population weights, where these were calculated by dividing the number of residents in an area by the number of recorded use of force incidents; Adjustment weights, where each force's (and in the case of the MPS: each borough's) contribution was equalised in a way that forces with higher number of use of force forms received smaller weight and forces with smaller number of use of force forms higher weight; Nested weights, which used population weights but it adjusted them by considering whether these were from the same region of England and to what extent they represented the region in question.

Lastly, we estimated the marginal effects which permitted direct comparability of the strengths of the effects.

[v] Once again, the main outcome variable is a dichotomous variable for Taser use, where 1 refers to the use of Taser and 0 to any other use of force. The number of uses and the relative share of this variable among all uses of force are described in the previous paragraph. Note that for each use of force form, multiple uses of force could have taken place, but in all such cases when Taser was mentioned, this was coded as a use of Taser. The second main outcome variable refers to the level of usage when a Taser was utilised. As multiple uses were often mentioned (e.g., drawn, aimed, fired), the most severe of these was selected for each case. After carrying out some exploratory modelling to assure usability, we arrived at a three-category outcome variable: 0 still refers to other uses of force; 1 incorporates the categories drawn, arced, and aimed, cases which refer to being prepared to use Taser; and 2 refers to cases when the subject was either red-dotted (i.e., imminent threat of Taser use) or was fired upon. Using the demographic information available on citizens and officers, we created three demographic match variables, where 1 referred to a match (i.e., same gender, same age, or same ethnicity) and 0 referred to a mismatch. These variables were chosen to estimate the influence that these similarities might have on Taser use. We start by introducing descriptive statistics for our main variables of interest: demographic match and area variables. We then embark on multivariate analysis with regression modelling. Binary logistic regressions are fitted for Taser use (vs other uses of force) with five models (1) demographics only; (2) demographics and demographic match variables; (3-4) demographics, demographic match variables, and the area variable modelled two different ways; (5) demographics, demographic match variables, area variables, and all other influential variables (impact factors, lockdowns). This is followed by an analysis of whether certain impact factors carry to the influence of ethnicity (i.e., semi-parametric mediation analysis). We estimate so-called 'indirect effects' which can quantify the extent to which an intermediate variable (here: impact factors) channel the association between a variable (ethnicity) and the outcome (Taser use vs any other use of force). Finally, three multinomial regression models are presented with the severity of Taser use as the outcome variable:

(1) demographics only; (2) demographics, demographic match variables, and area variable, and (3) demographic match variables, area variable, and other influential factors (as described above). This approach permits us not only to describe the association between our predictor variables and Taser use in general (vis-à-vis other uses of force), but also permits us to estimate the association between the predictors and the severity of Taser use.

[vi]There are peculiarities that need to be highlighted regarding the data. For some reason, subject and officer gender were not collected in the same way. While for citizens there are three categories: male, female, and other, for officers only male and female were options. There was also a mismatch for the ethnic categories: while there were 16 different options for officers, there were only six for subjects. We ended up using five categories to help with the perfect overlap of the categories. Finally, the officer ethnic category 'Black' will not appear in the multivariate analysis tables. This is because those Black officers present in the data used force very infrequently, with no Black officer using force five or more times with one of those being Taser. In this deep dive, we relied on multilevel models where level 1 represented information on each use of force instance and level 2 comprised the officers using force. In order to have sufficient variation in level 2, we only considered officers who have used force more than 4 times. This meant that we only included 1498 officers from the 2295 who used force in the four-year period (i.e., around 65% of all officers). Although this meant losing around one-third of officers in the data, in terms of use of force instances the loss was only 1678 cases, amounting to less than 5% of all recorded use of force incidents of which 26 involved Taser use (less than 2% of all incidents with Taser). Our model selection was guided by tests commonly used in the multilevel modelling literature. Bootstrapped Hausman-tests suggested that random effects models are preferrable. We fitted random slope models using the officer variables. We estimated the AICs and BICs which suggested that, for the Taser use versus any other use of force comparison, a linear link function outperformed the binary logistic model; and that for the Taser frequency variable a negative binomial model outperformed any other model fitted. Notably, the choice of the link function did not influence the substantive results which have remained largely the same. All models were estimated using maximum likelihood, although various tweaks to the estimator have been attempted as robustness checks but yet again the substantive results remained largely unchanged. The level of evidence chosen for significance was 1% ($p<0.01$) to account for the high number of comparisons in the modelling

[vii] We calculated the Intraclass Correlation Coefficient for both models. The ICC for the multilevel linear regression model is straightforward to calculate and indicated that around 19% of the variation in whether Taser was use instead of other uses of force could be attributed to the officer-level when all variables were included in the model, whilst in the empty model (without the explanatory variables), around 23% of the variation was partitioned to level-2. For the multilevel negative binomial model, we used the 'iccCounts' R package which implemented the solution put forward by Carrasco (2010). These intraclass correlation coefficients cannot be given a straightforward interpretation (as count models are contingent on distributional assumptions), but the values of 0.521 for the empty and 0.498 for the full model imply that level 2 captures a greater degree of the variation in the outcome variable compared to the multilevel linear regression model. We also acknowledge that Leckie et al.'s (2020) ICC estimate would be a more accurate representation of the variance decomposition with clearer interpretation, but this approach is yet to be implemented in any software.