Holloway, C., Munro, N., Cossburn, K. and Ropar, D. (2022). A pilot study of co-produced autism training for police custody staff: Evaluating impact on perceived knowledge change and behaviour intentions., *Policing: An International Journal*, ahead of print. DOI (10.1108/PIJPSM-11-2021-0159)

Accepted: 11th Feb 2022

Published under an AAM under the Creative Commons Attribution Non-commercial International Licence 4.0 (CC BY-NC 4.0). Any reuse is allowed in accordance with the terms outlined by the licence. To reuse the AAM for commercial purposes, permission should be sought by contacting permissions@emeraldinsight.com.

For the sake of clarity, commercial usage would be considered as, but not limited to:

- o Copying or downloading AAMs for further distribution for a fee;
- o Any use of the AAM in conjunction with advertising;
- o Any use of the AAM by for promotional purposes by for-profit organisations;
- o Any use that would confer monetary reward, commercial gain or commercial exploitation.

Title: A pilot study of co-produced autism training for police custody staff: Evaluating impact on perceived knowledge change and behaviour intentions.

Abstract

Purpose - Autistic people have reported particularly negative experiences in police custody which can lead to significant long-term personal and legal consequences. Research has suggested providing autism training to police forces would help improve the support of autistic people but there is a distinct lack of appropriate autism training available. An evidence-based autism training package specifically tailored to the roles of custody staff was co-produced by autistic people, academics and police staff to address this. A pilot study was conducted to further understand its value in terms of perceived changes in knowledge and future behaviour intentions.

Design/methodology/approach - A total of 18 sessions were held across 5 police forces in England attended by police staff working in custody (n=142). The sessions were delivered in person using a presentation and video replicating the experiences of autistic people during the custody process. Attendees completed a survey rating their perceived changes in knowledge of autism after the session and described changes they planned to make in their practice to support autistic people.

Findings – The majority of police custody officers rated the training highly on its content, delivery, and informativeness about autism. Participants also reported a change in perceived knowledge about autism, with those who reported having the least amount of knowledge prior to training indicating the greatest change. Responses about intended changes to future behaviour and practice showed a clear indication of specific understanding about autism and strategies to support autistic individuals in custody.

Originality - This is the first study to outline, assess and evaluate the impact of the first evidence-based and co-produced autism training package specifically designed for custody staff on perceived knowledge and intended behaviour.

Introduction

Across the world, autistic people are highly likely to experience some form of police interaction whether as suspects, victims or witnesses (Debbaudt and Rothman, 2001). There is no exact figure for the number of autistic people who do come into contact with police, particularly in England and Wales (see King and Murphy, 2014). But research suggests that a significant proportion of the autistic population will experience police interaction at least once in their lifetime and in some cases, may experience repeated encounters (Salerno and Schuller, 2019). In the USA, Rava and colleagues have reported that 19.5% of autistic people have been stopped and questioned by police by their twenties, and 4.7% of those have been arrested (Rava, Shattuck, Rast and Roux, 2017). Consistent with these findings, a study in Canada found that 16% of 284 autistic participants had experienced some form of police interaction over an 18-month period (Tint, Palucka, Bradley, Weiss and Lunsky, 2017). Police officers themselves have also reported frequent interactions with autistic people in their daily roles (Christiansen, Minich and Clarke, 2021).

The most common reason for interactions between police and autistic people has been attributed to the increased risk of victimization experienced by this population (Salerno and Schuller, 2019; Gibbs and Haas, 2020). There is also increasing evidence which suggests that a number of interactions could be initiated by calls for assistance from parents and carers (Gibbs and Haas, 2020). Another potential explanation for the increased risk of police interaction among the autistic population is that they may be more likely to engage in certain types of offending behaviour (see Allely and Creaby-Attwood, 2016), or to be manipulated to commit offences by others (Gibbs and Haas, 2020). However, it has been shown that autistic people are being charged for offences at a rate comparable to non-autistic people (Yu, Bradley, Boan, Charles and Carpenter, 2020). An alternative understanding which has been provided that may account for the increased police interaction among autistic people, particularly as suspects, is that they may be at greater risk of their behaviour being misinterpreted by others, including the police (Dickie, Reveley and Dorrity, 2018). A partial explanation for this risk of misinterpretation is a lack of understanding of autism among police which may encourage individuals to perceive behaviour as non-compliant, violent or suspicious (Gardner, Campbell and Westal, 2019; Railey, Campbell-Bowers, Love and Campbell, 2020). Consequently, this risk of misinterpretation may lead to an increased likelihood of being arrested for offending behaviour and detained in police custody (Dickie, Reveley and Dorrity, 2018).

Generally, autistic people report having negative experiences of police interactions (Allen, D., Evans, C., Hidler, A., Hawkins, S., Peckett, H., and Morgan, H., 2008; Crane, Maras, Hawken, Mulcahy, and Memon, 2016; Holloway, Munro, Jackson and Ropar, forthcoming). It has been suggested that this is particularly the case where autistic characteristics impact on what happens during an interaction (Haas and Gibbs, 2020). In Australia, as part of a wider study investigating the nature of autistic people's interactions with police, Gibbs and Haas (2020) interviewed 12 autistic adults about their experiences. Notably, they found that the autistic adults were unsatisfied or very unsatisfied with 62% of the 74 police interactions reported. Similar findings of dissatisfaction with police interactions have also been reported in Canada (Salerno and Schuller, 2019). Concerningly, these negative perceptions were found to be associated with a reluctance among autistic people to disclose they were autistic (Salerno and Schuller, 2019; Gibbs and Haas, 2020). This was attributed to a lack of confidence that police would understand autism and the fear this would lead to negative outcomes (Gibbs and Haas, 2020). Significantly, these studies also found that even where autism is disclosed, this is not associated with higher levels of satisfaction, suggesting that provision of quality autism resources and training for police officers is paramount (Salerno and Schuller, 2019; Gibbs and Haas, 2020).

Importantly, these findings are not just limited to initial police interactions. Research has also shown that autistic people have particularly negative experiences in police custody, particularly in England and Wales (Crane *et al.*, 2016; Holloway, Munro, Jackson, Phillips and Ropar, 2020; Holloway et al., forthcoming). Following a survey with police officers, autistic adults and their parents in England and Wales, Crane *et al.* (2016) reported that out of 23 autistic adults who responded, 61% were unsatisfied with their treatment by police at the initial stages of investigation and, 30% were unsatisfied with the explanation they received about what would happen during this process. Particular concerns were raised about the lack of adequate autism training among police and their

inability to meet the emotional wellbeing, cognitive and physical needs of the autistic individuals. They also reported that they did not disclose their diagnosis due to a fear of being victimized or discriminated against by police. Holloway et al. also conducted two studies investigating the experiences of autistic people during the custody process which highlighted similar issues (Holloway et al., 2020; Holloway et al., forthcoming). They carried out a novel participative walkthrough of the custody process which found that autistic people may experience barriers to communication with custody staff and significant sensory demands. The 2 autistic participants also felt that custody staff lacked specific training about how the custody process may affect autistic individuals. They also interviewed 12 autistic people about their lived experiences of being arrested and detained in police custody as suspects (Holloway et al., forthcoming). The findings further illustrated the negative impact of the sensory demands of the custody environment such as the bright lights and loud noises of other detainees, as well as the impact not knowing what is happening can have on the emotional wellbeing of autistic people.

A significant factor in the negative experiences of autistic people during police interaction appears to be the lack of adequate autism training offered by police forces which has been noted both within and outside the United Kingdom A survey conducted by Gardner, Campbell and Westal (2019) in the USA with law enforcement officers (n=72) reported that 72.2% had not received any form of autism training. A further study conducted by Christiansen, Minich and Clarke (2021) with 51 United States police officers reported only 53% had received some autism training and 55% felt the training they had received was not sufficient to assist them when interacting with autistic people. Notably, police officers with personal experience or previous training rated their knowledge and confidence in dealing with an autistic person higher than those who did not (Christiansen, Minich and Clarke, 2021). In England and Wales, adequate autism awareness training also seems to be an issue. In a questionnaire administered by Crane et al. (2016) with238 police officers only 37% reported receiving some training on autism and a further 25% felt dissatisfied with the training they received (Crane et al., 2016). Police officers also described feeling frustrated with the lack of training available and how this limited their capacity to support autistic people effectively.

Several factors may contribute to this expression of general dissatisfaction amongst police officers in regards to autism training. Firstly, as autism training is not a mandatory requirement in England and Wales training is either not provided or its content and delivery varies between forces (Beardon, Chown and Cossburn, 2018). Following a freedom of information request carried out in 2018, it was found that only 16 out of 34 the police forces who responded provided some form of autism training (Beardon, Chown and Cossburn, 2018). This also varied greatly in format consisting either of a PowerPoint presentation, online learning or a longer in person session. Notably, only 5 police forces involved an autism organisation in the development of their training.

Crane *et al.* (2016) also highlighted issues with the content and delivery of autism training in England and Wales. Police officers described how the training they received largely focused on improving general autism knowledge or techniques to improve communication or minimise distress. However,

concerns were raised about the lack of sufficient focus on autism in the criminal justice system, the simplicity of the training and lack of practical application and relevance for their specific job role. In a survey conducted by Honess (2020) with 809 police officers, findings emphasised the constraints of online training, mirroring wider concerns about the effectiveness of general police training delivered through NCALT.

Given the variations in existing autism training available in both England and Wales and across the world, it is hard to draw conclusions about what form of autism training would be most effective (Railey, et al., 2020). There is some indication that in-person training may be preferred, or the use of a training video with an adjunctive element (Teagardin et al., 2012). In particular, it has been recommended that training should provide opportunities for interaction and reflection on potential misinterpretations between police and autistic people (Railey, Campbell-Bowers, Love and Campbell, 2020; Teagardin et al., 2012). Hinkle and Lerman (2021) have specifically highlighted the benefits of incorporating simulated interactions to help demonstrate steps for improving interactions between police staff and autistic people. Studies have also argued for role specific-training (Railey et al., 2020; Crane et al., 2016) rather than general autism knowledge training, as specific strategies for improving communication and supporting autistic people during police interactions are likely to be more effective (Holloway et al., forthcoming; Gibbs and Haas, 2020; Salerno and Schuller, 2019; Gardner, Campbell and Westal, 2019). The importance of including autistic people in the development and delivery of autism training has also been emphasised as being a fundamental part of an effective training programme (Holloway et al., forthcoming; Salerno-Ferrano and Schuller, 2020; Railey et al., 2020; Crane et al., 2016). In light of this literature, the current paper outlines the development, delivery, and assessment of a role-specific autism training package which is co-produced with autistic individuals and police officers. As there has been very little focus on autism training for custody staff previously, this will be the job role of focus. Due to the specific demands autistic people may face during the custody process, it is vital that this is considered in order to ensure that the experiences of autistic people during police interactions in this setting can be improved. To assess the value of the training and its potential impact, we will measure custody staffs' perceived changes in knowledge of autism and intended changes in behaviour in their role.

Method

Development of the autism training

The authors worked with a group of autistic people with lived experience of the criminal justice system and/or expertise in socio-legal research, academics working in this field and police officers – to codevelop the autism training package for custody staff. An autism toolkit containing visual and written resources for autistic people and custody staff was also developed but this study only focuses on the autism training package. The training package was developed over a 12-month period. Six meetings were held in person aimed at identifying priorities for improving the experiences of autistic people and facilitating input in the development of the training. With the exception of 2 meetings, these were held with both autistic people and police officers to foster community relationships and promote discussion (see Table 1). This allowed the group to resolve tensions between

recommendations for change and working practices of police and identify a compromise which addressed the needs of both stakeholders. The autistic members of the group also reviewed the training and provide feedback via email.

Table 1: Summary of project meetings

Number	Participants	Focus	
1	All	Introduction to the project	
2	All	Priority feedback for autism training and toolkit	
3	Police only	Priority feedback for autism training and toolkit	
4	Police only	Feedback on working drafts	
5	All	Feedback on working drafts	
6	All	Review of autism training and toolkit and showing of training video	

Details of the focus of each meeting can be seen in Table 1. During the first 2 meetings, members were asked to review findings from research completed by Author 1 and reflect on their own experiences to consider what areas for improving practice should be covered by the training as priority (see Table 2). They were also asked to prioritise what the training and toolkit should contain (see Table 3). Items 1 and 5 focused on the autism training. In light of the priorities of both the police officers and autistic people, the content of the training was designed to focus on the difficulties experienced by autistic people during the custody process and what custody staff can do to support them. A short introduction about autism was also included for context.

Table 2: Summary of priority areas for improving practice

- 1. Understanding how to communicate with autistic people
- 2. Understanding what should be communicated to autistic people in police custody
- 3. Impact of police custody on mental health
- 4. Sensory demands of the custody environment
- 5. Providing verbal and visual information

Table 3: Summary of priority for resources to be included in training and toolkit

- 1. Information about supporting autistic people
- 2. Visual booklets and timeline
- 3. Visual communication aids
- 4. Written information
- 5. Information about autism

The group agreed that an in-person presentation and training video demonstrating the lived experiences of autistic people should be produced to maximise the effectiveness of the training. The training presentation was broken down into six areas: i) actually I'm autistic – identifying autistic

people ii) understanding each other – communication during the custody process iii) thinking differently – processing and making sense what happens in police custody iv) information – the need for accessible information v) sensory differences – sensory demands of the custody environment and vi) mental and physical impact – the impact of police custody on autistic people. Each section gave an outline of the difficulties that autistic people may experience in police custody based on findings from the literature, including research by Holloway et al. (2020). The aim was to improve custody staff's awareness and understanding of these difficulties with a view to helping them recognise potential barriers to autistic people's participation in the custody process. This was followed by recommended strategies for helping address or minimise the risk of this difficulties which could be employed by custody staff. These included making adjustments to verbal communication such as asking direct questions, making adjustments to the sensory environment such as dimming the lights and providing visual resources containing information about the custody process. The aim of this was to improve custody staff's knowledge of what they could do to help autistic people and encourage them to make changes to their practice.

The training video was comprised of 4 scenarios representing the custody process: i) booking-in ii) personal search iii) collection of biometric data and vi) the police cell. The content of the video was based on the findings of Holloway, et al. (2020) and Holloway et al., (forthcoming). Two autistic actors completed a walkthrough of these custody processes as if they had been arrested and detained and suspects and were interviewed about their experiences. This was followed by a verbal summary of the key learning points following the structure and content of the training presentation. The design i.e. colour, font, text, spacing and layout and content i.e. language, words, symbols were all checked by the group to accommodate neurodivergent conditions. Feedback was provided where changes were needed. This process of adjusting and collecting feedback continued until a consensus was reached on the final version.

Participants

The pilot study of the training took place at 5 different police forces across England and Wales. Each police force approached author 1 and invited her to deliver the training as part of their sergeants training course. A total of 142 members of police staff took part in the training [22 women, 111 men, 9 unspecified] (n = 111 men). The majority of attendees were custody sergeants (n = 61). Police sergeants (n = 22), response sergeants (n = 17) and sergeants from other departments (n = 17) also took part. There were also other members of police staff who attended including detention officers (n = 17) and custody nurses (n = 4). Most attendees had worked in custody between 1 - 5 years (n = 50) followed by less experienced members of staff who had worked in custody less than 6 months (n = 32). This included those who had never worked in custody such as the response sergeants who only worked in the community. The majority of attendees were from a white ethnic background (n = 122).

Procedure

Ethical approval for the pilot study was granted by the Research Ethics Committee at the authors institution. The study took place over an 8-month period. 18 sessions were delivered lasting between 45 minutes and 2hr 30 minutes. The length of the sessions was determined by the different time slots allocated to the training by each force in the schedule. The training was delivered by author 1 in person using the presentation and training video. Twenty-five percent of the sessions were shorter and only the training presentation was delivered. The majority of the sessions were longer (i.e. 75%) including both training presentation and video, allowing for greater discussion about the content. There were 2 occasions when only the presentation was shown at the longer sessions due to technical difficulties which prevented the training video from being played to attendees.

At the start of each session, author 1 verbally explained what the aim of the training was and purpose of the pilot study. Each attendee was asked to read an information sheet about the pilot study and sign a consent form stating that they agreed to participate and provide feedback on the training. All attendees were given the opportunity to withdraw during the session and before providing feedback. No one withdrew. After consent was obtained, the session started with a short introduction about autism and a discussion about attendees' previous experiences of autism. A summary of the training was then provided. For the longer sessions author 1 then played the relevant section of the training video followed by a verbal overview of the key learning points outlined by the powerpoint presentation (alternating between video and presentation). Participants were given an opportunity to provide comments on how they felt after each section and ask any questions. For the shorter sessions, the powerpoint training presentation was delivered only, followed by an opportunity for questions afterward. At the end of each session, author 1 gave attendees a feedback survey to complete. All responses were anonymous. The survey was designed to collect information about different aspects of the training and its impact on the perceived knowledge and intended behaviour of custody staff. It used a mixed quantitative and qualitative approach. The survey asked questions about: i) their background ii) previous knowledge and experience of autism iii) the training session iv) knowledge of autism after the training and v) plans to change behaviour in their role (see Table 4). Some questions used a Likert-scale rating while others required open-ended responses to allow respondents to provide more detailed information about their views and experiences. Table 4: Outline of training survey

1. About you	Q1. Job role
	Q2. Age
	Q3. Gender
	Q4. Ethnicity
	Q5. How long have you been working in police custody?
Knowledge of Autism (Before)	Q6. How would you rate your knowledge of autism before the training?
	Q7. Do you have any experience of autism?
	Q8. Please provide more information about this experience i.e.
	personal/family/professional:

	Q9. Have you had any previous autism training? If yes, please provide more information about this training: Q10. Have you had any interaction with an autistic individual in police custody? If yes, please provide more information about this interaction:
3. Training	How would you rate the session overall? Was it
	Q11. Useful?
	Q12. Interesting?
	Q13. Productive?
	Q14. Organised?
	Q15. Inclusive?
	Q16. Relevant?
	Q17. How would you rate the presentation?
	Q18. How would you rate the training video?
	Q19. How you rate the training materials? (excluded)
	Q20. Please provide more information about what you did or did not like about the training:
	Q21. How could the session be improved?
Knowledge of Autism (After)	Q22. How would you rate your knowledge of autism after the training?
	Did the session help with your understanding of:
	Q23. Autism Spectrum Conditions
	Q24. Difficulties experienced by autistic individuals
	Q25. Supporting autistic individuals
	Q26. Please provide more details about what you learnt in the session:
5. Changing Practice	Do you plan to change your behaviour or practice as a result of the session?
	Q27. The way I do things in my work
	Q28. Practices in my workplace
	Q29. The way I work with vulnerable detainees
	Q30. Please provide more details about how you plan to change your behaviour or practice as a result of the session:
	Q31. Please describe any other ways the session will impact you in your role:

Data Analysis

The feedback was collated by author 1 using MS Excel and MS word. Analysis of the quantitative data was performed by author 4. This was shared with the authors and guided the analysis of the qualitative data. Two independent qualitative analyses were conducted by author 2 and author 3 who reviewed the qualitative data separately and developed an overall qualitative framework using thematic analysis (Braun and Clarke, 2006). This was then upon completion with a view to developing a cohesive overall analysis of the data. Any discrepancies in interpretation were resolved.

Results

Knowledge and experience of autism before training

Of the 142 participants that received the training, the majority (72%) had met autistic people in their role within the police force. Thirty-nine percent also described knowing autistic people outside work, as friends, family members and colleagues in other settings. However, only 32% of officers reported receiving any previous training on autism. In the majority of cases this had been covered as part of more general training on mental health awareness. Only 7 reported receiving specific autism training and in all cases this had been received in the context of other employment.

Ratings of content, delivery and informativeness

Table 5 shows participants' mean ratings for the training session on different aspects of its content and delivery using a 5 point likert scale (with 1 being the most positive). The training was favourably received with mean ratings for all questions being less than 2 even when looking at the shorter and longer sessions separately. Most participants rated the training as being "very" = 1, or "quite" = 2, useful, interesting, ect. Notably, the ratings are very comparable between the different session lengths, with ratings being slightly closer to 1 for the longer length session indicating more positive views for these. The percentage of participants giving rating of either 1 or 2 for each question across all sessions is included in table.

Table 5. Participants' ratings of the training session on a 5 point likert scale.

How would you	Longer	Shorter	All .	% of participants rating
rate the session	presentation	presentation	sessions	either 1 or 2 (all
overall	only	only		sessions)
Was it useful?	1.42	1.44	1.42	92%
Was it interesting?	1.49	1.58	1.51	91%
Was it productive?	1.51	1.66	1.55	91%
Was it well organised?	1.38	1.46	1.40	96%
Was it inclusive?	1.44	1.51	1.46	93%
Was it relevant?	1.34	1.31	1.33	95%

Participants were asked to rate if they felt the session helped with their understanding of autism, the difficulties autistic individuals experience and how to support autistic individuals in their job role. Table 6 shows participants' mean ratings on a likert scale (with 1 being the most positive). The majority of participants rated the session as being "very" (1) or "quite" (2) helpful in allowing them to understand more about autistic individuals in each of these areas with all mean scores being lower than 2 even on shorter sessions. Again, across different lengths sessions were comparable with those being more positive (i.e. closer to 1) for the longer presentation.

Table 6. Participants' ratings of how informative the session was on a 5 point likert scale.

Area of knowledge	Longer presentation only	Shorter presentation only	All sessions	% of participants rating either 1 or 2 (all sessions)
Autism Spectrum Conditions	1.78	1.94	1.82	84%
Difficulties experienced by autistic individuals	1.48	1.60	1.51	89%
Supporting autistic individuals	1.53	1.71	1.57	87%

Self-ratings of perceived levels of knowledge

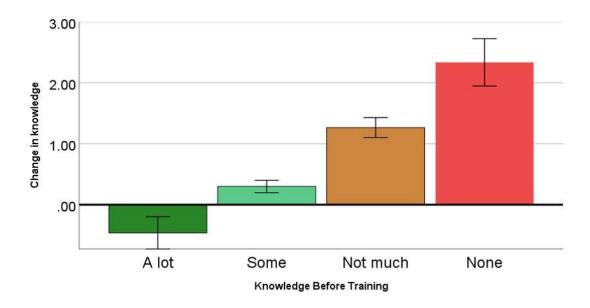
In addition, participants were asked to rate what they felt their overall level of knowledge about autism was prior to the training and after. Average ratings of level of knowledge before training were 2.24 with the majority of responses being 2 indicating "some" knowledge, The average rating after training was 1.69 indicating a greater shift towards the more positive end of the scale reflecting higher levels of perceived knowledge change which can be seen in Table 7.

Table 7. Ratings of overall perceived level of autism knowledge prior to and after training.

	A lot (1)	Some (2)	Not Much (3)	None (4)	Not sure (5)
Before training	9%	62%	25%	4%	0
After training	32%	67%	8%	0	0

It is likely that those who estimated their knowledge of autism to be lower before training, would benefit most and show a larger change between pre and post ratings of perceived knowledge. Therefore, a difference score was calculated by subtracting post-training knowledge ratings from pretraining ratings to reflect the change in perceived knowledge. A correlation was then carried out on this difference score with participants' pre-training ratings of autism knowledge which show a significant positive relationship r (138)=.80, p=.000. Specifically, those who rated themselves as having less knowledge (i.e. indicated by higher ratings), had the largest perceived increase in knowledge. Figure 1 displays average perceived change in knowledge for participants according to their initial self-rating of autism knowledge which illustrates this relationship.

Figure 1. Change in perceived levels of knowledge between pre and post training ratings in relation to how participants estimated their initial level of autism knowledge.



Changes in behaviour

Despite a lack of formal training some officers were able to describe changes they had made to practice when working with autistic people prior to the training. Twenty-four officers gave detailed responses to the question: 'Have you had any interaction with an autistic individual in police custody? If yes, please provide more information about this interaction.'

The changes made included changing communication style by using clear, precise language (n=10), adapting the environment to meet sensory needs e.g. by reducing light levels (n=6) and asking a known family member or friend to support the individual (n=7). In 2 cases officers reported deciding that the custody environment was too stressful for detention to be appropriate, and instead arranged bail for the person and an interview later.

Respondents were also asked whether they intended to change their own personal practices in the workplace or how they worked with vulnerable detainees in response to the training. They were also asked if they intended to try to make more general changes in their workplace in relation to practice/procedures. In all cases, more than 80% of respondents reported that they would "maybe" or "definitely" change their working practices after the training. In detailed responses, respondents described how they were going to communicate differently with detainees (n=50), including by taking more time and choosing words more carefully to avoid miscommunication (n=46) and by using additional visual aids to augment communication (n=18). A further 24 respondents described how they would make additional efforts to identify potential autistic detainees during the 'booking-in' process to ensure reasonable accommodations for their communication and sensory needs were offered. Finally, 27 officers described how the training helped them develop insight into how their own behaviour, including their body language, facial expressions and eye contact around an autistic

person could increase anxiety, and described finding this knowledge empowering as it meant they had the ability to improve interactions unilaterally.

Co-production as a strength of the training

Since the study was designed by autistic people we were interested in whether participants appreciated this as a strength of the training. In analysis of the qualitative responses to the survey it was clear that the fact the training focused in detail on the specifics of autistic people's lived experiences was appreciated as a clear strength of the training

"I like the fact that real people with autism were used in the videos and not actors. It was interesting to hear first hand their experience and feelings."

Of the 75 participants who gave responses explaining why they liked the training 25 cited the video developed by autistic people and demonstrating first-hand experiences of custody environments and 6 felt the training would be improved by the use of autistic trainers.

Discussion

This sample represents a population of custody officers working in custody environments across five policing regions in England and Wales. None of the participants had any *role-specific* training focussed on autism whilst in the police force. The purpose of this article was to outline and assess a co-produced autism training session for custody officers. Specifically, the aim was to explore whether officers found the training valuable and if it had an impact on perceived knowledge about autism and intended behaviour for working with autistic detainees. Overall, the findings indicated the training was received very positively and was considered informative. An increase in perceived levels of knowledge about autism were found which was most evident in those reporting lower levels of knowledge pre-training. After training, many custody officers also reported they would consider changing different ways they could change their behaviour in the future when working with autistic detainees. These findings and their implications will be discussed further.

The current study found that although the majority (72%) of officers reported interacting with autistic people in their job role, none of them had previously received specific training solely focussed on autism whilst working for the police. This is consistent with research conducted by Beardon et al. (2018) which also reported a lack of autism specific training in officers. Although ten custody officers in our survey reported having some training which briefly mentioned autism, this was a small component within a course on Mental Health Awareness. In 2018, a report by an inspection body highlighted that training on mental health was fragmented, rarely face-to-face and not always consistent with the College of Policing Approved Professional Practice on Mental Health (HMIFRCS, 2018). Whilst preparing our training we reviewed a script for the e-learning module on Mental Health Awareness developed by the College of Policing (not available as a public document). It does provide

a brief account of one person's experience of living with 'high-functioning autism'. In does not go on to explain how autism may affect the interactions an individual has with the police or steps the police can take to improve those interactions. The Approved Professional Practice on Mental Health which is intended to provide a framework for all forces to ensure their mental health awareness training is consistent does not contain any content on autism itself, instead directing officers to the National Autistic Society Guide for Criminal Justice Professionals (College of Policing 2021).

One reason for the lack of autism specific training available to custody officers may be that although increasing training in mental health has been a priority for several years now, autism has tended to be addressed as a subsidiary issue within the wider context of mental health. The distinct experiences autistic people have of the criminal justice system have only recently been the subject of separate policy reviews (Criminal Justice Joint Inspectorate, 2021). Considering the high proportion of officers in our study who reported interactions with autistic individuals in custody, but had not received autism training, these findings highlight a clear gap in provision for autism specific training that needs addressed.

The training was well-received with the vast majority of participants providing positive responses on the questionnaire to questions regarding content and delivery and following up with detailed feedback on specific strengths. Consistent with suggestions based on findings from other studies (see Teagardin et al., 2012; Railey, Campbell-Bowers, Love and Campbell, 2020), delivering the session in-person and providing officers with an opportunity to reflect on potential misinterpretations between police and autistic people by way of the training video appeared to be particularly favoured. Moreover, when asked to rate how informative they found the session to be about autism, autistic difficulties, and support strategies, again ratings reflected the two most positive options "very" and "quite". In open comments, the focus of the content on specific strategies to improve communication with autistic people by identifying adjustments that could be made was noted by the officers. This supports earlier suggestions about the benefits of such training as compared to training focusing on improving general awareness of autism (Gibbs and Haas, 2020; Salerno and Schuller, 2019; Gardner, Campbell and Westal, 2019). Importantly, although average scores were slightly more positive for the longer session, both short and longer sessions ratings were very similar across all of these questions. This suggests that although the longer session may be slightly more preferred, the shorter session was still regarded highly in terms of its content, delivery and informativeness. The finding that session length did not have a notable difference is important as not all police forces may be able to accommodate the longer training session.

Overall, the findings from the current study do provide some evidence of changes in perceived levels of knowledge and intended behaviour following training. Participants judged themselves to have a higher levels of autism knowledge after training. This change was largest for the group of individuals who rated themselves as having the least amount of autism knowledge prior to the session, suggesting they may benefit the most. However, caution must be exercised in interpreting these findings as perceived knowledge may be different from and individual's actual knowledge of autism

(McMahon et al, 2020). However, there was considerable detail in the open responses provided by participants about the future changes they intend to make when working with autistic detainees to suggest a good level of actual knowledge had been acquired. Those who described what changes they would make mainly highlighted behaviours which were specified in the training (see Holloway et al., 2020). For example, 46 participants said they would choose clear and precise language to describe the booking in procedures. Eighteen said they would make use of specific visual aids provided in an accompanying toolkit. Twenty-seven participants reported that the training had raised their awareness that changing their behaviour could positively improve the overall interaction, one participant said as a result of the training they would 'be more sensitive to understanding that things I would see as trivial, to an autistic individual may be worrying. Therefore I would ensure that I changed my behaviour to suit the individual's needs.' This was a valuable insight since it describes a phenomenon known in the literature as the double-empathy problem, the theory that neurotypical people lack the ability to automatically empathise with autistic perceptions of their behaviour (Milton 2012).

Altogether, these findings suggest that appropriately designed training can improve non-autistic people's awareness of their communication difficulties. However, follow-up research is needed to determine if there are any long-term impacts of the training and if it translates into actual changes in behaviour in the workplace. Additionally, it would be important to also explore if the longer training sessions could have a more lasting effect on retention of information as they allow for greater depth of discussion.

Limitations

This study only assessed participants' perception of their autism knowledge rather than actual knowledge. Therefore as it did not include a direct measure of actual knowledge both pre and post training. Future studies should consider using formal tools to directly measure the knowledge of police staff. This study also only asked participants at the point of completing the training how it might affect their future practice. A further follow-up study with the same participants is needed to see how it has actually influenced practice. The training we developed was based on research in police custody suites in England and focused on the experiences of autistic people in police custody. These findings may not be generalizable to all other contexts in which autistic people come into contact with the police. Training for officers working as first responders or conducting investigations should be adapted to meet the demands and limitations of their work environments. Finally, the training did not explore different modes of training delivery e.g. online versus face-to-face. In the post COVID-19 pandemic era, it is likely more online training will be expected and even necessary and the ability of officers to engage with this also needs to be evaluated.

Conclusion

Autism specific training for the police is important to improve the quality of interactions between autistic people and police officers. In this study, officers responded positively to training which addressed the needs of autistic people specifically and related it to one area within the criminal justice pathway, detention at the police station. The majority of officers reported the training was informative and that they could now identify practices they would change such as their communication style and making adjustments to the environment to reduce sensory demands. Officers also reported increased awareness that changing behaviour was a shared responsibility between themselves and autistic detainees in custody. This study highlights many positive qualities of a good autism training programme for police officers such as being role specific and offering clear guidance on how practices can be adapted to meet communication and sensory needs of autistic people. Importantly, it also needs to be developed with the input of autistic people and police, and should consider the possibility of employing autistic individuals to deliver the training.

Funding

This work was supported by the author's institution by award of an impact accelerator grant to the authors and the Economic and Social Research Council [grant number ES/T008881/1] by a fellowship to author 1.

References

Allely, C., and Creaby-Attwood, A. (2016). Sexual offending and autism spectrum disorders. Journal of Intellectual Disabilities and Offending Behaviour, 7(1), 35–51.

Allen, D., Evans, C., Hidler, A., Hawkins, S., Peckett, H. and Morgan, H. (2008). Offending behaviour in adults with Asperger Syndrome. *Journal of Autism and Developmental Disorders*, 38, 748–758

Beardon L., Chown N. and Cossburn K. (2018). *First Responders and Autism*. In: Volkmar F. (Ed.) Encyclopedia of Autism Spectrum Disorders.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2)

Christiansen, A., Minich, N.M. and Clarke, M. (2021). Pilot Survey: Police Understanding of Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*

Crane, L., Maras, K. L., Hawken, T., Mulcahy, S. and Memon, A. (2016). Experiences of autism spectrum disorder and policing in England and Wales: Surveying police and the autism community. *Journal of Autism and Developmental Disorders*, 46(6), 1–14.

Criminal Justice Joint Inspectorate (2021). Neurodiversity in the Criminal Justice System: A Review of the Evidence (London: Her Majesty's Inspectorate of the Constabulary and Fire Rescue Service)

Debbaudt, D., and Rothman, D. (2001). Contact with individuals with autism: Effective resolutions. *FBI Law Enforcement Bulletin*, 70(4), 20–24.

Dickie, I., Reveley, S., and Dorrity, A. (2018). The criminal justice system and people on the autism spectrum: Perspectives on awareness and identification. *Journal of Applied Psychology and Social Science*, 4(1), 121

Gardner, L., Campbell, J.M. and Westdal, J. (2019). Brief Report: Descriptive Analysis of Law Enforcement Officers' Experiences with and Knowledge of Autism. *Journal of Autism and Developmental Disorders*, 49, 1278 – 1283

Gibbs, V. and Haas, V. (2020) Interactions between the police and the autistic community in Australia: Experiences and perspectives of autistic adults and parents/carers. *Journal of Autism and Developmental Disorders*, 50, 4513 – 4526

Haas, K. and Gibbs, V. (2020) Does a person's autism play a role in their interactions with Police: The perceptions of autistic adults and parents/carers. *Journal of Autism and Developmental Disorders*

Hinkle, K. and Lerman, D. (2021). Preparing Law Enforcement Officers to Engage Successfully with Individuals with Autism Spectrum Disorder: An Evaluation of a Performance Based-Approach, Journal of Autism and Developmental Disorders

Holloway, C.A., Munro, N., Jackson, J. and Ropar, D. (forthcoming). Understanding and addressing the impact of police custody on autistic people in England and Wales.

Holloway, C.A., Munro, N., Jackson, J., Phillips, S. and Ropar, D. (2020). Exploring the autistic and police perspectives of the custody process through a participative walkthrough. *Research in Developmental Disabilities*, 97

Honess, R. (2020). Mandatory Police Training: The Epitome of Dissatisfaction and Demotivation?. Policing, O(0), 1-11

King, C. and Murphy, G. H. (2014). A systematic review of people with autism spectrum disorder and the criminal justice system. *Journal of Autism and Developmental Disorders*, 44(11), 2717–2733.

Love, A.M.A, Usher, E.L., Toland, M.D., Railey, K.S, Campbell, J.M and Spriggs, A.D. (2021). Measuring police officer self-efficacy for working with individuals with autism spectrum disorder, *Journal of Autism and Developmental Disorder*, 51, 1331 – 1345

McMahon, C.M., Stoll, B., Linthicum, M. (2020). Perceived versus actual autism knowledge in the general population, Research in Autism Spectrum Disorders, 71, 101499

Milton, D.E.M. (2012). On the ontological status of autism: the 'double empathy problem', *Disability & Society*, 27, 883-887

Railey, K.S., Campbell-Bowers, J., Love, A.M.A and Campbell, J.M. (2020). An Exploration of Law Enforcement Officers' Training Needs and Interactions with Individuals with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 50, 101 – 117

Rava, J., Shattuck, P., Rast, J. and Roux, A. (2017). The prevalence and correlates of involvement in the criminal justice system among youth on the autism spectrum, *Journal of Autism and Developmental Disorders*, 47(2), 340 - 346

Salerno, A. and Schuller, R.A. (2019). A mixed methods study of police experiences of adults with autism spectrum disorder in Canada. *International Journal of Law and Psychiatry*, 18 – 25

Salerno-Ferraro, A. and Schuller, R.A. (2020). Perspectives from the ASD community on police interactions: Challenges & Recommendations. *Research in Developmental Disabilities*, 105, 103732

Teagardin, J., Dixon, D. R., Smith, M. N. and Granpeesheh, D. (2012). Randomized trial of law enforcement training on autism spectrum disorders. *Research in Autism Spectrum Disorders*, 6, 1113–1118.

Tint, A., Palucka, A., Bradley, E., Weiss, J., & Lunsky, Y. (2017). Correlates of police involvement among adolescents and adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 47, 2639–2647

Yu, Y., Bradley, C., Boan, A.D., Charles, J.M. and Carpenter, L.A. (2020). Young adults with autism spectrum disorder and the criminal justice system, *Journal of Autism and Developmental Disorders*