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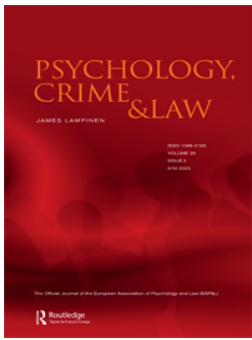
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The impact of trauma-awareness session on police officers' trauma-informed attitudes in Scotland

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ABSTRACT

Following reports that up to 80% of calls received by police in Scotland concern vulnerability issues, adoption of trauma-informed policing has taken priority. This is the first evaluation of the impact of a brief trauma-awareness training session on police officers' trauma-informed attitudes. Participants from two Scottish police divisions – one who had been exposed to trauma-awareness training ($n=62$) and one who had not ($n=91$) – completed self-report questionnaires on their trauma-informed attitudes. Officers displayed more positive trauma-informed attitudes towards victims/witnesses than suspects/perpetrators ($p < .001$). Female officers ($p = .002$), those with longer service ($p = .018$) and marginally those who were older ($p = .048$) demonstrated more trauma-informed attitudes; officer rank was unrelated. Female officers who received the training had significantly higher trauma-informed attitudes towards both groups than male officers who received the training ($p < .001$), and higher trauma-informed attitudes towards suspects/perpetrators than both male and female officers who had not – though marginal ($p = .048$). Findings indicate that the Resilience trauma-awareness has limited potential to influence trauma-informed attitudes, which appear to be more dependent upon officer age, gender and experience. However, female officers may be more susceptible to awareness training than male officers. To meaningfully increase trauma-informed attitudes, a more intensive tool-based training programme may be required.

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Trauma informed care; adverse childhood experiences; trauma; policing; police attitudes

Introduction

There is increasing recognition that Adverse Childhood Experiences (ACEs) are a significant public health issue. ACEs are potentially traumatic events, including childhood abuse and neglect, loss of a parent and household dysfunction, such as parental mental ill health or substance misuse or occurrence of domestic violence (Felitti et al., 1998). National studies

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suggest that around 50% of the population experience at least one ACE, while around 12% experience four or more (Bellis et al., 2014, 2015). Accumulating research demonstrates that experiencing ACEs increases the risk for negative outcomes in relation to health, well-being, and criminality across the life span (Anda et al., 2004; Liu et al., 2013). ACEs are said to function in a dose-response manner, whereby the higher the adversity a person experiences, the higher the risk of poor health and social outcomes (Felitti et al., 1998). Given the prevalence and impact of ACEs, the Scottish Government has prioritised the integration of trauma-informed care across all public services in Scotland, including the Scottish police force. Given the growing evidence of high levels of prior trauma exposure in those who encounter the police (both in the context of victimisation and perpetration; Barton et al., 2019; Bellis et al., 2015; Boulton et al., 2017). Police Scotland, in 2018, began to implement trauma-awareness training to ensure that their frontline officers are equipped to respond to vulnerable members of the public. This study aimed to evaluate the impact of an initial trauma-awareness training session on police officer's trauma-informed attitudes by comparing a Police Scotland division that had been exposed to the awareness session with a group who had not yet received this training.

Adverse Childhood Experiences (ACEs)

The 'ACEs movement' was instigated from the seminal study conducted by Felitti et al. (1998), which examined links between a range of adverse experiences in childhood and chronic health problems in adulthood. This initial research, and vast investigations since, have focused on the occurrence of five child maltreatment factors (physical, emotional and sexual abuse, and physical and emotional neglect) and five household dysfunction factors (substance abuse, mental illness, domestic violence, familial incarceration/jail, and parental divorce/separation). While it has been argued that this restricted approach to defining ACEs fails to consider the wider structural inequalities associated with higher ACE scores (Walsh et al., 2019). Despite this, a growing body of research demonstrates considerable and complex links between ACEs and clinical/criminal outcomes across the life-span (Allen & Donkin, 2015; Chapman et al., 2004; Dube et al., 2003; Felitti et al., 1998).

ACEs have been associated with structural and functional impacts on the developing brain, leading to significant difficulties in self-regulatory functioning (Bellis et al., 2014). Poor self-regulatory control can predispose an individual to engage in a wide range of risky behaviours that may bring them to the attention of community police officers, including premature sexual activity, alcohol/substance misuse, suicide attempts and intimate partner violence (McManus et al., 2022; Stinson et al., 2023; Urben et al., 2022). A worldwide meta-analysis of 119 longitudinal studies found that ACEs could predict aggressive, criminal and violent behaviour in later life (Derzon, 2010), while a more recent systematic review of meta-analyses found that childhood adversity, particularly family-related trauma, consistently predicted both offending and persistence in criminal behaviour across the lifespan (Basto-Pereira & Farrington, 2022). This means that as a child transitions through adolescence into adulthood they may be more likely to encounter the criminal justice system, with children who have experienced child abuse or neglect being 59% more likely to be arrested during adolescence, and 28% more likely to be arrested during adulthood (Widom & Maxfield, 2001). Studies conducted in England and Wales found that individuals with four or more ACEs were up to fifteen times more likely to

have been a victim or perpetrator of violence than those with no ACEs (Bellis et al., 2014, 2015).

Recent statistics reported by the Scottish Children's Reporter Administration indicate that, of 400 children aged 12–15 referred for criminal offences during 2018–2019 (reflecting 10% of the total number of children referred for offence behaviours during that period), 48% were reported to be victims of parental neglect, 25% were victims of parental violence or aggression, and 14% were victims of sexually abusive behaviours (McGarrol et al., 2022). These figures only appear to increase later in the lifespan; A study of male prisoners in Wales found that 50% and 41% reported being victims of verbal and physical abuse in childhood, respectively (Ford & Hughes, 2019), while the Scottish Prison Services' Prisoner Survey in 2017 found that, of the 46% of the prison population who responded to the survey, just over half (52%) reported four or more ACEs and around one in ten (11%) reported ten or more (Carnie et al., 2017).

However, ACEs do not only predispose contact with the police in the context of criminal perpetration, but also future victimisation. For example, studies have found a strong graded relationship between ACEs and the probability of school-based victimisation, including physical bullying, being threatened with a weapon, and theft or property destruction, with boys especially vulnerable to the negative effects of collective ACEs (Forster et al., 2020). For those who have experienced child sexual abuse, research also indicates a cumulative increase in adult sexual victimisation risk with each additional ACE experienced (Ports et al., 2016). Given the negative environmental context in which ACEs often occur (Papalia et al., 2021; Walsh et al., 2019), those who are exposed to ACEs are also at a heightened risk of witnessing criminal activity, and so trauma-exposed individuals can come into contact with police officers in a number of capacities – as a witness, victim or suspect of crime. This highlights the importance of moving towards a trauma-informed police force, in which officers are aware of the links between ACEs and subsequent behaviours, and are given opportunities to develop practical skills to facilitate safe and effective interactions with trauma-exposed individuals. Therefore, an understanding of how these early experiences interrupt normative developmental processes and thereby influence outcomes in adulthood is a crucial first step in order for workforces to become trauma-informed and be able to identify and respond to vulnerability.

Trauma-informed care

Trauma-informed care (TIC) describes service delivery that integrates understanding of the impact of trauma across the lifespan, including ACEs, on the neurological, psychological and behavioural outcomes of people affected by them (Azeem et al., 2011; Harris & Fallot, 2001; Jennings, 2007). This requires the reconceptualization of services, in which complex behaviours are recognised as potential responses to trauma-related triggers (Scottish Government, 2021). In the last decade there have been calls for service systems to implement TIC, including healthcare, education, and the criminal justice system (CJS) – particularly police forces (Burch et al., 2010; Jennings, 2007; Ko et al., 2008). This includes a commitment to 'developing adversity and trauma-informed workforces and services' outlined in the Scottish Government's Programme for Scotland, published in September 2018. Within Scotland there is a recognition that 'responding to trauma is everyone's business' (NES, 2017, p. 4) and the NHS Education for Scotland

(NES) produced a framework specifying the knowledge and skills required by staff across workforces in order to implement trauma-informed practice successfully. This framework, based largely on the trauma-informed approach manual developed by the Substance Abuse and Mental Health Administration (SAMSHA, 2014), specifies the key assumptions/outcomes of being a trauma-informed workforce, which are as follows:

- The widespread occurrence and nature of trauma is realised.
- The different ways in which trauma can affect people are realised.
- People affected by trauma are supported to recover and avoid unnecessary or unhelpful retraumatisation and trauma related distress.
- Workers are well supported when responding to trauma.

These drivers highlight that the first steps in moving towards becoming a trauma-informed workforce require the development of awareness and understanding as to the prevalence and impact of childhood trauma on service users. This reflects the aim of the trauma-awareness training initiated by Police Scotland in late 2018.

The move towards trauma-informed policing in Scotland

The last decade has seen a considerable shift in the nature of service demand faced by Police services across the UK, with issues relating to public welfare and vulnerability increasing substantially (Barton et al., 2019; Bellis et al., 2015; Boulton et al., 2017). For example, in 2015, South Wales Police reported that up to 89% of command-and-control calls received were related to safeguarding and public vulnerability issues, rather than crime-related incidents (College of Policing, 2015). Although definitions of vulnerability vary across sectors (Enang et al., 2019), a broad concept of vulnerability encompasses adults who are under threat, in danger, experiencing health challenges, or requiring support or protection (Larkin, 2009). Call outs for vulnerability issues, such as mental health crises (e.g. suicidal intent), substance-related incidents, and missing persons reports (almost 50% of whom are reported to have mental health markers) are reported to be continually rising (Police Scotland, 2020/2021).

Through adopting a trauma-informed approach to policing, it is suggested that front-line officers and other police staff can become better equipped to identify and respond to vulnerability in the early stages of interactions with members of the public, allowing for appropriate intervention and referral process to be utilised (College of Policing, 2018). Following reports that indicated that up to 80% of calls received by the police in Scotland concern trauma and vulnerability (i.e. individuals in distress or crisis) rather than crime-related incidents, many divisions within Police Scotland have begun moving towards becoming trauma-informed. Their first step in achieving this involved the gradual roll out of a trauma-awareness training session to all officers and police staff. These sessions involved a screening of the one-hour 'Resilience' documentary (2016), which synthesises scientific evidence on how childhood adversity can impact on the developing brain and lead to poor health and behavioural outcomes in adulthood and highlights the importance of trauma-informed policies and practices to support those who have been exposed to trauma. The documentary focuses on medical and scientific evidence of how extreme and prolonged stress in childhood can affect brain development, causing social and

health problems across the lifespan. Following the screening, attendees took part in a one-hour multi-disciplinary question-and-answer session with an expert panel, comprised of practitioners from public health, policing, third sector organisations and individuals with lived-experience of ACEs and involvement with the criminal justice system. This began by each panel member introducing themselves and their role, and the lived-experience panel member providing an overview of their journey into, through and out of the criminal justice system. Participants were then free to ask the panel whatever questions they wanted, and the panel varied for each documentary screening but the nature of the panel remained the same (i.e. the composition was made up of different relevant professionals and experts by experience). This was the extent of the awareness training, and no formal activities were undertaken by participants.

The present study

In order to evaluate the impact of the initial trauma-awareness training outlined above, this study compared attitudes of police officers from a division where the ACEs event had taken place, with officers from a geographically similar force who had not yet received any ACEs awareness training. The aim of this comparison was to determine whether officers who had received the intervention had more attitudes more conducive with TIC than those who had not. A secondary aim was to investigate whether any demographic factors, such as age, gender, or length of police employment were related to attitudes towards TIC. Finally, attitudes towards TIC for suspects/perpetrators was measured separately to attitudes towards victims/witnesses to determine whether attitudes varied in relation to group.

Methods

Participants

The sample comprised 153 police officers ($M^{age} = 42$; 51.6% male, 46.4% female, 2% not specified). Police officers from the Police Scotland division who took part in the awareness training ($n = 62$) were compared to officers from a comparable Police Scotland division ($n = 91$), who did not take part in the awareness training (see Table 1). These two divisions were compared due to geographic and demographic similarities based on advice from Police Scotland.

Measures and procedure

Following University ethical approval and approval from Police Scotland Academic Research Team, the Chief Superintendents for both divisions distributed the survey link via email to all division officers between 30 August 2019 and 30 October 2019. The link led to a secure online survey which opened with the participant information sheet and informed consent section. Participants responded to demographic questions (age, gender, length of employment with police and police rank) before completing the standardised measure below. Upon completion of all questions, respondents were directed to a debriefing page which provided more information on trauma, TIC and signposted to support sites if required.

Table 1. Participant information by division.

Variable	Intervention division (n = 62)	Control division (n = 91)
Mean Age (Years)	42.30	42.01
Gender (M:F:N*)	34:26:2	45:45:1
Time Served as Police Officer	15.73	14.51
Rank		
Police Constable	36	57
Detective Constable	6	10
Sergeant	6	7
Detective Sergeant	5	3
Inspector	4	3
Detective Inspector	1	3
Chief Inspector	2	2
Detective Chief Inspector	1	0
Other (police staff, special constable, support staff)	1	9

*N = Not specified.

Demographic questions

Participants were asked to respond to the following demographic questions: 1. Please indicate your age in years (e.g. 32); 2. Please indicate your gender (Male, female, non-binary, other – open text, prefer not to say); 3. Please indicate the Division you currently work in; 4. Please indicate your current rank; 5. How many years in total have you been employed by the police?

Attitudes related to trauma-informed care scale – 10 item (ARTIC-10; Baker et al., 2021)

The ARTIC-10 is a 10-item short version of the ARTIC-42, which assesses an individual's level of trauma-informed attitudes. In order to account for officer time constraints, the validated 10-item short-form version of the ARTIC was deemed more appropriate for the current sample. This version of the instrument has demonstrated strong construct and criterion-related validity in previous studies (Baker et al., 2016, 2021). The questionnaire assesses (i) beliefs about the underlying causes of behaviours (internal and fixed versus external and malleable); (ii) beliefs about optimal responses to behaviours (focus on eliminating problem behaviours versus flexibility and ensuring feelings of safety); (iii) job-related behaviours (empathy-focused approach versus control-focused approach); (iv) self-efficacy (belief that they can meet the demands of working with a trauma-exposed population); (v) reactions to vicarious trauma ('I'm too sensitive to this' versus 'being sensitive makes me better at my job'); (vi) personal support for a trauma-informed approach (am I willing to implement this?). For each item, officers were asked to indicate where their attitudes lay between two bipolar statements. Responses to the 10 items were averaged to provide an attitudes score from 1 to 7, with 1 reflecting attitudes in contrast with trauma-informed principles and 7 reflecting attitudes conducive with trauma-informed principles. Participants completed the ARTIC-10 once in respect to their attitudes towards potential victims of crime ($\alpha = .73$), and a second time in the context of suspects or perpetrators of crime ($\alpha = .74$).

Results

Trauma-informed attitudes across the sample

Age (marginally; $r = .17, p = .048$) and years served as a police officer ($r = .20, p = .018$) were positively correlated with trauma-informed attitudes towards suspects/perpetrators but

not towards victims/witnesses. Across the whole sample, female officers ($M = 5.17$, $SD = .83$) demonstrated significantly more positive attitudes than male officers ($M = 4.74$, $SD = .81$) towards trauma exposed victims/witnesses, $t(146) = -3.18$, $p = .002$. This pattern was also identified for attitudes towards suspects/perpetrators ($M = 5.00$, $SD = .88$ and $M = 4.51$, $SD = .85$, respectively), $t(141) = -3.11$, $p = .002$. A paired-samples t -test indicated that overall, the sample held more trauma-informed attitudes towards witness/victims ($M = 4.96$, $SD = .85$) than suspects/perpetrators of crime ($M = 4.72$, $SD = .89$), $t(140) = 6.083$, $p < .001$.

Differences in trauma-informed attitudes based on training-exposure and gender

A two-way ANOVA was conducted to examine the effect of training exposure and gender on trauma-informed attitudes towards victims/witnesses, controlling for age and years served as a police officer. The 3 participants who chose not to disclose their gender were removed from this analysis. There was a significant main effect of gender on victim/witness attitudes, $F(1, 141) = 12.260$, $p = .001$, $\eta^2 = .080$, but no significant main effect of training exposure. However, there was a statistically significant interaction between the effects of gender and training exposure on victim/witness attitudes, $F(1, 141) = 4.756$, $p = .031$, $\eta^2 = .033$. Simple main effects analysis showed that female officers who had received the awareness training had significantly higher trauma-informed attitudes towards victims/witnesses than male officers who received the training ($p < .001$), but there were no differences between gender for those who did not receive the training ($p = .304$). There were also no significant differences between female officers, or between male officers, who had or had not received the training ($p = .202$ and $p = .111$, respectively).

A second two-way ANOVA was conducted to examine the effect of training exposure and gender on trauma-informed attitudes towards suspects/perpetrators, controlling for age and years served as a police officer. There was a significant main effect of gender, $F(1, 136) = 13.336$, $p < .001$, $\eta^2 = .089$, but no significant main effect of training exposure. Once again, there was a statistically significant interaction between the effects of gender and training exposure on suspect/perpetrator attitudes, $F(1, 136) = 4.834$, $p = .030$, $\eta^2 = .034$. Simple main effects analysis showed that female officers who had received the awareness training had significantly higher trauma-informed attitudes towards suspects/perpetrators than male officers who received the training ($p < .001$), but there were no differences between gender for those who did not receive the training ($p = .251$). Furthermore, female officers who had received the training were also marginally significantly higher in trauma-informed attitudes towards suspects/perpetrators than female officers who had not received the training ($p = .048$), but there were no significant differences between male officers who had or had not received the training ($p = .280$). Descriptives for both models are shown in [Table 2](#).

Discussion

This study aimed to determine whether a low-cost initial trauma-awareness training had the potential to influence trauma-informed attitudes in police officers. This was done by

Table 2. Descriptive statistics for victim/witness and suspect/perpetrator attitudes.

Division	Gender	Mean	Std Deviation	<i>n</i>
Victim/Witness Attitudes				
Training	Male	4.55	.82	33
	Female	5.33	.82	26
No Training	Male	4.88	.78	45
	Female	5.08	.84	44
Suspect/Perpetrator Attitudes				
Training	Male	4.37	.83	30
	Female	5.20	.90	25
No Training	Male	4.60	.86	44
	Female	4.81	.84	44

comparing level of trauma-informed attitudes towards both witnesses/victims and suspects/perpetrators of crime in officers who had been exposed to the awareness training with a geographically similar division who had not yet attended these sessions. This study also considered other relevant factors including officer age, time served on the force and officer gender.

Age, gender and time served

Across the sample, officer attitudes were significantly more favourably disposed to trauma-informed working in relation to victims/witnesses of crime compared to suspects/perpetrators. Given that the primary objective of police work is to protect and improve the safety and wellbeing of people, places and communities it is unsurprising that officers are more favourably inclined towards accounting for traumatic experiences in witnesses or victims of crime rather than suspects or perpetrators. Indeed, much of the literature surrounding the concept of trauma-informed policing is centred around police interactions with victims (e.g. rape victims; Rich, 2019). However, given the prevalence of ACEs in both the youth and adult offending communities, it is crucial that police forces understand that accounting for prior traumatic experiences is equally, if not more, significant when dealing with potential perpetrators. By recognising vulnerability in suspects or perpetrators when attending an incident, officers' have the opportunity to not only improve investigative outcomes (e.g. cooperation with questioning) but also to identify appropriate referral routes (e.g. mental health services) in order to address any underlying trauma that may contribute to offence behaviour, and indeed the cycle of reoffending, for that individual. The College of Policing (2018) states that recognising vulnerability-related risk is grounded in identifying person-specific vulnerabilities that may interact with that individual's current situation to result in an increased risk of harm – either to themselves or others. This approach supports the premise that physical, mental or emotional adversity can affect anyone at any given time, regardless of whether they are a victim, witness or perpetrator of crime.

Age and length of employment as a police officer were found to be positively related to trauma-informed attitudes towards suspects/perpetrators, which may suggest that the longer an officer has been on the force, and the older they are, the more trauma-informed their attitudes become towards suspects or perpetrators of crime – though it must be noted that the current study was cross-sectional in nature. However, this is conducive with common theoretical perspectives on attitude formation and change,

which posit that attitudes are most strongly influenced by exposure to the target group (Hogg & Vaughan, 2005). This finding also aligns with previous research that demonstrates that police officers' attitudes towards offenders generally become more positive with age and years of service (Cunha & Gonçalves, 2017). Those with more experience in working with perpetrators of crime, whether on the frontline or in a rehabilitative capacity (e.g. prison officers), tend to hold more positive attitudes towards them and more favourably view their rehabilitative potential (Kifer et al., 2003; Ricciardelli & Clow, 2016). This suggests that increased exposure and contact with perpetrators may have the propensity to increase officer understanding that offenders, and indeed their offending behaviours, are complex and changeable (Hirschfield and Piquero, 2010). However, this highlights that it is imperative that police forces identify opportunities to improve awareness and understanding of the impact of early traumatic experiences on both victims and offenders at an earlier stage of their policing career. Integrating trauma-awareness training into initial police training programmes for new recruits may better prepare younger and less life-experienced officers for dealing with trauma-exposed members of the public as they enter the force.

Overall, female officers held more trauma-informed attitudes towards both witnesses/victims and suspects/perpetrators of crime than male officers. This aligns with previous research carried out in trauma-informed police divisions (i.e. South Wales; Ford et al., 2019). Ford et al. found that female police officers held more positive attitudes towards TIC, and the current study extends these findings to suggest that these attitudes encompass both victims or witnesses and suspects or perpetrators of crime. Female police officers have also been previously found to report more positive attitudes than male officers towards individuals with other types of vulnerability, including intellectual disability (Eadens et al., 2016) and mental illness (Wainwright & Mojtahedi, 2020). Female police recruits also report 'opportunity to help people in the community' as a significantly stronger motivator to embark on police training than male recruits (Raganella & White, 2004). Female officers have also been found to implement more comfort-based techniques when dealing with vulnerable members of the public than their male counterparts (e.g. when dealing with domestic violence cases; Sun, 2007). However, it has also been argued that the viewpoint that female officers inherently display more stereotypically feminine traits in their policing work oversimplifies the complex role and influence of gender in the police force (Rabe-Hemp, 2008). Rather, there are other relevant factors that might interact with officer gender to predict more supportive attitudes or behaviours. For example, Dejong (2004) found that female officers were more likely to be assigned to cases that involved female suspects (to allow for stop and search) and traumatised female victims, both of which are more likely to receive comfort-related behaviours from attending officers than male suspects or victims. Therefore, the more positive trauma-informed attitudes held by female officers may instead reflect the nature of calls they are most commonly attending. Both female sex and gender have also been found to be associated with increased risk of exposure to ACEs and trauma (Lee & Chen, 2017; Mersky, Choi, Lee, & Janczewski, 2021), with female adolescents in the criminal justice system being more than twice as likely to have experienced six or more ACEs than male adolescents (Baglivio & Epps, 2016). It is therefore possible that female officers may be more receptive to TIC due to personal experiences of trauma. However, future research is required to examine what role officers' own exposure to ACEs plays in their

understanding, willingness and ability to adopt TIC principles, especially given their own risk of retraumatisation.

Differences based on training exposure and gender

Given the gender differences identified across the sample, the interaction between gender and training exposure was examined. It was found that female officers who had received the awareness training had significantly higher trauma-informed attitudes towards both victims/witnesses and suspects/perpetrators than male officers who received the training. Furthermore, female officers who had received the awareness training were significantly higher in trauma-informed attitudes towards suspects/perpetrators than female officers who had not received the training. While it must be noted that this was marginal, it may suggest support for the notion that gender-based differences in police attitudes may be present alongside other interacting factors (Rabe-Hemp, 2008), in this case, the provision of trauma-awareness training. Indeed, research examining law enforcement responses to other types of vulnerability training (e.g. autism spectrum disorder training) has also found that female officers demonstrate more changes in on-the-job behaviour and increased self-confidence in dealing with such cases following training than male officers (Gardner & Campbell, 2020). In part, this may be a product of the nature of the ACEs-awareness session evaluated in this study. This involved the screening of the highly emotive Resilience (2016) documentary, which presents real-life case studies of children who have experienced childhood trauma and the impact that this has had on their development and experiences later in life. A wide body of literature indicates that female participants display stronger reactions to sadness-inducing film content than male participants, with higher levels of physiological arousal indicating more a substantial subconscious response to such content (Deng et al., 2016; Fernández et al., 2012). Therefore, the nature of the trauma-awareness session itself may have initiated stronger responses from female officers, which may have been associated with stronger short-term impact on their trauma-informed attitudes. However, further research is required, directly examining physiological and self-reported responses to the Resilience documentary, to determine whether this may have been the case. It is also possible that this finding reflects the hegemonic masculinity still arguably present in police culture in Scotland (Atkinson, 2017), and elsewhere. This culture can often prioritise and encourage traits seen to be more 'masculine' (e.g. physical strength) over those considered to be more 'feminine' (e.g. compassion), constraining male officers within their predefined gender roles, and some research has indicated that male officers can struggle with the incorporation of what are perceived as more 'feminine' traits into their community police work, believing they more closely reflect the role of a social worker, not a police officer (Miller, 1999).

These findings have implications for Police Scotland's move towards becoming a trauma-informed police force. Intensive police training plays a powerful role in attitudinal change (Cunha & Gonçalves, 2017), and while the route to behavioural change is a complex one, attitudes are thought to be a crucial foundation upon which behavioural responses to any given scenario are formed (Robinson and Chandek, 2000). This means that, for police officers, more trauma-informed attitudes may lead to the implementation of, or intention to implement, more trauma-informed behaviours and techniques when

interacting with members of the public during policing tasks. However, attitudes alone cannot fully inform behaviour. Before trauma-informed behaviours *can* be implemented, more intensive hands-on training must be provided to equip officers with the tools and resources they require to engage with trauma-informed practice. For example, there is wide support for the use of scenario-based approaches to police training (Jenkins et al., 2021), which offer a highly effective route to developing and practicing skills and tactics to aid in decision-making and responding, especially in stressful or volatile situations (which vulnerability-related incidents can often be). The provision of more practical and police relevant trauma-informed response training, rather than passive awareness-raising sessions, may close the gender gap identified in the current study by providing all officers with the tools needed to respond to the public in a trauma-informed way. This has the propensity to provide officers with a sense of perceived behavioural control where trauma-informed practice is concerned (i.e. the perception that they have the ability to perform the desired behaviour), which is fundamental in facilitating the link between attitudes and behavioural action (Terry & O'Leary, 1995).

Limitations

Conclusions about the impact of the Resilience event on attitudes are limited by two main factors. Firstly, due to the timing of the research it was not possible to obtain a baseline measure of officers' attitudes prior to exposure to training. This leaves the current findings susceptible to potential confounding factors between officers within each division. Secondly, as attitudes were only measured at a single timepoint, we are unable to determine any longer-term impact of the trauma-awareness training on officer attitudes. Significant attitudinal change is unlikely to occur within a short period of time, and so repeated measures may have provided more insight into officer attitudes across the weeks or months following the training sessions. It is also important to note that, while attitudes can influence behaviour, the current study was not able to measure any actual changes in officer behaviour following the awareness sessions. It is therefore important that future research examines any *behavioural* as well as attitudinal change following trauma-awareness interventions. Finally, this study did not account for any prior trauma-related training (e.g. vulnerability training) received by officers in either division. It is important that future research accounts for this to determine officer awareness and understanding of trauma and ACEs prior to any intervention.

Conclusion

The findings highlight that trauma-informed attitudes were higher in the context of witnesses/victims than suspects/perpetrators, indicating that officers may be less aware of the importance of being trauma-informed in their practice with the latter. Officer age and time in role were both positively related to trauma-informed attitudes towards suspects/perpetrators, suggesting that trauma-awareness interventions need to be implemented early in the police training process. Finally, female officers displayed more trauma-informed attitudes across the sample and were also the only group to demonstrate significantly higher trauma-informed attitudes when exposed to the trauma-awareness session examined in the current study. This indicates that there may

be gender differences both in pre-existing trauma-informed attitudes and responsivity to trauma-awareness training, which may reflect the hegemonic masculinity still arguably present within police culture in Scotland and beyond. Overall, this study suggests that earlier, and more action-driven, trauma-informed training should be implemented and evaluated with police forces to identify the most effective route to both attitudinal and behavioural change towards to a more trauma-informed approach to police practice for both male and female officers, with a focus on highlighting its importance with not only victims of crime, but also potential perpetrators.

Data availability statement

The data that support the findings of this study are available from the corresponding author, [blinded for review], upon reasonable request.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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