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An evaluation of the Adverse Childhood Experience (ACE) Informed Approach to Policing Vulnerability Training (AIAPVT) pilot

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Acronyms used in this report

ACE **Adverse Childhood Experience:** stressful experiences occurring during childhood that directly hurt a child (e.g. maltreatment) or affect them through the environment in which they live (e.g. growing up in a house with domestic violence).

BCU **Basic Command Unit:** The structure of a police force area is broken up geographically into smaller operational areas. South Wales Police has four BCUs: Central, Eastern, Northern and Western.

NCALT **National Centre for Applied Learning Technologies:** Established to assist the 43 Home Office police forces in England and Wales and the wider policing community in adopting alternative learning methodologies.

NPT **Neighbourhood Policing Team:** A local approach to policing consisting of Police Officers, Police Community Support Officers (PCSOs), Special Constables, police staff and volunteers.

PC **Police Constable:** A police officer of the lowest rank.

PCSO **Police Community Support Officer:** Uniformed staff that support Police Officers and work to reassure the public, provide crime prevention advice and assist with enquiries.

PPN **Public Protection Notice:** An information sharing document in which SWP staff record safeguarding concerns.

PPU **Public Protection Unit:** A police unit which provides governance and oversees safeguarding issues. Its duties include strategic development of child protection (including child sexual exploitation), domestic abuse, vulnerable adults, missing persons, rape and serious sexual offenses. All PPNs submitted by SWP staff are risk-assessed in a PPU.

PS **Police Sergeant:** An operational senior rank responsible for supervising a shift of constables and allocating duties.

SWP **South Wales Police:** The largest of four territorial police forces in Wales.

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Executive summary

In recent years demand for policing in the UK has increased for occurrences relating to complex welfare, public safety and vulnerability. Research on the response to vulnerability by South Wales Police (SWP) identified a need for staff to be trained to understand the impact of Adverse Childhood Experiences (ACEs) and trauma to ensure that they have the right skills to assist vulnerable individuals in times of crisis and need. In response to these findings, the ACE-Informed Approach to Policing Vulnerability Training (AIAPVT) was developed by ACE co-ordinators from NSPCC and Barnardo's. The training covered the impact of trauma on development; defined ACEs and outlined their impact on life outcomes; tactical skills for working with trauma and promoting resilience in children. The training was mandatory and delivered to all frontline staff including operational and neighbourhood policing teams in a pilot area in South Wales across two months in 2017. The training aimed to provide SWP staff with an understanding of the impact of ACEs and trauma-informed interventions as well as tactical options to increase the competency and confidence of police when responding to vulnerability.

To inform the development of the pilot training, provide a baseline for monitoring progress and understand potential for roll out and scale up, an independent evaluation was undertaken of the AIAPVT by Public Health Wales. The evaluation comprised of pre- and post-questionnaires and a validated scale to measure Attitudes Related to Trauma-Informed Care (ARTIC-35) with training participants and follow up one to one interviews with a randomly selected number of participants (n=15), training providers (n=3) and wider SWP staff (n=2) involved in its delivery. The evaluation aimed to examine if participation results in increased ACE awareness and to explore the impact on policing practice, including staff confidence of responding to vulnerability. It also sought to understand how the training could be rolled out across the wider force and to different staff roles.

151 SWP staff participated in the evaluation and covered a range of roles and ranks. Six in ten (57%) participants worked in response, service length at SWP varied from two months to 27 years with an average of nine years.

Key findings

Awareness and attitudes towards trauma-informed care and ACEs

- Baseline figures (pre-training) identified moderate scores in attitudes towards trauma-informed care (ARTIC scores), with females, PCSOs and participants with less than three years' service having significantly higher scores, indicating a higher awareness and good attitudes towards trauma-informed care.
- Following training, ARTIC scores were significantly higher, and significant differences by gender, job role and length of service did not remain.
- Following training, participants reported improved confidence in responding to vulnerability. All confidence scales improved post-training. Staff who undertook the second session of training (part 2) reported the highest confidence in understanding of ACEs and ACE-informed approaches.

Attitudes towards the utilisation of support services

- One in four (26.7%) participants reported that prior to attending training they had accessed a support service available to staff whilst employed by SWP.
- Following the training, SWP staff were asked whether they felt more or less likely to seek support after attending a traumatic incident. SWP staff reported that they were more likely to seek support, both from formal support services and informal support networks i.e. support from colleagues.

Impacts on policing

- All participants interviewed (average follow up time 7 weeks, 10% staff trained) identified positive impacts of the training on their policing. Staff recognised positive changes in their own judgements towards individuals, a more measured response in their behaviour when responding to calls and utilising greater lines of enquiry to understand the root causes of behaviour.
- Many staff indicated that training had led them to change their thinking around their response to individuals who they previously had typically viewed as problematic and/or confrontational.
- Participants reported that as a result of their greater understanding they subsequently included more detailed information (i.e. risks observed) on the PPNs they had submitted following the training, however the evaluation was not able to confirm this or explore any effect that this may have had on PPN submission and outcomes for the vulnerable individuals.
- Some staff reported having submitted early help referrals as a result of the training.
- Furthermore, participants stated that they felt the training provided a more unified understanding of other services which would help to improve relationships with other services. Staff additionally reported that they felt that other organisations would benefit from similar training.
- Participants reported a greater understanding of the additional support available within the local community and reported increased confidence to seek support and make early help referrals when required.

Implications for scale up

- All participants interviewed stated that they felt the training should be made mandatory to SWP staff to ensure the force wide adoption of an ACE-informed approach to policing, and consistency in response. It was felt that some staff roles i.e. HR and senior management could receive condensed versions of the training.
- Training participants reported that they considered the social work background of the trainers' essential in the delivery of the training. Participants stated that this gave credibility to the training and created a platform for knowledge sharing, and understanding of the work of different sectors.
- A relaxed learning environment was felt essential to allow staff to feel comfortable in discussing sensitive topics and the use of an external training environment assisted this.
- Participants felt the skill development section of the training needed to be pitched at a higher level and expressed a desire for greater clarity on wider operational changes in relation to working in an ACE-informed way.

Conclusion and recommendations

Through experience working in the police, participants reported an existing skill set for working with traumatised individuals, however, staff reported that the training provided them with a greater depth of knowledge which would positively impact their ability to respond to vulnerability. Staff reported a low level of attendance at other courses related to vulnerability (64% reported no other training courses). Given the increasing demand that vulnerability places on police resource, this identifies a considerable need for staff to be trained in this topic.

During interviews and throughout the delivery of the training a small number of participants stated they felt the training needed to be pitched at a higher level as it was reported to be similar to initial 'core' training. Any training delivered should take into account current training provision and ensure that it builds on and does not duplicate 'core' training.

Generally SWP staff held very positive views about the AIAPVT training, reporting that it had had a beneficial impact on their knowledge, attitudes and behaviours, ultimately enabling staff to work in a more trauma-informed way.

The evaluation found significant improvements in levels of SWP staff ACE awareness and reported confidence to respond to vulnerable individuals in a trauma-informed way. There are clear benefits of delivering this style of training to the police, however the impacts need to be recognised through a longer period of time to see if these benefits can be sustained. Further evaluation should also seek to explore any impact of this change of practice for the vulnerable individuals that the police respond to on a daily basis, which was not possible as part of this evaluation due to timescales. The evaluation makes the following recommendations:

- AIAPVT should continue and be developed and incorporated into a broader work programme to raise awareness of ACEs by SWP. Work should seek to examine overlaps with current training provision so that the training compliments and does not duplicate existing resource.
- Follow up evaluation should be completed to assess long-term change of this to also include an examination of impact on police practice. Public Health Wales are completing a 6-month follow up of AIAPVT to explore if the ACE-informed approach to policing is now embedded within daily practice. This is part of wider operational changes to policing in the pilot area including a structured multi-agency, early intervention approach to vulnerability with Neighbourhood Policing Teams. The evaluation will seek to examine any differences between the pilot area and other areas in force.
- Any scale up of training including roll out to different policing roles should be evaluated to further examine the effect of this type of training on different roles and impact on policing.
- With many areas developing trauma-informed training for police staff across the UK, and a lack of evaluation of effectiveness, the positive results found in this evaluation should be shared widely. Such findings are useful for informing how staff can be trained.
- Given the positive effects on staff attitudes towards accepting support services, the potential for scale up and roll out should align with on-going work by SWP on their agenda for improving staff well-being.

1. Background

1.1. Adverse childhood experiences (ACEs) and resilience

Adverse childhood experiences (ACEs) are stressful events experienced before the age of 18. These include a child being directly harmed through abuse (physical, verbal or sexual) or having dysfunction in the environment in which they live (e.g. growing up in a house with drug misuse). Research has shown that individuals who experience ACEs are more likely to adopt health harming behaviours,[2,3] suffer from poor physical and mental health and suffer increased mortality.[4,5] Furthermore, they are more likely to have poor educational[6] and employment outcomes,[7,8] and become involved in antisocial or criminal behaviour.[9] The first Welsh ACE survey in 2015 found that almost half of the Welsh population had experienced at least one ACE, 14% had experienced four or more.[10]

However, not all individuals who experience ACEs will have negative outcomes. It is thought that resilient individuals benefit from protective factors which help them avoid the negative outcomes associated with chronic stress and ACEs.[11] These protective factors are known as the building blocks of resilience and are outlined in Figure 1. Internationally there has been an increasing focus on how sectors can work in a trauma-informed way to respond to individuals who have experienced ACEs and prevent ACEs from occurring for future generations.[12,13] Preventing ACEs for future generations in Wales could reduce criminal justice outcomes by an estimated 55% (violence perpetration, 60%; violence victimisation, 57%, incarceration 50%), therefore this is an area for work in the criminal justice sector.[10]

Figure 1: Building blocks of resilience

Source: National Scientific Council on the Developing Child, 2015

1.2. Policing in the UK

The past decade has witnessed the changing role of the police across England and Wales from preventing and responding to crime, to responding to issues of vulnerability and public welfare.[14,15] In South Wales demand has changed considerably, with a 27% reduction in crime and a 30% increase in public welfare and safety issues.[16] Following a HMIC inspection into police effectiveness, efficiency and legitimacy around vulnerability in 2015[17]

and Operation Liberty,[a,18] South Wales Police (SWP) introduced a new definition for vulnerability, which categorises a person as vulnerable if they are unable to care or protect themselves from harm or exploitation and the following circumstances:[19]

- Personal circumstances (e.g. social isolation, repeat victim, poor education, history of offending, living conditions, bereavement);
- Health and disabilities (e.g. learning disability, mental health, drug/alcohol misuse and intoxication, and physical disability);
- Personal characteristics (gender, sexual orientation, ethnicity, age, religion); and/or,
- Economic circumstances (e.g. financial, unemployment, and housing).

The SWP safeguarding referral process entails the completion of a Public Protection Notification (PPN). PPNs are completed by Police Officers and staff within 24 hours of an incident involving a vulnerable person (categories of vulnerability on PPNs include: Domestic abuse and violence; Child concern/child sexual exploitation; Vulnerable adult; Mental health; and/or, Honour-based violence). SWP respond to high levels of vulnerability. Research into the police response to vulnerability and risk conducted as part of the Early Intervention Project (see Box 1) found that in excess of 60,000 PPNs were submitted by South Wales Police staff in 2016, SWP staff may be well-placed to identify people who are at risk of ACEs, SWP officers and staff had limited knowledge and understanding of ACEs or the impact of trauma. Findings also indicated that staff attended incidents which they felt insufficiently trained for, felt under confident in their response, and that lines of responsibility when working with other agencies were unclear.[1]

Box 1: Early Intervention and Prevention Project

The Early intervention and prevention project: breaking the generational cycles of crime is a two year project (April 2016 – March 2018) which seeks to work with the police to address vulnerability and risk using an ACE-informed public health approach. The project is a unique collaboration between Public Health Wales, the Police and Crime Commissioner for South Wales, South Wales Police (SWP), NSPCC, Barnardo's, and Bridgend County Borough Council. Funded through the Home Office Police Innovation Fund and South Wales Police and Crime Commissioner, the project is the first of its kind to address the lack of early intervention and preventative activity when ACEs are evident and families are at risk of poor outcomes (e.g. involvement in crime).

The research recommended that police training should ensure that all staff are able to apply an ACE/trauma-informed approach to policing. This will help to develop the skills required to work with vulnerability and increase professional confidence and assist Police staff in early identification of adversity. This was one of five recommendations for change approved by South Wales Police Force (see Box 2).[1] In response, the ACE-Informed Approach to Policing Vulnerability Training (AIAPVT) programme was developed.

1.3. The ACE-Informed Approach to Policing Vulnerability Training (AIAPVT) programme

The AIAPVT was developed by two highly experienced social care practitioners (ACE co-ordinators) from NSPCC Cymru and Barnardo's Wales in conjunction with an independent consultant in trauma-informed intervention from Rock Pool.[b] The training aimed to provide SWP staff with an understanding of the impact of ACEs and trauma-informed interventions, tactical options to increase the competency and confidence of police when responding to vulnerability and to enhance staff to work with other agencies in their response to vulnerable people. The training was delivered in two sessions (see Box 3). Session one was a one-day core programme for all operational staff (i.e. Response[c]

a Launched by SWP in July 2016, Operation Liberty aimed to gain an understanding of the current level of staff awareness of vulnerability and reinforce to staff that is a priority area.
b Rock Pool provide a range of consultancy support for those working with vulnerable and complex individuals and families.
c Police officers who respond to 999 emergencies.

Box 2: Recommendation Two - Pilot a training programme with 'fast' and 'slow time' policing on 'ACE-Informed Approach to Policing'

Aims:

- To ensure police have the right skills to respond to vulnerable people at the earliest point
- To support '999' response and community officers to understand the impact of ACEs and trauma and how they can best assist vulnerable people in times of crisis and need

Research into the police response to vulnerability and risk conducted as part of the Early Intervention Project highlighted the importance for the police to have the right skills to respond to vulnerable people at the earliest point, recognising that just awareness of vulnerability is not enough to generate an effective response. The content of the training is in response to the police saying they needed to have a better understanding of vulnerability and why people sometimes behave in particular ways and how they can respond. The other important message from the police was that they wanted this training delivered by professionals with experience and knowledge of vulnerability.

The 'ACE-Informed Approach to Policing Vulnerability' training programme has been developed and will be delivered by 'ACE co-ordinators' who are social care professionals in consultation with an emotional trauma recovery expert. It will be targeted at '999' response and community neighbourhood officers, with a greater focus on community engagement. This will equip them with a better understanding of the impact of ACEs and trauma on the behaviour of vulnerable people and the basic skills for responding to emotional trauma behaviour.

Follow up support and advice will be provided by the ACE co-ordinators to ensure officers are supported in early action and collaboration with partners.

Source: Ford, K., Kelly, S., Evans, J., Newbury, A., Meredith, Z., and Roderick, J. (2017) Adverse Childhood Experiences: Breaking the Generational Cycle of Crime. Turning Understanding into Action: Summary Report. Public Health Wales.

Box 3: Training content (see Appendix 1)

Session 1

- Working with vulnerability
- Understanding what toxic stress is and its impact on well-being
- The impact of trauma on brain development, behaviour and response to threat
- Outlining what ACEs are and the research evidence of associations with poor health outcomes
- Applying trauma-informed practice to policing
- Staff well-being and managing secondary trauma

Session 2

- Understanding thresholds for social-services and early help
- Advantages and challenges of multi-agency working
- Stages of Change
- Motivational interviewing techniques
- The importance of protective factors and how to promote resilience

and Neighbourhood Policing Teams [NPTs][d]). Session Two was an enhanced programme for NPTs only, delivered on a follow-up day which offered further detail on trauma-informed early interventions, tactical options and building resilience/protective factors in the public. For more information on the training provided see Appendix 1.

> *"We are training our frontline responders and our neighbourhood teams, around understanding what ACEs are, why they do what they do, what the possible, um, outcomes are if there isn't a level of resilience built, and the whole idea is to make our teams ACE and trauma-informed in the way they approach vulnerable people, and to break the cycle and provide some resilience hopefully"*
>
> Interview 3, Wider SWP staff

The training was piloted in two sectors within a single Basic Command Unit (BCU), over a 7 week period (April - May 2017). The training was delivered by the ACE co-ordinators to all NPT and response Officers geographically located in the pilot area as part of their continued professional development. Following research findings that indicated a preference for more interactive training[1], the training was developed to be delivered in a more collaborative style than the traditional training delivered to police staff. Attendance at the training was mandatory for all operational staff in the pilot area; however participation in the evaluation was optional.

The primary evaluation objectives were:

1. To examine if participation in the AIAPVT training programme results in increased ACE awareness amongst Police Officers and staff and them being trauma-informed;
2. To explore how being ACE aware may impact police practice including decision making in situations of vulnerability;
3. To examine if participation in the AIAPVT training programme results in increased staff confidence in responding to vulnerability and an increased skill set;
4. To identify if making SWP staff ACE aware impacts on their understanding of a multi-agency approach and the roles of different agencies.

Furthermore, the evaluation sought, where possible, to develop an understanding of how the impact of ACE-informed policing can be evaluated on a larger scale/over a longer term so that the potential for the AIAPVT to be rolled out across the whole SWP force area and beyond is understood.

d A local approach to policing consisting of Police Officers, Police Community Support Officers (PCSOs), Special Constables, police staff and volunteers.

2. Methods

Note: This section describes the methods used by PHW to evaluate the pilot, further details on implementation of AIAPVT can be found in Appendix 1.

An evaluation framework was designed using a mixed methods approach, collecting data from a series of questionnaires and interviews pre- and post-training. The evaluation was approved by the Public Health Wales R&D Office (03/04/2017).

2.1. Evaluation questionnaires and ARTIC tool

A member of the research team attended every training session to ensure consistency of data collection and record any changes to training or method of delivery. Before each training session commenced, the researcher introduced the evaluation, outlined what participation included and emphasised that the evaluation was confidential and that all responses were anonymous. Potential participants were provided with an information sheet, consent form, pre-evaluation questionnaire and the ARTIC scale and were given time to consider whether or not they wanted to take part. Signed consent was obtained from all evaluation participants.

All eligible staff participated in the evaluation (151 participants; 86 response, 65 NPT). Participants completed an ARTIC-35 scale and training questionnaire pre- and post-training after session 1 (part 1) of training. Questionnaires included a series of likert scales, dichotomous questions and open text boxes. NPT staff (n=59) attended a second session of advanced training (part 2), and all participants completed an additional post-questionnaire and ARTIC scale at the end of their second session of training. All data collection materials were anonymous and included a unique identification code generated by the research team to enable pre- and post-training questionnaires to be linked.

Training questionnaires

Pre-training questionnaire

Questions included information on participant demographics (i.e. gender, age range, job role and years of service), previous vulnerability training courses attended, multi-agency working, confidence in their current knowledge and skills when working with vulnerable people[e] and measures of their awareness and use of SWP support services.

Post-training (part 1) questionnaire

Questions explored participants' opinions on the content and delivery of the training, the potential impact of the training on their policing practice, decision-making around PPN submission, barriers to adopting AIAPV and perceived benefits to the public. It also explored any impact of the training on attitudes towards seeking support from SWP support services and peers.

Post-training (part 2) questionnaire

Questions explored changes in policing practice since training (i.e. use of the ACE LENS card[f]) and the influence of the training on engagement with other agencies.

ARTIC tool

Participants' attitudes towards working with people who have experienced trauma were measured using the Attitudes Related to Trauma-Informed Care (ARTIC-35) scale.[20] The ARTIC scale is a 35-item

e Asked in all pre- and post- questionnaires.
f All participants received an ACE LENS card post the initial training session (part 1) which highlighted 9 types of ACE (See Appendix 1).

tool developed by the Traumatic Stress Institute which measures favourable and unfavourable attitudes towards trauma-informed care, important drivers of staff behaviour.[21] The scale is psychometrically validated and has strong internal consistency and test-retest reliability.[20] The ARTIC-35 measures attitudes towards trauma on five scales (see Table 1).[21]

Table 1: The ARTIC-35 scale

Subscale	Description	Example item
Underlying causes of problem behaviour and symptoms	Distinguishes the participant's attitudes towards a clients' behaviours and symptoms, and belief in external and malleable causes (vs. internal and fixed).	*The clients were raised this way, so there's not much I can do about it now*
Responses to problem behaviour and symptoms	Attitudes towards whether clients behaviour can change through relationships, flexibility, kindness and safety, as opposed to rules, consequences and accountability	*Administering punitive consequences is the best way to eliminate undesirable behaviours*
On-the-job behaviour	Explores the participant's support of an empathetic approach towards clients rather than one based on control.	*As long as everyone is safe, it is ok for clients to become really upset, even if they cause some property damage*
Self-efficacy at work	Explores the participant's attitudes towards their own ability to meet the demands of working with a traumatised population	*The ups and downs are part of the work so I don't take it personally*
Reactions to work	Explores the participant's insight into the effects of secondary trauma and traumatisation and whether they cope with this through seeking support or by hiding the impact.	*The best way to deal with feeling burnt out at work is to seek support*

The term 'client' describes the person being served in a particular setting (e.g. student, person, resident or patient).

2.2. Interviews

Following completion of the training, semi-structured face-to-face interviews were conducted with the ACE co-ordinators and staff involved in training development (n=3), and wider SWP staff involved in training delivery (n=2) and a sample of staff who attended the training (n=15, staff were invited to interview a month post training attendance). Individuals were invited to interview by email from the research team. A sample of training participants were anonymously invited to be interviewed across each training group to ensure all roles and ranks were covered (Response, n= 4 and NPT, n= 11). Interview participants were given a participation information sheet, and informed that all responses were anonymised and confidential. Informed written consent was obtained from all who took part in an interview. Separate interview schedules were developed to enable a more specific line of enquiry.

ACE co-ordinators and training developers[g]

Interviews explored the ACE co-ordinator role, aims and objectives of the training, experience of developing and delivering the training, and perceptions of the impact of the training on police practice. The interviews also explored potential changes to the training and potential for rolling the training out to other BCUs and roles and ranks within SWP.

Wider SWP staff

Interviews explored knowledge and understanding of the training, involvement in the development and pilot of the training, current training provisions within SWP and how the AIAPV training could

g Two interviews were conducted with each ACE co-ordinator, following the completion of delivery of part 1, and following completion of the delivery of part 2.

be incorporated into existing provision, and considerations for potential roll out to other BCUs, roles and ranks.

Training participants

Interviews explored training participant's experience of attending the training, perceptions of training delivery the impact of the training on policing and perceptions on roll-out of the training to other roles and ranks within SWP.

2.3. Data analysis

An analysis template for the ARTIC was provided by the Traumatic Stress Institute in Microsoft Excel. Formulas in this template calculate mean scores for each of the five subscales, as well as an overall score. Possible ARTIC scores range from 1 (low awareness/poor attitudes towards trauma-informed care) to 7 (high awareness/good attitudes towards trauma-informed care). This data, alongside other quantitative data collected in the questionnaires was analysed using IBM SPSS Statistics for Windows, Version 24.0. Analysis used descriptive statistics, chi-squared, independent-samples t-test and one-way ANOVA.

Interviews were audio recorded, transcribed and pseudonymised before thematic analysis was completed on Atlas ti Version 7.5.15 software.

3. Questionnaire and ARTIC Results

151 SWP staff participated in the pre and post-training evaluation from neighbourhood (43%) and response teams (57%). This included staff across a range of ranks including; Police Constable (PC, 62%), Police Community Support Officers (PCSOs, 29%) and Police Sergeants (PS, 9%). Participant service lengthh ranged from two months to 27 years (average nine years; see Appendix 2, Table A1 for detailed participant demographics). 59 NPT staff also took part in the post -part 2 evaluation.

Previous training attended

Only just over a third of participants (36%) reported that they had previously attended at least one other training course in relation to vulnerability. Of these individuals, participants had attended an average of 2.7 courses each; Sergeants had attended the most courses with 43% reporting having attended at least one vulnerability-related course, compared to 34% of PCSOs and 37% of PCs. Similarly, participants from response teams had attended more courses than NPT participants (41% compared to 31%). The most common type of course attended by staff were in relation to domestic violence (51%) and mental health (35%; see Appendix 2, Table A2).

3.1. ACE/Trauma-informed care and practice

Pre-training

Staff attending training session one completed the ARTIC scale prior to the session commencing (N=151). The mean ARTIC scores for each subscale and the mean total score are shown in Table 2. Total ARTIC scores ranged from 3.40 to 6.79 (possible range 1 to 7, with scores of 7 indicating a more positive attitude towards trauma-informed care).

There was no significant difference for sub-scales and total ARTIC scores by team (i.e. neighbourhood and response; see Table 2). A significant difference was found by gender with females reporting higher overall ARTIC scores (4.92; Males, 4.66; $p<0.01$). PCSOs also had significantly more positive attitudes towards trauma-informed care, with Sergeants having the least positive attitudes. Participants with less than three years' service also had significantly higher ARTIC scores for total score and the sub-scales underlying causes of problem behaviours and symptoms and self-efficacy at work.

Post-training

Staff completed the ARTIC scale following completion of the training. Staff completing part 2 of the training completed scales post 1 and post 2.

Following attendance at part 1 of the training (all staff, n=151) mean ARTIC scores increased, showing improved awareness and attitudes towards trauma-informed care. Scores improved across all sub-scales (see Figure 2 and Appendix, Table A3). When examining total ARTIC scores, female participants remained significantly more trauma-informed than males, except for sub-scale *Response to problem behaviour and symptoms*. The significant differences for ARTIC scores observed for job role at baseline (pre-training) did not remain following attendance on the first training session, and no significant difference was observed in scores for attitudes towards trauma-informed care between role or team. Overall there was no significant difference in ARTIC scores by length of service, however for the sub-scales *Underlying causes of problem behaviours and symptoms* and *Self-efficacy at work*, participants with less than three years' service maintained significantly higher scores/good awareness.

h Length of service does not include time worked in other police forces.

Table 2: Pre – training mean ARTIC scores by job role, team and length of service (n=151).

	Underlying causes of problem behaviours and symptoms	Response to problem behaviours and symptoms	On the job behaviour	Self-efficacy at work	Relations to the work	Overall score
All						
Mean	4.21	4.57	5.06	5.17	4.77	**4.76**
SD	0.59	0.68	0.64	0.78	0.77	**0.49**
Gender						
Male	4.13	4.45	4.97	5.08	4.65	**4.66**
Female	4.35	4.78	5.21	5.32	4.96	**4.92**
p	*<0.05*	*<0.01*	*<0.05*	*NS*	*<0.05*	*<0.01*
Role						
PCSO	4.33	4.60	5.09	5.41	4.93	**4.87**
PC	4.18	4.57	5.11	5.11	4.73	**4.74**
PS	4.05	4.52	4.59	4.86	4.50	**4.50**
p	*NS*	*NS*	*<0.05*	*<0.05*	*NS*	*<0.05*
Team						
Response	4.16	4.57	5.14	5.08	4.73	**4.73**
NPT	4.28	4.58	4.95	5.30	4.82	**4.79**
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Length of service (yrs)						
< 3	4.45	4.65	5.27	5.60	4.78	**4.95**
3 - 10	4.15	4.56	5.08	5.16	4.77	**4.74**
11 - 19	4.10	4.47	4.89	4.90	4.77	**4.63**
≥ 20	4.22	4.82	4.92	4.93	4.85	**4.75**
p	*<0.05*	*NS*	*NS*	*<0.01*	*NS*	*<0.05*

Police Community Support Officer (PCSO), Police Constable (PC), Police Sergeant (PS), Neighbourhood Police Team (NPT);NS = Not significant, SD=Standard Deviation.

Figure 2: Mean overall ARTIC scores and sub-scales

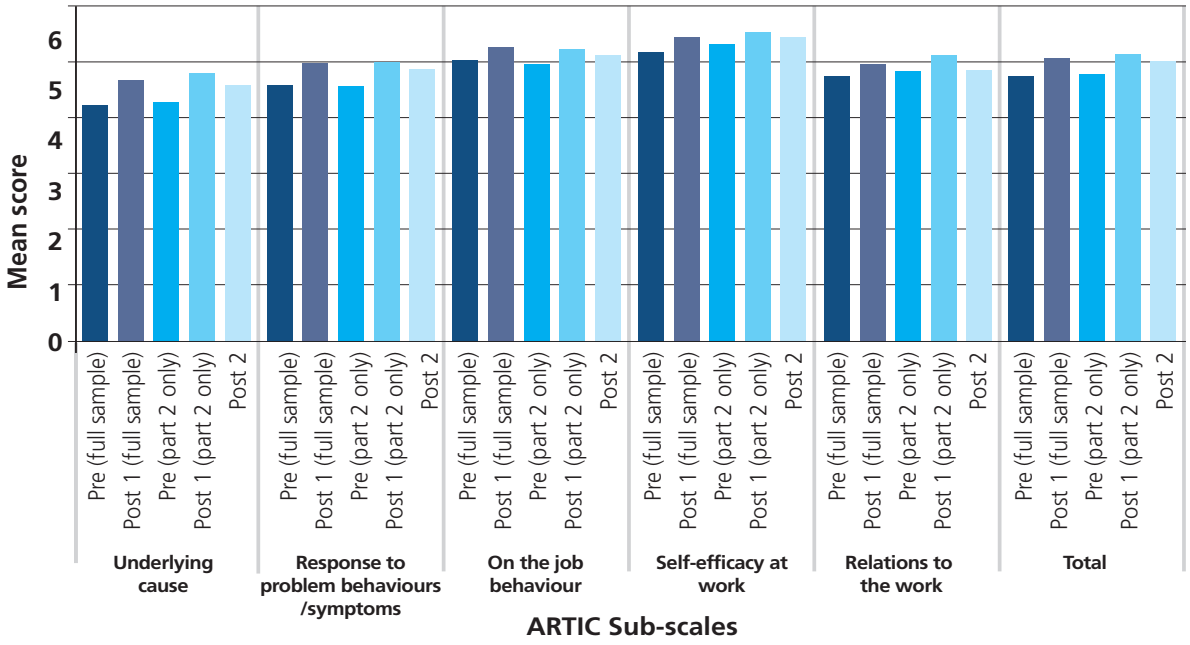


Table 3: Mean ARTIC scores, pre and post-1 training for the full sample (n=151)

	Underlying causes of problem behaviours and symptoms		Response to problem behaviours and symptoms		On the job behaviour		Self-efficacy at work		Relations to the work		Overall score	
	Pre	Post 1	Pre	Post 1	Pre	Post 1	Pre	Post 1	Pre	Post 1	**Pre**	**Post 1**
All												
Mean	4.21	4.69	4.57	5.00	5.06	5.27	5.17	5.46	4.77	5.01	**4.76**	**5.09**
SD	0.59	0.70	0.68	0.88	0.64	0.78	0.78	0.88	0.77	0.94	**0.49**	**0.80**
Gender												
Male	4.13	4.55	4.45	4.90	4.97	5.15	5.08	5.32	4.65	4.84	**4.66**	**4.95**
Female	4.35	4.94	4.78	5.16	5.21	5.48	5.32	5.69	4.96	5.30	**4.92**	**5.31**
p	*<0.05*	*<0.01*	*<0.01*	*NS*	*<0.05*	*<0.05*	*NS*	*<0.05*	*<0.05*	*<0.01*	*<0.01*	*<0.01*
Role												
PCSO	4.33	4.84	4.60	5.05	5.09	5.33	5.41	5.63	4.93	5.25	**4.87**	**5.22**
PC	4.18	4.65	4.57	4.98	5.11	5.29	5.11	5.42	4.73	4.90	**4.74**	**5.05**
PS	4.05	4.56	4.52	4.96	4.59	4.96	4.86	5.14	4.50	4.99	**4.50**	**4.92**
p	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*	*<0.05*	*NS*	*NS*	*NS*	*<0.05*	*NS*
Team												
Response	4.16	4.61	4.57	4.99	5.14	5.29	5.08	5.41	4.73	4.91	**4.73**	**5.05**
NPT	4.28	4.81	4.58	5.00	4.95	5.24	5.30	5.53	4.82	5.15	**4.79**	**5.14**
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Length of service (years)												
< 3	4.45	4.99	4.65	5.08	5.27	5.55	5.60	5.86	4.78	5.16	**4.95**	**5.34**
3- 10	4.15	4.66	4.56	5.01	5.08	5.20	5.16	5.38	4.77	4.95	**4.74**	**5.04**
11-19	4.10	4.48	4.47	4.88	4.89	5.13	4.90	5.29	4.77	5.00	**4.63**	**4.95**
≥ 20	4.22	4.63	4.82	5.16	4.92	5.27	4.93	5.38	4.85	5.06	**4.75**	**5.10**
p	*<0.05*	*<0.05*	*NS*	*NS*	*NS*	*NS*	*<0.01*	*<0.05*	*NS*	*NS*	*<0.05*	*NS*

Police Community Support Officer (PCSO), Police Constable (PC), Police Sergeant (PS), Neighbourhood Police Team (NPT); NS = Not significant, SD=Standard Deviation.

Table 4: Mean ARTIC scores, pre and post-2 training for staff who attended part 2 (n=59)

	Underlying causes of problem behaviours and symptoms		Response to problem behaviours and symptoms		On the job behaviour		Self-efficacy at work		Relations to the work		Overall score	
	Pre	Post 2	Pre	Post 2	Pre	Post 2	Pre	Post 2	Pre	Post 2	**Pre**	**Post 2**
All												
Mean	4.28	4.63	4.59	4.88	4.96	5.14	5.36	5.48	4.84	4.89	**4.81**	**5.00**
SD	0.56	0.87	0.63	0.89	0.65	0.88	0.73	1.03	0.83	1.01	**0.48**	**0.8**
Gender												
Male	4.20	4.51	4.46	4.82	4.87	5.09	5.35	5.50	4.75	4.70	**4.73**	**4.92**
Female	4.39	4.80	4.76	4.95	5.06	5.20	5.38	5.45	4.97	5.13	**4.91**	**5.10**
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Role												
PCSO	4.34	4.68	4.63	5.02	5.10	5.25	5.48	5.59	4.95	4.95	**4.90**	**5.10**
PC	4.18	4.50	4.60	4.50	4.78	4.95	5.11	5.10	4.78	4.74	**4.69**	**4.76**
PS	4.00	4.57	4.17	4.6	4.23	4.71	4.94	5.49	4.14	4.8	**4.3**	**4.83**
p	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Length of service (years)												
< 3	4.51	4.78	4.57	5.13	5.17	5.24	5.59	5.51	5.00	4.94	**4.97**	**5.12**
3-10	4.23	4.65	4.68	4.88	5.02	5.12	5.38	5.49	4.82	4.77	**4.83**	**4.98**
11-19	4.13	4.41	4.40	4.66	4.79	5.02	5.16	5.50	4.85	5.10	**4.66**	**4.94**
≥ 20	4.17	4.55	4.53	4.57	4.48	5.15	5.02	5.35	4.57	4.93	**4.56**	**4.91**
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

Police Community Support Officer (PCSO), Police Constable (PC), Police Sergeant (PS), Neighbourhood Police Team (NPT). NS = Not significant, SD=Standard Deviation.

For NPT staff who completed part 2 of the training, attitudes to trauma-informed care were slightly less positive than after part 1 but remained more positive than pre-training (see Table A3). After part 2 of the training, no significant difference in scores was observed by any demographic factor (see Table 4).

3.2. Confidence to act in an ACE-informed way

Participants were asked to indicate their confidence across a range of items on a scale from 1 (not at all confident) to 10 (completely confident). Overall, pre-training staff reported moderate to high levels (mean scores of 7 or above) of confidence on measures including responding to vulnerable people, using professional judgement and the ability to identify if additional support is needed.

There were significant differences in confidence levels by team with response team members reporting higher confidence scores for responding to vulnerable people (7.73; NPT, 7.16; $p<0.05$; see Appendix 2, Table A4) and understanding when a PPN needs to be submitted (8.65; NPT, 8.17; $p<0.05$). Participants with 20 years or more police service reported higher confidence scores for using professional judgement (8.50) compared to those with three years or less experience (7.32; $p<0.05$).

Following the training, participants reported improved confidence in responding to vulnerable people, using professional judgement and understanding of processes i.e. when a PPN needs to be

submitted (see Table 5). After part 1 of the training a significant difference in confidence scores was found by team with response staff reporting more confidence in the ability to identify whether or not additional support is needed (8.67; NPT, 8.33; $p<0.05$; see Appendix 2, Table A5). The significant difference by length of service present at baseline did not remain after part 1 of the training. Female participants scored themselves significantly higher on the ability to interact with vulnerable people sensitively (8.78; male, 8.38; $p<0.05$).

Overall, there was a slight decrease on some items at post-2 however confidence scores remained higher than pre-training (see Table 5).

Participants were also asked to score their confidence in understanding the effect of trauma and ACEs using a set of likert scales. Pre-training, staff reported low levels (mean scores of 3 or below) of confidence in their understanding of an ACE-informed lens and ability to use an ACE-informed approach, see Figure 3. Pre-training, participants who were male, sergeants or NPT had significantly higher-scores for understanding what an ACE-informed lens is (see Appendix 2, Table A6). There were no other significant differences by gender, role, team or length of service.

Participants reported more confidence in their understanding of ACEs and ACE-informed approaches after training (both post 1 and post 2; see Figure 3, Appendix 2, Table A7).

Following completing part 1 female participants reported more confidence in their understanding of the impact of trauma on the brain, what an ACE-informed lens is and the ability to use a trauma-informed approach (see Appendix 2, Table A8). PCSOs reported higher confidence scores for understanding the impact of stress and trauma on the brain (8.73; PC, 8.60, PS, 7.93; $p<0.05$). No significant difference remained in confidence scores by team or length of service.

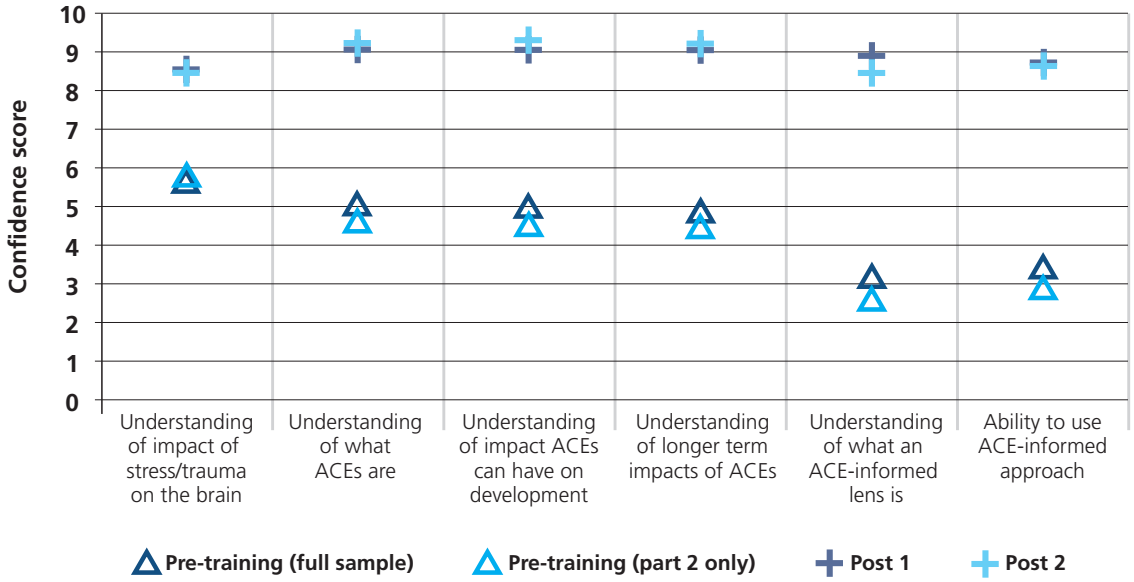
For individuals who took part in part 2 of the training, female participants were significantly more confident in understanding the longer term impact of ACEs (9.46; male, 9.00; $p<0.05$).

Table 5: Mean confidence scores for responding to vulnerable people

Confidence scale	Pre-training (full sample, n=151)		Pre-training (part 2 only, n=59)		Post 1 (full sample, n=151)		Post 1 (part 2 only, n=59)		Post 2 (n=59)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Responding to vulnerable people in your role	7.49	1.46	7.17	1.40	8.55	1.07	8.41	1.06	8.31	1.18
Interacting with vulnerable people sensitively	7.79	1.28	7.66	1.16	8.53	1.11	8.42	1.09	8.41	1.2
Using your professional judgement	7.80	1.24	7.66	1.10	8.43	1.07	8.33	1.15	8.28	1.19
Ability to identify whether or not additional support is needed	7.75	1.26	7.79	1.18	8.53	1.05	8.38	1.15	8.31	1.15
Understanding of when a PPN needs to be submitted	8.44	1.44	8.21	1.50	8.85	1.33	8.61	1.65	8.95	1.13
Understanding of multi-agency approach & roles of different agencies	6.74	1.88	6.92	1.65	7.75	1.63	7.68	1.60	8.19	1.53

SD=Standard Deviation.

Figure 3: Mean confidence score for understanding ACEs and an ACE-informed approach pre and post training



3.3. Awareness/Engagement with staff support services

The police workforce is engaged in challenging, distressing work. Staff are exposed to trauma and the nature and severity of incidents that the police deal with can have an adverse impact on well-being. Research on the response to vulnerability by SWP identified the impact of vulnerability demand on staff well-being and a limited knowledge and uptake of staff support services[1]. The AIAPVT pilot therefore included information on the support available to SWP staff experiencing stress and secondary trauma (see Appendix 1), thus the evaluation enquired about awareness and engagement with staff support services.

Pre-training

Staff were asked to indicate their awareness and usage of a range of support services available to SWP staff. Despite almost seven in ten participants reporting awareness of some services such as My Mind[i] (73.5%) and My Health[j] (64.9%), other services such as the Red Arc[k] (21.2%) and the Blue Light Infoline[l] (21.2%) were less well known (see Appendix 2, Table A9).

Approximately 1 in 4 (26.7%) participants reported that they had accessed a support service whilst employed by SWP. Of these, 15.3% had accessed one service, 6.0% had accessed two services and 5.3% had accessed three or more. The most commonly accessed services were My Mind (12.6%) and My Health (13.2%) followed by the Police Federation[m] (8.6%). Despite the low level of uptake, six in ten staff (64.9%) reported that they agreed or strongly agreed that following attendance at a traumatic incident they should seek support from formal services offered by SWP. There was no significant difference in attitudes towards support (by colleagues/supervisors, formal services, feeling supported to access services) by gender, role, team and length of service.

i An internal counselling and trauma services, including Trauma Risk Management (TRIM) which provides peer-led assessments and support following incidents.
j Occupational health services;
k An Independent Care Advisory Service, providing advice and emotional support for people suffering a serious illness, bereavement or long-term disability
l Mind ran helpline offering confidential, independent and practical support, advice and signposting on mental health and well-being for emergency service staff, volunteers and their families.
m Providing rehabilitation and health services, a 24/7 support line and counselling for officers who find themselves having to cope with often life changing situations through the course of their duties.

Post-training

Following training, participants were asked if as a result of attendance at the training they would be more likely, less likely or no change in seeking support (either formal support or informal i.e. colleagues). After training session one, three in ten (29.3%) participants reported that they were more likely to seek support from colleagues, and over a third (36.1%) said they would be more likely to seek formal support from SWP. PCs were significantly more likely to seek support both formally and informally (see Appendix; Table A10). Post-part two of the training, this increased to 39.7% and 46.6% respectively, no significant differences by gender, role, team and length of service remained.

3.4. Attitudes towards delivery of the training

Participants were asked how much they agreed or disagreed with a range of statements relating to the delivery of the training using a five point scale from strongly agree to strongly disagree. Over 90% of participants agreed or strongly agreed for all measures, these included that the training content was relevant, delivered effectively, and that they developed knowledge and skills from the training which they then reported as feeling confident to use (see Figure 4).

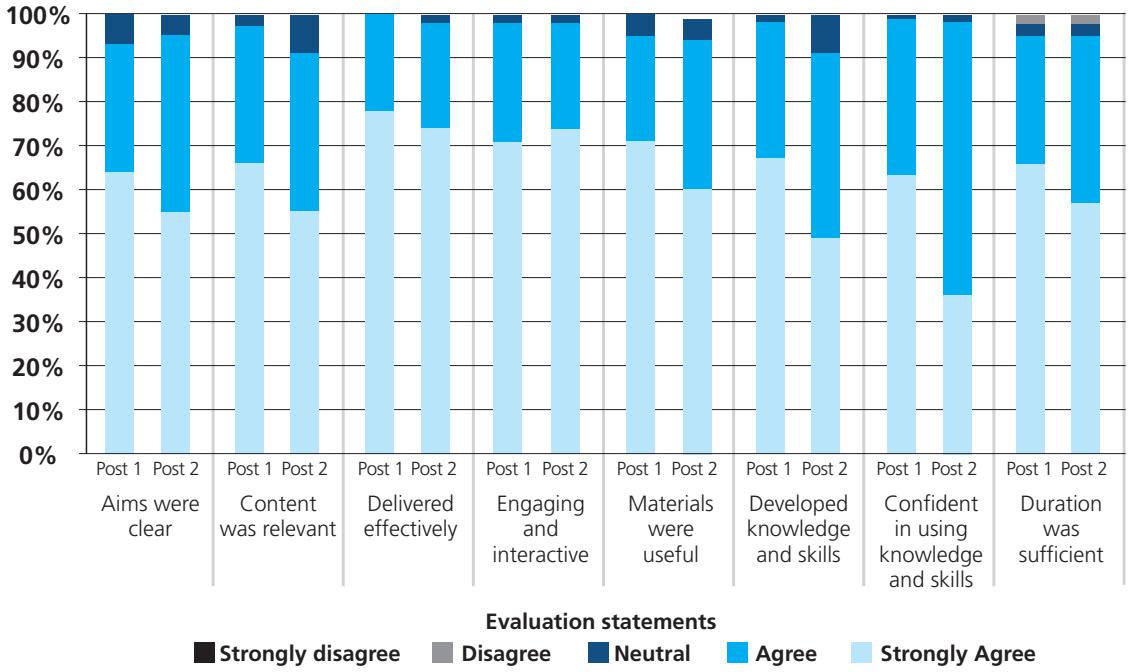
3.5. Impact of the training on police practice

Pre-training nine in ten staff (89.3%) reported that they currently engaged with other agencies in their current role whilst supporting vulnerable people.

The post part 2 training questionnaire asked NPT participants if they had used the ACE LENS card (see Appendix 1) since attending the first training session. Three in ten (29.3%) reported they had used the card and when asked about its usefulness on a scale of one to ten with ten being very useful, participants reported an average score of 8.

SWP asked staff who had attended the training to subsequently record the number of ACEs that they identify for each individual they submit a PPN for (ACEs are not enquired about). This information is to be recorded on the officer observations section of the PPN. Seven in ten participants (69.2%) reported that they had recorded the number of ACEs identified on PPNs submitted since the training.

Figure 4: Proportion of participants strongly agreeing/agreeing with selected statements on training delivery, post part 1 and 2



Participants were asked if elements of the training would influence their practice, nine in ten agreed that their learning in the following areas would influence their practice: understanding of the thresholds of other agencies when responding to vulnerability (87.5%); understanding of the process that individuals go through when trying to change their behaviour (94.8%); techniques in motivational interviewing (93.0%) and understanding of the importance of protective factors in building resilience (96.5%).

Valuable elements of the training

Participants were asked to indicate which elements of the training they found most valuable. The use of video clips and animation (Post 1, 57.1%; Post 2, 69.6%) and group discussions and activities (Post 1, 46.3%; Post 2 64.3%) were selected as the most valuable for both post first and second training session. Post 1, seven in ten (69.0%) also indicated Information on ACEs and generational transmission and six in ten (58.6%) selected information on the biological impact of trauma on children. All participants' post 1 reported that they felt that there are benefits to the public of adopting AIAPV.

4. Qualitative findings from follow up interviews post training

This section explores the findings from interviews with training participants, training providers and wider SWP staff involved in the organisation of the training. Findings cover the impact of the training on the knowledge and skills of police staff; impacts on policing, PPNs and multi-agency working. It also explores considerations for the scale-up of the training including its delivery and the importance of training environment.

4.1. Impact of training on staff knowledge and skills

Some participants indicated prior awareness of generational cycles of crime and the impact that growing up in adverse environments may have on individuals;

> *"If children have difficult upbringings, they're more likely to be involved in crime."*
>
> Interview 9, PS

Further, participants indicated that they work with large amounts of vulnerability, and had a good understanding of the referral systems, as one participant stated "*that's my bread and butter, I do that, and I'm in that world every day*" (Interview 12, PS). Some participants reported that they felt skilled in engaging with traumatised individuals, but felt their knowledge of the impact of trauma prior to the training was *"more of a general awareness"* (Interview 8, PC) and that attendance had given them a deeper understanding of the impact of trauma and ACEs. It was reported that the training provided a platform for awareness which would assist all staff in responding to vulnerable individuals:

> *"So really if you have the training, it should make you more aware, so there's no excuse if you fail somebody in regards to their needs."*
>
> Interview 11, PCSO

The majority of staff noted that since attending the training they had been able to identify ACEs when attending calls and recognised that a large proportion of the people they came into contact with had, or were, experiencing adversity:

> *"Nearly every call we go to there's an identifiable ACE, when you get to that 4 [ACEs], you should be thinking well this [having multiple ACEs] could have a big difference then."*
>
> Interview 9, PS

Impact on skill development

During interviews and throughout the delivery of the training a small number of participants stated they felt the training needed to be pitched at a higher level as it was reported to be similar to initial training.

> *"I don't think any of that was relevant, because we do a lot of it with our basic training."*
>
> Interview 19, PC

> *"All it's done [the training] is perhaps put a new structure or a new terminology around stuff that we already know."*
>
> Interview 12, PS

Furthermore, it was stated by almost all participants interviewed that some of the skills covered in the training are developed through experience; "*these are skills which I've developed over a long period*

of time" (Interview 10, PC). Because of this it was suggested that the training may therefore be better suited to new staff and PCSOs who have less experience in working with traumatised people.

> *"PCs have probably got more experience of dealing with how to manage those people, volatile people, as opposed to PCSOs. I think that part of the training may be more beneficial to PCSOs than it would be to PCs."*
>
> Interview 9, PS

Despite this, most participants stated that the training allowed them to gain a deeper insight and understanding of ACEs and trauma; "*whilst we anecdotally know that, to see it in black and white was great*" (Interview 13, PS).

4.2. Impact of training on policing

During interviews, participants were asked to describe how the training had impacted on their policing practice. All staff interviewed reported that there were positive impacts of attending the pilot training including how they worked with individuals who had experienced/were experiencing trauma or on PPN submission.

Working with individuals who are vulnerable

Many staff indicated that training had led them to change their thinking around their response to individuals who they previously had typically viewed as problematic and/or confrontational. Staff recalled that the training had lead them to now consider the trauma that may be underlying this behaviour and work with this as opposed to only responding to an individuals' presenting problems. This new way of working meant that staff would "*not to go in there with any pre-conceived ideas and not to jump to conclusions about why people behave the way they do*" (Interview 18, PCSO).

> *"You get a snapshot and you only see, for instance the 14 year old who's a missing person, who is an absolute nightmare to deal with, who won't engage...I think it is a little bit of a wake-up call for some people, of, of why they've ended up in that position, and what's happened before, so I thought that was really useful. I enjoyed that."*
>
> Interview 13, PS

As a direct result of the training many participants stated that they would now enquire about trauma and try to gather more detailed background information; *"when we're speaking to people...we're putting that mind-set into place that we're asking those additional questions, where we may have asked basic police questions*" (Interview 9, PS). This extended to reflection of the importance of staff interactions with individuals, particularly children to ensure good engagement.

> *"You've got to talk to them on their sort of level, so rather than going in all guns blazing so to speak, being that like scary figure of authority ... you actually just want to have a general conversation with them, to kind of build a rapport."*
>
> Interview 14, PCSO

A number of participants identified that they would now reflect on the impact that their own behaviour may have when responding, "*so when I go to calls, it does open my mind a bit more to how my behaviour may affect their behaviour in the future*" (Interview 15, PCSO). It was felt that working in a trauma-informed way would enable staff to be more patient and friendly and consequently, able to build better relationships and gather more detailed intelligence, "*get a bit more history, a bit more information"* (Interview 8, PC). Participants highlighted that these changes to police practice would also improve the support vulnerable people receive from the police:

> *"Perhaps I wouldn't have offered the intervention, just put the PPN in, now um, I would look at that incident and look at the circumstances, um, and identify that there's an ACE before I actually put the PPN in."*
>
> Interview 21, PC

One participant stated they had used the hand model for brain science learnt during the training with a child to help them to understand their anger and behaviour:

> *"I've actually used it [hand model] a few times, err, children in the park. I had one little boy who was quite angry, and I could see he was quite angry, and it was a very physical representation of it, and I explained it to him, well, I obviously asked him what was wrong, and once we had done every, all the standard formalities, I explained it to him, and then he copied it, and err, he's used it as well."*
>
> Interview 15, PCSO

Impact on PPNs

It was not intended for attendance at the training to impact on PPN submission, as this is a safeguarding requirement. Generally staff felt that training participation had little impact upon their decision making for PPN submission. Staff reported that PPNs are submitted for all forms of vulnerability, and that given the number of PPNs which do not result in an intervention by social services[1], it would have been useful for the training to include guidance on appropriate PPN submission. However staff reported some impacts of the training on PPN submission. In addition to the training, SWP requested that staff now include the number of ACEs identified for the subject on all PPN submissions. Staff reported a high level of compliance with this request and that the language of ACEs was now being used frequently amongst attendees:

> *"People are using ACEs terms to identify ACEs when they go to calls… so I think it has been a drip feed into our daily practises."*
>
> Interview 9 PS

Furthermore, it was noted that other staff across SWP who had not participated in the training were now identifying ACEs:

> *"CID appear to be including ACEs on PPNs without having the training, thus, appears to be filtered across."*
>
> Interview 9, PS

Learning about the number of PPNs which resulted in action by social services led some staff to question if this was a result of the police not adequately describing on a PPN the risks that they observed, "*maybe I'm not putting it in there right, or they're not seeing it right*" (Interview 8, PC).

> *"You kind of, you forget that you've been to that house, you've spoken to that person … whereas, the person reading it hasn't. So, you might sort of realise that you've got to be specific about things, not just be vague about, 'the house was in a state."*
>
> Interview 18, PCSO

This resulted in staff reflecting that they may now consider further what information to include on the PPN. Some participants noted that this had led them to alter their practice, gather more history on people named on PPNs and ensure that PPNs had "*a bit more content to it.*" (Interview 16, PCSO).

> *"I am more alert to different vulnerabilities that may pop up, or they may mention something um, which then would affect my PPN submission. Whereas before I would just go in, knowing they were mental health sufferers, write that they have mental health, but I wouldn't really be open to any more, as in like, I wouldn't be looking for them."*
>
> Interview 15, PCSO

> *"Including at the bottom what I believe to be the impacts on the children…we do tend to forget them and the impact it's having on, it's just as important what that child's going through because the physical and emotions she's going through."*
>
> Interview 10, PC

4.3. Impact of training on multi-agency working

As per other research findings[1], the majority of participants highlighted frustrations of multi-agency working, particularly a strained relationship with social services. Participants reported frustrations on learning the number of PPN referrals which result in intervention by social services, which opposed the expectation that referrals were resulting in action for individuals:

> *"That information is going into these agencies, we, rightly assumed that something, someone is looking at that information and doing something about it."*
>
> Interview 12, PS

A number of participants stated that they felt that their attendance at the training would help to improve multi-agency working in that "*there's a unified process now, a standard for everyone*" (Interview 15, PCSO). There was however a disjuncture across roles, as it was felt multi-agency working was more difficult for response due to high workloads.

As a result of the training participants noted a further understanding of services available in the local area, and clarity for what can be done to support individuals. Staff reported feeling empowered to find out more about services available in the local area and "*made me a lot more aware of like looking to see what we've actually got in our area*" (Interview 14, PCSO). A number of participants shared examples of multi-agency working, including the use of local hubs for information sharing and advice, and working with housing, schools and wider multi-agency arrangements.

> *"Knowing that there are other agencies out there as well, that support you…I think it's really good… for me, anyway, that's the key thing."*
>
> Interview 17, PCSO

Some participants stated that they now felt confident to make early help referrals and had made referrals to early help since training attendance "*we've started using…we've put some in this week I think, no last week*" (Interview 12, PS).

Need for other agencies to receive the training

Staff reported a need for other agencies and organisations to have similar training, noting that this would improve communication and multi-agency working, "*if that can get rolled out to everyone, then hopefully that stops some issue we have like lack of communication*" (Interview 15, PCSO). A shared understanding was reported to be crucial to multi-agency working and some staff indicated that they would personally share their learning with other agencies:

> *"We've got a massive boy's and girl's club up by me on Friday, with ninety kids in it … so, I'll be speaking to the guys on that, as well … and briefly mentioning this."*
>
> Interview 17, PCSO

> *"We're going into schools and saying oh, have you heard about the ACEs training ... it's kind of already a current, a bit of a commentary that we're beginning to use."*
>
> Interview 19, PC

4.4. Considerations for future training development

There was a general consensus amongst training participants interviewed that the training was of strong relevance to the field of policing and in general attitudes towards the training were very positive. However, a number of considerations for the scale-up of training were highlighted across the interviews.

Pre-awareness of training

Staff reported a mixed-awareness of what the training was about pre-attendance. Some staff noted that they were informed via email which detailed the requirements of the course (i.e. date, time, location, uniform), as well as a brief description of what ACEs stand for, other staff reported very little information on the course. The training providers felt that it would be helpful for staff to formally receive information about the course prior to attendance, through a written briefing, NCALT (National Centre for Applied Learning Technologies; online) package or video on the intranet. Although a small number of participants agreed that more information on the training would be helpful, the majority of participants felt that this should be limited due to constraints to explore the information and because of a consensus that it could have a negative impact on engagement, due to staff having preconceived ideas and agendas.

> *"It's like Google …you've got something wrong with you and then you Google the symptoms and you're dying…then you go to the Doctor and you've got a cold. So, by me not being told what I'm looking for, then I won't Google it."*
>
> Interview 17, PCSO

Training tools

All the participants found the ACE animation particularly useful "*it outlined everything that ACEs represented in about four minutes*" (interview 11, PCSO) and it was reported that the video offered a good visual representation of the impact of childhood adversity. Participants also stated that they identified people who they felt the animation portrayed *"you can associate a lot of families to that, the cartoon that they showed us, so, it's just making you kind of realise that, it's always out there, isn't it?"* (Interview 19, PC). Many participants found the case study particularly useful in developing a clearer understanding of the link between childhood adversity and later life outcomes:

> *"The case study was something that really stayed with me because then you can see it in, in real life. You can see it actually happening. You can picture people from your wards in that, in that area."*
>
> Interview 15, PCSO

Some participants requested more real-life stories from the training which highlighted the role of the police and positive examples of when the police have used a trauma-informed approach with success "*that's obviously the best way to learn, 'cause people can see that it's been a success and how we can link into it*" (Interview 9, PS).

> *"maybe having a bit more like real-life stories, again sort of drives home what it's like, right, you've got to make sure that you know, we get this right, otherwise these are the consequences."*
>
> Interview 8, PC

Participants also reported that the information packs provided to them during were beneficial, acting as a reminder and refresher. The ACE LENS card was in particular reported as being of use:

> *"The little cards you gave us … so now we just carry it around with us … if ever we don't … if we're somewhere and there's always ACEs around us, even if that's not at the forefront of our mind, I'll get back in the car afterwards and be like, "Ooh, look at all these" … I found that really handy."*
>
> Interview 16, PCSO

Although some participants reported having made early help referrals, other participants reported that they felt it was not relevant to policing, and felt that this was the responsibility of social services: "*My personal opinion is that you know, social services should be obviously doing the early help, you know, they should be referring people*" (Interview 11, PCSO).

Understanding wider operational changes

Participants were keen to understand what other operational changes would be in place as a result of this training and what processes if any would change as a result.

> *"Throughout the training, we were questioning what our roles were gonna be, in relation to how we were gonna implement it."*
>
> Interview 9, PS

A number of participants felt the training needed to include detail on how this learning could be applied to policing and what to do to help vulnerable families beyond PPN submission. Some participants stated that the only change they felt was required was to include ACEs on PPNs:

> *"What I should be doing in regards to the PPN, but that's as far as it goes. I don't know if that is at all there is, or I may be I'm missing something out."*
>
> Interview 11, PCSO

Police culture and disruption

During the training it was reported that the trainers encountered some staff frustration and disengagement. All participants stated that they recognised the challenge of delivering this type of training to police who can be "*outspoken, and a bit uncouth sometimes*" (Interview 19, PC). It was felt that this was due to police culture; "*Police officers are not the easiest people to speak to because they normally do the talking and not the listening" (Interview 10, PC).* Reflecting on the negative staff in their training group, one sergeant stated "*…they wanted to voice their opinions, and they felt that the social workers didn't understand. Well of course the social workers understand better than anybody else"* (Interview 13, PS). Some participants thought that this negativity was particularly common for longer serving frontline staff who are considered *'old school'* and may be less willing to adopt a more therapeutic approach to working with vulnerability. Participants noted that younger staff have a greater understanding of vulnerability and risk "*because it's out there, people are talking about it, we are more aware of it, so the younger ones are sort of, they come, come here with the understanding, they understand a little bit more*" (Interview 13, PS).

> *"You had people who were from response who'd done the same job for 30 odd years, they're almost retired, and they don't care."*
>
> Interview 15, PCSO

Despite the challenges present many of the participants identified the importance of needing to adopt this approach to their policing to improve outcomes for children who experience ACEs. The learning from the training indicated that training providers need to be resilient and equipped to respond to potential conflict and possible negative attitudes towards the content.

4.5. Training duration

A small number of participants felt the training was too long and could be condensed down to a shorter version to improve staff engagement "*a lot of what we did on the first day, we could have condensed down to a couple of hours*" (Interview 19, PC). However, the majority of participants felt that the duration of the training was sufficient and that anything shorter would be too much for staff to digest "*it would be too much to do in one day 'cause you'd… you'd just lose people*" (Interview 12, PS). It was noted however that more time was needed to adequately learn about the early help referral process and for tactical skills "*I don't really think that two and a half… one-and-a-half-day input is going to give my PCSOs the skills to sit down and speak to people who are you know, vulnerable, traumatised. They just… they're not going to do it*" (Interview 12, PS).

4.6. Training roll out

Roll out across SWP

All participants interviewed felt that the training should be made mandatory to staff across SWP, recognising that the training can only add benefit to their practice. It was argued to be particularly important to ensure a force wide adoption of a trauma-informed approach to policing, that staff had universal knowledge and to provide consistency in terminology and assessment of risk.

> *"You have inputs on things sometimes, and they're a waste of time, you know. Or there things that aren't suitable to us, but this is something that would be benefit, there's no negative impact on doing the training. It's only going to be a positive thing."*
>
> Interview 15, PCSO

This was recognised to also be important due to high levels of staff movement between departments and role change. *"I'd say it should be rolled out in general"* (interview 17, PCSO).

It was felt that the Public Service Centre, as the first point of contact would benefit from the training as it would help the call handlers improve the conversations they have with traumatised people. It was however, noted that the training would need to be adapted to be more aligned with the nature of their own role. Furthermore, it is thought that the PPU should receive the training because of their role assessing PPNs and referrals to other agencies, and any contact had with clients through follow-up work that is done "*for them to have an understanding when somebody comes in to report something they can perhaps have a little more thought and perhaps ask more questions"* (Interview 4, wider SWP staff). Reflections captured at the training indicated concern about the PPU having not received the AIAVPT:

> *"I found it a bit strange that front line officers like myself were getting training prior to public protection officers. I thought to myself, well, I'm in… I'm putting things on that I find following ACEs and that's going to PPN but the people there are maybe they're wondering what that is."*
>
> Interview 10, PC

With regards to management, it was thought that Sergeants, Inspectors and Chief and Bronze Inspectors should receive the training, due to their involvement in decision making and risk assessment of incidents, but that senior management should receive a condensed version. Some participants thought that modified versions could be delivered to staff not working on the frontline and dealing directly with trauma.

Trainers' background/experience

It was felt that the training providers having a social work background was essential in the delivery of the training as this created a platform for knowledge sharing, and understanding of the work of different sectors, as an ACE co-ordinator described; *"bringing that information and knowledge from our sector to the police"* (Interview 2, ACE co-ordinator). Training participants similarly reported that this was beneficial "*It was very nice to hear the social workers' life, real life stories, um, as opposed, we get a lot of err, generic training delivered by generic trainers"* (Interview 13, PS).

Participants reported that it was essential that the trainers providing the training were 'experts', and were able to answer any questions participants had and draw on their experience to provide examples: "*Both trainers knew exactly what they were talking about, and there was no umming and ahh-ing with them. Answer all, any of the questions that come out*" (interview 20, Response PS). Participants felt that although it may be practical for SWP Learning and Development Service to deliver this training, the training would not have the same impact and credibility.

> *"I really don't think that it would have been, um, as positively received had it of been delivered by the police. I think they may have felt it was just another police tick box, chalk and talk type thing."*
>
> Interview 7, training developer

Participants commented on the passion the trainers displayed during the delivery of the training, which they felt kept them engaged throughout. The trainers were described by participants as *bubbly, confident, engaging*, and *light-hearted* which participants reported being very receptive to and generally feeling comfortable in their presence.

> *"Sometimes you go to courses, especially day courses, and either the person involved, or the person leading it, isn't passionate about it, therefore they aren't good public speakers, and they can't hold a conversation, they can't keep you entertained while delivering the information, but these two were really good."*
>
> Interview 15, PCSO

A couple of participants also expressed a desire for guest speakers to share their personal experiences of working with other agencies and to see the theory in practice, i.e. a previous service user:

> *"bring somebody who was… instead of the cartoon character on the screen is, well, a real person who's been there and come through it and this is their experience of how they worked with those agencies."*
>
> Interview 12, PS

Training environment

Staff overwhelmingly supported the interactive nature of the training. It was felt that this was essential to the learning environment for the police and that the training was "*much more engaging … definitely better than the normal training we have*" (Interview 9, PS). In particular, participants showed preference to the variety of methods used to deliver the training which supported the different learning styles of staff: "*there were visual aids, handouts, personal knowledge, bit of fun work for people, case studied to do, so there was a good variety which kept… keeps your audience stimulated and keeps them, you know, keeps them interested*" (Interview 12, PS).

All participants highlighted the importance of a positive training environment to allow an open and friendly atmosphere for learning and allow staff to feel comfortable in discussing sensitive topics: "*we all shared our experiences, and kind of tailored it. They said, from obviously their perspective of their job, and then, it was like open discussion how we could tailor it to our jobs*" (Interview 14, PCSO). It was perceived that the trainers had managed to create the right environment "*I thought that was pretty suitable*" (Interview 12, PS).

The importance of the training taking part in an external venue and not on SWP premises was also highlighted. The benefits of this included providing a less formal environment without distractions, which is essential when delivering such sensitive training: "*I think everyone enjoyed going to an external venue, I think it's something different, and, it takes you out of this [police station] environment*" (Interview 20, PS). It was reported that this, combined with being out of uniform made the training a lot more relaxing:

> *"I feel a lot more comfortable doing it, 'cause typically we go to porta cabins in Headquarters, for training, when we're in uniform, it's not comfortable."*
>
> Interview 9, PS

Mixed training group

There was a discordance between participants as to whether future training should be split by role. The ACE co-ordinators perceived that it "*works well having response, NPT and PCSOs together because it gives them an opportunity to discuss how their roles are very different*" (Interview 1, ACE co-ordinator). Participants identified a number of benefits of being trained alongside different colleagues, including being able to learn from their experiences, sharing best practice and discussing the challenges of their roles. However, issues in attitudes and a difference in job role led to a small number of participants feeling that it might not be suitable delivering training to both NPT and response at the same time. A number of NPT participants talked about how negativity from response impacted upon their learning experience:

"It did kind of feel like there was a bit of tension and a bit of atmosphere and when you wanted to say something, you kind of stopped and thought before you said anything, you know?"
Interview 18, PCSO

"It's difficult to provide something like this to NPT and response, because the roles are so different, so, in future, it would be better if it was NPT and then response had their own course."
Interview 15, PCSO

Other participants did not feel there was a problem receiving training in a mixed group because although the job is different, the processes are similar "*I mean that's our world. I manage PCSOs, I manage PCs. It's the police family*" (Interview 12, PS).

When exploring rank, participants identified that they felt the training of different ranks together worked well, "*everyone's in plain clothes anyway, so unless you know them, you know, through the job, you wouldn't know anyway*" (Interview 15, PCSO), "*I felt comfortable, err, in, in the environment, even though I was sat next to a sergeant, I didn't feel like I could not speak my mind*" (Interview 11, PCSO). However, it was recognised that management and roles above the rank of Sergeant should probably be trained separately.

Current training provisions

Participants stated that they receive a lot of vulnerability training which is considered "*a real growth area*" (Interview 4, wider SWP staff). It was anticipated that the ACE training could be incorporated into the vulnerability training plan and that ACEs could be an underpinning theme within all vulnerability courses, to bring each form of vulnerability back to its root cause.

"when we are doing domestic violence, we could perhaps look at the little bit of the background as to how we come to this position and I believe that we will probably find that people have had the childhood experiences."
Interview 4, Wider SWP staff

5. Discussion and recommendations

Research with SWP indicated that current vulnerability training does not meet the needs of the modern policing role.[1] In response training was developed to ensure staff have the right skills and knowledge to assist vulnerable individuals in times of crisis and need. The AIAVPT pilot aimed to provide staff with an understanding of the impact of ACEs and trauma-informed interventions, which it was hoped would increase the competency and confidence of police when responding to vulnerability. The pilot was delivered to frontline police (NPT and response teams) in a pilot area in 2017 and resulted in a number of positive changes including increased staff knowledge of ACEs and confidence to work in an ACE and trauma- informed way.

The evaluation observed significant increases in awareness of and good attitudes towards trauma-informed care (TIC; measured through the ARTIC scale) across all sub-scales, with the overall mean ARTIC score increasing from 4.76 to 5.09 post first training session. The significant differences in observed ARTIC scores pre-training for females, PCSOs and members of staff with less than three years' service were removed following training participation. For those taking part in the second training session (part 2), despite the decreases seen in ARTIC scores post the second session of training for NPT staff, attitudes towards trauma-informed care remained higher for all sub-scales and overall scores (5.00) than pre-training, thus suggesting a positive change in attitudes across staff. These preliminary findings from the use of the ARTIC tool within policing, highlight that this method, when combined with additional understanding from staff questionnaires and interviews (small sub-set, 10% of those trained) is appropriate for measuring attitudes towards trauma-informed care with the police.

Given the increasing demand that vulnerability places on police resource, a low number of staff reported having previously attended training which related to vulnerability (in addition to their core training), highlighting a considerable need for staff to receive additional training in this subject. Participants reported an existing skill set for working with traumatised individuals developed from their experience of working in the police. For some, the content of the training was too basic and did not build upon current training for policing, it is therefore important that any training delivered to police takes into account training gaps and builds on existing knowledge rather than duplicating it. This also has implications for the timing that this training could be delivered if roll out was completed, as it could be embedded into existing training programmes. In general it should be noted that staff reported that the training provided a greater depth of knowledge which was felt to positively impact the ability of staff to respond to vulnerability. Generally staff held very positive views about the AIAPVT training, reporting that it had had a beneficial impact on their knowledge, attitudes and behaviours, ultimately enabling staff to work in a more trauma-informed way.

Following the training, participants reported improved confidence in responding to vulnerable people, using professional judgement and many staff indicated that training had led them to change their thinking around their response to individuals who they previously had typically viewed as problematic and/or confrontational. There were also significant increases in reported confidence for understanding of the effect of trauma and ACEs, with mean scores for understanding of ACEs and their impact on child development almost doubling from pre scores following the first session of training, and scores for understanding an ACE-informed lens increasing almost three-fold. Furthermore, findings from interviews with staff post-training indicated that staff felt increasingly confident in identifying ACEs.

From interviews with a small subset of training participants, improved knowledge, awareness, and feelings of confidence was evidenced, however the strength of evidence of any change in behaviour or impact was limited. However, positive examples of changes in practice were demonstrated, including staff now reporting submitting early help referrals. This may also be associated with staff reports that the training offered limited content on operational support for what to do. Participants were keen to understand what other operational changes would be in place as a result of this training and what

processes if any would change as a result. A number of participants felt the training needed to include detail on how this learning could be applied to policing and what to do to help vulnerable families beyond PPN submission. Some participants stated that the only change they felt was required was to include ACEs on PPNs, however some staff demonstrated taking into consideration the impact on children and understanding issues wider than immediate safeguarding. It should also be noted that some participant's reported that they felt it was too soon to comment on the impact of the training on their policing practice, as they had very little opportunity to put what they have been taught into practice. Furthermore, it was anticipated that improvements with multi-agency working would come when other operational changes are implemented and the work with early help developed as part of recommendation one is underway.

Wider benefits of this training included staff reporting that they would be more likely to seek support (formally and informally i.e. colleagues) for their own well-being following attendance at a traumatic event. Given that the police are a workforce that is engaged in distressing and at times dangerous work and exposed to trauma they have the potential for secondary and vicarious trauma. Research has identified barriers to police seeking support.[1,] Changing this culture is vital and a positive outcome from the AIAVPT which aligns with the SWP priority to improve staff well-being.

An additional aim of the evaluation was to support the development of future work by understanding how this type of training could be rolled out across the SWP force area and to different roles within the police outside of frontline policing. It was evident that delivery to different roles (i.e. response and NPT) simultaneously presented difficulties for some staff and on some occasions the training providers were also confronted with staff frustration and resistance to the topic. This is an important consideration for any future training on ACEs to the police, with learning that trainers need to be resilient and plan for potential resistance to the subject content. It should be considered that given the prevalence of ACEs in the general population, it is likely that some staff present may have personally experienced ACEs. This further highlights the importance of this type of training being delivered in a training environment for learning which is sympathetic to the topic. Staff reported a need for greater communication and transparency as to how the training sits within wider operational police changes/ direction of change of the police force. This is a learning for the consideration of roll out and this may also help to minimise any frustration of staff.

Although it was felt that this training needed to be made mandatory and delivered to different roles including staff in the Public Service Centre and the PPU, it is unclear if and specifically how these roles may have benefitted from this training. Staff reported the need to ensure universal knowledge of ACEs so that a force wide trauma-informed approach to policing could be adopted. It was noted that staff who had not participated in the training were now identifying ACEs and that this was starting to become a shared language. Staff highlighted perceived benefits to multi-agency working, but to explore this further, this style of training should be considered for other organisations responding to vulnerability so that the effects can be further understood.

Conclusion

The AIAPVT presents an important step towards SWP staff being ACE aware and trauma-informed. The findings from this evaluation suggest that the intervention had a positive impact on increasing knowledge of staff and adds to the literature on what works to train the police on ACEs and a trauma-informed approach. There are clear benefits of delivering this style of training to the police, including advances in staff knowledge and awareness of ACEs and trauma-informed care. Other benefits may potentially include the workforce seeking support to ensure their own well-being.

There is national commitment in Wales to prevent ACEs from occurring and offer support to those affected.[23] As highlighted in the Chief Medical Officer's Report[24], addressing ACEs is a key priority for NHS and other public bodies across Wales. Many sectors (health, education, housing, prison and

probation services) have begun to implement and test ACE-informed changes to practice including staff training on understanding ACEs. This evaluation offers transferable learning for how this type of training can be delivered in other sectors, highlighting the importance of training being delivered in an appropriate style of delivery (i.e. interactive, delivered by 'experts', delivered externally; see Box 4). It provides an outline to content that has a positive outcome on levels of staff understanding and provides an initial baseline as to how this knowledge is being translated into practice.

Box 4: Success factors and learning from AIAPVT

The following success factors are evident from AIAPVT:

- Training resulted in higher awareness of ACEs and good attitudes towards trauma-informed care. Staff also reported increased confidence in responding to vulnerability.
- Staff reported that they were more likely to seek sources of formal and informal support after training participation.
- Staff reported positive changes in their judgements towards individuals, a more measured response in their behaviour when responding to calls, utilising greater lines of enquiry to understand the root causes of behaviour and some change in practice (i.e. making early help referrals).
- ACEs are becoming established as a common language within SWP.

To ensure successful delivery of the training to other forces:

- Training should build on 'core' training delivered to police staff and avoid duplication.
- Training should be delivered by social work professionals in a relaxed environment, external to the police setting.
- Sessions should be interactive and engaging, utilising a range methods (e.g. case studies, group discussions and activities).
- Consideration should be given to the information that is provided to participants prior to the training to avoid preconceived ideas and agendas impacting on the sessions.
- Training should be tailored according to participants' role.

The impacts of the training need to be recognised through a longer period of time to see if these benefits can be sustained. Further evaluation should also seek to explore any impacts of this change in practice for the vulnerable individuals that the police respond to on a daily basis, which was not possible as part of this evaluation due to timescales.

Recommendations:

- AIAPVT should continue and be developed and incorporated into a broader work programme to raise awareness of ACEs by SWP. Work should seek to examine overlaps with current training provision so that the training compliments and does not duplicate existing resource.
- Follow up evaluation should be completed to assess long-term change of this to also include an examination of impact on police practice. Public Health Wales are completing a 6-month follow up of AIAPVT to explore if the ACE-informed approach to policing is now embedded within daily practice. This is part of wider operational changes to policing in the pilot area including a structured multi-agency, early intervention approach to vulnerability

with Neighbourhood Policing Teams. The evaluation will seek to examine any differences between the pilot area and other areas in force.

- Any scale up of training including roll out to different policing roles should be evaluated to further examine the effect of this type of training on different roles and impact on policing.
- With many areas developing trauma-informed training for police staff across the UK, and a lack of evaluation of effectiveness, the positive results found in this evaluation should be shared widely. Such findings are useful for informing how staff can be trained.
- Given the positive effects on staff attitudes towards accepting support services, the potential for scale up and roll out should align with on-going work by SWP on their agenda for improving staff well-being.

Appendix 1 - ACE-Informed Approach to Policing Vulnerability Training (AIAPVT)

The training was delivered in a classroom setting, incorporating power-point and group activities and discussions to provide an interactive training environment. Several video clips were also shown, including the ACE animation[25], the science of the brain and how to apply a trauma-informed approach in policing. The training was delivered in two sessions across different days. Following completion of the training participants were provided with an information pack which included the ACE LENS prompt card, a summary of the ACE research, leaflets for the video clips and information on tactical skills, the cycle of change and motivation interviewing techniques.

Session one:

Session one was delivered in two parts.

Part 1 covered:

- What vulnerability is, the types of vulnerability officers see in their roles and the challenges that the police experience when working with vulnerable people;
- The different types of stress people experience (positive, tolerable and toxic stress), how they impact on brain development, and examples of these in policing;
- The neurological response to stressful experiences (fight/flight/freeze) and the impact of trauma on brain development, physical health and future responses to threat;
- The impact of trauma on well-being, behaviour and life outcomes;
- What ACEs are, the research evidence on ACES in Wales, including prevalence and outcomes;
- The role police can play in identifying and responding to ACEs (in line with the Police Crime Commissioner Strategy plan) and the effectiveness of the current system in place to identify and respond to vulnerability (PPN system); and,
- Officer well-being and the support available to SWP staff experiencing stress and secondary trauman. This also addressed the accessibility of this support and how officers manage stress and cope with work day-to-day.

Part 2 covered:

- A case study of a young person who has experienced trauma and is living with ACEs (see Box A1);
- The impact of trauma on a victim and how this may affect their behaviour and life outcomes;
- Skills officers can use to support a traumatised person (including stabilisation, de-escalation of emotions and grounding techniques);
- Understanding why children and young people may become angry

Box A1: The Case Study

This described a female's life from age 3 to 17 and the first 3 years of her sons' life. The study demonstrates the impact ACEs have and how ACEs can be transmitted to the next generation.

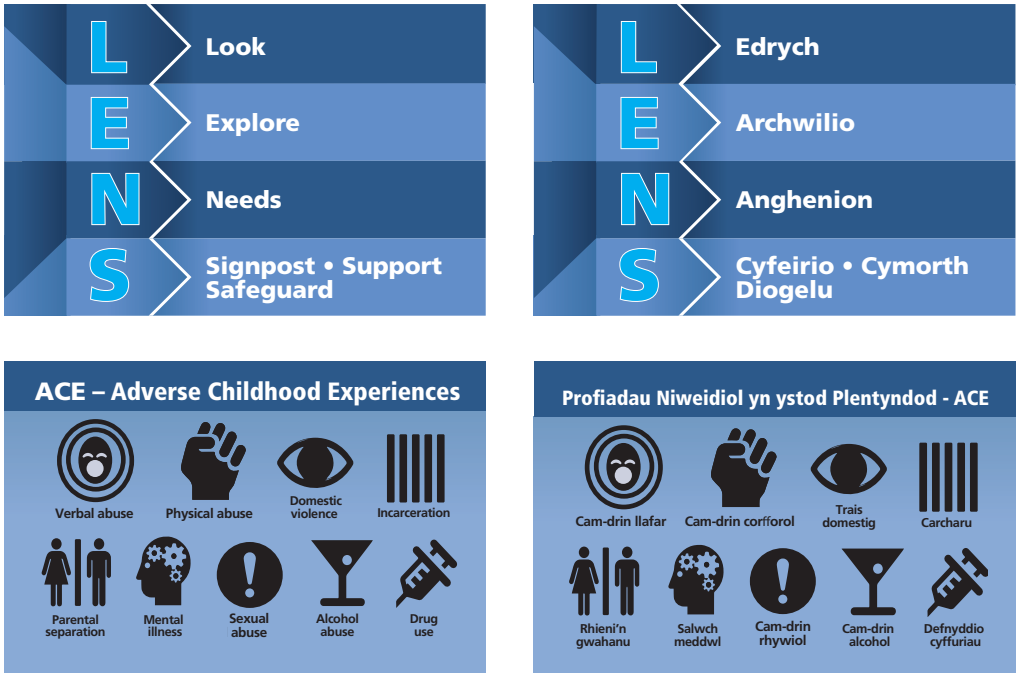
In small groups officers were given the experiences of the subject at different points in her life. Participants were asked to share their views on the part they had, before receiving the full case study was discussed as a whole group. This aimed to demonstrate how judgements can be made of a person based on observable behaviour, without knowledge of their life events which may have influenced them.

n SWP offer a number of support services including Red Arc, Police Federation Welfare Support Programme, trauma counselling, support and information hotline and intranet well-being services.

and how the brain during survival mode is unable to access the feeling and thinking part of the brain;

- The ACE LENS card (see Figure 5) and applying this in policing;
- How to include details of ACEs on PPNs. Officers were instructed to include in the officer observation section of the form "I have identified (number) of ACEs" or "I have not identified any ACEs"; and,
- Examples of practice in the UK and USA where ACE-informed approaches have been applied to policing.

Figure 5: The ACE LENS card



Session two:

This session covered:

- Thresholds for statutory services in the local area, and how to assess the service provision an individual needs using the continuum of need (universal, targeted or specialised services);
- Revisiting the case study, how to complete early help referral when support is identified and assessing what level of service provision that can be accessed;
- The importance of effective communication between agencies;
- The cycle/stages of change model which highlights the process people go through when trying to change behaviours (e.g. smoking, family conflict);
- Motivational interviewing techniques, and how they can apply these techniques when attending incidents;
- The role of protective factors in reducing poor life-outcomes for those who experience ACEs; and,
- How to build resilience in children and parent/carers.

Appendix 2 – Data tables

Table A1: Participant demographics

	Full sample		Part 2 (NPT only)	
	n	%	n	%
Job Role	151		59	
Police Constable	93	61.6	12	20.3
Police Community Support Officer	44	29.1	42	71.2
Police Sergeant	14	9.3	5	8.5
Department	151		59	
Response	86	57.0	-	-
Neighbourhood	65	43.0	59	100.0
Length of service	151		59	
<3 years	38	25.2	17	28.8
3-10 years	58	38.4	25	42.4
11-19 years	38	25.2	10	16.9
20+ years	16	10.6	7	11.9
Missing	1		-	
Gender	151		59	
Male	94	62.3	33	55.9
Female	57	37.7	26	44.1
Age	151		59	
18-25 years	19	12.6	8	13.6
26-35 years	52	34.4	20	33.9
36-45 years	49	32.5	16	27.1
46 + years	31	20.5	15	25.4

Table A2: Previous vulnerability training (n=151)

	Full sample	
	n	%
Number of other courses attended	**151**	
0	96	64
1	23	15
2	15	10
3+	17	11
Courses attended	**116**	**%***
Domestic violence	28	51
Mental health	19	35
PPN/PPU	15	27
NCALT (including MH, DV, MISPER**)	14	25
MISPER**	13	24
Other	16	29
Child Sexual Exploitation	11	20
Course delivered by	**115**	
South Wales Police	108	94
External organisation[$]	7	6

*% of participants who had attended at least one training course.**A missing person [$]includes Women's Aid, Communities First, G4S Custody Care, Swansea MET University, Swansea Drug Aid.

Table A3: ARTIC scales pre and post training

ARTIC sub-scales	Pre – training (full sample, n=151)		Pre – training (part 2 only, n=59)		Post 1 (full sample, n=151)			Post 1 (part 2 only, n=59)			Post 2 (n=59)		
	Mean	SD	Mean	SD	Mean	SD	p^o	Mean	SD	p^p	Mean	SD	p^q
Underlying causes of problem behaviours and symptoms	4.21	0.59	4.28	0.56	4.69	0.70	*<0.01*	4.81	0.70	*<0.01*	4.63	0.87	*<0.05*
Response to problem behaviours and symptoms	4.57	0.68	4.59	0.63	5.00	0.88	*<0.01*	5.01	0.87	*<0.01*	4.88	0.89	*<0.05*
On the job behaviour	5.06	0.64	4.96	0.65	5.27	0.78	*<0.01*	5.25	0.84	*<0.01*	5.14	0.88	*NS*
Self-efficacy at work	5.17	0.78	5.36	0.73	5.46	0.88	*<0.01*	5.54	0.87	*<0.05*	5.48	1.03	*NS*
Relations to the work	4.77	0.77	4.84	0.83	5.01	0.94	*<0.01*	5.13	0.91	*<0.01*	4.89	1.01	*NS*
Overall score	4.76	0.49	4.81	0.48	5.09	0.68	*<0.01*	5.15	0.72	*<0.01*	5.00	0.80	*<0.05*
Range	3.40 - 6.79		3.83 - 6.79		3.09 - 7.00		-	3.69-700		-	2.91 - 6.88		-

NS = Not significant, SD=Standard Deviation.

o Comparison between pre-training and post 1 scores (full sample)
p Comparison between pre-training and post 1 scores (part 2 sample only)
q Comparison between pre-training and post 2 scores

Table A4: Pre-training confidence scores for responding to vulnerable people by gender, job role, team and length of service (n=151)

	Responding to vulnerable people in your role	Interacting with vulnerable people sensitively	Using your professional judgement	Ability to identify whether or not additional support is needed	Understanding of when a PPN needs to be submitted	Understanding of multi-agency approach & roles of different agencies
All						
Mean	7.49	7.79	7.80	7.75	8.44	6.74
SD	1.46	1.28	1.25	1.27	1.45	1.89
Gender						
Male	7.34	7.59	7.83	7.74	8.43	6.44
Female	7.73	8.13	7.74	7.75	8.46	7.25
p	NS	*<0.05*	NS	NS	NS	*<0.05*
Role						
PCSO	7.09	7.52	7.60	7.70	8.21	6.80
PC	7.64	7.84	7.80	7.78	8.51	6.78
PS	7.71	8.29	8.36	7.64	8.71	6.36
p	NS	NS	NS	NS	NS	NS
Team						
Response	7.73	7.90	7.91	7.77	8.65	6.68
NPT	7.16	7.64	7.65	7.72	8.17	6.83
p	*<0.05*	NS	NS	NS	*<0.05*	NS
Length of service (yrs)						
< 3	7.11	7.53	7.32	7.61	8.18	6.49
3-10	7.71	7.93	7.88	7.79	8.60	6.84
11-19	7.46	7.54	7.83	7.59	8.43	6.59
≥ 20	7.56	8.38	8.50	8.13	8.44	7.69
p	NS	NS	*<0.05*	NS	NS	NS

NS = Not significant, SD=Standard Deviation.

Table A5. Post-1 and post-2 training confidence scores for responding to vulnerable people by gender, job role, team and length of service (n=151)

	Responding to vulnerable people in your role		Interacting with vulnerable people sensitively		Using your professional judgement		Ability to identify whether or not additional support is needed		Understanding of when a PPN needs to be submitted		Understanding of multi-agency approach & roles of different agencies	
	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2
All												
Mean	8.55	8.31	8.53	8.41	8.43	8.28	8.53	8.31	8.85	8.95	7.75	8.19
SD	1.07	1.19	1.11	1.20	1.08	1.19	1.05	1.16	1.33	1.13	1.64	1.54
Gender												
Male	8.43	8.25	8.38	8.28	8.37	8.16	8.44	8.03	8.77	8.94	7.60	7.84
Female	8.77	8.38	8.78	8.58	8.54	8.44	8.68	8.65	8.96	8.96	8.02	8.62
p	*NS*	*NS*	*<0.05*	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*	*NS*	*NS*	*<0.05*
Role												
PC	8.64	8.42	8.62	8.58	8.51	8.67	8.62	8.67	8.96	8.92	7.84	8.33
PCSO	8.43	8.34	8.44	8.46	8.30	8.23	8.34	8.29	8.66	8.93	7.70	8.22
PS	8.36	7.80	8.21	7.60	8.36	7.80	8.50	7.60	8.71	9.20	7.36	7.60
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Team												
Response	8.66	-	8.64	-	8.57	-	8.67	-	9.02	-	7.83	-
NPT	8.41	-	8.38	-	8.25	-	8.33	-	8.62	-	7.66	-
p	*NS*	-	*NS*	-	*NS*	-	*<0.05*	-	*NS*	-	*NS*	-
Length of service (years)												
<3	8.53	8.19	8.63	8.5	8.39	8.31	8.45	8.44	8.95	8.81	7.89	8.31
3 to 10	8.50	8.48	8.53	8.44	8.50	8.25	8.59	8.28	8.84	8.92	7.66	8.28
11 to 19	8.54	8.20	8.41	8.40	8.24	8.40	8.41	8.30	8.76	9.40	7.66	8.00
Over 20	8.81	8.14	8.75	8.14	8.69	8.14	8.75	8.14	8.75	8.71	8.31	7.86
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

Police Constable (PC), Police Community Support Officer (PCSO), Police Sergeant (PS), Neighbourhood Police Team (NPT). NS = Not significant, SD=Standard Deviation.

Table A6. Pre-training confidence scores for understanding ACEs and an ACE-informed approach by gender, job role, team and length of service (n=151)

	Understanding of impact of stress & trauma on the brain	Understanding of what ACEs are	Understanding of impact ACEs can have on child development	Understanding of longer term impacts of ACEs into adolescence and adulthood	Understanding of what an ACE-informed lens is	Ability to use ACE-informed approach
All						
Mean	5.81	4.65	4.56	4.46	2.63	2.92
SD	2.12	2.09	2.15	2.14	1.93	1.99
Gender						
Male	5.67	4.61	4.59	4.46	2.92	3.16
Female	6.05	4.72	4.53	4.46	2.13	2.50
p	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*
Role						
PCSO	5.82	5.05	4.89	4.8	3.09	3.30
PC	5.90	4.46	4.39	4.27	2.30	2.65
PS	5.21	4.64	4.71	4.64	3.29	3.43
p	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*
Team						
Response	5.94	4.42	4.34	4.24	2.33	2.66
NPT	5.65	4.95	4.86	4.75	3.02	3.25
p	*NS*	*NS*	*NS*	*NS*	*<0.05*	*NS*
Length of service (yrs)						
< 3	6.03	4.82	4.71	4.61	2.61	2.89
3-10	5.88	4.71	4.59	4.47	2.77	3.05
11-19	5.39	4.16	4.13	4.00	2.19	2.47
≥ 20	6.38	5.00	5.13	5.06	3.25	3.63
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

Police Community Support Officer (PCSO), Police Constable (PC), Police Sergeant (PS), Neighbourhood Police Team (NPT). NS = Not significant, SD=Standard Deviation.

Table A7. Mean confidence score for understanding ACEs and an ACE-informed approach

Confidence scale	Pre-training (full sample, n=151)		Pre-training (part 2 only, n=59)		Post 1 (full sample, n=151)		Post 1 (part 2 only, n=59)		Post 2 (n=59)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Understanding of impact of stress & trauma on the brain	5.81	2.12	5.69	1.75	8.58	1.07	8.69	1.09	8.47	1.15
Understanding of what ACEs are	4.65	2.09	5.05	1.95	9.07	0.96	9.12	1.02	9.24	0.88
Understanding of impact ACEs can have on child development	4.56	2.15	4.97	2.07	9.04	1.02	9.12	1.02	9.33	0.80
Understanding of longer term impacts of ACEs into adolescence and adulthood	4.46	2.14	4.86	2.05	9.04	0.97	9.15	0.96	9.21	0.85
Understanding of what an ACE-informed lens is	2.63	1.93	3.19	2.07	8.91	1.03	9.00	1.07	8.46	1.19
Ability to use ACE-informed approach vulnerability and respond to individual ACE needs	2.92	1.99	3.41	2.15	8.73	1.21	8.86	1.09	8.64	0.96

SD=Standard Deviation.

Table A8. Post-1 and post-2 training confidence scores for understanding ACEs and an ACE-informed approach by gender, job role, team and length of service (n=151)

	Understanding of impact of stress & trauma on the brain		Understanding of what ACEs are		Understanding of impact ACEs can have on child development		Understanding of longer term impacts of ACEs into adolescence and adulthood		Understanding of what an ACE-informed lens is		Ability to use ACE-informed approach	
	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2	Post 1	Post 2
All												
Mean	8.58	8.47	9.07	9.24	9.04	9.33	9.04	9.21	8.91	8.46	8.73	8.64
SD	1.07	1.16	0.96	0.88	1.03	0.80	0.97	0.85	1.03	1.20	1.21	0.97
Gender												
Male	8.38	8.28	8.96	9.06	8.93	9.16	8.94	9.00	8.78	8.38	8.55	8.44
Female	8.89	8.69	9.25	9.46	9.23	9.54	9.21	9.46	9.14	8.56	9.04	8.88
p	*<0.05*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*<0.05*	*<0.05*	*NS*	*<0.05*	*NS*
Role												
PC	8.60	8.58	9.10	9.17	9.03	9.25	9.01	9.25	8.92	8.67	8.71	9.08
PCSO	8.73	8.46	9.14	9.29	9.14	9.37	9.16	9.27	8.95	8.38	8.80	8.51
PS	7.93	8.20	8.64	9.00	8.79	9.20	8.86	8.60	8.71	8.60	8.71	8.60
p	*<0.05*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*
Team												
Response	8.53	-	9.07	-	9.03	-	9.01	-	8.91	-	8.68	-
NPT	8.63	-	9.06	-	9.05	-	9.08	-	8.92	-	8.80	-
p	*NS*	-	*NS*	-	*NS*	-	*NS*	-	*NS*	-	*NS*	-
Length of service (years)												
<3	8.71	8.63	9.16	9.31	9.13	9.56	9.18	9.44	9.16	8.56	8.55	8.50
3 to 10	8.50	8.44	9.07	9.28	9.07	9.28	8.98	9.16	9.07	8.33	8.83	8.56
11 to 19	8.53	8.40	9.00	9.20	8.89	9.2	9.00	9.10	9.00	8.40	8.70	8.90
Over 20	8.63	8.29	9.00	9.00	9.06	9.14	9.06	9.00	9.00	8.71	9.00	8.86
p	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*	*NS*

Police Constable (PC), Police Community Support Officer (PCSO), Police Sergeant (PS), Neighbourhood Police Team (NPT). NS = Not significant, SD=Standard Deviation.

Table A9: Participant awareness/Engagement with staff support services

Well-being and support services	Service awareness		Service use	
	n	%	n	%
My Mind	111	73.5	19	12.6
My Health	98	64.9	20	13.2
Connect Assist Counselling	54	35.8	5	3.3
Blue Light Infoline	32	21.2	*	*
Police Well-being Zone	55	36.4	*	*
Police Federation	78	51.7	13	8.6
Red Arc	32	21.2	5	3.3

*Numbers less than 5 have been suppressed

Table A10. Likelihood of seeking support post-1 training by role

		PS		PC		PCSO		Total		
	Seek colleague support	n	%	n	%	n	%	**n**	**%**	p
Post 1	More Likely	*	*	23	53.49	*	*	**43**	**100**	
	No change	11	10.89	66	65.35	24	23.76	**101**	**100**	*<0.05*
	Less likely	*	*	*	*	0	0.00	*****	**100**	
	Seek formal support									
	More Likely	*	*	26	49.06	*	*	**53**	**100**	
	No change	10	10.87	63	68.48	19	20.65	**92**	**100**	*<0.05*
	Less likely	0	0.00	*	*	0	0.00	*****	**100**	
Post 2	**Seek colleague support**									
	More Likely	*	*	*	*	16	84.21	**19**	**100**	
	No change	*	*	*	*	23	63.89	**36**	**100**	NS
	Less likely	0	0.00	*	*	*	*	*****	**100**	
	Seek formal support									
	More Likely	*	*	*	*	18	85.71	**21**	**100**	
	No change	*	*	*	*	22	62.86	**35**	**100**	NS
	Less likely	0	0.00	*	*	0	0.00	*****	**100**	

*Numbers less than 5 have been suppressed NS = Not significant.

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