# TRAUMA INFORMED RESEARCH

# THE IMPACT OF A MULTI-AGENCY TRAUMA-INFORMED PRACTICE TRAINING PROGRAMME IN A REGION IN THE UNITED KINGDOM


## ABSTRACT

This research study aims to add to the emerging evidence on the potential value of trauma-informed practice (TIP) training programmes for multi-agency practitioners by examining the associated impact of a UK TIP training programme on practitioner attitudes and knowledge 6 months post the training.


## RESEARCH METHODOLOGY

Participants completed pre- and post-surveys using four of the five subscales of the Survey for Trauma-Informed Systems Change. Multi-agency participants from across Merseyside (152 people) completed pre-surveys, engaged in four TIP training sessions and followed with a post-6-month survey and could be linked by their unique code.

## QUANTITATIVE METHOD

The pre-post study shows that a four-session TIP training program for education and public services staff can greatly improve the knowledge and attitudes of each trainee about trauma-informed practices [pre-mean 76.4, post-mean 90.9; $p < .001$; large effect size ($d = 1.4$)]. Attending the training program made a big difference in how much the trainees understood about how trauma, attachment, and ACEs affect the brain, as well as how aware they were of trauma-informed behaviours. There were also improvements in how the trainees felt about the whole system, including their attitudes, training, support, interactions, and the surroundings, which was used to judge safety and acceptance. In conclusion This study helps us learn more about how TIP training affects people from different fields, like education, health, police, and the public services. However, this training needs to be backed up by changes to the system as a whole that are clearly led and make it more trauma-sensitive. These changes should take into account things like hiring levels, staff well-being, burnout rates, and trainees' own experiences of ACEs and trauma.

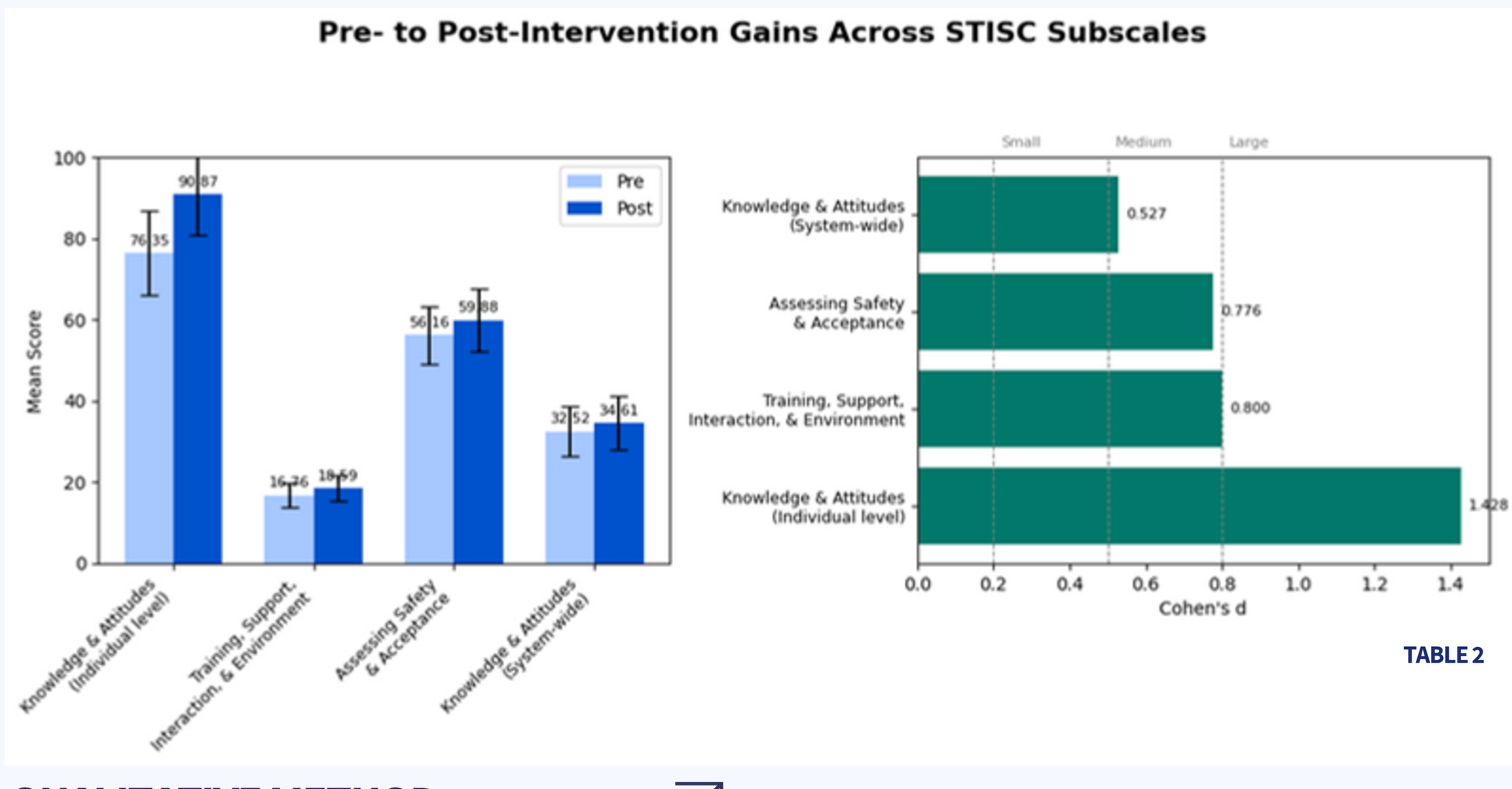


TABLE 2

## QUALITATIVE METHOD

All survey recipients were asked 3 follow up questions Since finishing the training has anything changed the way you work? Do you have an example of how using TIP has had a greater impact on clients/service users? Has TIPT had any impact on you from a personal perspective? (full analysis to be published in final thesis) Questionnaire respondents:

‘Yes, I have considered impact of trauma on family members and considered whether this could account for challenges / behaviours. I have reflected on whether I practice as much empathy and patience with family members as I do professionally with clients, probably not’.

‘I am going through adoption assessment and therefore reflecting on impact of early trauma and ACEs on children and how this would impact parenting / family life. The TIPT has been very helpful and impactful’.


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# INTRODUCTION

Globally, adverse childhood experiences (ACEs) and trauma are critical factors that have significant impacts on individuals, families, communities, and society (Bellis et al. 2019). A population wide survey from 24 countries estimated that over 70% of adults have experienced at least one traumatic event, including exposure to violence or injury, or other adversities (e.g. death of a loved one; disasters) (Benjet et al. 2015). International evidence suggests that around a sixth of adults (aged 18 + years) have experienced four or more ACEs (e.g. child maltreatment, and/or growing up in a dysfunctional household) and 70% at least one traumatic event (Benjet et al. 2015).

The cumulative impact of ACEs is associated with increased risk of multiple health issues, academic difficulties, mental health disorders, and violence across the life course (Bellis et al. 2019).


Furthermore, they place huge economic impacts on society. Across North America and the European Region, the costs of addressing the life-course impacts of ACEs are estimated to be substantial US$581 billion in Europe and $748 billion in North America (Bellis et al. 2023)

To prevent and respond to ACEs and trauma, several countries have begun to develop and implement trauma informed practices and trauma-informed practice (TIP) training across various settings including education, criminal justice, health, and the third sector (Lyons 2021; Quigg et al. 2024).

Some studies suggest that TIP training can be implemented across multiple agencies and have and working practices, the systems they work in, and the people they serve (e.g. children, young people, families) (Cole et al. 2009; MacLochlainn et al. 2022; Purtle 2018). For example, a systematic review of trauma-informed organisational interventions, including staff training, suggested positive impacts on staff knowledge, attitudes, and behaviours (with some studies suggesting impacts remained after 1-month follow-up), with a small number of studies (n = 6) finding statistically significantly improvements for client outcomes (Purtle 2018). However, there remains a paucity of evidence on the impacts of TIP training, particularly in relation to understanding longer-term impacts (Purtle 2018). Under standing the impact of TIP training is further complicated by inconsistencies in training content and delivery (e.g. number of hours of training), and insufficient evidence of what elements of TIP training are most beneficial (McNaughton et al. 2022). This recent literature review highlighted gaps in research on TIP training and education for professionals. Specifically, highlighting the importance of enhancing professional knowledge and practice across settings (e.g. education) to help practitioners recognise and assess signs of traumatic stress and subsequently provide both general sup port and specific intervention for clients (National Education Association 2023; Purtle 2018), and to evaluate TIP training particular training delivered beyond the health sector (e.g. education, welfare, and justice) (McNaughton et al. 2022).

Across the United Kingdom, several Violence Reduction Units (multi-agency partnerships at police force area level implementing a public health approach to violence prevention) are aiming to prevent and mitigate the impacts of ACEs and trauma through developing ACE and trauma responsive communities, practitioners, and systems (e.g. Lancashire; Greater Manchester, Wales). The Mersey side Violence Reduction Partnership (MVRP) ACE and Trauma Responsive Work Programme includes three key strands: (1) research to build the evidence on ACEs (Quigg et al. 2025; Wilson et al. 2024) and the impact of prevention programmes (Quigg et al. 2024a, b), (2) advocacy and mobilisation for ACE and trauma-responsive systems, and (3) large-scale TIP training for practitioners from various services (e.g. education, health, local government, third sector) to upskill the workforce. This study aims to add to the emerging evidence on TIP training by examining the impact of the Merseyside VRP-funded TIP training programme for multi-agency practitioners.

The study aims are:
- To examine the associated impact of the training on practitioner attitudes and knowledge.
- To explore if the TIP supports the implementation and embedding of change within practitioner working practices and organisational systems

# METHODS

The TIP training programme was open (at no cost) to practitioners from any public service across Merseyside [a region in Northwest England; population 1,442,081 (UK Office of National Statistics 2022 - Mid-Year Population Estimates, UK, June 2022)] and was promoted via regional and local/ regional partnerships meetings and communications (e.g. social media). Practitioners booked on the training course using the MVRP website. The MVRP commissioned Bee Kind Training to develop and implement a TIP training programme including a series of sessions for multi-agency practitioners across public services in Merseyside.

The TIP training aimed to enable practitioners to understand and embed six trauma-informed principles (graphic below), with the long term aim of creating trauma-responsive workforces and organisations that can more effectively improve outcomes for victims/survivors of ACEs/trauma, and support staff who may be directly or indirectly affected by trauma/ACEs, potentially increasing staff well-being, their performance and ability to support victims/survivors.


(Dorado et al. 2016)

The Bee Kind TIP training model incorporates four separate 2-h sessions with at least a week between each session were implemented (in some cases across several weeks), with the training content delivered in-person by formal lecture (using PowerPoint slides) and video aides covering an in-depth understanding of trauma attachment and ACEs.

Session one focused on brain development, attachment, behaviour, and play.

Session two: the physiological impacts of trauma on the body, sleep, long-term health, and well-being.

Session three: how trauma may present in sensory responses, and a case study including domestic violence

Session four: intergenerational trauma, attachment and ACEs, implicit and explicit memory, neuroception, and the six trauma informed principles.

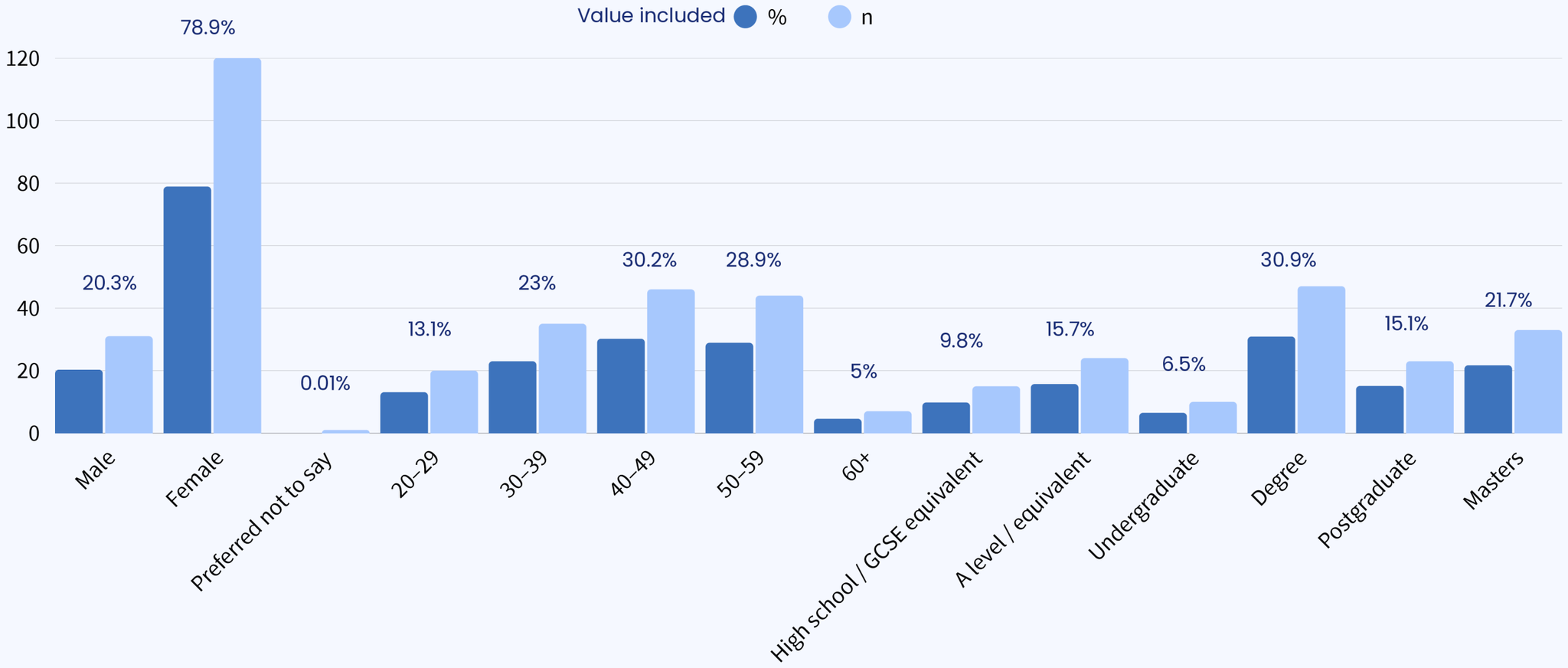
The training also included opportunity for reflective practice during the sessions where trainees could discuss in groups key aspects of trauma-informed practice, and case studies where delegates could apply learning and discuss the barriers to embedding trauma-informed practice. Each session was delivered by an education practitioner with expertise in trauma, attachment, and ACE/trauma informed practices, with a facilitator present to ensure that all delegates had a sense of safety and opportunity to move, discuss, or receive support should they feel triggered by the content.

Sessions were delivered in person in various locations around Merseyside. A pre- and 6-month post-test study was implemented prior to the first training session, the trainer provided trainees with a verbal description of the study; this was followed up with a participant information sheet inviting them to take part in the study (electronic information sheets were also included for trainees completing surveys online).

Trainees who consented to take part were invited to self-complete a pre- and post-training survey, either paper-based (delegates without access to electronic device) or online. In total, 1017 staff attended TIP training between October 2023 and May 2024, and of these 152 (14.9%) completed both the pre- and 6-month post-training survey. To enable matching of individual pre- and post-training surveys, survey participants were given an individual code which they added on each of the surveys they completed. Appropriate ethical principles were followed: all participants were provided with a participant information sheet detailing the study and its voluntary nature, and participants could be removed from the study up to the point of analyses. Ethical approval for this study was granted by Liverpool John Moores University Research Ethics Committee (ref: 24/PHI/017).

## SOCIO DEMOGRAPHICS

Table 1 shows the breakdown of respondees




## SURVEY FOR TRAUMA-INFORMED SYSTEMS CHANGE (STISC)

We used four parts of the STISC (Moreland Capuia et al. 2022) to measure the changes from before training to six months after training. These parts were: trauma-informed knowledge and attitudes (21 items); system-wide trauma-informed knowledge and attitudes (10 items); training, support, interaction, and environment (five items); and assessing safety and acceptance (23 items). The STISC tool is meant to be used with professionals in any field (Moreland Capuia et al. 2022). The trauma-informed knowledge and attitudes subscale checks how well people understand the brain physiology and biology related to trauma, attachment, and ACEs. It also checks how well people understand how trauma, attachment, and ACEs affect individuals and how well they understand how trauma-informed approaches can change their activities (see Supplemental Tables 1 and 2 at the end of the full research paper). The system-wide trauma-informed information and attitudes subscale asks people to rate how important they think trauma-informed practices are for their job or organisation. The questions about training, support, interaction, and environment are mostly about the views and practices of the organisation and how safe and acceptable it is. Check out Supplemental Tables 3 and 4 at the end of the paper to see how culturally accepting a person is. On a five-point scale, 1 means "strongly disagree" and 5 means "strongly agree," participants are asked to rate how much they agree with each statement. Each subscale was given a cumulative number, and higher scores meant that the person knew more about trauma and had more trauma-informed attitudes, behaviours, and knowledge.

## ANALYSES

Only those participants with matched pre- and post-training data were included in analyses (n = 152). For each STISC subscale overall score, paired-sample t-tests were used to explore whether significant changes were observed. The effect sizes (d) were calculated using post-hoc tests for the measurement scores, and the magnitude of the effects were determined using Cohen’s d (Cohen 1988) categorisation of effect sizes (small, 0.20; medium, 0.50; large, 0.80).

## RESULTS

### Socio demographics

A large proportion of the trainees were female (78.9%), most were aged 40–59 years (59.1%), and two-thirds (67.8%) of trainees were trained to degree level or above.

### Individual knowledge

Individually from pre (76.4) to post training (90.9) trauma-informed knowledge and attitudes showed with a significant increase in the combined mean score. This suggests that individual-level trauma-informed knowledge and attitudes improved.

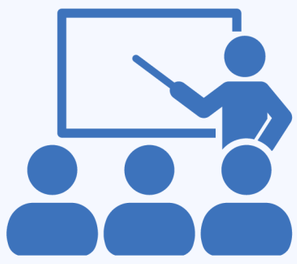
### System wide

System-wide trauma-informed knowledge and attitudes pre (32.5) post training (34.6) with a significant increase in the combined mean score. This suggests that system-wide trauma-informed knowledge and attitudes improved.

### Safety and acceptance

Safety and acceptance Pre (56.2) post (59.9), with a significant increase in the combined mean score indicating improvements in assessing safety and acceptance

### Training support, interaction and the environment



Training support, interaction, and the environment pre (16.8) to post training (18.6), with a large increase in the combined mean score suggesting improvements in training support, interaction and the environment.

# DISCUSSION

This study aimed to add to the emerging evidence on the potential value of TIP training programmes for multi-agency practitioners (MacLochlainn et al. 2022; McNaughton et al. 2022; Quigg et al. 2024a, b). Using a pre-post study design, it presents statistical evidence indicating that a four-session TIP training programme for public services and education staff can significantly enhance the individual-level knowledge and attitudes of trainees with regard to trauma informed practices.

This 4-day TIP training programme aimed to focus on providing multi-agency practitioners with the knowledge and skills to move individual staff from being 'ACE/trauma aware' to being ACE/trauma-responsive. Specifically, this was in response to previous research recognising a lack of awareness among stakeholders of the physiological responses to trauma and ACEs across the UK and in Merseyside, and to plug the gaps in knowledge that impede practitioners in recognising the signs and symptoms of primary traumatic experiences in those that they support (e.g. children, young people, and adults) and in the self care necessary to prevent compassion fatigue in themselves (MacLochlainn et al. 2022). This study suggests that such training is beneficial with significant improvements in knowledge and attitudes across all sub-scales examined and add to previous research through demonstrating longer-term impacts (i.e. 6 months post-training) (MacLochlainn et al. 2022; McNaughton et al. 2022; Quigg et al. 2024a, b). Whilst positive improvements in trauma-informed knowledge and attitudes were seen across all sub-scales, the study did however find differences in effect size, with a large effect size observed for two subscales (individual level knowledge and attitudes, and training, support, interaction, and environment) and a medium effect size observed for two sub-scales (system-wide trauma-informed knowledge; and attitudes safety and acceptance). Such differences may be expected as the TIP training programme is focused on personal learning and understanding of trauma, attachment and ACEs at a practitioner level. Previous studies into TIP training for police (Quigg et al. 2024a, b) hypothesised other underlying factors that influence how beneficial practitioner-focused TIP training programmes may be at a system-wide level, such as leadership buy-in and promotion of trauma-informed working, overall levels of staffing, levels of staff wellbeing and burnout, and trainees personal experience of ACEs/ trauma. System-wide changes to enable the implementation and embedding of trauma-informed and responsive practices requires time, substantial resource, and continued effort. Practitioner level training is one, albeit critical, component in developing and embedding a trauma-responsive workforce. However, this needs to be supported by wider system changes that have clear leadership for embedding a trauma-responsive system, considering staffing levels, staff wellbeing, burnout levels, and trainees' personal experiences of ACEs/trauma (Avery et al. 2020; Cole et al. 2009; Dorado et al. 2016; Hydon et al. 2015). The large-scale implementation of this TIP training programme across a region in the UK shows a clear commitment to becoming a trauma responsive region (i.e. as of 19th December 2024, 4187 practitioners had completed the TIP training programme); however, our study highlights that system-level changes, and support are needed. For example, individual items on the system-wide subscale suggest that whilst practitioners agreed that their organisations cared about trauma, there was an absence of knowledge in methods to reduce re-traumatisation (pre-mean 4.02, post-mean 4.00; Table S2), and fewer agreed that their organisations had the systems and processes in place that could support a trauma-responsive system (e.g. employee handbook and on-boarding material referencing trauma and TIP; pre-mean 2.65, post-mean 3.02; Table S2).

Engagement in the training programme was associated with a substantial significant improvement in trainees' understanding of brain physiology and biology in connection to trauma, attachment, and ACEs, as well as their awareness of trauma-informed practices.

Further, there were significant improvements in trainees' knowledge and attitudes system wide, training, support, interaction and the environment, assessing safety, and acceptance.

Across the UK and internationally, TIP training programmes are emerging for multi-agency practitioners, with the focus of such programmes ranging from upskilling the workforce to be 'ACE/trauma aware' to more detailed training to enable them to be responsive to ACEs and trauma.

# CONCLUSION

The conclusions of this study should be acknowledged with an awareness of its limitations. Whilst this study used match-paired analysis of pre- and post-surveys, it did not have a control group as this was a self-selecting sample of public-service delegates attending the training from across the region. Further, delegates were only from one UK region (i.e. Merseyside) and represent a small sample size of 152 from the 1017 who completed the training; thus, findings should not be extrapolated to a wider population. Despite this, the study provides useful information to support wider emerging evidence on the implementation and impact of TIP training programmes. In conclusion, the study underscores the importance of TIP training programmes in improving individual knowledge and attitudes while pointing out the challenges and limitations in achieving system-wide change. These findings and wider literature suggest that future efforts to upskill the workforce need be supported by a system-wide work programme that focuses on leadership engagement, and structural workforce support for long-term implementation of trauma-responsive systems. This study enhances the data about the impact of TIP training for multi-agency partners including education, health, police, and the public services. Further evidence is needed however to determine the impact this has on the workforce, the community, the families, and the children and young people they serve.

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