

# Evaluation of a novel co-designed and co-delivered training package to de-escalate violence and aggression in UK acute inpatient, PICU and forensic mental health settings

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## Accessible Summary

### What is known on the subject?

- Clinical guidelines and staff training recommend using de-escalation over restrictive practices, such as restraint and seclusion
- Evidence suggests that restrictive practices continue to be used frequently despite training
- This suggests a lack of impact of existing staff de-escalation training.

### What does this paper add to existing knowledge?

- The features of de-escalation training that are acceptable to staff and perceived to be impactful
- A co-designed and co-delivered training session on a trauma-informed approach to de-escalation on mental health wards was acceptable and perceived to be impactful
- Those attending training particularly valued how lived experience was incorporated into the training content and co-delivery
- The organizational and team context may need more consideration in adapting the training.

### What are the implications for practice?

- De-escalation training that adopts a trauma-informed approach and considers the context of ward environments is acceptable to staff
- Co-delivery models of training to tackle restrictive practice can be acceptable and impactful
- Further research will show how clinically effective this training is in improving outcomes for service users in ward contexts.

## Abstract

**Background:** Evidence suggests a discrepancy between recommended and routine practice in de-escalation in mental health settings, suggesting a lack of impact of existing training.

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**Aim:** To investigate the acceptability and perceived impact of a co-designed/delivered training intervention on a trauma-informed approach to de-escalation on mental health wards.

**Methods:** Trainees were invited to complete the Training Acceptability Rating Scale (TARS) post-training. Responses to the quantitative items were summarized using descriptive statistics, and open-text responses were coded using content analysis.

**Results:** Of 214 trainees, 211 completed the TARS. The trainees rated the training favourably (median overall TARS = 55/63), as acceptable (median 33/36) and impactful (median 23/27). There were five qualitative themes: modules of interest; multiple perspectives; modes of delivery; moulding to context; and modifying other elements.

**Discussion:** The EDITION training was found to be acceptable and impactful, with trainees particularly valuing the co-delivery model. Trainees suggested several ways in which the training could be improved, particularly around the need for further moulding of the intervention to the specific ward contexts/teams.

**Implications for Practice:** We recommend co-designing and co-delivering staff training to mental health professionals that tackles restrictive practices.

**Relevance Statement:** This research is relevant to lived experience practitioners who want to be involved in training mental health professionals around restrictive practices, demonstrating the value and importance of their voice. It is relevant to current providers of de-escalation training, and to staff receiving training, outlining a novel, but acceptable and impactful, form of training on a key area of mental health practice. It is relevant to anyone with an interest in reducing restrictive practice via co-delivered training.

#### KEYWORDS

acute mental health, collaborative research, forensic psychiatry, in-patient issues, restraint

## 1 | BACKGROUND

International clinical guidelines recommend de-escalation techniques for managing violence, aggression and other conflict behaviours in all mental health settings (Department of Health (DoH), 2014; Richmond et al., 2012). In such guidance, de-escalation techniques are recommended as the first-line intervention for managing antecedents to conflict (DoH, 2014; NICE, 2015). These guidelines inform policies for the training of mental health professionals, and de-escalation techniques are embedded in mandatory staff training in the NHS in the UK (NHS, 2004, 2005; NICE, 2015). Despite this emphasis, evidence indicates that restrictive practices continue to be used frequently (Reid & Price, 2022), suggesting a discrepancy between recommended and routine practice. This discrepancy at the very least suggests a lack of impact of existing training (Price et al., 2015).

There is currently a lack of evidence of both the characteristics of de-escalation training likely to enhance acceptability and uptake, and the clinical effectiveness of common models of de-escalation training. There are also evidence gaps in the content of current de-escalation training courses, which tend to focus on skills and techniques in de-escalation (Price et al., 2015). There is currently limited consideration of the impact of environmental and interpersonal

factors on violence and aggression in mental health settings (Price et al., 2015). Furthermore, there is limited consideration that many individuals in these environments have experienced trauma (Dillon et al., 2014), and of the role of iatrogenic trauma (Sweeney & Taggart, 2018) in current de-escalation training (Price et al., 2015).

The EDITION team devised an evidence-based training package with a trauma-informed approach to de-escalation in mental health ward-environments. Based on a model of co-delivery that has shown general acceptability from mental health staff elsewhere (Grundy et al., 2017), the EDITION feasibility and acceptability study aimed, in part, to illuminate the characteristics of de-escalation training likely to enhance acceptability and uptake across a range of clinical settings.

## 2 | METHODS

### 2.1 | Aim of the study

The aim was to investigate the acceptability and perceived impact of a co-designed and co-delivered training intervention on a trauma-informed approach to de-escalation of violence and aggression for

mental health professionals working in acute inpatient, Psychiatric Intensive Care Units (PICUs), and low, medium and high-secure forensic units.

## 2.2 | The EDITION training course

Prior research by the team (Price & Baker, 2012; Price et al., 2015; 2018) was synthesized at research team-meetings, including the service user and carer co-applicants/co-investigators, using co-production principles (Carr & Patel, 2016), and guided by the Theoretical Domains Framework (TDF) to investigate implementation problems (Atkins et al., 2017). The TDF was specifically developed to identify determinants of behaviour change (Cane et al., 2012), and it was selected to provide rigour to the identification of evidence-based factors that influence staff engagement with de-escalation. The TDF also provided a theoretically informed approach to applying those identified factors in the development of the EDITION intervention, which is aimed at behavioural change.

Potential intervention targets derived from the TDF were presented to and discussed with three stakeholder groups—one with violence reduction training specialists and academics ( $n=10$ ), one with current clinical staff ( $n=10$ ) and one with service users/survivors and carers ( $n=11$ ). Furthermore, the views and feedback of a Lived Experience Advisory Panel ( $n=10$ ) were also sought at different points as the training evolved. These consultations helped the research team in co-designing an intervention protocol, training manual, presentation slides and scripts for the filming of video clips, for a one-day training course. As per good practice (Fraser et al., 2017), the training facilitators then familiarized themselves with the materials and the methods of delivery at a train the trainer's session.

Given the feasibility and acceptability study design, there was no distinct 'piloting' phase. A baseline of the acceptability of the training content and materials had already been established via stakeholder engagement, and it was deemed ready for acceptability testing. The train the trainer's session tested the delivery modes and timings. However, the training team did conduct a review of the training delivery after each of the first three sessions, which confirmed that trainers were happy with the arrangements.

Each training-session began around 09:30 and finished by 16:30, based at NHS training venues close to the participating wards. Following a round of introductions, a facilitator explained that the training was part of the EDITION acceptability and feasibility study. The training outcomes were then introduced: to understand the neurobiological and psychological consequences of traumatic development/experience; and to explore verbal- and sensory-based approaches for de-escalating heightening aggression and other conflict behaviours.

The training-course consisted of four modules. In the morning, the training covered an introduction to trauma (module one) and creating trauma-sensitive clinical environments (module two—part one). After lunch in the afternoon, the training continued with further discussions on creating trauma-sensitive clinical processes (module two—part two); verbal de-escalation (module three); and

TABLE 1 EDITION training content.

### Module 1: Introduction to trauma

- Clinical definition of trauma/trauma types/prevalence
- Impact of trauma on childhood development
- Consequences of trauma for brain structure/function
- Impact on memory and emotional self-regulation
- Trauma-informed principles of care and recovery from trauma

### Module 2: Creating trauma sensitive clinical environments

- Support planning
- Principles of communication in the context of traumatized people
- Conflict formulation exercise
- Powerlessness: clinical processes as traumatic reminders
- Neglect and abuse re-enactment within the context of staff-patient relationships

### Module 3: Verbal de-escalation

- An introduction to the General Aggression Model
- Understanding aggressive behavioural scripts in the context of traumatic development
- Breaking the script case-studies
- Understanding interpersonal hostile-dominance factors

- De-escalation according to aggression function/need

### Module 4: Sensory-based de-escalation, and compassionate engagement with voices

- Rationale for sensory-based de-escalation
- Sensory processing disorders and severe mental illness
- Communicating a safe environment: external sensory inputs
- Creating internal safety: manipulation of somatic senses
- Compassionate engagement with voices

sensory-based approaches to de-escalation (module four), including sensory rooms and compassionate engagement with people hearing hostile voices. Further detail is outlined in Table 1.

The training also introduced several practical components, which applied training content. These were to be implemented on the wards as part of the broader intervention for reducing antecedents to conflict to determine if they would be acceptable to staff and patients. These were as follows: a codesigned welcome guide to give to patients on admission; a welcome team; a set of standards for ward rounds; a collaborative antipsychotic-prescribing model; an environmental audit led by a service user fortnightly; a "here to help" lanyard to identify a staff member available to deal with patient needs; a patient handover sheet to capture service user perspectives on the past shift; feedback boxes for both staff and service users, routinely reviewed with senior management; a model of post-incident debrief; reflective sessions for staff led by ward psychologists; sensory plans devised with OTs; and sensory equipment. These components were identified using the TDF from evidence generated in previous work, which is described in further detail elsewhere (Price et al., 2024).

The training content, and the practical components which apply it, were embedded in practice via 'Intervention Champions.' There

were at least seven identified champions per ward, including a senior nurse, three more nursing staff, one OT, one psychiatrist and one psychologist, each overseeing the implementation of learning for their respective area of responsibility.

### 2.3 | Trainers

The training team consisted of an academic researcher with a clinical background in forensic mental health nursing (OP), and/or an academic researcher with a clinical background in mental health nursing and psychology (PC), and/or a Prevention and Management of Violence and Aggression (PMVA) trainer (MK), along with a service user (AG) and a carer (LC) co-facilitator, both of whom had considerable prior experience of training mental health professionals (Grundy et al., 2017). Facilitation of the four modules was shared amongst the trainers throughout the day and group work was co-facilitated. The final component on compassionate engagement with voices was underpinned by the service user co-facilitator's lived experience (Grundy, 2024).

### 2.4 | Delivery

The training mainly consisted of interactive presentations guided by audio-visual aids. The introduction to trauma (module one) used two didactic videos, one to present the neurobiological and psychological consequences of traumatic development/experience and another to apply these factors to trauma-informed care. The sensory-based approaches to de-escalation (module four) used a didactic video on the compassionate engagement with voices model. For the other modules, some short video-clips of scenarios, that had been specifically scripted and filmed for the training, were used as a basis for discussion. A longer video was filmed of an escalating situation and demonstrating verbal de-escalation skills for discussion in module three.

For variation, some case studies were also described by facilitators and used to generate group discussion. Furthermore, a large group 'feelings and needs' exercise encouraged reflection upon a conflict situation between a staff-member and a patient that had occurred on the ward. This involved identifying the feelings aroused (from  $n=90$  cards with different possible emotions on), and the possible underlying needs (from  $n=72$  cards with different possible needs on), of both parties involved in the conflict. This is then contextualized with reference to the individuals involved, the environment/institution and wider social factors. This reflective exercise ends with planning around meeting needs and changing the work/care context to reduce negative emotion and conflict.

The training was designed to be delivered face-to-face. However, the emergence of COVID-19 impacted upon the training with one ward. One impact was that the service user and carer co-facilitators could not travel and needed to contribute remotely; another impact was that the size of the training groups were made smaller, and social distancing and wearing of masks were introduced.

### 2.5 | Recruitment to study

Study team-members (OP; CPB; IJ) recruited 10 wards overall—two acute inpatient teams (one male, one female ward), two PICUs (both mixed wards), two low-secure (one male, one female), two medium-secure (one male, one female) and two high-secure forensic units (both male wards). Meetings were held with ward managers, senior staff, consultant psychiatrists, psychologists and occupational therapists to maximize engagement in the training and the component parts. Ward managers were informed that at least 50% of ward staff-teams would need to be trained. Ward teams were offered a choice of training dates, dividing teams into smaller subgroups to minimize service disruption (as well as to meet COVID-19 guidelines for one ward).

### 2.6 | Participants

Attendance at each training session ranged from 2 to 16 trainees (mean 7.1), and in total 214 staff completed the training across 30 training dates. Sixty acute inpatient staff, 52 PICU, 28 low-secure, 58 medium-secure and 16 high-secure staff were trained. Overall, the 10 ward teams consisted of mental health professionals across a wide spectrum of roles, summarized in Table 2.

### 2.7 | Evaluation tool (TARS)

The *Training Acceptability Rating Scale* (TARS) is a standard self-reported measure consisting of two sections, the first of which measures trainees' acceptability of training (TARS-1: Davis et al., 1989), and the second of which measures the perceived impact of training (TARS-2, Milne & Noone, 1996, pp140-141).

TARS-1 consists of six items measuring general acceptability, perceived effectiveness, negative side-effects, appropriateness,

TABLE 2 Trainee role profiles ( $n=214$ ).

Breakdown by role	Band	Ward	n=
Consultant psychiatrist	-	From 1 ward	1
Clinical psychologist	Band 7	1 ward	1
Ward manager	Band 7	7 wards	7
Deputy ward managers	Band 6	2 wards	7
Registered nurse	Band 6	9 wards	20
Occupational therapist	Band 6	1 ward	2
Registered nurse	Band 5	9 wards	46
Clinical psychologist	Band 4	1 ward	1
Associate practitioner	Band 4	2 wards	2
Trainee associate practitioner	Band 3	1 ward	1
Healthcare assistant	Band 3	9 wards	63
Healthcare assistant	Band 2	7 wards	19
Role unknown	-	1 ward	44

consistency and social validity of training, on a six-point Likert scale ranging from 'strongly disagree' (score 1) to 'strongly agree' (score 6). TARS-1 has good test-retest reliability ( $r=0.83$   $p<.01$ ) and internal consistency (0.99) (Davis et al., 1989).

TARS-2 consists of nine items measuring the trainees' overall impressions of the training process and its perceived outcomes, on a four-point scale from 'not at all' (score 0) to 'a great deal' (score 3). Although TARS-2 has not been psychometrically assessed, it has repeatedly demonstrated good face and concurrent validity (Carpenter et al., 2007). TARS-2 concludes with three open-ended questions asking about the 'most helpful' part of the training, any 'recommended changes' and 'any other comments.'

The six items of TARS-1 were summed to calculate an overall acceptability score (possible range 6–36), and the nine items of TARS-2 were summed to calculate an overall perceived impact score (possible range 0–27). An overall TARS score was calculated by summing the responses to all 15 questions (possible range 6–63) (Milne et al., 2000; Myles & Milne, 2004).

## 2.8 | Data collection

For the evaluation, at the end of each training session, participants were invited to complete the TARS.

## 2.9 | Ethical considerations

The EDITION acceptability and feasibility study, of which the TARS evaluation was a part, received formal ethical approval from the NHS Health Research Authority. Other ethical considerations informing this part of the study were that completion of the TARS was voluntary, and the completed questionnaire was anonymous.

## 2.10 | Data analysis

Quantitative analysis of the TARS results was conducted by generating descriptive statistics (frequencies, median averages and interquartile ranges; Miles, 2013). The open-ended comments were analysed using content analysis (Weber, 1990), a qualitative method that can classify open-ended text into categories that represent similar meanings and identify trends in the data via the quantification of specific words or themes.

# 3 | RESULTS/FINDINGS

## 3.1 | Quantitative results

Of the 214 trainees, 211 (99%) completed the quantitative sections of the TARS (three were missing the data). The TARS scores are detailed in Table 3.

TABLE 3 TARS scores descriptive statistics.

Question/domain (possible score range)	n	Median	IQR	Range
1. General acceptability (1–6)	211	6	5–6	1–6
2. Perceived effectiveness (1–6)	211	6	5–6	1–6
3. Negative side-effects (1–6)	208	5	5–6	0–6
4. Inappropriateness (1–6)	211	5	5–6	2–6
5. Consistency (1–6)	211	6	5–6	2–6
6. Social validity (1–6)	211	6	5–6	1–6
7. Did the training improve your understanding? (0–3)	211	2	2–3	0–3
8. Did the training help you to develop skills (0–3)	211	2	2–3	0–3
9. Has the training made you more confident? (0–3)	211	2	1–2	0–3
10. Do you expect to make use of what you learnt in the training? (0–3)	211	2	2–3	0–3
11. How competent were those who led the training? (0–3)	210	3	3–3	1–3
12. In an overall, general sense, how satisfied are you with the training? (0–3)	211	3	2–3	1–3
13. Did the training cover the topics it set out to cover? (0–3)	211	3	2–3	1–3
14. Did those who led the training sessions relate to the group effectively? (0–3)	211	3	3–3	1–3
15. Were the leaders motivating? (0–3)	211	3	2–3	1–3
Total 'acceptability' Q1-6 (1–36)	208	33	30–35	11–36
Total 'perceived impact' Q7-15 (0–27)	210	23	20–25	5–27
Total TARS Q1-15 (6–63)	206	55	50–59	21–63

For questions one, two, five and six on the TARS-1 acceptability subscale, there was a median score of 6, with questions three and four presenting a median score of 5 (out of a possible range of 1–6). Most participants 'strongly agreed' that the training was generally acceptable (57.8%), effective/beneficial (55.0%) and consistent with good practice (46.5%). Approximately half of participants 'strongly agreed' that it had high social validity (50.2%), that it was appropriate (49.8%), and the training was unlikely to harm patients (48.6%).

The questions on the TARS-2 perceived impact subscale had a possible score range 0–3. Most participants answered 'a great deal' to

questions 11–15 related to: how competent the course leaders were (77.6%); their satisfaction with the training (62.6%); how well the training covered the course topics intended (64.9%); how the leaders related to the training group (76.3%); and how motivating the leaders were (66.4%). However, the most frequent response to questions 7–10 was 'quite a lot'. These questions asked whether the training: improved understanding (47.4%); helped them to develop skills (51.7%); increased confidence (49.3%); and would be used by them in future (46.9%).

### 3.2 | Qualitative findings

In total, 198 of the 214 trainees (93%) completed parts of the open-ended questions of the TARS; 16 submitted entirely blank sections. Not all 198 completed every open-ended question: 189 (88%) completed Q16 on the most helpful parts; 146 (68%) completed Q17 on suggested changes; 100 (47%) completed Q18 for other comments; and 78 (36%) completed all three questions.

Overall, 15 trainees stated that all the training, or everything covered, was most helpful to them, and 91 suggested no changes to the training. Fourteen trainees expressed general appreciation for the training in the other comments. More specifically, trainees stated that the training was good ( $n=19$ ), enjoyable ( $n=14$ ), informative ( $n=11$ ), useful ( $n=9$ ), applicable ( $n=6$ ) and insightful ( $n=3$ ). The open-ended questions allowed the research team to understand why the training was beneficial or how it could be improved in further detail. Five overarching themes were constructed from the three open-ended questions: modules of interest, multiple perspectives, modes of delivery, moulding to context and modifying other elements. Quotations are reported here exactly as they were written by respondents.

### 3.3 | Modules of interest

Whilst seven trainees appreciated the overall focus on de-escalation and nine the whole trauma-informed approach as the most helpful aspects of the training generally, 33 trainees identified certain modules or parts of modules as the most helpful parts. These included the neuroscience of trauma (module 1;  $n=4$ ), verbal de-escalation (module 3;  $n=4$ ), sensory interventions (module 4;  $n=5$ ) and working with individuals distressed by hostile voices (module 4;  $n=24$ ). This suggests that the final module, which is perhaps the most practical, and the most novel, was particularly useful to many. Some trainees also wanted more content on certain topics, including more on sensory modulation ( $n=2$ ), on practically working with voices ( $n=2$ ), on managing risk ( $n=1$ ) and on suicide prevention ( $n=1$ ).

### 3.4 | Multiple perspectives

Several trainees identified the contributions of the service user and carer co-facilitators as the most helpful part of the training ( $n=39$ ). Trainees identified being able to listen to them ( $n=4$ ) as important and

they valued their sharing of their experience ( $n=17$ ; '*having an expert by experience as part of trainers*'), perspectives ( $n=5$ ) and stories ( $n=3$ ). Eight trainees particularly appreciated the lived experience underpinning the section on hearing voices. One trainee also stated that they valued the co-facilitation of group work ('*group work i.e., patient inclusion*'). The inclusion of lived experience was seen as invaluable ( $n=1$ ), enjoyable ( $n=1$ ), impactful ( $n=2$ ; '*hearing it from others perspective was very powerful*') and insightful ( $n=3$ ; '*I was happy to see the (carer) insight offered*'; enabling '*thinking from patient perspective*'), with value in '*being able to talk with someone that's gone through this*'. One person stated they wanted '*more from service user + carer (smiley face)*'.

In addition to this, five trainees stated that they appreciated the multiple perspectives brought by the combination of professional, service user and carer co-facilitators. For instance, one trainee commented that it was most helpful that '*the training consisted of teaching from different backgrounds and knowledge*'. Another commented that they valued '*hearing from lived experiences from the staff members who led the training*'. Furthermore, one trainee stated that this brought a '*variety*' of different perspectives.

One person stated that the value of group work was that it gave an opportunity for them to hear from their colleagues ('*seeing colleagues perspectives*') and another that it gave opportunity to reflect '*as a team*'. And one person commented on the value of their perspective and contribution to considering the feasibility and acceptability of interventions ('*accepting our input*'). Finally, six trainees commented that the training enabled '*self-reflection*' on their own perspectives.

### 3.5 | Modes of delivery

In the overall comments, eight trainees commented that they thought the delivery of the training was good or great. Twelve trainees particularly valued the group work, group discussion and interaction. Five people wanted more interaction, with one commenting '*potentially more interactions in the afternoon*'. There was some recognition that the size of the groups could impact ease of discussion, with two wanting smaller groups ('*small groups - more likely to share*') and one person (pre-COVID) wanting '*larger groups for interactions*'. One person also wanted '*more group work/practical trial*,' which might imply a desire for role-play or similar.

Ten trainees stated that the 'feelings and needs' card task was the most helpful aspect of the training; that it was helpful to think about a particular incident ( $n=2$ ), to explore both staff and patient opinions and perspectives ( $n=2$ ) or feelings ( $n=1$ ), and to encourage reflection ( $n=2$ ). One person wanted more activities.

Eight people particularly appreciated the video scenarios, with one commenting that the '*use of the videos that support the learning on PowerPoint*' was most helpful; whilst two further people wanted more videos, two others did comment that there should be less reliance on videos ('*less videos, explanation would have sufficed at times*'). With videos comes the potential for IT issues, and three people (early on in delivering the training) commented that the IT should have been checked before the trainees arrived. Eight people

commented on the other scenarios, case studies and examples as being particularly helpful; one saying they were 'relatable' and another that they encouraged 'reflection'. One person wanted 'more examples of de-escalation/practices' and another 'more practice scenarios.' Two people commented that, overall, there should be less reliance on PowerPoint slides.

In terms of providing other resources, four trainees suggested that handouts of the material should be provided, that they would be helpful 'to look back at' ( $n=1$ ) and to 'help remember everything/further reading' ( $n=1$ ). Thus, handouts and a list of recommendations for further reading were desired.

Regarding the pitch or level of the training, one trainee commented that the training should be 'less basic', with another commenting that there should be 'less introduction.' Similarly, one person commented 'it is good for people naïve to working in a mental health setting but feel like it comes naturally after many years of working on the ward,' suggesting they felt the training was more for beginners. However, one person suggested that there was a need to 'simplify questions/words.' Finally, two people suggested that the material could be delivered over two sessions.

### 3.6 | Moulding to context

Six trainees explicitly commented that the training would be 'applicable' to their practice. Another commented that, overall, the training was 'very appropriate to our working environment.' However, five trainees suggested that the training needed more moulding to the ward environment ('training should be ward/environment specific'). Of these, two trainees from a PICU ward felt that the training needed further contextualisation; for instance, that it should be 'more specific to risk - e.g., some interventions unsafe for PICU patients.' Another trainee suggested 'relate it to current policies and look how wards run,' which suggests that the trainers may have given the impression that they did not know how these wards operate. Consequently, two other trainees raised acceptability questions about the lanyard intervention, which was seen as 'good on paper' or 'in theory' but not in practice. One raised the issue of staffing time (it 'may not be practical on wards i.e., the free to ask me badge with things like staffing time') and another the concern about risk in a PICU setting.

In terms of applying the training to ward culture, one person's suggested change was to 'include medical staff', and one other suggested that there should be a 'mix of staff of differing levels.' Similarly, two people made the general comment that it would be important for ward doctors and consultants to attend the training. Furthermore, going forward, three people suggested that the training would be a good induction course for new starters.

One trainee commented that the training should have been delivered as a full team away-day, providing this rationale:

*This may have been better as a team away day so we could look at how interventions could be rolled out on the ward as a team. Also, there is no clarity about what the next steps are, how these things will*

*be used/implemented on the ward & how all the profession specific parts tie together as it feels like we are doing things in silos (as usual) - a team approach would be best for consistency.'*

Here the overall training approach is felt to reinforce existing disciplinary distinctions rather than encouraging working together as a multidisciplinary team. A whole-team approach is suggested as a means of enabling the team to see how all the component parts of the intervention fit together, and ensuring they are implemented across the ward, by all ward staff.

### 3.7 | Modifying other elements

In addition to the changes to delivery mentioned above, further important suggestions of modifications came out of the TARS comments. One comment was that a trainee felt 'unprepared for content,' from which can be inferred that they had not been pre-warned or adequately prepared for the training discussions around trauma. Another suggested change was that 'trauma can be both ways staff & service users' suggesting that this person felt that staff trauma had not been adequately addressed.

Another trainee commented 'there is a focus on how important language is, yet use of "patient" (rather than service user, individual etc) contributes to pathologising/stigma.' This came from a staff member on a low-secure forensic ward and was a general comment on the language used throughout the slide-set. Another piece of feedback concerned when to discuss the interventions, suggesting 'perhaps more discussion/thought about interventions after each section rather than end of day.' This suggestion was implemented by the team early in the training, where each intervention was then discussed as the appropriate time, and feedback sought. Finally, one staff member asked, 'could we have a follow-up - how has it worked/been implemented?' which emphasizes the importance of reporting back to staff the findings as to whether the intervention is acceptable and feasible.

In terms of the venue and context when the training was delivered face-to-face, one person stated that the most helpful aspect of the training was that it was held 'within my colleague base.' However, four people commented that a better physical training environment was needed. One commented on the 'alarms going off' when the training was held in a training-room on the ward. Another 'not have it undertaken in a communal area where other non-attendees are working and creating noise distractions' when the training was held in a PMVA training area. Once training moved online due to COVID-19 for one ward, only one person commented on the remote delivery, saying 'Zoom meetings make it more difficult'.

## 4 | DISCUSSION

Part of the reason why current de-escalation training may not be impacting on routine practice could be due a lack of knowledge of the characteristics of training likely to enhance acceptability

and uptake (Price et al., 2015). This study explored whether a co-designed and co-delivered training package on de-escalation of violence and aggression in ward-settings is acceptable to mental health professionals attending the training. The EDITION training focussed less on skills/techniques and more on contextualizing de-escalation within a trauma-informed perspective in the context of ward-environments.

Overall, the TARS scores indicated high levels of satisfaction with the trainers and the training generally. Improved understanding, developing skills, increased confidence and future use of the training were rated quite highly ('quite a lot'), and these findings informed the process evaluation interviews to explore why that might have been the case. The facilitators and the training content were perceived to have the highest impact (rated 'a great deal').

Most trainees wanted to explore all the four modules and they appreciated the various modes of delivery. However, we have found that trainees may need more forewarning about the training focus and content, and more consideration of staff's own trauma, thereby emphasizing the importance of trainer's themselves role-modelling sensitivity to trauma (Li et al., 2019). Staff particularly valued hearing from the different perspectives (service user, carer, staff and colleagues) present at the training. Having a service user and a carer co-facilitator in a training-context may serve to elevate their perspectives and experiences as forms of experiential knowledge and expertise (Gillard et al., 2020), challenging staff ideas as to what perspectives could be valuable to consider in the context of understanding de-escalation. It is hoped that this would then help staff re-evaluate and listen to the perspectives of the people they care for back in the ward environment (Grundy, 2024).

Trainees suggested several ways in which the training could be improved, particularly around further moulding of the intervention to the specific ward contexts being addressed. As with previous training for mental health teams (Grundy et al., 2017), trainees suggested that those with more influence or power to change ward culture or clinical practice (such as ward managers and consultants) should be present at the training. Furthermore, common terminology used to talk about people being cared for within ward environments (such as 'patients' and 'service users') continue to be contested (Fischer et al., 2020), and the training should acknowledge this, perhaps thereby helping staff to be more person-centred (RCPsych Person-Centred Training and Curriculum Scoping Group (RCPPC), 2019).

#### 4.1 | Strengths and limitations

A key strength of the EDITION study was the involvement of people with direct lived experience and carers in the design of the training-package. Whilst the service user and carer co-applicants/co-investigators were involved throughout, the co-design of the training could have been strengthened by more involvement of the Lived Experience Advisory Panel and by greater diversity in involvement (particularly ethnic diversity; Dawson et al., 2018). A further strength lies in the involvement of a service user and

a carer as co-facilitators of the training. As seen elsewhere (Grundy et al., 2017), trainees clearly valued the overall model of co-delivery.

The TARS is a helpful training evaluation tool enabling the integration of quantitative and qualitative data on the acceptability and perceived impact of the training, the valued aspects of the training, with space for recommending changes. There was a high response rate to the TARS, with a large sample size, across the different study sites. One key limitation of the TARS is that it does not capture whether trainees feel that the training could be specifically applied *in their working environment*; whilst the qualitative comments gave limited insight and overcame this problem to some extent, this is an important omission for assessing the acceptability of training interventions.

Another limitation is that the TARS only captures responses immediately after the training session itself, hence it does not address the long-term acceptability and impact in terms of implementing learning in practice; these issues were addressed in interviews as part of the process evaluation reported elsewhere (Price et al., 2024). A further limitation of the study was the lack of demographic data for questionnaire participants, meaning that we were unable to assess response patterns by professional role or any other demographic factors.

Finally, the fact that the whole training course was only 1 day in length could be considered a limitation. This was accounted for by applying training content via the implementation of several practical components aimed at changing ward culture and impacting practice. Furthermore, 'Intervention Champions' were identified to embed learning into practice. These measures should be considered a further key strength of the work, and their feasibility and acceptability are evaluated elsewhere (Price et al., 2024).

#### 4.2 | Implications for practice

This study illuminates the characteristics of de-escalation training likely to enhance acceptability and uptake for mental health professionals working in ward environments. A trauma-informed approach to de-escalation, which focuses on creating trauma-sensitive clinical environments, was acceptable and impactful on trainees from different service settings. The model of facilitation whereby training content was co-delivered by service user, carer and staff facilitators, was a key factor in the acceptability and perceived impact of the training-package. We recommend co-production models of designing and delivering training to mental health professionals. Whilst the training was acceptable and impactful, further research is needed to demonstrate whether it is clinically and cost-effective.

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### CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflicts of interest in relation to this work.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

### ETHICS STATEMENTS

The EDITION acceptability and feasibility study, of which the TARS evaluation was a part, received formal ethical approval from the NHS Health Research Authority (references: 18/YH/0035 and 19/WS/0098).

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