

## RESEARCH ARTICLE OPEN ACCESS

# Therapists' Attitudes and Exclusion Criteria for Prolonged Exposure and EMDR in Patients With Eating Disorders and PTSD

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## ABSTRACT

**Objective:** A significant proportion of patients with eating disorders (EDs) also meet criteria for posttraumatic stress disorder (PTSD). Guidelines recommend exposure-based treatments for PTSD, including prolonged exposure (PE) and eye movement desensitisation and reprocessing (EMDR). Investigating therapist-related factors could lead to improve their use when ED and PTSD co-occur.

**Method:** A cross-sectional survey was conducted among 81 EDs therapists (88% female;  $M$  age = 40.4,  $SD$  = 10.4) in 2023 in the Netherlands. Hierarchical multiple regression analyses assessed predictors of excluding patients with EDs and comorbid PTSD from exposure-based treatments for PTSD.

**Results:** Therapists held more favourable beliefs about EMDR ( $M$  = 10.5,  $SD$  = 7.5) than PE ( $M$  = 13.9,  $SD$  = 6.9), and were less likely to exclude patients with EDs and comorbid PTSD from EMDR ( $M$  = 15.5,  $SD$  = 9.3) than PE ( $M$  = 17.7,  $SD$  = 9.3) ( $t(80) = 3.47$ ,  $p < 0.002$ ). Beliefs about exposure-based interventions predicted the likelihood of exclusion from both PE ( $\beta = 0.56$ ,  $p < 0.002$ ) and EMDR ( $\beta = 0.69$ ,  $p < 0.002$ ).

**Conclusions:** Therapists' beliefs influence the use of exposure-based treatments for PTSD in patients with EDs and comorbid PTSD. Addressing these beliefs in training, may support broader implementation.

## 1 | Introduction

Eating disorders (EDs) are debilitating mental disorders associated with a high mortality rate (van Hoeken and Hoek 2020), lower quality of life, and significant economic costs (Agh et al. 2016). Remission rates following treatment vary by diagnostic category and the definition of remission used. A recent systematic review and meta-analysis pooling together all diagnostic categories of EDs and different forms of psychotherapeutic

treatment found recovery rates of approximately 46% (Solmi et al. 2024). Thus, more than half of the patients with EDs who undergo treatment do not adequately respond.

EDs and posttraumatic stress disorder (PTSD) often co-occur: between 18% and 25% of adult patients with an ED have comorbid PTSD (Ferrell et al. 2022). A substantial body of evidence indicates that a diagnosis of PTSD negatively influences response to ED treatment. For instance, two systematic reviews

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### Highlights

- Therapists hold more favourable views towards EMDR compared to prolonged exposure when treating PTSD in patients with eating disorders.
- Attitudes towards exposure based treatment predict the likelihood that clinicians exclude patients with eating disorders and PTSD from exposure-based treatment for PTSD.
- Addressing these attitudes towards exposure-based treatment in clinical training and supervision may increase uptake and treatment outcomes for patients with PTSD and eating disorders.

demonstrated that PTSD diagnosis was related to greater post-treatment symptoms of ED psychopathology and higher ED treatment drop-out, although heterogeneity between the studies was high (Convertino and Mendoza 2023; Day et al. 2024; Hazzard et al. 2021). Given the high comorbidity between EDs and PTSD (Ferrell et al. 2022), there is an increasing recognition among therapists and patients of the need for integrated treatment approaches that simultaneously address the complex and interrelated symptomatology of both disorders (Trottier et al. 2017, 2016).

For the treatment of PTSD, several evidence-based treatments exist (McLean et al. 2022). Exposure-based trauma focused treatments are recommended in international guidelines (Jericho et al. 2022; McLean et al. 2022; “National Institute for Health and Care Excellence: Guidelines” 2018). In the Netherlands, the most frequently utilised forms of exposure-based treatment are prolonged exposure (PE (Powers et al. 2010)) and eye movement desensitisation and reprocessing (EMDR) therapy (Shapiro 2018).

Despite substantial scientific evidence for providing exposure-based treatments for PTSD, research has shown that therapists may decide not to provide these treatments (Meyer et al. 2014). Avoidance of exposure-based treatment has been investigated among therapists that treat anxious patients (Meyer et al. 2014), as well as among those treating persons with PTSD and comorbid psychotic disorder (D. P. van den Berg et al. 2016), children with anxiety disorders (de Jong et al. 2020; Whiteside et al. 2016) and adults with EDs (Mulken et al. 2018; Waller et al. 2016). Specific therapist-related factors contribute to this reluctance, such as beliefs about the utility, safety, and ethicality of a treatment method. Additionally, female sex, older age, a lack of training in exposure-based treatment (Becker et al. 2004), and higher anxiety sensitivity (de Jong et al. 2020; Deacon et al. 2013) increase the likelihood of excluding patients from exposure-based treatment. Therapists' reluctance to offer exposure-based treatments for PTSD represents a significant missed opportunity, as their use can be beneficial in supporting optimal recovery, also in patients with complex comorbidities such as EDs.

Research on therapists' beliefs regarding exposure-based treatment, specifically for patients with an ED and comorbid PTSD, is scarce. To date, only one study explored this topic showing that therapists perceived both benefits (e.g., improved treatment retention and decreased drop-out) and risks (e.g., increased self-

harm and suicidal ideation) of concurrent treatment (Trottier et al. 2017). Notably, over 50% of the therapists in this study feared that addressing PTSD symptoms in this population could worsen the ED.

The aim of this study is twofold. First, we aimed to identify therapists' beliefs about the safety, tolerability and ethicality of exposure-based treatments for PTSD in patients with an ED and comorbid PTSD, as well as patient factors that may lead therapists to exclude patients from these treatments. Based upon previous work in the Netherlands (M. van den Berg and van Minnen 2014), we hypothesised that therapists would view EMDR as more favourable than PE in treating patients with an ED and comorbid PTSD. Additionally, we expected that therapists were less likely to exclude these patients from EMDR than PE. Second, we aimed to predict the likelihood that therapists would exclude patients with an ED and comorbid PTSD from exposure-based treatment for PTSD. Based on prior research, we hypothesised that female sex, older age, less clinical experience, absence of prior experience in exposure techniques, higher anxiety and negative beliefs about exposure-based treatment would predict this likelihood (Langthorne et al. 2023; Meyer et al. 2014; Meyer et al. 2020; Whiteside et al. 2016).

## 2 | Method

### 2.1 | Participants

From October 2021 until April 2023, a convenience sampling strategy was used to recruit ED therapists via newsletters from the Netherlands Academy for Eating Disorders (NAE) and through flyers at their annual conference. Additional dissemination efforts included targeted e-mails to mental healthcare professionals and institutions specialising in the treatment of EDs. To encourage study participation, therapists were offered the opportunity to enter a lottery, in which three randomly selected therapists would each receive a €25 gift certificate.

To be included in the study, participants had to: (1) have clinical experience in the treatment of EDs, including anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), or other specified feeding or eating disorder (OSFED); (2) hold a professional registration as a psychologist, physician or psychiatrist, and (3) give active informed consent.

### 2.2 | Procedure

Participants accessed the study via a link to a digital survey platform, where they were informed about the study's aims and procedures. Those who provided active informed consent received a follow-up e-mail containing the survey that took approximately 30 min to complete. In total, 87 participants gave consent, and 83 initiated the survey. Of those, two did not complete the survey, resulting in a final sample of 81 participants. Non-completers did not differ from completers ( $p > 0.05$ ) with respect to sex, age or years of experience.

The study was independently reviewed and approved by the Psychology Research Ethics Committee at Leiden University, the Netherlands (Reference No. V2-2873).

## 2.3 | Measures

### 2.3.1 | Demographic and Professional Characteristics

Participants reported their sex, age, professional discipline, postdoctoral training, years of experience in PE and/or EMDR for PTSD, and current professional setting (e.g., private practice, mental healthcare centre, or psychiatric hospital).

In the Dutch health care system, healthcare psychologists undergo an additional 2 years of post-doctoral training; psychotherapists and clinical psychologists must complete 4 years, and psychiatrists four-and-a-half years of post-doctoral training.

### 2.3.2 | Anxiety Sensitivity

The Anxiety Sensitivity Index-3 (ASI-3) (Taylor et al. 2007) is an 18-item questionnaire that measures different concerns participants may have regarding their anxiety. Items are scored on a five-point Likert scale, ranging from (0) 'very little' to (4) 'very much'. Responses to each item are summed to produce a total score (range: 0–72), with higher total scores indicating more anxiety sensitivity. Previous research has demonstrated a good internal consistency as well as a good convergent, discriminant and criterion validity (Taylor et al. 2007). The internal consistency of the ASI-3 in this study was good ( $\alpha = 0.90$ ).

### 2.3.3 | Therapists' Beliefs About Exposure-Based Treatment

The Therapists' Beliefs about Exposure Scale (TBES) (Deacon et al. 2013) is a 21-item questionnaire that measures therapists' beliefs about the safety, tolerability and ethicality of exposure-based treatment. Participants respond to statements such as 'Most patients have difficulty tolerating the distress exposure therapy evokes' or 'Asking the patient to discuss traumatic memories in exposure therapy may retraumatise the patient'. Items are scored on a five-point Likert scale, ranging from 0 ('strongly disagree') to 4 ('strongly agree'), with higher total scores representing more negative beliefs about exposure-based treatment. Previous research has shown good psychometric properties, with a test-retest reliability of  $\alpha = 0.89$  and an internal consistency of  $\alpha = 0.96$ .

For this study, the original 21-item TBES questionnaire was translated into Dutch. Subsequently, to answer our research questions, three versions of this instrument were created.

To capture beliefs regarding PE the words 'exposure therapy' were replaced by 'prolonged exposure for PTSD'. This adapted Dutch version (TBES<sub>PE21</sub>) was used in the hierarchical multiple regression analyses. Subsequently, to assess held beliefs towards EMDR, the TBES<sub>EMDR18</sub> was created. In this version, 'exposure

therapy' was replaced by 'EMDR' and the three items related to homework assignments and in vivo exposure were omitted, as these interventions are not part of the standard EMDR manual, thus resulting in an 18-item questionnaire. To directly compare therapists' beliefs towards PE and EMDR, an abbreviated version of the TBES<sub>PE21</sub> was made (TBES<sub>PE18</sub>) which consisted of the 18 items shared with the TBES<sub>EMDR18</sub>. This version was used in the paired samples *t*-tests. Both short versions demonstrated excellent internal consistency (TBES<sub>PE18</sub>:  $\alpha = 0.91$ ; TBES<sub>EMDR18</sub>:  $\alpha = 0.92$ ). In this study, the middle response option 'unsure' (2) was accidentally omitted when programming the two questionnaires (TBES<sub>PE</sub>, TBES<sub>EMDR</sub>) on the online platform. As a result, participants could choose between (0) 'strongly disagree'; (1) 'partly disagree', (2) 'partly agree', and (3) 'strongly agree'.

To specifically assess beliefs about exposure-based treatment for PTSD in individuals with an ED and comorbid PTSD, three items were added to the end of the questionnaires. These items were: (1) 'PE/EMDR for PTSD often worsens ED symptoms', (2) 'PE/EMDR for PTSD often causes patients to drop out of their ED treatment', and (3) 'Patients are at risk of decompensating (e.g., losing mental or behavioural control, resulting in purging behaviours, binges, or restricting their food intake) after PE/EMDR'. These items were developed in consultation with national experts in the treatment of EDs and PTSD. Descriptive statistics for these items are reported separately, and they were not included in the total scores of the TBES<sub>PE18</sub> and the TBES<sub>EMDR18</sub> (and were not included in the paired samples *t*-tests or hierarchical multiple regression analyses).

### 2.3.4 | Likelihood to Exclude Patients From Exposure-Based Treatment

The Broken Leg Exception Scale (BLES) (Meyer et al. 2014) is a 25-item questionnaire that assesses the likelihood that therapists exclude patients from exposure-based treatment based on patient characteristics. Examples of patient characteristics are a comorbid substance use disorder or below average intelligence. Items are scored on a four-point Likert scale, ranging from (0) 'very unlikely to exclude' to (3) 'very likely to exclude'. Responses to each item are summed to produce a total score (range: 0–75), with higher total scores indicating a greater likelihood of excluding patients from exposure-based treatment. Previous research has shown excellent internal consistency ( $\alpha = 0.93$ ) (Meyer et al. 2014).

As with the TBES, for this study we translated the 25-item BLES questionnaire into Dutch and administered two versions to assess reasons for excluding patients from PE (BLES<sub>PE25</sub>) and EMDR (BLES<sub>EMDR23</sub>) (an adapted version wherein the words 'Exposure therapy' were replaced with 'Prolonged exposure for PTSD/EMDR'). In the BLES<sub>EMDR23</sub>, two items regarding homework exercises and in vivo exposure were omitted, as these interventions are not part of the standard EMDR manual, resulting in a total of 23 items. To compare the BLES<sub>PE</sub> and the BLES<sub>EMDR</sub>, sum scores were calculated for the 23 items that appear in both modified versions of the BLES, with total sum scores ranging between 0 and 69 (BLES<sub>PE23</sub>). Internal consistency for both

modified versions was good to excellent (BLES<sub>PE23</sub>:  $\alpha = 0.87$ ; BLES<sub>EMDR23</sub>:  $\alpha = 0.90$ ). As with the negative beliefs about exposure-based treatment scale and following expert consultation, 10 items were added at the end of both modified version of the BLES to gain more insight into therapists' reasons to exclude patients with an ED and comorbid PTSD from exposure-based treatment for PTSD, specifically related to ED pathology. Examples of these items are 'The patient is severely underweight (BMI < 15)' and 'The patient purges > 8 times per week'. These items are for descriptive purposes only and were not included in the total scores of the BLES<sub>PE25</sub>, BLES<sub>PE23</sub> and the BLES<sub>EMDR23</sub>.

### 2.3.5 | Statistical Analysis

ChatGPT-4-turbo was used to assist with language editing. The data were analysed using SPSS (Version 27.0). Descriptive statistics were initially calculated for the variables of interest, that is, means, standard deviations, item means and item frequency scores to rank the most prevalent beliefs about exposure-based treatments and the most frequently cited reasons for avoidance of these treatments. Paired samples *t*-tests were conducted to assess differences in therapists' beliefs about PE or EMDR (TBES<sub>PE18</sub> or TBES<sub>EMDR18</sub>), as well as differences in the reasons

for the likelihood to exclude patients with an ED and comorbid PTSD from these treatments (BLES<sub>PE23</sub> and BLES<sub>EMDR23</sub>).

To identify factors (e.g., demographic and professional characteristics, anxiety sensitivity, beliefs about exposure-based treatment) predicting the likelihood that therapists would exclude patients with an ED and comorbid PTSD from exposure-based treatments (BLES<sub>PE25</sub> and BLES<sub>EMDR</sub>), two separate hierarchical multiple regression analyses were performed. Standardised regression coefficients ( $\beta$ ), associated *p*-values, the total explained variance ( $R^2$ ), the change in explained variance ( $\Delta R^2$ ), and *F*-statistics for model significance and model change were reported for each step (see Tables 1 and 2). Multicollinearity was observed between therapist age and therapist years of experience in PE/EMDR; therefore, only years of experience was included in the final regression models.

In both regression analyses, the first step included sex, professional discipline, and years of experience in PE/EMDR, the second step included anxiety sensitivity (ASI-3 total scores), and the final step included therapists' beliefs about exposure-based treatments (TBES<sub>EMDR</sub> or TBES<sub>PE</sub>). Benjamini and Hochberg corrections for multiple comparisons were used to account for the increased risk of Type I error; corrected values were reported in this paper (Benjamini and Gavrilov 2009).

**TABLE 1** | Hierarchical multiple regression results for the tendency to exclude patients with an eating disorder and comorbid PTSD from prolonged exposure.

| Variable                 | <i>B</i> | 95% CI for <i>B</i> |       | SE <i>B</i> | $\beta$ | <i>R</i> <sup>2</sup> | $\Delta R^2$ |
|--------------------------|----------|---------------------|-------|-------------|---------|-----------------------|--------------|
|                          |          | LL                  | UL    |             |         |                       |              |
| Step 1                   |          |                     |       |             |         | 0.03                  | 0.03         |
| Constant                 | 14.77*** | 6.86                | 22.68 | 3.97        |         |                       |              |
| Sex                      | 4.44     | −2.31               | 11.18 | 3.39        | 0.15    |                       |              |
| Professional discipline  | 0.34     | −0.94               | 1.63  | 0.65        | 0.08    |                       |              |
| Experience               | −0.10    | −0.39               | 0.20  | 0.15        | −0.10   |                       |              |
| Step 2                   |          |                     |       |             |         | 0.03                  | 0.00         |
| Constant                 | 13.94*** | 5.01                | 22.88 | 4.49        |         |                       |              |
| Sex                      | 4.70     | −2.21               | 11.60 | 3.47        | 0.16    |                       |              |
| Professional discipline  | 0.32     | −0.98               | 1.62  | 0.65        | 0.08    |                       |              |
| Experience               | −0.09    | −0.39               | 0.21  | 0.15        | −0.09   |                       |              |
| Anxiety sensitivity      | 0.07     | −0.29               | 0.43  | 0.18        | 0.05    |                       |              |
| Step 3                   |          |                     |       |             |         | 0.33                  | 0.30***      |
| Constant                 | 4.23     | −3.97               | 12.42 | 4.11        |         |                       |              |
| Sex                      | 2.41     | −3.43               | 8.25  | 2.93        | 0.08    |                       |              |
| Professional discipline  | 0.49     | −0.60               | 1.58  | 0.55        | 0.12    |                       |              |
| Experience               | −0.05    | −0.30               | 0.20  | 0.13        | −0.05   |                       |              |
| Anxiety sensitivity      | −0.01    | −0.31               | 0.29  | 0.15        | −0.01   |                       |              |
| Beliefs towards exposure | 0.68***  | 0.45                | 0.92  | 0.12        | 0.56    |                       |              |

Note: *p* values were corrected for multiple testing.

Abbreviations: CI, confidence interval; LL, lower limit; UL, upper limit.

\**p* < 0.05.

\*\**p* < 0.01.

\*\*\**p* < 0.001.

**TABLE 2** | Hierarchical multiple regression results for the tendency to exclude patients with an eating disorder and comorbid PTSD from EMDR.

| Variable             | <i>B</i> | 95% CI for <i>B</i> |       | SE <i>B</i> | $\beta$ | <i>R</i> <sup>2</sup> | $\Delta R^2$ |
|----------------------|----------|---------------------|-------|-------------|---------|-----------------------|--------------|
|                      |          | LL                  | UL    |             |         |                       |              |
| Step 1               |          |                     |       |             |         | 0.02                  | 0.02         |
| Constant             | 13.82*** | 6.31                | 21.32 | 3.77        |         |                       |              |
| Sex                  | 3.39     | −3.00               | 9.79  | 3.21        | 0.12    |                       |              |
| Profession           | −0.14    | −1.36               | 1.08  | 0.61        | −0.04   |                       |              |
| Experience           | −0.05    | −0.33               | 0.23  | 0.14        | −0.05   |                       |              |
| Step 2               |          |                     |       |             |         | 0.02                  | 0.00         |
| Constant             | 13.25*** | 4.77                | 21.72 | 4.26        |         |                       |              |
| Sex                  | 3.58     | −2.98               | 10.13 | 3.29        | 0.13    |                       |              |
| Profession           | −0.16    | −1.39               | 1.07  | 0.62        | −0.04   |                       |              |
| Experience           | −0.04    | −0.33               | 0.24  | 0.14        | −0.05   |                       |              |
| Anxiety sensitivity  | 0.05     | −0.29               | 0.39  | 0.17        | 0.03    |                       |              |
| Step 3               |          |                     |       |             |         | 0.46                  | 0.43***      |
| Constant             | 5.53     | −1.14               | 12.20 | 3.35        |         |                       |              |
| Sex                  | 0.56     | −4.42               | 5.55  | 2.50        | 0.02    |                       |              |
| Profession           | 0.00     | −0.92               | 0.93  | 0.47        | 0.00    |                       |              |
| Experience           | 0.06     | −0.15               | 0.28  | 0.11        | 0.07    |                       |              |
| Anxiety sensitivity  | −0.04    | −0.30               | 0.22  | 0.13        | −0.03   |                       |              |
| Beliefs towards EMDR | 0.85***  | 0.63                | 1.07  | 0.11        | 0.69    |                       |              |

Note: *p* values were corrected for multiple testing.

Abbreviations: CI, confidence interval; LL, lower limit; UL, upper limit.

\**p* < 0.05.

\*\**p* < 0.01.

\*\*\**p* < 0.001.

### 3 | Results

#### 3.1 | Participant Demographic and Professional Characteristics

Table 3 presents the demographic and professional characteristics of 81 participants, of whom 87.7% were female. The mean age was 40.4 years (*SD* = 10.5). On average, participants had 13.8 years of clinical experience (*SD* = 10.1). About three-quarters of the participants had received at least 2 years of postdoctoral education. Additionally, over two-thirds of the participants had received specific training in psychotherapeutic treatment of PTSD. About one-quarter had been trained in PE, while just over one-third had received training in EMDR. Close to two-fifths of the participants reported having treated between 26 and 50 patients primarily diagnosed with an ED. Furthermore, approximately half of the participants indicated that they treated up to 10 patients with a primary diagnosis of PTSD.

#### 3.2 | Therapists' Beliefs About Exposure-Based Treatments

The mean score for the TBES<sub>PE18</sub> was 13.9 (*SD* = 6.9), with scores ranging from 0 to 28 (see Table 4). The most strongly endorsed beliefs about PE were: “Most patients have difficulty

**TABLE 3** | Sample characteristics of eating disorder therapists (*N* = 81).

| Characteristic                                      | Total <i>N</i> = 81 |
|-----------------------------------------------------|---------------------|
| Sex, <i>n</i> (%)                                   |                     |
| Female                                              | 71 (87.7)           |
| Male                                                | 10 (12.3)           |
| Clinical experience (years), <i>M</i> ( <i>SD</i> ) | 13.8 (10.1)         |
| Professional discipline <i>n</i> (%)                |                     |
| Psychologist                                        | 24 (25.9)           |
| Healthcare psychologist <sup>a</sup>                | 30 (37.0)           |
| Psychotherapist/Clinical psychologist <sup>b</sup>  | 18 (22.2)           |
| Physician                                           | 4 (4.9)             |
| Psychiatrist <sup>b</sup>                           | 5 (6.2)             |
| Anxiety sensitivity, <i>M</i> ( <i>SD</i> )         | 8.21 (6.3)          |

<sup>a</sup>Registered academic professional with at least 2 years of post-master education.

<sup>b</sup>Registered academic professional with at least 4 years of post-master education.

tolerating the distress exposure therapy evokes” (*M* = 1.5, *SD* = 0.8), “Patients are at risk of decompensating (i.e., losing mental and/or behavioural control) during highly anxiety-provoking exposure therapy sessions” (*M* = 1.4, *SD* = 0.8),

**TABLE 4** | Means and standard deviations of TBES items.

| Item                                                                                                                                                                  | $M_{PE}$ ( $SD_{PE}$ ) | $M_{EMDR}$ ( $SD_{EMDR}$ ) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------|
| 1. Most patients have difficulty tolerating the distress exposure therapy/EMDR evokes.                                                                                | 1.47 (0.82)            | 1.12 (0.83)                |
| 2. Exposure therapy/EMDR addresses the superficial symptoms of an anxiety disorder but does not target their root cause.                                              | 0.75 (0.62)            | 0.58 (0.65)                |
| 3. Exposure therapy/EMDR works poorly for complex cases, such as when the patient has multiple diagnoses.                                                             | 0.63 (0.58)            | 0.44 (0.63)                |
| 4. Compared to other psychotherapies, exposure therapy/EMDR leads to higher dropout rates.                                                                            | 0.98 (0.65)            | 0.43 (0.52)                |
| 5. Conducting exposure therapy sessions outside the office increases the risk of an unethical dual relationship with the patient.                                     | 0.63 (0.64)            | —                          |
| 6. Exposure therapy/EMDR is difficult to tailor to the needs of individual patients.                                                                                  | 0.46 (0.57)            | 0.43 (0.61)                |
| 7. Compared to other psychotherapies, exposure therapy/EMDR is associated with a less strong therapeutic relationship.                                                | 0.58 (0.59)            | 0.53 (0.59)                |
| 8. Asking the patient to discuss traumatic memories in exposure therapy/EMDR may retraumatise the patient.                                                            | 0.67 (0.71)            | 0.58 (0.63)                |
| 9. It is unethical for therapists to purposely evoke distress in their patients.                                                                                      | 0.26 (0.44)            | 0.26 (0.44)                |
| 10. Patients are at risk of decompensating (i.e., losing mental and/or behavioural control) during highly anxiety-provoking exposure therapy/EMDR sessions.           | 1.37 (0.78)            | 1.15 (0.81)                |
| 11. Conducting exposure therapy sessions outside the office endangers the patient's confidentiality.                                                                  | 0.90 (0.82)            | —                          |
| 12. Arousal reduction strategies, such as relaxation or controlled breathing, are often necessary for patients to tolerate the distress exposure therapy/EMDR evokes. | 1.25 (0.81)            | 1.09 (0.82)                |
| 13. Compared to other psychotherapies, exposure therapy/EMDR places patients at a greater risk of harm.                                                               | 0.58 (0.57)            | 0.31 (0.49)                |
| 14. Most patients perceive exposure therapy/EMDR to be unacceptably aversive.                                                                                         | 0.79 (0.61)            | 0.43 (0.61)                |
| 15. Exposure therapy/EMDR often causes patients' anxiety symptoms to worsen.                                                                                          | 0.48 (0.53)            | 0.48 (0.55)                |
| 16. Asking the patient to discuss traumatic memories in exposure therapy/EMDR may vicariously traumatise the therapist.                                               | 1.30 (0.75)            | 1.04 (0.89)                |
| 17. Patients may experience physical harm caused by their own anxiety (e.g., loss of consciousness) during highly anxiety-provoking exposure therapy/EMDR sessions.   | 0.90 (0.68)            | 0.64 (0.71)                |
| 18. Having patients conduct exposures in their imagination is sufficient; facing feared stimuli in the real world is rarely necessary.                                | 0.89 (0.82)            | —                          |
| 19. Exposure therapy/EMDR is inhumane.                                                                                                                                | 0.22 (0.42)            | 0.14 (0.34)                |
| 20. Most patients refuse to participate in exposure therapy/EMDR.                                                                                                     | 0.64 (0.55)            | 0.43 (0.61)                |
| 21. Compared to other psychotherapies, exposure therapy/EMDR increases the risk that the therapist will be sued for malpractice                                       | 0.58 (0.61)            | 0.42 (0.59)                |
| <i>Added eating disorder items; not included in original questionnaire.</i>                                                                                           |                        |                            |
| 22. Exposure therapy/EMDR for PTSD often exacerbates eating disorder symptoms.                                                                                        | 1.02 (0.71)            | 0.74 (0.65)                |
| 23. Exposure therapy/EMDR for PTSD leads to patients dropping out of their eating disorder treatment.                                                                 | 0.80 (0.58)            | 0.58 (0.52)                |
| 24. Patients are at risk of increased eating disorder symptoms (i.e., bingeing, purging, fasting) during highly anxiety-provoking exposure therapy/EMDR sessions      | 1.42 (0.83)            | 1.25 (0.80)                |



and ‘Asking the patient to discuss traumatic memories in exposure therapy may vicariously traumatise the therapist’ ( $M = 1.3$ ,  $SD = 0.8$ ).

The primary endorsed ED belief was: ‘Patients are at risk of decompensating in their eating disorder symptoms (e.g., binge eating, purging, fasting) during highly anxiety-provoking exposure therapy sessions’ ( $M = 1.4$ ,  $SD = 0.8$ ).

As for the  $TBES_{EMDR18}$ , the mean score was 10.5 ( $SD = 7.5$ ), with scores ranging between 0 and 29 (see Table 4). The three most strongly endorsed items were: ‘Most patients have difficulty tolerating the distress that EMDR evokes’ ( $M = 1.1$ ,  $SD = 0.8$ ), ‘Patients are at risk of decompensating (i.e., losing mental and/or behavioural control) during highly anxiety-provoking EMDR sessions’ ( $M = 1.2$ ,  $SD = 0.8$ ), and ‘Arousal reduction strategies, such as relaxation or controlled breathing, are often necessary for patients to tolerate the distress EMDR therapy evokes’ ( $M = 1.1$ ,  $SD = 0.8$ ).

The most endorsed additional ED item in the  $TBES_{EMDR18}$  was: ‘Patients are at risk of decompensating in their eating disorder symptoms (e.g., binge eating, purging, fasting) during highly anxiety-provoking EMDR sessions’ ( $M = 1.3$ ,  $SD = 0.8$ ).

Participants’ beliefs about PE were less positive ( $TBES_{PE18}$ :  $M = 13.9$ ,  $SD = 6.9$ ) than beliefs about EMDR ( $TBES_{EMDR18}$ :  $M = 10.5$ ,  $SD = 7.5$ ),  $t(80) = 6.58$ ,  $p < 0.002$ ,  $d = 0.73$ , a medium effect.

### 3.3 | Likelihood to Exclude Patients From Exposure-Based Treatment

For the  $BLES_{PE23}$ , the mean score was 17.7 ( $SD = 9.3$ ), with scores ranging from 0 to 34 (see Table 5). The three most strongly endorsed reasons to exclude a patient from PE were: the presence of a comorbid psychotic disorder ( $M = 1.6$ ,  $SD = 1.0$ ), a comorbid substance use disorder ( $M = 1.6$ ,  $SD = 0.9$ ), and the patient being younger than the age of 7 ( $M = 1.5$ ,  $SD = 1.1$ ). Concerning the additional ED items, the patient being severely underweight ( $BMI < 15$ ) was cited as the most likely reason to exclude a patient from PE ( $M = 2.0$ ,  $SD = 0.9$ ).

For the  $BLES_{EMDR23}$ , the mean score was 15.4 ( $SD = 9.2$ ), with scores ranging from 0 to 32 (see Table 5). The three most strongly endorsed reasons to exclude a patient from EMDR were that the patient had previously participated in EMDR and did not find it helpful ( $M = 1.5$ ,  $SD = 0.9$ ), followed by the presence of a comorbid substance use disorder ( $M = 1.4$ ,  $SD = 0.9$ ), and a comorbid psychotic disorder ( $M = 1.3$ ,  $SD = 1.0$ ). Concerning the additional ED items, the patient being severely underweight ( $BMI < 15$ ) was cited as the most likely reason to exclude a patient from EMDR ( $M = 1.8$ ,  $SD = 0.9$ ).

On average, participants were more likely to exclude patients from PE ( $MBLES_{PE23}$ :  $M = 17.6$ ,  $SD = 9.4$ ) than from EMDR ( $MBLES_{EMDR23}$ :  $M = 15.5$ ,  $SD = 9.4$ ),  $t(80) = 3.47$ ,  $p < 0.002$ ,  $d = 0.39$ , a small effect.

### 3.4 | Predictors of the Likelihood to Exclude Patients From Exposure-Based Treatment

Two hierarchical multiple regression analyses were conducted to identify factors predicting the likelihood that therapists would exclude patients with an ED and comorbid PTSD from PE or EMDR. In the first step, sex, professional discipline, and years of experience in exposure techniques did not significantly predict the likelihood of exclusion from exposure. In the second step, adding anxiety sensitivity also did not yield significant results. However, the third step, which included beliefs towards PE, resulted in a significant model. The full model significantly predicted the tendency to exclude from PE,  $R^2 = 0.33$ ,  $F(5, 75) = 7.39$ ,  $p < 0.002$ , with beliefs regarding PE emerging as the only significant predictor ( $B = 0.68$ , 95% CI [0.45, 0.92],  $\beta = 0.56$ ,  $p < 0.002$ ) (see Table 1).

Similarly, in the model testing predictors of the likelihood of exclusion from EMDR, only the third step yielded significant results. The full model significantly predicted the likelihood of exclusion from EMDR,  $R^2 = 0.46$ ,  $F(5, 75) = 12.64$ ,  $p < 0.001$ , with beliefs towards EMDR emerging as the only significant predictor ( $B = 0.85$ , 95% CI [0.63, 1.07],  $\beta = 0.69$ ,  $p < 0.002$ ) (see Table 2).

## 4 | Discussion

This study examined ED therapists’ beliefs about two evidence-based exposure treatments for PTSD (PE and EMDR) in patients with EDs and comorbid PTSD. Our findings provide novel insights into therapists’ perceptions of safety, ethicality, and usability across the two treatments, and whether these differed between PE and EMDR. Additionally, we explored patient-related factors that influence therapists’ likelihood of excluding patients with an ED and comorbid PTSD from exposure-based treatment for PTSD and examined whether these differed between PE and EMDR. Finally, we investigated predictors of exclusion decisions for both PE and EMDR.

Overall, beliefs regarding PE and EMDR for PTSD in patients with an ED and comorbid PTSD were predominantly positive; on average, therapists either strongly or partially disagreed with most negative beliefs regarding exposure-based treatment in this population. Across both treatments, the most strongly endorsed concern was that patients may be unable to tolerate the distress elicited by exposure-based therapy for PTSD. This perception may be influenced by evidence that individuals with an ED and comorbid PTSD exhibit greater emotion regulation difficulties than those with either disorder alone (Scharff et al. 2021; Thompson and Martin-Wagar 2024). Consequently, clinicians may fear that exposure exacerbates emotional dysregulation in this group. However, while transient increases in distress may occur, multiple studies indicate that exposure-based treatment for PTSD ultimately enhance emotion regulation (Jerud et al. 2016; Opriel et al. 2021; van Toorenburg et al. 2020), suggesting that such concerns may be overstated. Similarly, regarding ED-specific factors, the belief that patients are at risk of decompensating in their ED symptoms (e.g., binge eating,

**TABLE 5** | Means and standard deviations of BLES items.

| Item                                                                                                                    | $M_{PE}$ ( $SD_{PE}$ ) | $M_{EMDR}$ ( $SD_{EMDR}$ ) |
|-------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------|
| 1. The patient has a comorbid psychotic disorder.                                                                       | 1.61 (0.99)            | 1.31 (1.04)                |
| 2. The patient is emotionally fragile.                                                                                  | 0.73 (0.74)            | 0.60 (0.66)                |
| 3. The patient is reluctant to participate in exposure-based cognitive-behavioural therapy.                             | 1.09 (0.95)            | 1.06 (0.89)                |
| 4. The patient has a comorbid substance use disorder.                                                                   | 1.58 (0.92)            | 1.43 (0.92)                |
| 5. The patient is younger than age 7.                                                                                   | 1.47 (1.12)            | 1.10 (1.08)                |
| 6. The patient prefers non-directive psychotherapy.                                                                     | 0.95 (0.91)            | 0.85 (0.88)                |
| 7. The patient has previously participated in exposure-based cognitive-behavioural therapy and did not find it helpful. | 1.31 (0.93)            | 1.46 (0.85)                |
| 8. The patient is afraid of harming oneself and/or others.                                                              | 0.31 (0.52)            | 0.35 (0.57)                |
| 9. The patient has a comorbid personality disorder.                                                                     | 0.22 (0.45)            | 0.21 (0.41)                |
| 10. The patient is currently experiencing significant stressful life events.                                            | 1.33 (0.88)            | 1.19 (0.79)                |
| 11. The patient is pregnant.                                                                                            | 1.21 (0.93)            | 1.09 (0.90)                |
| 12. The patient has poor insight into the irrational nature of his or her fear (s).                                     | 0.79 (0.79)            | 0.51 (0.73)                |
| 13. The patient has angry outbursts.                                                                                    | 0.54 (0.61)            | 0.44 (0.59)                |
| 14. The patient has below average intelligence.                                                                         | 0.52 (0.69)            | 0.42 (0.57)                |
| 15. The patient has a non-terminal medical disease related to his or her anxiety symptoms.                              | 0.81 (0.87)            | 0.56 (0.71)                |
| 16. The patient is between the ages of 7 and 11.                                                                        | 0.81 (0.78)            | 0.68 (0.83)                |
| 17. The patient has comorbid depression.                                                                                | 0.56 (0.72)            | 0.57 (0.67)                |
| 18. The patient's feared situation (s) are difficult to recreate in real life.                                          | 0.67 (0.74)            | —                          |
| 19. Conducting exposures to the patient's feared stimuli would require leaving the office.                              | 0.44 (0.72)            | —                          |
| 20. The patient is older than age 65.                                                                                   | 0.32 (0.61)            | 0.27 (0.55)                |
| 21. The patient has a non-terminal medical disease unrelated to his or her anxiety symptoms                             | 0.30 (0.53)            | 0.35 (0.53)                |
| 22. The patient is between the ages of 12 and 17.                                                                       | 0.30 (0.51)            | 0.35 (0.57)                |
| 23. The patient's fears have religious themes.                                                                          | 0.42 (0.59)            | 0.28 (0.58)                |
| 24. The patient holds strong religious beliefs.                                                                         | 0.38 (0.58)            | 0.31 (0.56)                |
| 25. The patient is an ethnic minority.                                                                                  | 0.16 (0.40)            | 0.15 (0.36)                |
| <i>Added eating disorder items; not included in original questionnaire.</i>                                             |                        |                            |
| 26. The patient has a comorbid eating disorder.                                                                         | 0.25 (0.43)            | 0.26 (0.47)                |
| 27. The patient has a long-term eating disorder (> 10 years).                                                           | 0.21 (0.47)            | 0.25 (0.46)                |
| 28. The patient is underweight, BMI 15–18.5.                                                                            | 0.85 (0.79)            | 0.70 (0.73)                |
| 29. The patient is severely underweight (BMI < 15).                                                                     | 2.00 (0.94)            | 1.75 (0.93)                |
| 30. The patient purges $\geq 8$ times per week.                                                                         | 1.00 (0.95)            | 0.84 (0.78)                |
| 31. The patient binges $\geq 8$ times per week.                                                                         | 0.54 (0.74)            | 0.60 (0.72)                |
| 32. The patient exercises excessively.                                                                                  | 0.49 (0.61)            | 0.49 (0.61)                |
| 33. The patient is very avoidant.                                                                                       | 0.47 (0.63)            | 0.47 (0.63)                |
| 34. The patient is emotionally flattened/numbed.                                                                        | 0.79 (0.83)            | 0.79 (0.83)                |
| 35. The patient has physical complaints as a result of the eating disorder (including bradycardia, hypotension).        | 1.10 (0.93)            | 1.10 (0.93)                |

purging, fasting) during highly anxiety-provoking exposure-based sessions was the most strongly endorsed item for both PE and EMDR. Yet, the limited available evidence suggests that decompensating effects rarely occur and are often transient (Ten

Napel-Schutz, Karbouniaris, et al. 2022; Ten Napel-Schutz, Vroling, et al. 2022; Trottier et al. 2022). Further research is warranted on the concurrent treatment of ED and PTSD to better understand the risk of symptom exacerbation.



As hypothesised, beliefs towards EMDR were more favourable than those towards PE. Although both PE and EMDR are found to be equally effective and tolerated, previous survey studies conducted among therapist samples in the Netherlands have similarly reported more favourable beliefs towards EMDR than towards PE (M. van den Berg and van Minnen 2014). The self-reported tendency to exclude patients with an ED and comorbid PTSD from exposure-based treatment was relatively low and consistent with earlier studies with samples of American and Australian therapists that utilise exposure in the treatment of anxiety (Meyer et al. 2014; Meyer et al. 2020).

A comorbid psychotic disorder was the most strongly endorsed reason for excluding patients from PE. This is consistent with previous work, where therapists were found to be more likely to exclude this group from exposure-based treatment (Meyer et al. 2014). In our sample, the mean scores suggested slight disagreement with this criterion. Thus, while this reason was endorsed more than others, it does not reflect a strong tendency towards exclusion from exposure-based treatment for PTSD. This finding may indicate a shift in clinical beliefs, possibly influenced by emerging evidence that PE and EMDR can be effective for patients with PTSD and psychotic symptoms (de Bont et al. 2016; D. van den Berg et al. 2018). Although there are patients with an ED and comorbid psychotic disorder (Hovmand et al. 2025), those with psychosis are often excluded from clinical trials investigating treatments for patients with an ED and comorbid PTSD (Ten Napel-Schutz, Karbouniaris, et al. 2022; Ten Napel-Schutz, Vroling, et al. 2022; Trottier et al. 2022). Therefore, empirically grounded treatment recommendations for this subgroup remain limited. Future research should address this gap to inform clinical practice. Among the additional ED-specific factors, low body weight was the most frequently endorsed reason for exclusion from both exposure-based treatments. It has been suggested that patients with AN who are severely underweight may experience a 'starvation brain' (Munro et al. 2017), marked by nutritional deficiencies that contribute to emotional and cognitive impairments including heightened anxiety, cognitive rigidity and reduced concentration or decision-making capacity. These impairments may hinder the effectiveness of treatments relying on cognitive and emotional processing, such as PE and EMDR. Our findings suggest that therapists may perceive the treatment of PTSD in patients who are underweight because of their ED and comorbid PTSD to be particularly challenging. To date, the evidence base for concurrent treatment of PTSD in patients with EDs remains limited, particularly among those who are severely underweight (Rijkers et al. 2019; E. van den Berg et al. 2024). Consequently, it is still unclear whether PTSD can be effectively addressed within this subgroup. Pioneering work (Ten Napel-Schutz, Karbouniaris, et al. 2022; Ten Napel-Schutz, Vroling, et al. 2022) demonstrated promising outcomes using a combined treatment approach involving imagery rescripting, another exposure-based treatment for PTSD (Raabe et al. 2022; Smucker et al. 1995), which yielded improvements in both ED and PTSD symptoms among 10 underweight inpatients. Further research is needed to evaluate both the feasibility and efficacy of concurrent PTSD and ED treatment, with particular attention to underweight patients.

Consistent with our hypothesis, therapists reported that they were significantly less likely to exclude patients from EMDR than from PE, indicating a therapist preference for EMDR in

treating PTSD in patients with an ED and comorbid PTSD. This preference mirrors previous findings from the Netherlands, that EMDR is more frequently utilised than PE when treating PTSD (M. van den Berg and van Minnen 2014). Studies show that clinical training enhances positive beliefs towards a treatment and increases its use (Rowe & Kangas, 2020). For instance, U.S. therapists working with veterans were more likely to choose PE over EMDR, likely reflecting greater accessibility of PE training within the Veterans Affairs system (Hundt et al., 2016). In our sample, most participants were trained in EMDR, suggesting that received training may influence treatment selection. These findings imply that clinician training in evidence-based treatments could contribute to increased use and potentially improve shared decision making and consequently outcomes for patients with an ED and comorbid PTSD.

Contrary to previous research (Becker et al. 2004; de Jong et al. 2020; Deacon et al. 2013), we found no evidence that therapist characteristics, such as sex, years of experience, or professional discipline, predicted the likelihood of excluding patients from exposure-based treatment for PTSD. These findings align with those of a study conducted among German therapists involved in the treatment of PTSD and anxiety disorders (Schumacher et al. 2019). We also found no evidence that anxiety sensitivity predicted the likelihood of exclusion. However, beliefs about the safety, efficacy, and ethicality of exposure-based treatments strongly predicted the likelihood of exclusion, for both PE and EMDR. Granted that therapist training, education and supervision improve beliefs about exposure based treatment and increases its use (Meyer et al. 2020; Foa et al. 2020), implementing strategies to strengthen positive beliefs about exposure based PTSD treatment in this patient group may increase uptake.

## 5 | Strengths and Limitations

While most previous studies have focused on beliefs towards exposure treatment in general populations, we specifically investigated these beliefs in ED therapists pertaining to exposure-based treatment for PTSD in a specific population of patients with an ED and comorbid PTSD. These results may inform clinical practice and supervision by providing more targeted insights into therapists' perspectives, which may increase further uptake of these methods and improve treatment outcomes for patients with an ED and comorbid PTSD. Additionally, our sample was heterogeneous in terms of experience, thus capturing a wide range of beliefs and previously validated questionnaires were used to facilitate comparison with earlier research. Moreover, additional ED-specific items that were added to these questionnaires were formulated in consultation with national experts in the treatment of EDs.

This study has several limitations. First, all data were collected through self-report which may be subject to over- or under-reporting due to social desirability. However, evidence suggests that self-report data can be reliable and valid when confidentially is assured (Krumpal 2013; Tourangeau and Yan 2007). Second, participants were asked about their beliefs and tendencies regarding the exclusion from exposure-based treatments. Prior

research has documented discrepancies between self-reported beliefs and actual clinical behaviour (Godin et al. 2005), suggesting that the true rate of exclusion from exposure-based treatment may differ from what was self-reported. Third, a programming error led to the omission of the 'neutral' response option on the TBES, which may have contributed to response bias by pushing participants towards more extreme answers. However, previous research has shown that midpoint categories are often used as a 'don't know' response rather than reflecting true neutrality (Sturgis et al. 2014). Nevertheless, excluding midpoint categories may also have encouraged more discriminative answering. Finally, because the sample consisted exclusively of ED therapists, the findings may not be fully generalisable to clinicians who specialise in PTSD treatment and also treat patients with EDs.

## 5.1 | Future Prospects

A qualitative study (Ten Napel-Schutz, Karbouniaris, et al. 2022; Ten Napel-Schutz, Vroling, et al. 2022) in which the patient perspective on integrated/combined treatment for EDs and comorbid PTSD was investigated revealed that trauma focused treatment aided in patients' hope for recovery. An autoethnographic study (Moberg 2025) in which blog posts, personal correspondence and diary entries from patients with AN and comorbid PTSD were investigated showed that patients frequently viewed AN as a coping mechanism where hunger serves as a way to achieve emotional avoidance of distress stemming from PTSD. Taken together, these publications highlight the importance of further investigating the interplay and treatment of EDs and comorbid PTSD.

Given the early stage of research in this area, studies requiring smaller sample sized, such as single-case experimental designs, including multiple-baseline case series, may represent a practical and informative first step forward. To our knowledge, combined treatments for ED and PTSD have thus far investigated Cognitive Processing Therapy (Trottier et al. 2022) and Imagery Rescripting (Ten Napel-Schutz et al. 2022) for PTSD, with no data on PE or EMDR. Future research should investigate the efficacy of PE or EMDR in this group.

Another valuable direction for future research would be to conduct a follow up study that recruits PTSD therapists and administers the same assessment measures. Such a study could clarify whether and how perspectives differ from those of ED therapists, thereby deepening our understanding of how ED symptoms are evaluated when determining suitability for trauma-focused treatments.

## 6 | Conclusions

This study demonstrates that ED therapists generally hold positive beliefs towards exposure-based treatments for PTSD and rarely exclude patients with an ED and comorbid PTSD. However, persistent concerns about patient tolerance and ED symptom exacerbation remain. These findings underscore the need to challenge misconceptions about exposure-based

therapies and to enhance clinician confidence through targeted training and supervision.

Future research should focus on the further development and evaluation of integrated, evidence-based treatment models that concurrently address both EDs and PTSD. It is particularly important to systematically investigate the effectiveness and feasibility of PE and EMDR to enlarge treatment response in this complex population. Reducing negative beliefs about exposure-based treatments for PTSD by training and supervision should be prioritised in education and continuing professional development.

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## Conflicts of Interest

The authors declare no conflicts of interest.

## Data Availability Statement

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

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