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# Implementing Adjunct Trauma-Focused Imagery Rescripting in Inpatient Treatment for patients who are underweight with comorbid eating disorders and PTSD: Therapist Challenges and the Supporting Role of Peer Group Supervision

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## ABSTRACT

**Background:** Trauma-focused therapies like Imagery Rescripting (ImRs) are seldom offered to patients who are underweight with comorbid eating disorders (uED) and PTSD, due to doubts about their emotional and cognitive capacities. However, high rates of PTSD comorbidity in this group highlight the need for tailored trauma interventions. This study examines therapists' experiences applying ImRs in this population, with a focus on specific challenges and how Peer Group Supervision sessions (PGSs) supported treatment delivery.

**Method:** A qualitative thematic analysis was conducted using 11 semi-structured therapist interviews and 32 PGS recordings. Data were analyzed, summarized and classified within a thematic framework.

**Results:** Therapists initially used PGSs to validate their application of ImRs. Over time, PGSs facilitated skills development through role-play, peer exchange, and reflective dialogue. Four main themes emerged: 1) determining the right moment to start rescripting; 2) challenges specific to uED; 3) topics related to ImRs sessions in which patients had to rescript; 4) the therapists' progress.

**Conclusion:** With appropriate protocol modifications and PGSs, ImRs appears both feasible and valuable for uED patients with PTSD. This study aims to inform the feasibility of applying ImRs in this population, with a focus on specific challenges and practical suggestions that supported treatment delivery.

**Trial registration:** International Clinical Trials Registry Platform (ICTRP) (NTR6094), registered 09/23/2016.

## 1. Background

Trauma-focused Imagery Rescripting (ImRs) is an emerging evidence-based trauma-processing intervention, showing promising outcomes for posttraumatic stress disorder (PTSD), and for a range of other clinical problems (Kip et al., 2023; Kroener et al., 2023; Morina et al., 2017; Pelzer et al., 2025; Strachan et al., 2024). The protocol (see

Supplementary Material S1) involves guiding patients to relive distressing memories in imagery and then actively transform the narrative by introducing empowering or corrective elements. Through this process, emotional meaning can be restructured, resulting in symptom reduction and shifts in self-perception (Arntz & Weertman, 1999; Arntz, 2012). However, despite the high prevalence of trauma among patients who are underweight and have an eating disorder (uED), ImRs has

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received limited attention in this group (Brewerton, 2007).

Emerging evidence suggests that between 10 % and 47 % of individuals with Anorexia Nervosa (AN) meet diagnostic criteria for PTSD (Brewerton, 2007). More broadly, traumatic experiences may play a role in both the onset and maintenance of the eating disorder (Brewerton et al., 2020). Contrary to the common clinical assumption that patients who are underweight lack the emotional or cognitive capacities to process trauma, the psychological impact of traumatic experiences is often evident, and untreated PTSD may contribute to poor treatment outcomes and high relapse rates (Carter et al., 2006; Gleaves et al., 1998; Mitchell et al., 2012; Tagay et al., 2014). Given their impaired emotional processing and tendency toward dissociation, uED patients may require adaptations to the standard ImRs protocol (Keski-Rahkonen, 2025; Nandrino et al., 2012; Zhou et al., 2025). A pilot randomized controlled trial by Zhou and Wade (2021) provided early support for the feasibility of face-to-face ImRs as adjunctive treatment for patients with ED. Fifty percent of the patients in the study were underweight, however, this study did not focus on PTSD.

Nevertheless, the application of ImRs in uED patients presents unique clinical challenges. Malnutrition can impair concentration, memory, and broader cognitive functioning (Abbate-Daga et al., 2011; Brockmeyer et al., 2012; Danner et al., 2012), leading therapists to question whether patients are emotionally or cognitively able to engage in the vivid, emotionally charged mental imagery required for trauma-focused interventions (Hudson et al., 2007; Martinez et al., 2014). This concern is exacerbated by the high level of emotional avoidance often seen in this population, coupled with fragile self-esteem and ambivalence about recovery (Bulik, 2013, p. P105; DeJong et al., 2012; Demmler et al., 2020). These factors can lead to apparent disengagement or resistance during sessions, making it difficult for therapists to assess readiness for trauma processing or emotional exposure.

Moreover, therapists themselves face significant emotional and professional challenges in treating individuals with uED, particularly when trauma histories are involved. Numerous studies have shown that therapists working with this population frequently report feelings of worry, anxiety, sadness, frustration, burnout, compassion fatigue, and countertransference reactions (Burket & Schramm, 1995; Colli et al., 2015; Delucia-Waack, 1999; Franko & Rolfe, 1996; Warren et al., 2012). These reactions are often intensified by the high rates of treatment dropout, chronicity, comorbid psychiatric conditions, and even mortality associated with severe eating disorders (ED) (Abbate-Daga et al., 2011; Bulik, 2013, p. P105; Cavan & Connan, 2010, pp. 330–333; Chesney et al., 2014; Harrison et al., 2009; Smink et al., 2012). Therapists may also feel unsure whether patients are able to experience or regulate affective states, which can result in hesitancy to initiate trauma-focused work (Brockmeyer et al., 2012; Danner et al., 2012; Martinez et al., 2014).

Inexperienced therapists appear especially vulnerable to these negative professional experiences (Thompson-Brenner et al., 2012). The therapeutic alliance itself may suffer, as the interpersonal dynamics associated with anorexia nervosa can erode relational trust and create a perceived lack of reciprocity or connection within sessions (Zugai et al., 2018). Graham et al. (2020) note that clinicians sometimes experience themselves as “helpers who struggle to help,” which may result in avoidant behavior, blame, or disengagement toward the patient.

Given these complexities, Boterhoven de Haan et al. (2021) argue that therapists must actively work through their own avoidance and build confidence in their ability to facilitate trauma-focused interventions, even with vulnerable and seemingly treatment-resistant populations. This requires not only technical skill but also reflective capacity, emotional resilience, and access to adequate supervision and peer support.

Given the limited empirical guidance for using ImRs in uED patients and the complex relational and clinical dynamics involved, it is essential to explore how therapists navigate its implementation. Specifically, there is a need to examine how ImRs protocols may require modification

for this group, and how therapists manage their own emotional responses and treatment decisions in the process.

To support therapists in this novel and demanding application, peer group supervision sessions (PGSs) were employed as a structured forum for reflective practice. Supervision and PGSs are well-established mechanisms for improving clinical practice and therapist wellbeing (Benjamin & Penland, 1995). They provide opportunities to address countertransference, increase self-awareness, and enhance treatment outcomes (Cartwright et al., 2021; Pilkington et al., 2022). When facilitated effectively, PGSs can leverage shared expertise and promote collective problem-solving, especially in complex clinical contexts (Enyedy et al., 2003; Ogren & Sundin, 2009; Ray & Altekruse, 2000; Staempfli & Fairtlough, 2019). A recent meta-analysis by Ragnarsson et al. (2024) underscored the role of supervision in promoting meaningful behavioral change in therapists, reinforcing its value in implementing novel interventions such as ImRs.

While prior studies have investigated therapists' experiences with ImRs or with PGSs in isolation, to our knowledge no research has explored how therapists experience learning and applying ImRs within the uED population, supported by PGS. This study formed part of a broader intervention project on the effectiveness of ImRs in inpatient treatment for ED specifically in patients with comorbid PTSD (Ten Napel-Schutz, Vroling, et al., 2022). The present qualitative study addressed the gap by examining therapists' experiences of using ImRs with uED patients and the role that peer group supervision (PGS) played in facilitating this process. Therapists involved were early adopters, working in a clinical setting where standard ImRs protocols required adaptation to suit the specific needs of patients who are underweight.

## 2. Method

### 2.1. Participants

Each of the 11 inpatients (all diagnosed with PTSD, all underweight, average BMI 15.6 at the start of the study; 10 met criteria for Anorexia Nervosa, 1 for Other Specified Feeding and Eating Disorder; mean age 26.4) followed a six-week program of twelve adjunct individual 90-min ImRs sessions focused on trauma processing, in parallel with the uED program focusing on weight gain (Ten Napel-Schutz, Vroling, et al., 2022, for further details on patient characteristics). After three ImRs sessions, one patient stopped. All 12 sessions per individual patient were conducted by the same therapist.

The five therapists in this study worked at an expertise center for ED in the Netherlands. The five therapists' background and work experience are listed in Table 1. An individual semi-structured interview was held with each therapist two weeks after the end of each patient's 12 ImRs sessions. The PGSs (32 in total) were held weekly during each 6-week treatment period, spread over a total of more than 30 weeks, allowing the therapists to discuss all ImRs sessions in the PGSs. All 5 therapists were in principle present at these sessions (illness and holiday absence by exception). The 32 PGSs lasted 60 min and had no fixed form.

### 2.2. Design

To examine the therapists' experiences with and perspectives on ImRs and the PGSs, we used a qualitative approach with semi-structured interviews and recordings of the PGSs. In line with our aim of improving the training and treatment, the approach to coding and analyzing was more descriptive than interpretative. This study was reported in accordance with the COREQ checklist (see Supplementary Material S2).

### 2.3. Data collection

Data was collected through 11 semi-structured interviews (Green & Thorogood, 2018) and 32 recordings of PGSs, all of which were conducted at the same center for ED. All interviews and PGSs were recorded

**Table 1**  
THERAPISTS' DESCRIPTIVE statistics

Variable		
Age at the start of the study (Mean (SD))	Range 37–48 (n = 5)	41.6 (4.2)
Sex assigned at birth (Number (%))	Female	5 (100%)
Race and ethnicity (Number (%))	Dutch	5 (100%)
Completed educational level (Number (%))	Health Psychologist <sup>a</sup>	5 (100%)
	Psychotherapist <sup>b</sup>	2 (40%)
	Psychotherapist trainee	1 (20%)
	Clinical Psychologist <sup>c</sup>	1 (20%)
	Clinical Psychologist trainee	1 (20%)
	Cognitive behavior therapist <sup>d</sup>	5 (100%)
	Cognitive behavior therapist supervisor	2 (40%)
	EMDR practitioner <sup>e</sup>	3 (60%)
	Junior schema therapist <sup>f</sup>	2 (40%)
	Schema therapist	3 (60%)
Years of experience working with ED (Mean (SD))	Range 2–16 (n = 5)	8.4 (5.6)
Primary therapeutic modalities	Cognitive Behavioral Therapy (Fairburn)	5 (100%)
Years of experience working with ImRs (Mean (SD))	Range 5–20 (n = 5)	12.6 (7.0)

<sup>a</sup> Health Psychologist: psychologist with 2 years of postgraduate study.  
<sup>b</sup> Psychotherapist: psychologist with 3 years of postgraduate study.  
<sup>c</sup> Clinical Psychologist: psychologist with an advanced degree (4-year specialized Health Psychology study).  
<sup>d</sup> Cognitive behavior therapist: psychologist trained in Cognitive Behavioral Therapy.  
<sup>e</sup> EMDR practitioner; Clinicians competent in Eye Movement Desensitization and Reprocessing Therapy.  
<sup>f</sup> (Junior) Schema Therapist: psychologist trained in Schema Therapy, including ImRs.

on an mp3 player. They were typed out verbatim, and a summary was written.

*Semi-structured interviews:* Semi-structured interviews were guided by a topic list that was developed in several steps in line with established qualitative methodology (Green & Thorogood, 2018). The initial version of the list was based on informal exploratory conversations with experienced therapists working with ImRs for PTSD. The first author synthesized key themes from these conversations into a preliminary draft. This draft was then discussed with a senior ImRs practitioner, who provided feedback and suggested the addition of several clinically relevant topics.

Following this, the list was piloted in three initial interviews with therapists, which served to evaluate both the relevance and clarity of the topics. Based on these pilot interviews, minor adjustments were made: some questions were reworded for clarity, two topics that consistently led to confusion or overlap with other areas were removed, and new prompts were added to encourage more in-depth reflection. The final version of the topic list, used in all subsequent interviews, is shown in Table 2. An example of how one interview item was developed through this process is provided in the Supplementary Material S3.

All interviews were conducted by the first author, who ensured a consistent structure and guided the conversation so that all topics were covered while remaining open to spontaneous input. Field notes were taken during each interview. Interviews continued until saturation was reached and ranged from 25 to 55 min in length.

**Table 2**  
Topic list for the individual interviews with the therapists, WHICH were held 2 weeks after the 12 imrs sessions.

	Topic	Question	Examples of key words and focus questions
Main topics	1. Therapists' overall experience of providing ImRs.	<ul style="list-style-type: none"> <li>• What was your overall experience when conducting the ImRs sessions?</li> <li>• What can you say about using ImRs with patients in their underweight phase?</li> <li>• Please tell me something about your own feelings during these ImRs sessions.</li> </ul>	<ul style="list-style-type: none"> <li>• Were there awkward/nice/neutral moments for you as a therapist during the ImRs?</li> <li>• To what extent did you experience difficulties or discomposure during or after the sessions?</li> <li>• The patients' attention/concentration/dissociation etc.</li> <li>• Fear/shame/insecurity/anger/black-out/concentration/attention.</li> </ul>
		2. Therapists' ImRs training.	<ul style="list-style-type: none"> <li>• What was your opinion of the ImRs training program?</li> <li>• What are your opinions on treating trauma in underweight patients?</li> <li>• What are your opinions on the effectiveness of using ImRs with patients who are underweight?</li> </ul>
Additional topics	3. Is there anything you would change in the ImRs protocol? 4. What is your opinion on the advantages or shortcomings of ImRs with this target group? 5. Would you continue to conduct ImRs with underweight patients?	<ul style="list-style-type: none"> <li>• Do you have any wishes with respect to ImRs?</li> </ul>	<ul style="list-style-type: none"> <li>• (Such as setting ground rules.)</li> </ul>

*PGSs:* The PGSs were therapist meetings, in which learning experiences were exchanged, new training techniques and exercises were learned, and difficulties were shared. There were reflections and discussions on uncertainties, and on questions and situations that had arisen while working with ImRs with patients who are underweight. PGSs were led by a facilitator (first author), who monitored aspects of

group work that may have caused distractions and took fieldnotes. There were also opportunities to consult an expert (the fourth author), who posed a series of questions to help the therapists conceptualize the difficulties they had faced and to develop potential strategies for them (Bennett-Levy, 2006). Per session, therapists were asked what they wanted to use the PGS for. A thematically ordered report of each PGSS was written and the PGSSs were assessed using fixed observational items (Table 3).

#### 2.4. Sampling

We view qualitative research as an iterative process in which information gathered in one phase forms new input for the subsequent phase. As data saturation was obtained on four main topics in the interviews, we were able to make valid statements on these four topics (Green & Thorogood, 2018), which the PGSSs enabled us to understand in depth. As the study involved a small group of five therapists, each therapist was interviewed after completing a full protocol of 12 ImRs sessions with a patient. Consequently, therapists who treated multiple patients were interviewed multiple times—resulting in a total of 11 interviews: two therapists were interviewed three times, two twice, and one once. This approach aligns with accepted practices in qualitative research involving small, information-rich samples (Guest et al., 2006). These interviews were conducted based on ten completed treatments and one treatment that was terminated after 3 sessions (Ten Napel-Schutz, Vroling, et al., 2022).

#### 2.5. Analyses

We conducted a reflexive thematic analysis following Braun and Clarke's (2006) six-phase approach, combined with a framework analysis structure developed by the National Center for Social Research. The analytic process unfolded as follows:

**Familiarization** – The first and second authors independently familiarized themselves with the material through immersive reading and repeated listening to audio recordings of interviews and PGS sessions. Field notes were also reviewed to enrich contextual understanding.

**Thematic framework development** – An initial coding framework was developed both deductively (based on the research questions and interview guide) and inductively (emerging from the data). Themes were aligned with core topics such as protocol challenges, emotional experiences, and supervision dynamics.

**Indexing and coding** – Transcripts were coded systematically by both researchers using ATLAS.ti. Thematic labels were applied to meaningful segments. Independent double-coding was used to enhance reliability, followed by intersubjective comparison and discussion to ensure interpretive consistency.

**Charting and matrix mapping** – Data were reorganized thematically in matrix format, allowing cross-case and within-case comparison of therapist responses across time and PGS sessions.

**Mapping and interpretation** – Themes were refined through iterative discussion, with close attention to deviant cases and the evolution of therapist reflections over time.

Throughout the process, we used a reflexive, constructivist lens. The first author (a clinical psychologist and group facilitator) collaborated with the second author, who holds a dual identity as both researcher and expert by experience. This pairing allowed for triangulation of clinical, experiential, and interpretive perspectives—an approach supported by prior literature (Abma et al., 2009; Nierse et al., 2012; Schipper et al., 2010). The interpretive process aimed not only to describe therapist experiences, but to explore their implications for trauma-focused treatment in complex populations.

#### 2.6. Quality procedure

We conducted a validity check with respondent validation by e-

**Table 3**  
Researcher's observations after the PGSSs.

PGS number:	Date of PGS:	Number of therapists present during PGS:	Date of observation:	Observation done by:
Thematic report of PGSS:				
1. Problematic aspects of ImRs, such as any dilemmas, tensions and problems the therapists perceived when conducting it.				Which problems, dilemmas or difficulties (e.g., personal, research-related, practical, technical, interpersonal) did therapists perceive? Pay attention to: themes such as obstacles arising from the protocol, having to be imaginative, getting the patient back into the image, getting the patient out of dissociation, concluding the sessions, and themes related to the therapists' personal feelings or experiences (e.g., insecurity, fear, guilt, shame, the feeling of doing something awful to the patient, difficulty with firm behavior, black-out, fear that the patient would collapse). Why and when did the therapists share these problems? Other difficult issues.
2. Positive aspects of ImRs perceived by the therapists during ImRs.				Which positive themes did therapists mention (e.g., fine method, fine protocol, efficacy, feeling of being able to contribute something and feeling of meaning something to the patient)? Why and when did the therapists share these positive aspects? Other positive issues.
3. Did the therapists reflect during the PGS?				What was the quality of the therapists' reflections? What did they reflect on? Personal issues that arose during the sessions, practical issues (major or minor), dilemmas presented by the peers, solutions exchanged? What triggered the therapists' reflections?
4. Did the therapists conceptualize difficulties?				How well could the therapists describe the difficulties they encountered? What were these difficulties and how did they describe them? For example, which images, concepts or terms did they use?
5. Did the therapist develop possible strategies?				Which potential strategy or strategies did they develop? How did they develop them?
6. Did the therapists express their opinions on their experience of treating the trauma of patients who are underweight?				What did they express? How did they express themselves (e.g., calm, agitated, upset)?
7. Knowledge transfer. Did the therapists use knowledge transfer during the PGS? If yes:				Which knowledge did they share? How was knowledge shared (e.g., on the basis of scientific articles or books, of oral transmission, or of videos)? Why was the knowledge shared? Did the therapists appreciate the knowledge transfer?
8. Experiential learning. Did the therapists use any experiential learning techniques? If yes:				Which form of experiential learning was used? - Modeling (one therapist showing another how something works) - role-playing (e.g., acting out a difficult situation from a therapy session) - Imagery (practicing with the imagery technique). Did they appreciate experiential learning? Why did they use experiential learning? If they didn't use it, why not?
9. Did the therapists consult the expert (fourth author)?				Which questions did they ask the expert? Which questions did the expert ask the therapists? Which feedback did the therapists receive from the expert? What role did the expert take during the consultation? (Such as giving guidance, coaching, leading, etc.) How was the expert's feedback received by the therapists? If the therapist(s) did not consult the expert, did they consider contacting one?
10. Did the therapists take the opportunity to use the facilitator's ((first author) who monitored interfering group aspects and took				Which questions did the therapists ask the facilitator? Which questions did the facilitator ask the therapists? Which feedback did the therapists receive from the facilitator?

(continued on next page)

Table 3 (continued)

PGS number:	Date of PGS:	Number of therapists present during PGS:	Date of observation:	Observation done by:
fieldnotes)				
knowledge and skills?				
11. What was the quality of the dialogue between the therapists during the PGS, and what was the atmosphere between them?		For example, friendly, respectful, safe, hostile, aggressive? Were they able to say uncomfortable confronting things about the other and visa versa etc.?		

mailing the verbatim transcript and summary analysis to each therapist (Frambach et al., 2013; Green & Thorogood, 2018; Meadows & Morse, 2001). The therapists were asked if the interpretations matched their own perspectives, and whether they corresponded to what they had intended. This validation indicated that all therapists recognized the transcripts and summary analyses.

### 2.7. Ethics

This study was approved by the ethical committee at the University of Amsterdam. All therapists signed informed consent, personally traceable information was deleted from the data, and pseudonymity was guaranteed. Ten years after the publication of this article, the audio recordings of the interviews and PGSs, and the verbatim transcripts, will be destroyed. As therapists in the PGSs would in principle be able to link statements to other therapists, each therapist consented to treat the information confidentially. The therapists were told at the start of the interview and during PGSs that it was possible and permissible not to answer. The researcher (first author) is a clinical psychologist/psychotherapist and certified group therapist. The researcher worked in the same team as the therapists and had no hierarchical relationship with the therapists.

### 2.8. ED treatment

All 11 patients were offered 12 individual, 90-min trauma-focused ImRs sessions during an inpatient treatment program they attended for their ED (for more information on the ED treatment program, see Ten Napel-Schutz, Vroling, et al., 2022). The ED-program used cognitive behavior change methods and focused on recovery from eating-disorder pathology. All 11 patients in this study were underweight and committed to a weekly weight gain of 700 g.

### 2.9. Trauma-focused ImRs

ImRs is an experiential therapeutic technique that attempts to change the meaning of a traumatic event through experiencing a different look at traumatic memories, by using imagery to intervene imaginatively in traumatic memories. In the first six sessions, the therapist steps into the image to stop trauma and take any care of the needs that may be necessary, whereas in the last six sessions, the patient is instructed to step into the image as an adult and to take care of the needs-self. Later in the rescripting during this phase, the patient-self can, if needed, ask the adult-self for further interventions (Arntz, 2015; see Supplementary Material S1).

In our study, the fourth author gave the therapists a one-day training in trauma-focused ImRs. They were then given a practitioner's manual.

## 3. Results

The interviews with the topic list questions generated four main

themes that the therapists had encountered when working with ImRs with uED patients: 1) determining the right moment to start rescripting; 2) challenges specific to uED; 3) topics related to ImRs sessions in which patients had to rescript; 4) the therapists' progress. The greatest amount of time was devoted to the first two of these main themes. Close reading of all four main themes led to the formulation of 19 sub-themes. Our further description of the results is based on the four main themes and 19 sub-themes, which showed how, when working with ImRs with uED patients, the therapists in our study learned through PGSs in these areas of concern.

### 3.1. Determining the right moment to start rescripting

The individual semi-structured interviews showed that the therapists often found it difficult to determine the right moment to enter the image. This expressed itself in three ways. (1.1) The first, limited control, was a consequence of the fact that the therapists' familiarity with the patients' traumas was general rather than detailed, and thus required them to let go of their control needs. (1.2) The second, uncertainty about the right timing in various situations, was the consequence of trying to find out whether they had started rescripting at the right time (not too late nor too early), either when there was no immediate reduction in symptoms, or when symptoms increased during or after rescripting. (1.3) The third, difficulties with dissociation and re-experiences, involved how to determine the right moment for starting rescripting in uED patients who either slipped quickly into re-experiences or otherwise dissociated.

#### 3.1.1. Limited control

In the PGSs, therapists expressed difficulty in treating trauma when they lacked detailed knowledge of the traumatic events. This uncertainty made it challenging to determine the appropriate moment to begin rescripting and to plan the therapeutic approach. They searched for practical guidance, questioning whether deeper trauma knowledge was necessary to intervene at the right time during imagery. Early on, this struggle with limited control, fear of mistiming, and reliance on practical advice remained evident in PGS discussions. Therapists considered checking with patients about the timing of their intervention or asking permission to step in, reflecting their desire to avoid re-traumatization and to conduct treatment as effectively as possible. This mirrored the control and perfectionism often seen in uED patients.

When the expert was consulted about whether therapists should first review the trauma globally to identify the intervention point, the advice was that this was unnecessary. Instead, sufficient emotional arousal was key. This insight shifted the focus from identifying the trauma's most intense moment to attuning to patient arousal levels. Therapists were encouraged to act reflectively and intuitively, trusting their instincts and checking with patients afterward whether the timing had been appropriate or if the image should be rewound and revisited.

During the PGSs, therapists practiced this approach, learning to trust their emotional responses. They noted that not needing to know every detail required them to manage their curiosity and tolerate ambiguity. Practicing helped reduce their need for control, increased confidence in their intuition, and eased fears about making mistakes.

#### 3.1.2. Uncertainty about the right timing in various situations

During the PGSs, the therapists sought reassurance on their uncertainties about the right time for intervening in specific situations that were not covered in the protocol. For instance, did intervening too early mean that they had gone along with the patient's avoidance of the traumatic image, or did intervening too late mean that they still had to get used to the rationale of ImRs? Due to their prior experience with imaginary exposure and Eye Movement Desensitization and Reprocessing (EMDR; Table 1), they had to abandon the notion that only the most intense traumatic images should be addressed. This led to reflection on whether early intervention constituted avoidance or effective practice, reinforcing that ImRs focuses on meaning transformation

rather than mere exposure.

Therapists reported that role-playing within the PGSs helped refine their sense of appropriate timing. They also sought mutual reassurance, offering encouragement and affirming that therapeutic progress may emerge gradually. Table 4 outlines specific scenarios where therapists experienced uncertainty about timing and the strategies discussed to address them.

### 3.1.3. Difficulties with dissociation and re-experiences

During the PGSs, therapists explored how to respond when patients exhibited dissociation or re-experiencing during ImRs. They questioned when to begin rescripting in such cases, how early to intervene if re-experiencing occurred rapidly, and whether to continue ImRs once the patient had returned to the present (Table 5).

Some therapists expressed reluctance to use ImRs with uED patients known to dissociate, reflecting on challenging sessions involving dissociation or re-experiencing. In response, they engaged in role plays, shared intervention strategies, and discussed dissociation as an integral part of the process.

An external expert was consulted on techniques to better anticipate dissociation. PGSs served as a space to process doubts, gain reassurance, and receive peer support. Sessions marked by dissociation were described as emotionally taxing and sometimes triggered negative countertransference.

The therapists also addressed the emotional impact of working with visibly fragile uED patients and the difficulty of adhering to the protocol while witnessing patient distress during dissociative episodes (see Table 5 for related actions and recommendations).

## 3.2. Challenges specific to uED

It emerged from the interviews with the therapists that the treatment protocol had not described ten main themes related to subjects that often occur in patients with uED: 2.1) eating-disorder symptoms; 2.2) concentration; 2.3) lack of progress with ED-therapy; 2.4) autism traits; 2.5)

**Table 4**

Specific issues concerning the moment of therapist entry into the image discussed by the therapists during PGSs.

Specific issue	PGS Response	Suggestions
No visible arousal in patient	Therapists recognized this as typical for uED patients.	Actively check arousal by asking the patient to rate it aloud (e.g., on a scale).
Patient feels physically dirty	Therapists explored appropriate interventions and shared a rationale to apply.	Intervene early but recognize that patients may not yet be aware of this feeling. If the feeling arises post-event, embed reassurance in the rescripting itself (e.g., “You are not dirty”), rather than starting a separate rescripting moment.
Event involves death — when to start rescripting?	Therapists exchanged views and discussed patient needs versus therapist’s caregiving instinct.	Focus on providing support and reducing loneliness, rather than forcing exposure to the most painful image (e.g., seeing the deceased).
Patient insists on going to the traumatic hotspot	Therapists formulated word choices and metaphors to use.	Avoid early intervention that may be perceived as invalidating. Instead, acknowledge the event occurred (e.g., by saying “We know it happened”) and offer symbolic distancing (e.g., using a metaphor like a “black box”).
Traumatic images keep returning	Therapists shared strategies based on positive PGS experiences.	Therapist and patient should jointly decide which episodes to rescript as separate events.

**Table 5**

Specific issues about dissociation and re-experiences discussed by the therapists during PGSs.

Specific issue	PGS Response	Suggestions
Risk of dissociation or re-experiencing	Therapists shared fears; put own influence in perspective.	Discuss signs of dissociation with patient; intervene early in imagery; accept it can’t always be prevented.
Unexpected absence of dissociation	Therapists expressed relief.	Structured method, pleasant endings of images, and consistency reduce dissociation risk; avoid long silences; help patient stay focused on voice or clock.
Anticipating dissociation	Therapists emphasized widening the patient’s window of tolerance; exchanged ideas.	Consult experts; consider using less severe trauma if needed.
Managing actual dissociation or re-experiencing	Shared doubts about ImRs effectiveness, emotional impact, countertransference, and high standards; practiced scripts and supported each other in working with the burden and vulnerability of uED patients.	Continue ImRs if possible; prepare patient with grounding tools; consider earlier intervention in imagery; involve expert if needed; use standing ImRs or metaphors (e.g., “watching a film”); return patient gently to the present.
Uncertainty about dissociation	Therapists discussed doubt and confusion.	Ask patient what a silence means; allow time to return from imagery if patient lingers after rescripting.

emotional deprivation; 2.6) psychotic symptoms; 2.7) lack of support figures; 2.8) persistent core beliefs; 2.9) conversion symptoms; and 2.10) feeling dirty. Below, we provide a summary of each theme, while Table 6 describes how the therapists dealt with these issues during the PGSs and what suggestions they gave each other.

### 3.2.1. Eating-disorder symptoms

Therapists noted that some patients experienced increased body-related disgust during ImRs, despite therapeutic efforts to address this within the rescripting. Patients attributed this disgust to recent weight gain rather than trauma-related content. During the PGSs, therapists expressed relief at not having to focus on weight gain during ImRs and used the sessions to explore solutions to diverse ED issues, including dissociative responses such as altered taste perception.

### 3.2.2. Concentration

Therapists observed that most patients were able to concentrate adequately during ImRs. In the PGSs, they discussed practical solutions for managing distractions, such as noisy environments, and strategies for patients with concentration difficulties.

### 3.2.3. Lack of progress of ED-therapy results

Therapists expressed feelings of despondency and hopelessness when ED symptoms showed little improvement. In the PGSs, they supported one another in identifying subtle gains, maintaining hope, and adhering to the protocol despite slow progress.

### 3.2.4. Characteristics of autism

PGSs were used to explore adaptations to ImRs for patients with autistic traits, such as providing more detailed explanations during rescripting and closely attuning to each patient’s specific needs and abilities.

### 3.2.5. Emotional deprivation

Therapists noted that many patients had unmet basic emotional

**Table 6**  
Specific issues concerning situations that often arise when working with ued

Specific Issue	PGS Response	Suggestions
ED symptoms	Shared relief of no ED responsibility during ImRs; discussed cautiousness about overprotectiveness; role plays; tips exchange	Avoid over-cautiousness due to vulnerable appearance. Address trauma beyond physical signs. Practice body-affirming language. Include eating in imagery (e.g., hot chocolate). Reconnect with taste.
Concentration	Shared recordings; discussed reactions; normalized difficulty	View poor concentration as normal underweight symptom. Use quiet room. Explore irritation from patient as a message. Continue even if ImRs feels off.
Lack of Progress	Mutual support; exchanged hope	Completing protocol is corrective. Look for small gains. If no child contact, link to earlier trauma. Start with earliest traumas if needed.
Autistic Traits	Sought confirmation; exchanged tips	Attune to patients' needs by providing extra coaching, clear explanations, adjusting imaginative content when needed, considering parental autistic traits, and recognizing that limited fantasy play does not preclude therapeutic benefit.
Emotional Deprivation	Shared tips; role plays	Needs may be more basic than expressed/aware. Balance assessed and expressed needs.
Psychotic Symptoms	Joint problem-solving; role plays	Use PGSs to assess continuation. Don't underestimate patient.
Lack of Support Figures	Joint reflection; role plays	Support each other in coping, in enduring and finding solutions. Use fictional figures (e.g., Harry Potter).
Persistent Core Beliefs	Sought validation	Proactively identify and include core beliefs in ImRs.
Conversion Symptoms	Shared tips; role plays	Try standing ImRs. Use physical grounding (e.g., rope, body checks). Allow eyes open. Use aftercare (wheelchair, safe room). Involve sociotherapists. Empower patient ("What can you do to feel your legs?"). Reinforce they're not a burden.
Feeling Dirty	Raised awareness; shared ideas	Explicitly state patient is not dirty. Use metaphors (e.g., crumpled banknote). Explain cell renewal—no contact remains.

needs due to early neglect, complicating emotional connection and comfort within imagery. PGS discussions focused on recognizing hidden needs, such as attachment or emotional expression, and therapists' own hesitations in adopting a more directive approach.

**3.2.6. Psychotic symptoms**

Concerning psychotic symptoms, there was one case in which the PGSs were used to decide whether ImRs should be continued. Due to a worsening of a particular patient's psychotic symptoms, the therapist felt as if the patient were "leading a lamb to the slaughter." This made it difficult for her to continue with the protocol. The other therapists encouraged her to continue, nonetheless.

**3.2.7. Lack of support figures**

Therapists often had to act as support figures or introduce fictitious ones when none were present in the trauma narrative. In PGSs, they discussed the balance between realism and imagination and explored strategies when patients still felt unsupported, emphasizing the need for therapist tolerance and creativity.

**3.2.8. Persistent core beliefs**

Although the effectiveness study of ImRs in these patients who are underweight had asked patients to name their persistent core beliefs about themselves and their bodies (Ten Napel-Schutz, Vroling, et al., 2022), the therapists wondered in the PGSs whether it would be helpful to ask about them more directly in the sessions. By including them in the rescripting, they might thus be able to change them. The PGSs prompted them to check these beliefs more often.

**3.2.9. Conversion symptoms**

Therapists noted that conversion symptoms did not increase their caution but used the PGSs to share practical strategies for helping patients stay physically grounded and safely transition out of sessions.

**3.2.10. Feeling dirty**

PGSs highlighted that shame around feeling dirty could prevent patients from expressing related needs. Therapists advised explicitly affirming the patient's cleanliness during rescripting to counteract these feelings.

**3.3. Topics related to ImRs sessions in which patients had to rescript**

With regard to the second part of the protocol, in which the patients start to rescript themselves, the interviews and PGSs both showed that the therapists (3.1) had to get used to the sessions in which patients had to rescript, but had positive reactions and were positively surprised during most sessions about patients' ability to rescript themselves; (3.2) had to control a tendency to be more active; and (3.3) struggled with patients who were not very expressive. Below, we briefly summarize each of these themes. Table 7 describes how the therapists dealt with these issues during the PGSs and what suggestions they gave each other.

**Table 7**  
Specific issues about imrs sessions IN WHICH patients had to rescript.

Specific Issue	PGS Response	Suggestions
Getting familiar with the sessions in which patients had to rescript.	Practiced in role plays; shared experiences and suggestions.	Practice a lot, use role plays. Involve other adult figures in the image if a patient is very young (e.g., 16) and has to step into an image in a situation where the patient is younger (e.g., 14).
Tendency to be more active.	Alerted each other.	Rather than assuming the adult's role, the therapist should start coaching.
Introverted patients.	Practiced in role plays.	Allow inner speech if patient resists verbal expression; indicate that all sorts of things are likely to happen in her head and that the patient can just verbalize this; provide permission to express anger; model anger during initial sessions.
Number of sessions.	Discussed in PGS.	Some patients may need more sessions in the second phase of ImRs to learn how to act from an adult role against offenders (e.g., express anger, set boundaries).

**3.3.1. Getting familiar with the sessions in which patients had to rescript**  
 PGSs revealed that therapists initially struggled with distinguishing between the adult and child perspectives during this protocol phase and required frequent practice to adhere to it. Therapists also shared positive experiences, such as patients independently providing reassurance or successfully rescripting events previously thought impossible. Notably, some patients who had dissociated earlier no longer did so, and one patient even found strength in this phase.

**3.3.2. Tendency to be more active**  
 Therapists had to manage their impulse to take over when they perceived the patient-as-adult interventions as inadequate. PGS discussions emphasized the importance of coaching rather than intervening, to avoid undermining patients' sense of efficacy.

**3.3.3. Introverted patients**  
 Given the often introverted nature of uED patients, therapists encountered challenges when patients engaged silently or with shame during rescripting. PGSs highlighted the need for therapist attunement and patient feedback to determine when coaching was appropriate.

**3.3.4. Number of sessions**  
 In the PGSs the therapists discussed whether the number of sessions in the second part may be too limited for this population, as some of them had never really learned to act in an adult role against offenders – by getting angry, for example, or by setting healthy boundaries.

**3.4. Therapists' progress**

The interviews revealed that therapists advanced when they (4.1) shared positive personal experiences with the ImRs method during PGSs, and (4.2) reflected on their own characteristics, including high personal standards, emotional state, need for appreciation, and the value they placed on genuine connection with patients. Below, each theme is briefly summarized. Table 8 outlines how therapists addressed these topics in the PGSs and the suggestions they offered each other.

**3.4.1. Positive feelings on ImRs**

During the PGSs, therapists shared the positive emotions evoked by delivering ImRs. This exchange fostered hope among colleagues, encouraged recognition of progress in PTSD symptoms—even within a short timeframe—and motivated continuation of treatment in a patient group often marked by hopelessness and ambivalence. Therapists valued not only ImRs' symptom-reducing effects but also the meaningful therapeutic connection it fostered. Notably, considerable time was spent reflecting on and sharing these positive experiences.

**Table 8**  
 Specific issues concerning the therapists' OWN performance and sense of progress when working with this group of patients.

Specific issue	PGS action	Suggestions
Positive views on ImRs	Shared hope and experiences.	Sharing positivity helps maintain motivation. ImRs aids connection with uED patients, enhances emotional contact, reduces powerlessness, and fosters a strong therapeutic alliance. Treat ED and PTSD separately to reduce therapist burden.
Therapists' characteristics	Reflected, checked, and practiced together.	Open discussion of tension, high standards, and personal responses encouraged. Role-playing helps. Therapists must tolerate limited patient resolution, act firmly yet kindly in imagery, and trust in patients' capacity despite low weight. Continued peer support is essential.

**3.4.2. Therapists' characteristics**  
 Therapists also used the PGSs to reflect on their personal characteristics, especially their high internal standards. These discussions helped them recognize how such demands affected their expectations—of themselves, the patients, and the imagined caregivers—and highlighted their need for reassurance and validation. Some experienced stress practicing ImRs in front of colleagues and found it difficult to relinquish control to patients during later sessions.

Therapists also explored their challenges in taking firm action during imagery and remaining emotionally available when they themselves felt distressed or perceived patients as too vulnerable. These struggles were openly acknowledged and supported, with colleagues offering help and role-play opportunities.

Finally, the PGSs served as a space to express the emotional toll of working with this population, characterized by limited feedback, high dependency, resistance to hope, and serious treatment risks. The sessions allowed for emotional processing and collegial support in managing these demands.

**4. Discussion**

This study examined the implementation of ImRs in a cohort of uED patients, highlighting both the clinical relevance and the challenges encountered by therapists in practice. The findings underscore that, despite longstanding hesitations regarding trauma-focused interventions in this population, ImRs can be meaningfully and safely applied according to therapists' experiences, if adapted with clinical sensitivity and embedded in appropriate supervision structures.

Thematic analysis revealed four central domains in which therapists navigated these challenges: determining the right moment to start rescripting, addressing clinical and emotional complexities specific to underweight eating disorder patients, supporting patient-led rescripting processes, and managing their own emotional responses and professional development. These interconnected themes offer insight into the real-world adaptation of ImRs and the conditions that helped make trauma work possible in this vulnerable group.

Therapists described several ways in which they adapted the standard ImRs protocol to accommodate the unique needs of patients with uED. These adaptations addressed emotional dysregulation, cognitive limitations due to starvation, and tendencies toward dissociation. Such adjustments are supported by literature indicating that malnutrition can significantly impair attention, memory, and emotional processing (Abbate-Daga et al., 2011; Brockmeyer et al., 2012; Danner et al., 2012), which in turn influences the capacity to engage in trauma-focused interventions (Cavan & Connan, 2010, pp. 330–333; Martinez et al., 2014).

Therapists used techniques such as grounding, simplified language, and more verbal coaching to help patients stay present and engaged. They also incorporated psychoeducation to help patients understand the relevance of trauma work, particularly when they showed little emotional response or imaginative capacity. These adaptations align with previous findings suggesting that ImRs can be successfully applied in patients with dissociative tendencies or complex trauma histories when paced and structured appropriately (Arntz, 2012; Morina et al., 2017).

In response to symptom interference - such as intrusive eating disorder thoughts or conversion symptoms - therapists suggested creative integration, for example by involving the 'eating disorder voice' in imagery work, to reinforce autonomy and disrupt internalized shame. This approach reflects recent clinical models that highlight the central role of shame and trauma in the maintenance of ED (Brewerton, 2023; Monteone et al., 2022).

Therapists' suggestions for adapting the standard ImRs protocol, as described above, are summarized in Table 9, providing a structured overview of practical strategies recommended for addressing the specific challenges encountered with patients with uED.

**Tabel 9**  
SUMMARY OF PROTOCOL ADAPTATIONS FOR uED PATIENTS.

Clinical Challenge in uED Patients	Adaptation to ImRs Protocol
Reduced attention and concentration (due to malnutrition)	Simplify language, shorten imagery segments, increase use of verbal cues to maintain focus.
Dissociation during trauma recall	Integrate grounding techniques; stop imagery when dissociation increases; monitor arousal closely.
Limited fantasy/imaginative capacity	Provide more concrete coaching; model responses; reduce reliance on symbolic imagery.
Severe emotional avoidance and flat affect	Use psychoeducation to explain purpose of imagery; normalize lack of immediate emotional access, actively check arousal.
Ambivalence about recovery and trauma processing	Reinforce patient agency in choosing trauma memories; adapt pace of sessions to readiness.
Fragile self-esteem and shame	Use rescripting to repair self-image; focus on empowerment themes; avoid overwhelming scenes, confirm the patient's cleanliness, use metaphors (e.g., crumpled banknote), explain cell renewal—no contact remains, allow inner speech if patient resists verbal expression.
Intrusive eating disorder thoughts (e.g., "ED voice")	Include "ED voice" in imagery work to externalize and challenge it.
ED symptoms	Practice body-affirming language. Include eating in imagery (e.g., hot chocolate), reconnect with taste.
Conversion symptoms or freeze responses	Pause imagery work; validate physical signals; reintroduce imagery in smaller steps.
Autistic traits or emotional underdevelopment (in inner child)	Provide more structure in adult intervention scenes; name therapist actions aloud.
Therapist fear of doing harm or being too directive	Avoid over-cautiousness due to vulnerable appearance. Use PGS to explore countertransference and build confidence.

Despite prevailing clinical assumptions that trauma-focused interventions should be delayed until full remission (Treasure et al., 2010), the therapists in this study reported that ImRs can be both safe and effective during an underweight phase when sensitively modified. These findings support emerging research suggesting that trauma-focused interventions can be meaningfully introduced before full remission of the eating disorder (Fairburn et al., 2003; Herman et al., 2023).

PGS served as a crucial mechanism to support the clinical delivery of ImRs in this target group. The Peer Groups helped therapists reflect on their own emotional reactions, such as helplessness, perfectionism and fear of causing harm, which have been shown to influence therapeutic alliance and treatment outcomes in complex populations (Colli et al., 2015; Warren et al., 2012). The opportunity to share both doubts and positive experiences also promoted therapeutic persistence and hope - key components in sustaining trauma work with patients who are ambivalent about recovery (Graham et al., 2020; Zugai et al., 2018).

Therapists' reflections on their own high internal standards, difficulty with emotional presence and fear of making mistakes are consistent with previous findings on countertransference of therapists in ED treatment (Delucia-Waack, 1999; Thompson-Brenner et al., 2012). These insights support the need for ongoing supervision and reflective practice when implementing emotionally intensive interventions such as ImRs with complex populations.

A consideration is that the use of brief sessional measures may have contributed to the observed improvements in the therapeutic process, as regular monitoring can enhance therapist responsiveness and strengthen the therapeutic alliance. This aligns with previous findings highlighting the benefits of routine outcome monitoring in psychotherapy (de Jong et al., 2021; Delgadillo et al., 2022), and may partially explain the positive experiences reported by both therapists and patients.

#### 4.1. Strengths and limitations

A key strength of this study is its detailed exploration of therapists' experiences delivering ImRs to a clinically complex population that is often excluded from trauma-focused interventions. By focusing on real-world application and therapist adaptation, the study offers valuable insights into how ImRs can be safely and effectively implemented in patients with uED.

Another important strength lies in the triangulation of data sources: the study combines insights from semi-structured interviews with therapists and recordings of PGS sessions. This multi-source approach allows for a richer and more nuanced understanding of therapists' reasoning, challenges, and strategies in daily practice.

In addition, the involvement of an expert by experience as both co-coder and co-author significantly strengthened the analytical process. Their unique perspective enriched the interpretation of the data and ensured greater sensitivity to the lived experiences behind the therapeutic encounters described.

A limitation, however, is that the study focused on a single form of trauma processing, which may limit the applicability of the findings to other therapeutic approaches. Additionally, data were collected from only one site; a multicenter study would have enhanced the generalizability of the results across diverse clinical settings. Another limitation concerns the sample: although 11 interviews were conducted, these were held with only five individual therapists. This may have introduced a degree of dependence in the data and possible overlap in certain themes, potentially limiting the diversity of perspectives represented in the findings. Finally, it is important to note that although the current findings provide valuable insights, they are primarily intended to generate hypotheses. The observations and suggestions from the interviews must be tested in future quantitative research to determine their effectiveness and generalizability.

#### 5. Conclusion

This study highlights that trauma-focused ImRs can be feasibly and meaningfully implemented in patients with uED, despite long-standing clinical hesitations. Therapists, initially cautious about initiating trauma work in this vulnerable population, reported that—when supported by PGSs and tailored protocol adaptations—ImRs was not only safe but also clinically valuable. Adjustments to address cognitive limitations, dissociation, and shame, as well as the creative integration of eating disorder symptoms and core beliefs, enabled meaningful engagement with trauma memories. PGSs played a crucial role in supporting therapist reflection, emotion regulation, and skill development, ensuring adherence to the protocol in the face of clinical complexity. These findings offer a practice-informed foundation for future research and training, and suggest that trauma work should not be automatically deferred in uED treatment. Instead, with appropriate supervision and flexible delivery, ImRs may enhance therapeutic engagement, symptom reduction, and recovery trajectories in this underserved population.

#### CRedit authorship contribution statement

**Marieke C. ten Napel-Schutz:** Writing – original draft, Visualization, Validation, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Simona Karbouniaris:** Writing – review & editing, Formal analysis. **Suzanne H.W. Mares:** Writing – review & editing, Supervision. **Tineke A. Abma:** Writing – review & editing, Validation, Supervision, Methodology, Conceptualization. **Arnoud Arntz:** Writing – review & editing, Supervision, Methodology, Conceptualization.

#### Ethics approval and consent to participate

Ethical approval was obtained from the Ethics Review Board from

the University of Amsterdam (reference number 2016-CP-7111).

### Consent for publication

Consent for publication is available from all participants.

### Availability of data and materials

Reasonable requests for data will be considered by the authors under the condition that the European Data Protective is guaranteed for these sensitive patient data, and an appropriate analytic plan is included.

### Declaration of generative AI and AI-assisted technologies in the writing process

During the review of this work the first author used CHATGTP in order to improve English language usage, summarize texts more concisely and explore various reviewer feedback. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

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### Appendix A. Supplementary data

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### Data availability

Data will be made available on request.

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