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EFT-AV: A CASE SERIES

Applying emotion-focused therapy to work with the ‘anorexic voice’ within anorexia nervosa: A Brief Intervention.

*Submitted for Publication in Journal of Psychotherapy Integration*

### **Abstract**

Existent treatments for anorexia nervosa (AN) have produced dissatisfactory outcomes. Research suggests that many people with AN experience an internal ‘voice’ which is related to eating disorder symptoms and relapse. This study was designed to consider the feasibility and acceptability of a new emotion-focused treatment of AN, which is designed to work directly with the anorexic voice (AV) (‘EFT-AV’). Six adult clients diagnosed with AN who were experiencing an AV and awaiting psychological treatment were recruited from an adult outpatient service. Informed by EFT and previous AV research, the intervention involved six weekly individual sessions which focused on transforming AV experiences and promoting self-compassion. Participants completed standardised measures of eating disorder symptoms, relating to the AV, illness beliefs, motivation to change, and hope of recovery. Participants were also interviewed at the conclusion of the intervention to ascertain their views of on its acceptability. Findings suggested good recruitment, retention, and treatment adherence which supported the feasibility of the EFT-AV intervention. Thematic analysis of participant interviews indicated the intervention was acceptable and tolerable. Future directions for the treatment of AN, including the potential value of EFT-AV as an adjunct to existing therapies, are discussed.

## Introduction

Anorexia nervosa (AN) is a difficult to treat disorder which is associated with high levels of chronicity, disability, and mortality (Arcelus, Mitchell, Wales, & Nielsen, 2011; Treasure, Claudino, & Zucker, 2010). Models of AN have highlighted multifarious factors implicated in the aetiology and maintenance of restrictive eating psychopathology, including developmental components (e.g. insecure attachment), biological components (e.g. reduced interoceptive awareness), cognitive components (e.g. positive beliefs about illness), emotional factors (e.g. impaired affect regulation), and social components (e.g. conflictual interactions with care-givers) (Connan, Campbell, Katzman, Lightman, & Treasure, 2003; Fairburn, 1999; Oldershaw, Startup & Lavender, 2019; Schmidt & Treasure, 2006).

Informed by these conceptualisations, psychological treatments for eating disorders progressed significantly over recent years. While various forms of CBT (e.g. Fairburn, 1999; Touyz et al., 2013; Waller et al., 2007) and allied approaches (e.g. MANTRA; Schmidt, Wade, & Treasure, 2013) have demonstrated moderate to good clinical outcomes (e.g. Schmidt et al, 2014), a sizeable proportion of individuals with AN make little or no progress within existing treatments (e.g. Fairburn et al. 2015). Moreover, comparison trials have failed to identify advantageous interventions (Bryne et al., 2017). Predictors of outcome in outpatient therapy for AN remain largely inconclusive, although preliminary research suggests that bulimic symptoms (e.g. purging) and lower BMI, motivation to change, self-esteem, and emotional regulation result in poorer treatment response (Gregetsten, Mandy, Kanakam, Armstrong, & Serpell, 2019; Nyman-Carlsson, Birgegard, Engstrom, Gustafsson, & Nevonen, 2019; Vall & Wade, 2015; Wild et al., 2016).

Dissatisfactory outcomes for AN highlight a need for novel therapeutic adjuncts which improve the efficacy of existent treatments. It is the need to enhance the outcomes for people with AN that has prompted this paper. Inspired by lived experiences of AN, an adapted form

of emotion focused therapy (EFT) which has been designed to work specifically with the anorexic voice is presented and evaluated ('EFT-AV')

### **The 'Anorexic Voice' (AV)**

Mirroring early clinical descriptions of anorexic presentations (Bruch, 1978), studies highlighted that many people experience their AN as an internal and sometimes highly distressing anorexic 'voice' (AV) (e.g. Pugh, 2016; Tierney & Fox, 2010; Williams & Reid, 2012). Similar voices have been reported in other eating disorder groups, including bulimia nervosa and 'unspecified' eating disorders (Noordenbos, Aliakbari, & Campbell, 2014; Pugh, Waller, Esposito, 2018), suggesting that this phenomena may represent a transdiagnostic feature of eating psychopathology. Moreover, internal eating disorder voices also appear to be highly prevalent (Noordenbos et al., 2014), with an estimated incidence of around 75% across disorder subtypes (Pugh, *in press*).

While most individuals recognise that the AV is internally generated, it is often described as alien to the self (possibly due to dissociative processes) (Pugh et al., 2018), manifesting as a second- or third-person commentary related to eating, weight, and shape (Pugh, 2016; Tierney & Fox, 2010). Given that EDs, psychosis, and dissociative processes overlap in multiple ways (Pugh et al., 2018; Rojo-Moreno et al., 2011; Solmi, Melamed, Lewis, & Kirkbride, 2018), it has been hypothesised that the AV experience may lie at varying points on a continuum between inner speech and auditory hallucinations, for different individuals, at different points in time (Pugh et al., 2018). In terms of temporal features, research suggests that the AV undergoes characteristic changes in its nature and intensity over time (Pugh, *in press*). For example, individuals usually identify the AV as functional during the early stages of illness (e.g. providing comfort and security) and as critical and hostile as disordered eating becomes more entrenched (Tierney & Fox, 2010; Williams & Reid, 2012).

Research has begun to clarify some of the mechanisms which link eating psychopathology and the AV. In a series of quantitative studies, Pugh and colleagues identified that AVs which were perceived as being more powerful than the self were related to more pathological attitudes towards eating (Pugh & Waller, 2016; Pugh et al., 2018). Furthermore, individuals who reported particularly strong AVs tended to experience more severe eating disorders characterised by longer durations of illness and greater use of compensatory behaviours (e.g. purging) (Pugh & Waller, 2017). How individuals relate to the AV also appears to interact with disordered eating. For example, responding to eating disorder voices in subordinate ways (e.g. submitting or sulking) has been associated with more pronounced eating disorder symptoms (Mantilla, Clinton, & Birgegard, 2018).

Longitudinal AV research remains lacking. However, preliminary studies suggest that features of the AV such as its relative power influence treatment outcomes in AN (Hormoz, Pugh, & Waller, 2019). Furthermore, qualitative meta-syntheses suggest that learning to protect against the AV plays a role in both recovery and relapse in AN, whereby individuals might be ‘seduced’ back to their illness by the AV (Duncan, Sebar, & Lee, 2015; Fox, Federici, & Power, 2012). In light of these findings, sufficient evidence exists to hypothesise that adjusting the manner in which individuals perceive and respond to the AV may support recovery from AN.

Despite the controversies surrounding this phenomena (Pugh, 2016; *in press*), a small number of AV-related treatments have been presented. While most of these are yet to be formally evaluated (e.g. Davis, 1991), initial findings are promising. For example, Kelly and colleagues (2017) found that compassion-focused group therapy which focused, in part, on addressing eating disorder voices was effective in ameliorating symptoms in a mixed eating disorder sample. Regarding AN-specific treatments, Dolhanty and Greenberg (2009) have reported positive outcomes in emotion-focused therapy applied to a single case of AN, which included two-chair enactments for addressing the anorexic voice. These findings suggest that

the AV is not only a meaningful feature of disordered eating, but may represent a fruitful avenue for therapeutic innovation.

### **Emotion-focused therapy (EFT)**

Emotional difficulties play a central role in the development and maintenance of AN (e.g. Lavender et al, 2015). Research indicates that deficits in the recognition, regulation, expression, and integration of affective states are prevalent in anorexic groups (Oldershaw et al., 2019), impacting upon social processes and general functioning (Caglar-Nazali et al., 2014). Accordingly, working with affective experience has been a focus for many AN therapies, although responses to this aspect of treatment have not always been satisfactory (Byrne, Fursland, Allen, & Watson, 2011).

Emotion-focused therapy (EFT; Greenberg, 2011) is an evidence-based psychotherapy which is specifically designed to help clients access, explore, regulate, and transform affect in the interests of adaptive functioning (Greenberg, 2008). To summarise, EFT postulates that emotions arise from basic affective meaning structures ('emotional schemes') which are shaped through interactions with the environment. In the context of eating disorders, dysfunction is believed to arise from the repetitive and rigid activation of negative emotional schemes, alongside the absence or limited access to healthy emotions (Dolhanty & Greenberg, 2009). The aim of EFT, therefore, is to transform 'maladaptive' emotions such as shame and anxiety through the activation of 'adaptive' emotions such as compassion and assertive anger. To achieve this, a variety of within-session therapeutic 'tasks' are initiated in response to particular client behaviours ('markers'), which intend to facilitate experiential processing and emotional transformation.

Given that EFT is focused on supporting emotional processing and regulation, it has been considered for the treatment of eating disorders, including AN (Glisenti, Strodl, & King,

2018; Ivanova & Watson, 2014). For example, a recent systematic review found that emotion focused treatments may be acceptable, feasible, and effective for adolescents and adults with AN (Sala, Heard, & Black, 2016). Preliminary applications of EFT to adult with AN have also generated positive outcomes (Dolhanty & Greenberg, 2007). As reported earlier, Dolhanty and Greenberg (2009) have presented a single-case study of EFT applied AN which resulted in improvements in eating disorder symptoms, overall mood, and emotional regulation, as well as weight maintenance.

Chairwork is an established emotion-focused task which has been only tentatively applied in treatments for eating disorders. It has a potentially good fit with AN given that the AV is experienced in a dialogical manner, as well as enabling individuals to concretise and separate from this experience of the self (Pugh, 2019). In a manner which is similar to working with self-evaluative splits (Greenberg, Rice, & Elliott, 1993), two-chair dialogues with the AV involve the client moving between seats, embodying the AV in chair one and then responding from chair two. This process of responding and counter-responding is repeated several times during which attention is focused on how the individual feels in response to their internally generated attacks. This exchange typically generates one of two outcomes: either the severity of AV's criticisms begins to diminish in response to the clients expression of healthy sadness, or adaptive anger is used to help the individual assert themselves in response to these attacks (Greenberg, 2011).

### **EFT-AV Development**



Although EFT is an evidence based psychological therapy (e.g. Greenberg, 2011), it is not a manualised treatment. It places much more emphasis on treatment processes and markers for particular therapy interventions. As discussed earlier, the EFT therapist utilises a variety of interventions, including chair work, to address specific issues such as ‘unfinished business’ or ‘shutting down emotions.’. However, in the treatment of eating disorders, especially AN, it is working with the AV that is regarded as a crucial agent for clinical change. Further, other therapeutic approaches, such as Compassion Focused Therapy (CFT) have used ‘empty chair work’ to address critical self to self dialogues and it was felt that it would be important to incorporate these into a new EFT-AV treatment. Within these contexts, the client is instructed to move between chairs so that a conversation between the self and the AV can occur. This fostering of a dialogue or ‘standing up’ to the AV was regarded as crucial to the intervention. Previous research has indicated that the self can often feel bullied or ‘squashed by the voice’ (e.g. Tierney and Fox, 2010) and this can lead to the suppression of identity and sense of self (e.g. Williams et al, 2016). This not only allows for boundary for the self towards the AV being established but also prompts the AV to quieten and soothe. In order to structure the EFT-AV, it follows the broad stages of therapy, as proposed by Dolhanty and Greenberg (2009). The initial stage is to focus on enagement/ psycho-education, followed by actively helping the self to ‘stand up to the AV’ (via chair work) and then, finally, developing a self soothing/ compassionate way of relating to the self. In order to achieve this focus on compassion, we utilised the letter writing technique from Compassion Focused Therapy (see Gilbert, 2004) and Cognitive Analytic Therapy (CAT) (e.g. Corbridge, Brummer and Coid, 2018). EFT-AV is distinguished from traditional EFT by its explicit ‘task focus’ and the use of additional chair-based techniques to better understand the developmental origins and functions of the AV (i.e. voice dialogue; Stone & Stone, 1989) and to promote compassionate self-to-self relating. EFT-AV consists of six one-hour, weekly sessions:

**Session one.** Building a therapeutic alliance, assessing the AV (e.g. onset, intensity, frequency, triggers and content) and providing psycho-education about the AV experience.

**Session two.** Assessing both the participant's style of relating to the AV and its perceived functions through simulated interviews with the AV.

**Sessions three and four.** Transforming participants' experience of the AV through two-chair dialogues, either by encouraging it to 'soften' or establishing more assertive counter-responding to the AV.

**Session five.** Cultivating a more compassionate manner of self-to-self relating by identifying or developing a soothing internal voice or presence which validates, regulates, and contains emotional distress.

**Session six.** Bringing the work together by integrating therapy experiences into a new view of the self and the AV. This included the participant reading a goodbye letter to the AV, summarising how the AV had affected their life, any intention to change this relationship, and the concrete steps they would take to achieve this aim. The therapist also read a goodbye letter to the participant.

Within this study, RH was the therapist and she was closely supervised by the other two authors (MP and JF). Only RH was in the room during the therapy and the supervisors listened to each session carefully to ensure fidelity to the model.

### **The Present Study**

The primary aim of this study was to implement a case series of a time limited EFT-AV to establish whether this intervention is a feasible and acceptable approach/ treatment for people with a diagnosis of AN who experience an internal eating disorder voice. Given that the specific intervention under investigation was only 6 sessions it was expected that there would not be specific symptom improvement, as treating AN tends to need much time and input (e.g. Hay et

al. 2014). However, specific group outcomes were tested in order to look at any direction of change, post intervention. Two variables were identified as crucial tests of feasibility and acceptability, namely Motivation to Change (MTC) and Hope of Recovery (HOR). Previous research has indicated that motivation to change and Hope of Recovery are important first steps in a recovery from AN and they occur prior to any symptom change (e.g. Geller et al, 2012).

**Specific questions were:**

- 1) To ensure that EFT-AV is offered as a manualised treatment and the fidelity to the treatment model is acceptable.
- 2) To ensure that EFT-AV is a feasible model of treatment by investigating levels of uptake and drop out rates from the treatment.
- 3) Can EFT-AV lead to improvements to motivation to change and hope of recovery?
- 4) Can EFT-AV lead to improvements in a) relationship with the AV; b) illness beliefs; c) ED cognitions and behaviours?
- 5) Do participant's evaluations of the intervention indicate that it can be considered an acceptable treatment?

The study employed a single-case experimental design (SCED) for clients diagnosed with AN and experienced an AV.

## **Methods**

### **Participants**

Participants were recruited from a specialist adult NHS ED outpatient service in the UK. The time period for recruitment was October 2017 – December 2017. Eight participants

initially expressed an interest in taking part in the study and were screened for eligibility. Of those who qualified for being included in the study ( $n = 7$ ), six (86%) consented to taking part, indicating a high uptake of participants. This left a sample of six participants (five females, one male) and all, but one of the participants had a confirmed DSM V (2013) diagnosis of AN. These diagnoses were given by experienced eating disorders clinicians at the NHS unit where this study was undertaken. The remaining participant had recently been through a re-feeding procedure on the unit and this had inflated their BMI. Although this technically meant that they would not meet the diagnostic criteria for AN (over the BMI cut off), there were still met all the other DSM V criteria for AN and this participant still experienced an AV. A review of case notes was used to confirm this diagnosis at the outset of the intervention and four participants took part in this study. Participants did not receive any other form of psychotherapy or dietetic intervention during the provision of EFT-AV. See table 1 for the participant's demographic and clinical details.

**Table 1 to go about here**

**Design**

The study employed an A-B single case experimental design (SCED). Individual baselines acted as control periods (Phase A), as each participant completed the EAVE-Q measure once a week for three weeks. None of the participants received any psychological or dietetic treatment during Phase A. The intervention phase (Phase B), lasted six weeks and comprised of six, weekly, face-to-face sessions, with each treatment session lasting up to 60 minutes. Each participant participated in a follow-up, semi-structured, interview one week after finishing the intervention. Once the participants had completed the intervention phase, they

returned to the top of the service waiting list for standard treatment. However, standard treatment did not start until the semi structured interviews were completed.

### **Therapist and Training**

The first author (RH) was the primary therapist and she received 30 hours of basic EFT training (emphasising client-centred principles and two-chair dialogue work) facilitated by the co-authors (JF and MP). JF has completed Level 1 and 2 EFT training and MP has completed Level 1, 2, and Advanced training in EFT in conjunction to publishing guidelines for the applications of two-chair dialogues in psychotherapy (Pugh, 2019). The training included several experiential workshops that involved viewing video-taped sessions and role plays. Supervision was weekly and each session was audio recorded to ensure fidelity to the EFT-AV model.

### **Measures**

**Psychopathology measures.** The following established measures were administered pre- and post-treatment:

1. **The Eating Disorder Examination-Questionnaire** (EDE-Q; Fairburn & Beglin, 1994)

This questionnaire is based on the ‘Gold Standard’ Eating Disorder Examination (EDE) interview (Fairburn and Cooper, 1993). It consists of 4 subscales (Restraint Eating (5 items), Eating Concern (5 items), Shape Concern (8 items) and Weight Concern (5 items) and one global subscale (composite of the other four subscales). Items from the subscales are designed to capture the frequency of eating disorder psychopathology using a 7-point Likert scale ranging from (0) ‘No days’ to (6) ‘Every day’, and severity on a scale ranging from (0) ‘Not at all’ to (6) ‘Markedly’. Higher global scores indicate greater levels of eating psychopathology (Fairburn & Beglin,

1994). Reliability statistics for this measure are good, with Cronbach alpha values (e.g. Fajja et al. 2017).

2. **The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983)**

This is a 14-item self-report measure split into two subscales (anxiety and depression), each with seven items. Each subscale identifies caseness with the following scores, mild (scores 8–10), moderate (scores 11–15) or severe (16+) (Zigmond & Snaith, 1983). It has good reliability statistics, as shown by Bjelland et al (2002) with Cronbach alphas of 0.83 on the HADS-Depression and 0.82 on the HADS-Anxiety. Bjelland et al. (2002) also noted that it had good correlations with other established measures of mood, such as the Beck Depression Inventory (0.49 to 0.83).

3. **The Pros and Cons of Anorexia Nervosa Scale (P-CAN; Serpell, Teasdale, Troop & Treasure, 2004)**

This scale measures individual beliefs about the perceived positive (pros) and negative (cons) of having AN in their life. There are 50 items that are scored on a five point Likert Scale. These then translate to ten subscales with six describing the Pros of AN and four describing the cons of the illness. Reliability is good with Cronbach Alpha's being between .68 and .89).

**Standardised measures.**

Standardised self-report measures were collected weekly during the intervention phase to assess limited efficacy:

1. ***The Experience of Anorexic Voice-Questionnaire (EAVE-Q; Gant et al., 2018)***. The EAVE-Q has recently been developed and measures the presence and significance of an AV in AN. Psychometric properties of the EAVE-Q have been found to be good,

with Cronbach's  $a = 0.83$ , test-retest reliability was moderate and construct validity was good (Gant et al., In Press).

2. ***The Brief Illness Perception Questionnaire (Brief IPQ; Broadbent, Petrie, Main & Weinman, 2006)***. Participants were asked to rate their beliefs about their illness over 8 items with each scale consisting of 10 points on a Likert Scale.
3. ***The Eating Disorder-15 (ED-15; Tatham et al., 2015) Motivation to change***. Participants were asked to rate how motivated they were to change on a Likert scale of 0 ("not at all") to 10 ("completely").
4. ***Motivation to change***. Participants were asked to rate how motivated they were to change on a Likert scale of 0 ("not at all") to 10 ("completely").
5. ***Hope of recovery***. Participants were asked to rate how hopeful they were of recovery on a Likert scale of 0 ("not at all") to 10 ("completely").

### **Ethical Approval**

Approval was given by the NHS Health Research Authority (HRA), relevant local Research and Development (R&D) teams.

## **Results**

### **Data Analysis**

Descriptive statistics were used to describe the sample. Data was collection on the recruited participants clinical characteristics, levels of treatment retention and treatment adherence in order to test treatment fidelity. A thematic analysis (Bruan and Clarke, 2006) of the follow up interviews was performed in order to investigate the acceptability of the treatment. Some simple analyses were undertaken between pre and post EFT-AV and visual analyses (Morley, 2018) of weekly measures were carried out in order to establish limited efficacy of the intervention.

### **Research Aim 1: Treatment Fidelity**

In order to ensure treatment fidelity, regular supervision of the first author (RH) by the second and third author utilised audio recordings of each session. In order to objectively assess adherence to the two-chair dialogues, an adapted form of Greenberg's adherence measure for two-chair dialogues was used (two-chair dialogue tasks; sessions 3 and 4). Once all interventions were completed, the Carkhuff and Truax empathy scale (Truax & Carkhuff, 1967) was used to assess empathic attunement in all sessions that did not contain the two-chair dialogue for conflict splits (Sessions 1, 2, 5 and 6). Acceptable competency standards were demonstrated as the mean empathy score was 3.7 ( $sd = 0.08$ ) and the mean adherence score was 3.7 ( $sd = 0.07$ ), both of which exceeds the satisfactory threshold.

### **Research Aim 2: Feasibility**

As discussed by Craig et al. (2013), in reference to the UK's Medical Research Council (MRC) guidance for the development of complex interventions (MRC, 2006), evaluation of the feasibility of an intervention is an invaluable first step in develop a new intervention. These authors discuss how a clear evaluation of an intervention can often be undermined by problems of acceptability, compliance and recruitment/ retention within a specific intervention. Within this study, Four of the six participants received all six sessions of the intervention and were considered treatment completers. In terms of feasibility, it is important to consider why 33% of participants dropped out of this study, as it may be indicative of poor feasibility. A key factor in assessing drop out is whether someone left the study because of specific aspects of the intervention. In order to investigate this, the two participants who left the study were asked about their reason for withdrawal. The first one decided not to pursue the treatment after assessment as there had been a stressful event in their life. It was discussed with this participant that she had made a decision not to engage with any psychological treatment and it was not specific to the intervention offered within this study. Indeed, she had not received any of the



core chair intervention thus making it unlikely to be a factor for her decision. For the second withdrawn participant, she stated that she could not continue with the EFT-AV as she had just had a bereavement. Again, this decision not to continue with the EFT-AV is not specific to this study and she was quite clear that she needed to take time out to arrange the funeral, support family, etc. However, it cannot be ruled out that the emotional aspect of the chair work had an impact on her decision to withdraw. In terms of assessing feasibility of this intervention, one participant withdrawing during the intervention (17%) was regarded as acceptable and is certainly comparable to standard non uptake of treatment within the service. Another important aspect of assessing feasibility is the need to consider effectiveness, albeit in a limited way. This will be discussed below.

### **Research Aim - Efficacy**

Before individual case results are discussed, the main outcome findings will be discussed across the whole sample. Table 2 shows the main findings from all the outcome variables.

**[Table 2 to go about here]**

### **Research Aim 3: Main findings from the Motivation to Change and Hope of Recovery**

#### **Measures**

Wilcoxon signed-rank tests showed that pre- and post-intervention results were non-significant for motivation to change ( $z = -1.826, p = 0.068$ ) or hope of recovery ( $z = -1.826, p = 0.068$ ). For motivation to change, the mean score pre-intervention was  $M = 3.38$  ( $sd = 0.8$ ) and post-intervention it was  $M = 5.81$  ( $sd = 1.3$ ). For hope of recovery, the mean score pre-intervention was  $M = 2.13$  ( $sd = 1.09$ ) and post-intervention was  $M = 5.38$  ( $sd = 1.3$ ). Although these findings are marginally non-significant, it is highly likely that with a larger sample that the pre-post scores would become statistically significant. These findings potentially show that,

following the six sessions of EFT-AV, participants were feeling more motivated and had an increased hope of recovery from their AN.

#### **Research Aim 4: Main findings from the Psychopathology measures**

Wilcoxon signed-rank tests were used to determine paired differences between data that were not normally distributed at two time points. As expected, the findings from the tests showed that there were no significant differences on any of the psychopathology measures pre- and post-intervention (see Table 3). Interestingly, there was a small increase in levels of depression and anxiety, whilst a very modest decrease in EDE-Q scores.

**[Table 3 to go about here]**

#### **Research Aim 5: Individual Participant Findings**

This section of the results describes individual visual analysis of idiographic measure data. Visual analyses were conducted to consider the pattern of individual participants' data over the duration of their involvement in the study. Although sometimes considered an insensitive method (Harper, 2002), the use of visual analysis is becoming increasingly widespread in clinical trials as it clearly enables the identification of effective interventions (Kazdin, 1998). Guidelines for visual analysis were followed (Kratochwill, et al., 2013), including that baselines will be considered stable enough to determine intervention effects when 80% of baseline phase data fall within a 20% range of the median (Gast & Spriggs, 2010). Idiographic data were graphed on x-y plots using Microsoft Excel (according to standard presentation of multiple baseline SCEDs) and can be seen in Figures 2 to 13. Raw data were graphed using solid lines and black square markers. Study phases have been separated by dashed vertical lines.

In order to assess change between study phases on the EAVE-Q, changes in the central tendency were investigated. In order to assess change within the intervention phase, the trend of all idiographic measure data were investigated. Different calculations of central tendency and trends were chosen according to Morley's guidelines (Morley, 2018). Definitions of key terms used within this section, and when they were calculated are given below (see Table 4).

**Table 4 to go about here**

Figures 1 to 13 display participant outcomes. All of their EAVE-Q scores demonstrated baseline stability (Gast & Spriggs, 2010). The running medians and broadened medians are sometimes not visible on graphs, where they are the same as raw data values.

Figures 1-4 to go about here

Figures from 5 – 8 to go about here

Figures 9 to 12 to go about here

**Participant one (P1).** P1 was a 27-year-old single man with a BMI of 19.9. He had a two-year illness history. He had a two-month inpatient admission. When he started the brief EFT-AV intervention, his weight had improved to within normal range, but his EDE-Q scores placed him in the clinical range, giving him a current diagnosis of atypical AN. He had no psychiatric history prior to the development of his ED. He described current symptoms of depression.

Lines of central tendency indicated that the extent to which he identified with, endorsed and experienced the AV decreased from baseline to intervention. A downward trend was also observed in the intervention phase. No clear trends were observed for his ED cognitions and behaviours. Within the intervention phase, a downward trend was observed for his IPQ scores, indicating that over the course of the intervention he developed a less threatening view of the illness.

**Participant two (P2).** P2 was a 55-year-old mother of one with a BMI of 16.7. She had a long-standing history of AN. She was first diagnosed aged 16. Since the onset of her illness, she has received treatment as an outpatient and has had several inpatient and day patient admissions. P2 described comorbid symptoms of depression and anxiety.

Lines of central tendency indicated that the extent to which she identified with, endorsed and experienced the AV decreased from baseline to intervention. Within the intervention phase, a very slight downward trend was also observed. A very slight downward trend was observed for her ED cognitions and behaviours. Within the intervention phase, a very slight upward trend was observed for the IPQ, which could indicate that over the course of the illness she developed a slightly more threatening view of the illness.

**Participant three (P3).** P3 was a 26-year-old single woman with a BMI of 17.7. She presented with a two-year history of AN. She had not previously presented to services or had any treatment for her ED. She described co-morbid symptoms of anxiety.

Lines of central tendency indicated that the extent to which she identified with, endorsed and experienced the AV decreased from baseline to intervention. Within the intervention phase, a very slight downward trend was observed on the same construct. Within the intervention phase, a downward trend was observed for her eating cognitions and behaviours. Within the intervention phase, a downward trend was observed for the IPQ, suggesting that over the course of the intervention she developed a less threatening view of the illness.

**Participant four (P4).** P4 was a 35-year-old married mother of two with a BMI of 16.9. She had a long-standing history of AN. She was first diagnosed when she was 12-years-old. Since the onset of her illness she has had three inpatient admissions and seven years of outpatient treatment. P4 described comorbid symptoms of anxiety.

Lines of central tendency indicated that the extent to which she identified with, endorsed and experienced the AV decreased from baseline to intervention. Within the intervention phase, a very slight downward trend was observed for the same construct. No clear trends were observed for her ED behaviours and cognitions. No clear trends were observed for her view of the illness.

#### **Research Aim 5: Qualitative Investigation of the Acceptability of EFT-AV**

All of the participants who completed the intervention took part in the follow-up semi structured interviews. These interviews were designed to look at how the four participants viewed the acceptability of the EFT-AV. Specific questions were asked questions on the

following topics; experiences of the intervention, identification with the AV, the experience of working with the AV (including speaking with the AV), experience of chairwork, what changed for the participant and what would they suggest needs to change with the EFT-AV to improve the intervention.

Thematic analysis was undertaken using the Braun and Clarke (2003) methodology, where the data from the interview transcripts was open coded and then organised into overarching themes. The interviews were conducted by the first author and the codes were checked/ themes were checked by an independent researcher (from the entire research team) with expertise in qualitative research. It is important to note that the aim of qualitative research is not to produce objective data, as its strength comes from data drawn from the interaction between the researcher and the participant in order to highlight new understandings. However, the independent reviewer agreed that the initial coding and thematic map were understandable and not drawn from erroneous or judgement based codings.

### **Findings from the Thematic Analysis**

110 initial codes were generated which were then searched and grouped into 13 separate themes which were collapsed into five sub-themes. The themes are presented below:

**Changes in awareness of the problem** Participants said that the intervention helped them become more aware of their difficulties (“It made me realise exactly how much my brain is following those sorts of thought patterns all the time, just because a lot of the time, I’m so used to it I don’t notice it” P1) and they talked about how this affected their motivation to change (“What has changed is mostly the motivation, the insight” P4). Participants discussed how the intervention had not led to any concrete behaviour change but pointed out that despite this, the intervention increased their awareness of the problem (“My defaults and bad habits are not, haven’t really changed much but I feel like I’m a lot more aware of them” P3; “I think

most things have stayed the same... just kind of feels like a plaster's been lifted, now you can see the, I'm not papering over the cracks anymore" P2).

**Changes in relationship with the AV.** Frequently, participants described changes in their relationship with the AV ("[the AV] has adapted...it feels like I'm a bit more free in my choice" P2). Participants discussed how the intervention had not changed the content of the AV, but their reactions to the AV had changed ("The [AV], it still says the same things... but I've been able to kind of tune it out, not completely tune it out but tone it down. It feels like it's dominating my life less than it was before" P3; "I don't think I've changed the thought patterns very much...but a few times I have thought well this is like in the sessions and, you know, tried to sort of think of it as not the only way to look at things" P1). Finally, participants talked about having acquired more skills and motivation to change their relationship with the voice ("The voice is still doing what he/she does. I just have more tools to combat it. Now I'm more interested in combatting it" P4).

**Specific helpful aspects of the intervention.** Participants made positive comments about the emotion-focused aspect of the intervention ("Just being forced to actually put feelings into words... I've never done that before and it's all very obvious things and it's not related directly to the eating disorder but just kind of makes me feel a bit more whole" P3) and also about certain therapeutic tasks ("The letter you wrote me was incredibly meaningful and summarised really well the treatment journey. I have referred to it several times since and know that it will continue to be a useful resource" P4). Participants talked about how the intervention was unlike any treatment they had tried previously ("I've been through the story of how it started so many times over the years...but this did feel like it was not just repeating it like that, it was looking at it in quite a sort of serious way, looking at what it means now rather than just the same old story that gets told again and again" P1; "I was actually pleasantly surprised.



There was a bit of scepticism from me...because I felt like I've kind of done stuff like this before" P2).

**Challenges to using chairwork to work with the AV.** Not everyone was able to easily identify with hearing an anorexic voice which was maintained until the end of the end of the intervention ("It was definitely not something I identified with before, and I still don't think I do" P3). Whilst for others, there were difficulties with externalising the AV ("I found that really, really hard because it does feel as though it's part of me most of the time so externalising it was hard" P2). Interestingly, P2 had the longest history of living with AN and was also the lowest BMI, which may explain why this participant had struggled with to externalise something that had been so present in her life for such a long time.

Some participants reported finding it 'weird' working with the AV ("It felt very strange...very forced" P3) and awkward to use chairwork ("I always find those things a bit awkward because I'm not a very outgoing person" P2). Some of the participants discussed how difficult it was to challenge the AV ("Challenging it was, I can't think of the word, well it felt unsafe, it felt like an unsafe thing to do" P2) and one participant was unsure whether the chairwork made any difference to her ("I don't actually know how much of a difference it makes to be moving chair to chair" P3). It was clear from the findings that participants found the initial introduction and socialisation to this aspect of the EFT-AV to be quite challenging which, perhaps, is not surprising. It is an intervention that is quite different from standard therapies offered in the UK.

**Overcoming challenges to using chairwork to work with the AV.** Within this theme, participants highlighted that the process of EFT-AV allowed them to socialise to the intervention. Participants discussed that once they were ‘up to speed’ with talking with the AV, it became easier/more comfortable (“I remember the first time or the first couple of times I found it a bit weird...and then the other times it became expected and it does actually help with the splitting the association part” P2; “It was a bit challenging to get in to but as it went on, I could see that there was, if I related to it a bit differently, if I related to it as a part of me it felt easier, I didn’t feel as awkward anymore” P3).

Importantly, the participants discussed a balance between the difficulties of engaging with the therapy versus the perceived intervention’s helpfulness. Most participants reflected on how they felt, on balance, that the intervention was helpful and useful

Across the data drawn from the interviews, there appeared to be a process where the initial stages of EFT-AV was felt as being awkward and ‘forced’ (P3), but as time went on the intervention became more acceptable to participants. Many of the participants reported that they found it an appropriate and helpful treatment, despite initial misgivings. For example, P1 reported that it was difficult but worthwhile (e.g. It was difficult, but I think it was worth doing, it was definitely worth doing” P1); or giving clarity in mind (e.g. just for a second being able to be in one mind-set, rather than being constantly conflicted. That was the most helpful thing” P2). Whilst participant 3 reported that the process provided a way to start to give clarity (e.g. I found it useful because it kind of gave you a way...of boxing up thoughts and feelings and starting to untangle some, yeah, the untangling process” P3). Participant 4 was quite clear that it was helpful (e.g. I really believe that this treatment would benefit lots of people should this be rolled out. I would highly recommend it to anyone struggling to move forward” P4).

## Discussion

The study employed a SCED and sought to explore whether a brief form of EFT, that focuses on the AV (EFT-AV), was (a) acceptable to be offered as a manualised treatment with good fidelity to the model; (b) a feasible intervention for adult outpatients with AN; (c) improve levels of hope and motivation for participants; (d) associated with improvements in the relationship with the AV, beliefs about the illness & ED cognitions/ behaviours; (e) reported by participants as an acceptable treatment (via qualitative interviews).

The authors, using the EFT model, developed a manualised EFT-AV therapy that stuck to the main principles of EFT for eating disorders, as discussed by Dolhanty and Greenberg (2009). It also includes a brief consideration of helping the self to develop an identity away from the eating disorder (Fox et al. 2012) by including a letter at the end that emphasises these therapeutic tasks. One of the most important findings from this study is that this manualised therapy held face validity to both the researchers and the participants. It also showed that it was possible to train a therapist to use this model, relatively quickly, and the ratings on the Carkhuff and Truax empathy scale (Carkhuff and Truax, 1967) supported a good level of empathy across the EFT-AV.

In terms of feasibility of the intervention, it is important to consider both recruitment and retention into the intervention. In terms of recruitment, out of the potential seven participants only one person did not consent to take part, after receiving information about the study. This is a promising indication that participants felt that the treatment looked acceptable and this may well fit with the growing literature that indicated that many people with a diagnosis of AN report hearing a voice (e.g. Pugh, 2016 and Tierney and Fox, 2010). It is likely that a treatment that offers an approach to work directly with the AV is likely to be well received by sufferers of AN and there have been many reports that many patients feels that clinicians have ignored or dealt with the voice in their therapy (e.g. Collie, Woodward and Fox,

submitted). However, it is of more concern that only 66% of participants completed the EFT-AV. It could be that potential participants may feel that although the approach has face validity, the process of therapy does not address the AN in a way that is acceptable to the participants. In order to test this hypothesis, the reasons for the 2 people to leave the treatment were considered and both reported emotionally difficult life events in their lives occurring at the start of the EFT-AV. One participant reported a bereavement and the other participant, unfortunately, did not want the researchers to state what had happened to them in any publication, due to confidentiality issues. However, the researcher was aware of what had happened and it was a clearly a highly distressing event that may well have led most participants to want to pause their therapy. However, it is important to note that a 33% attrition rate, even for understandable and non-treatment related factors, is still comparable to other AN treatment studies - including emotion-focused treatments (Sala et al., 2016) - are approximately 40%. Finally, as will be discussed below, participants reported that they found the treatment acceptable, despite the challenging nature of the chair work.

This study was only designed to test the efficacy of the intervention in a limited way, as six sessions of any psychological therapy for AN is likely to be really limited in its efficacy. Hay et al. (2014) reports that recovery from an eating disorder can take many years and, due to this factor, it was regarded that the main hypothesis for this study was to see if motivation and hope of recovery improved after EFT-AV. The pre- and post-intervention differences for motivation to change and hope of recovery were very close to significance and it is likely that a larger sample would have led to these results becoming significant. Crucially, these results do suggest that participants potentially showed an important increase in motivation and hope of recovery, which may be a useful precursor to helping clients to engage in a more behavioural/ change orientated therapy, such as CBT.

With regards to the other measures of efficacy, it is important that the intervention did not lead to any significant deterioration for the participants. For the reasons given above, it is highly unlikely that participants would show any clinically significant change over the intervention. It is for this reason that only visual analysis was undertaken on the data, as Reliable change indicators would not show any significance when the means were so close to each other pre and post EFT-AV. By considering the visual analyses, it can be seen how participants identified with, endorsed and experienced the AV decreased from baseline to intervention and that this continued to decrease over the course of the intervention. In addition, one participant showed an improvement in ED behaviour and cognitions and two participants showed a decrease in their IPQ scores, indicating a less threatening view of the illness over the course of the intervention. Three out of four participants did not show any change in ED behaviour and cognitions and two out of four participants did not show any change in their beliefs about the illness. Although this firmly remains an empirical question, it is likely that with more time or with the combination of a more behavioural focus, symptoms may well improve by virtue of improving motivation and hope of recovery. Finally, there were no significant pre- and post-intervention differences on any of the psychopathology measures, which suggests that the intervention does not lead to a deterioration in other psychopathology symptoms.

The final aim of this study was to consider whether participants' felt that the EFT-AV is an acceptable treatment approach. This was assessed via a thematic analysis and the findings suggested that there were initial mixed views about using 'empty chairs' to give the AV an externalised voice. Some described it initially difficult to work with the AV in this way which, perhaps, is not surprising. Dolhanty and Greenberg (2009) discuss that this technique should be 'marker focused', in that, it is applied in a way that is congruent to the client's feelings and material being presented. This, ultimately, gives the intervention face validity, which could not

be as neatly done within this time series, due to the time scales and limited sessions. Furthermore, research has also highlighted the importance of ‘dualism’ of AN as it can be both a separate entity and as part of their identity (e.g. Higbed & Fox, 2010). In saying this, it was noted that all participants discussed that they ‘got into it’ and they valued the emotion-focused aspects of the intervention. This finding corroborates previous research that points to emotion-focused treatments being acceptable, feasible and effective for individuals with AN (Sala et al., 2016). Although this needs further research, these findings suggest that it may be an important therapeutic task to help the client to disentangle the AN and the AV from their identity, so that they can resist and ‘fight back’ against the AV.

### **Treatment of Anorexia Nervosa: Need for Treatment to Integrate Different Approaches/**

#### **Models**

EFT-AV is a promising new treatment that is both feasible and acceptable to participants, whilst providing some preliminary evidence that it may aid both motivation and hope of recovery. Having belief and motivation in recovery are essential prerequisites for any successful treatment of AN (e.g. Geller et al, 2013) and it is encouraging that EFT-AV may help with these treatment foci. As a consequence, this intervention may be especially beneficial for individuals who are in contemplative and pre-contemplative stages of change and EFT-AV may offer an invaluable preparatory step prior towards engaging in change-focused therapies such as CBT-E (Fairburn et al, 2003) or MANTRA (Schmidt et al. 2014). This suggestion is consistent with other AN research that shows the importance of developing interventions that both manage the AV and behavioural change (Higbed & Fox, 2010).

Within the SPAARS-ED model of eating disorders (Fox and Power, 2009; Fox, Federici and Power, 2012), it is discussed that any work with AN needs to focus on ensuring that someone is safe and able to take in some nutrition to prevent a deterioration in both

physical and mental health. It is argued that EFT-AN fits with the SPAARS-ED model as it proposes that the AV can be used to facilitate a close engagement and to position the therapist as an advocate of the self towards the AN. This therapeutic stance can be crucial in ensuring that a treatment or therapy does not lead to a ‘stand-off’ or ‘battle’. Fox, Federici and Power (2012) also argue that the AV is a direct product of the various emotions that are theoretically seen to play an important role within the aetiology and maintenance of AN. Again, within the spirit of integration, the need for the treating clinician to adopt a compassionate perspective in understanding the role that AN plays in the sufferer’s life and EFT-AV potentially addresses the harshness of the AV. Incorporating a compassion focused therapeutic approach (e.g. Goss and Allen, 2009) will also assist in helping the client to develop a compassionate relationship with the self that helps to move away from needing the AN and the AV to promote self-worth and pride (e.g. Faija et al. 2016).

### **Limitations**

Although the generalisability of the intervention could be regarded as being limited by the small sample, it is important to note that all of the participants were drawn from established ‘every day’ NHS services. There are no apparent reasons why this intervention could not be applied in similar settings. It is also important to note that there was a lack of blinded data collection and this has the potential to bring bias into the findings. However, this is a small, feasibility study and, as such, the findings should only be regarded as an indication of the acceptability of this new treatment.

### **Recommendations for Further Research**

As this study was exploratory, it provides a starting point for research that is intended to be developed into larger experiments. Future research should aim to rectify the limitations of the current study. Such findings could then be used to guide the development of an optimised emotion-focused intervention that focuses on the AV. In the longer-term, an adequately

powered RCT should be conducted to determine the efficacy and cost-effectiveness of EFT-AV in comparison to control and/or recommended active control conditions (e.g. weekly CBT-E for AN). Recent research has highlighted links between the AV and early trauma (Pugh and Waller, 2018) and there is ample written about the application of EFT to trauma (e.g. Paivio and Pasual-Leone, 2010). It would be a useful addition to include a trauma-focused module intervention as a part of the EFT-AV.

## Conclusions

In summary, the current study provides new and tentative evidence highlighting the potential of a brief EFT intervention that focuses on the AV as a feasible and acceptable intervention for some adult outpatients with AN. This study adds to the growing literature implicating the need for treatment approaches to incorporate this phenomenological aspect of AN. Moreover, the findings of this exploratory study now warrant further evaluations in a pilot study to substantiate its results, identify treatment effects, and the conditions under which the intervention will be optimally effective.

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Table 1

*Participant demographics*

P	Sex	Age	Ethnicity	Marital status	Employment status	BMI	Length of illness	Comorbid symptoms
1	M	27	Asian British	Single	Employed	19.9	2 year	Depression
2	F	55	White British	In a relationship	Unemployed	16.7	39 years	Depression/ Anxiety
3	F	26	White Scandinavian	Single	Employed	17.7	2 years	Anxiety
4	F	35	White British	Married	Unemployed	16.9	23 years	Anxiety



Table 2

The main findings from the participants on each of the key outcome measures.

	Age	HADS-A pre	HADS-A post	HADS-D pre	HADS-D post	EDE-Q Pre	EDE-Q Post	Pro - Pre	Pro - Post	Con - Pre	Con - Post	MTC – Pre	MTC – Post	HOR - Pre	HOR – Post
P1	27	17	19	21	21	5.85	5.84	-.20	-.06	1.56	1.52	4.00	5.00	.00	6.50
P2	55	16	19	11	13	3.39	3.61	-.92	-.68	1.21	1.47	1.00	2.50	.50	1.50
P3	26	15	14	5	6	4.09	3.24	-.05	-.22	.45	.78	4.00	8.00	4.00	7.00
P4	35	2	7	1	2	2.37	2.08	.13	.02	.20	.51	4.50	7.75	4.00	6.50

Abbreviations are: HADS-A – Hospital anxiety and depression scale – Anxiety subscale; HADS-D – Hospital anxiety and depression scales – depression subscale; EDE-Q – Eating Disorders Examination questionnaire; Pro – Pro eating disorder beliefs; Con – con eating disorder beliefs; MTC – Motivation to change and HOR – Hope of Recovery.

Table 3

*Participants' psychopathology scores pre- and post-intervention*

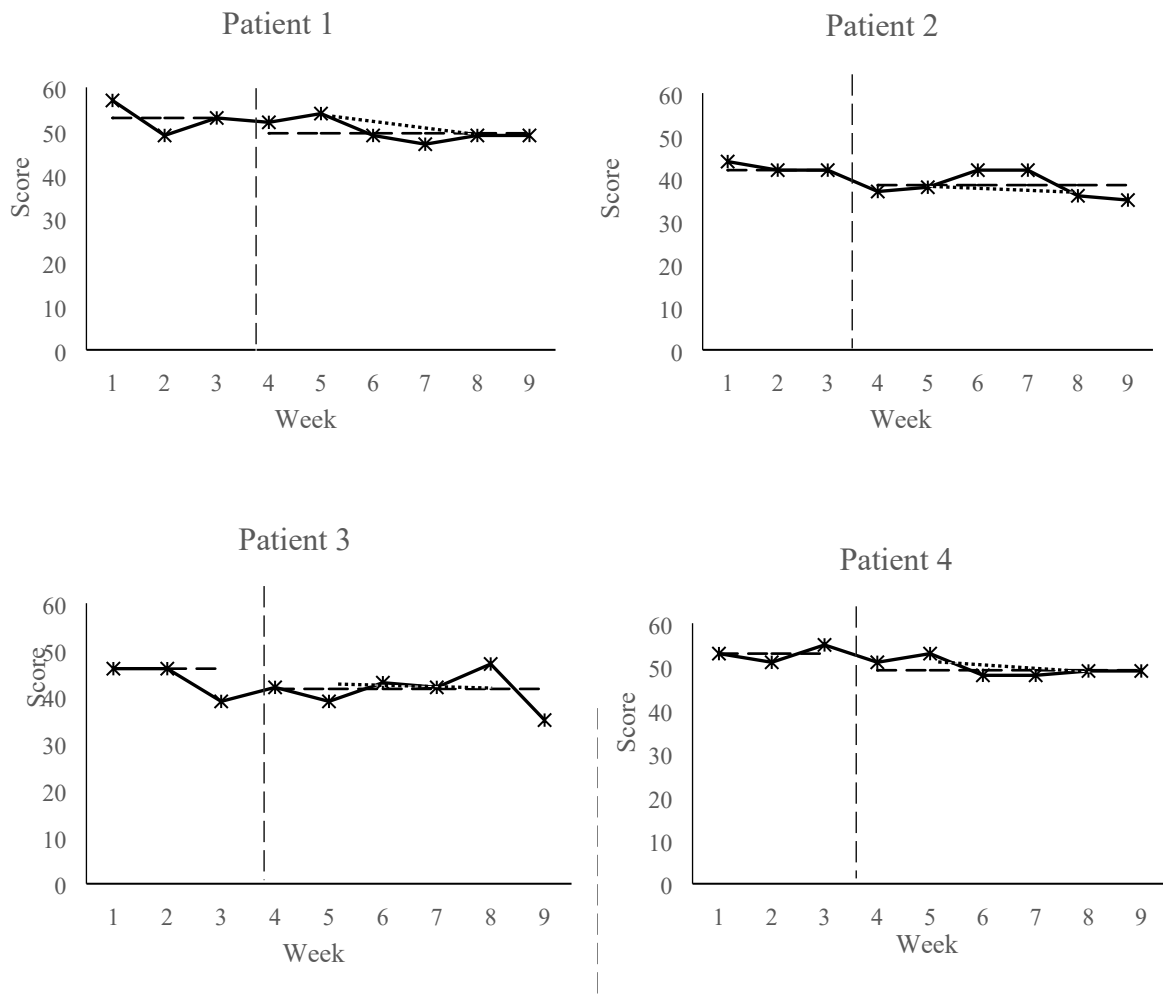
Measure	Pre	Post	z-score	p-value
	Median (range)	Median (range)		
HADS-A	15.5 (15)	16.5 (12)	-1.461	0.144
HADS-D	8 (20)	9.5 (19)	-1.633	0.102
EDE-Q	3.74 (3.48)	3.43 (3.76)	-1.095	0.273
PROS	-0.13(1.05)	-0.14 (0.7)	-0.365	0.715
CONS	0.83 (1.36)	1.13 (1.01)	-1.461	0.144

Table 4

*Explanation of key terms calculated within visual analysis*

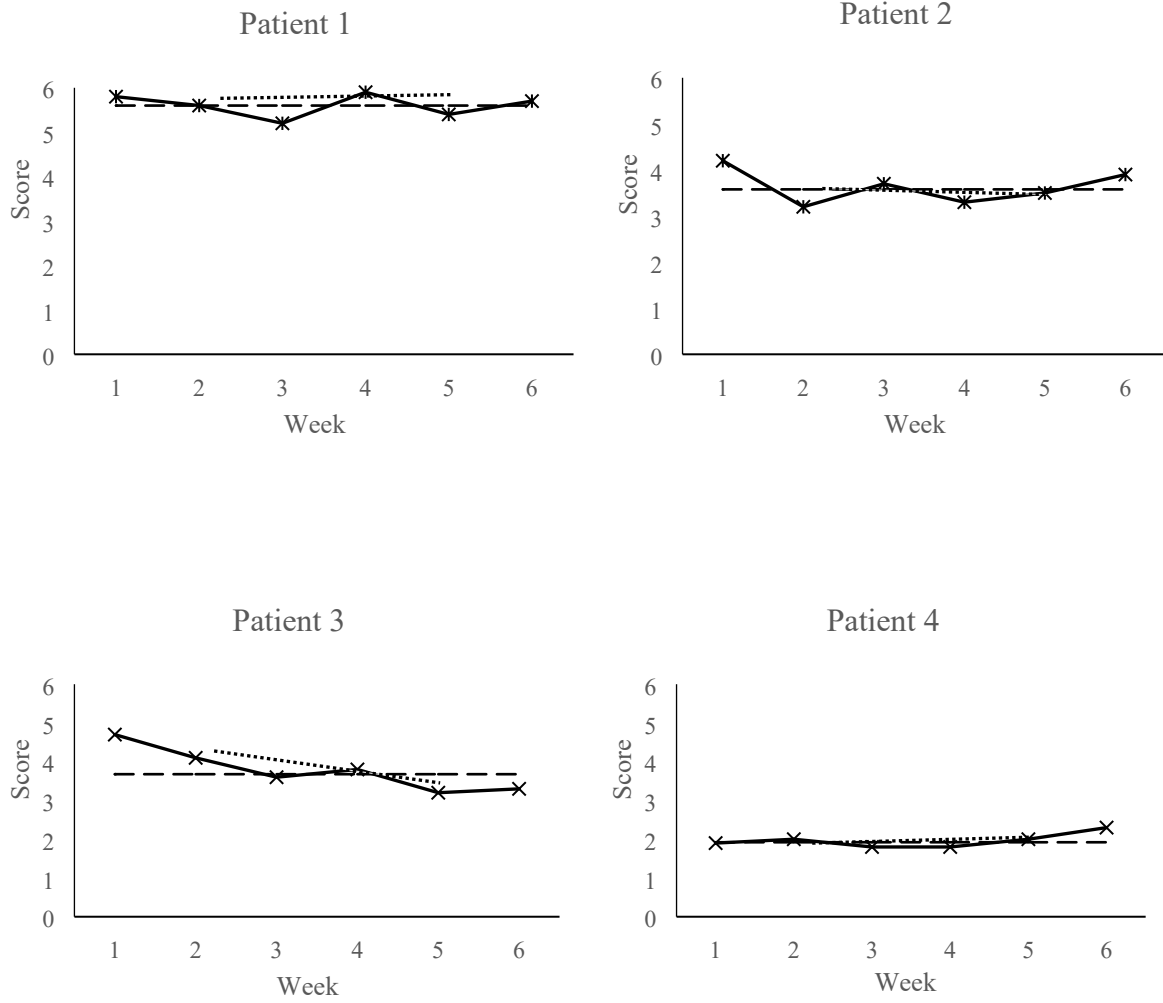
Type of measure	Key term	Explanation	Phase length	Depicted graphically by
Central tendency	Median	The middle value of rank ordered data	3	Dashed horizontal line
Central tendency	Broadened Median	The average of four middle values (the central two numbers are weighted by 1/3 <sup>rd</sup> and the outer 2 by 1/6 <sup>th</sup> )	6	Dashed horizontal line
Trend	Running median of 6	The average of successive sets of 6 data points throughout a phase, used to investigate systematic shift in central location over time, when data are highly variable	6	Dotted line

**EAVE-Q**



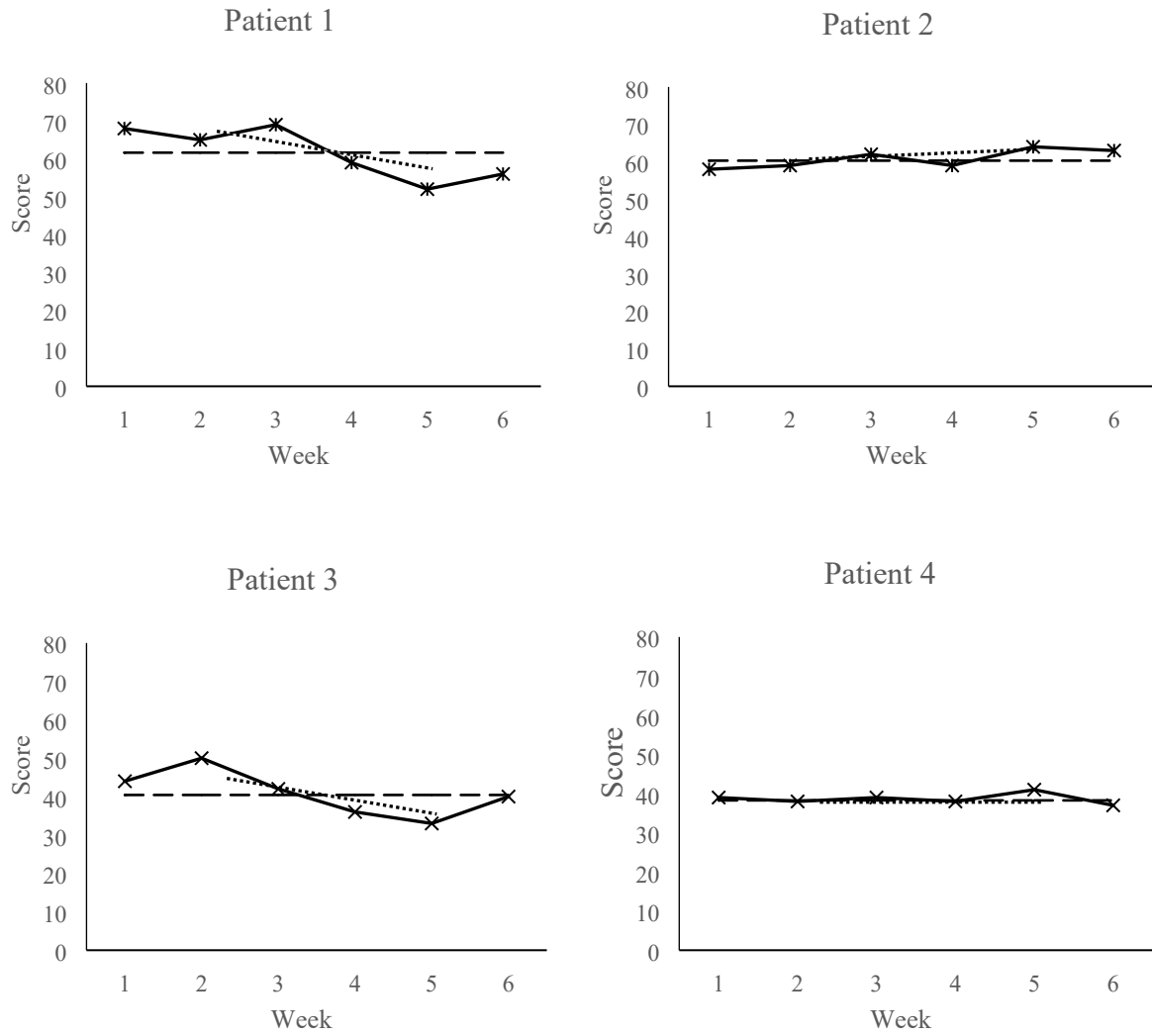
Figures 1 to 4, EAVE-Q scores during baseline and treatment

ED-15



Figures 5 to 8, ED-15 scores during treatment

IPQ



Figures 9 to 12, IPQ scores during treatment