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Using CBT-E in the Treatment of Anorexia Nervosa With Comorbid Obsessive-Compulsive Personality Disorder and Clinical Perfectionism

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ABSTRACT

Objective: Several studies and clinical vignettes emphasize the association between eating disorders and maladaptive personality traits that should be targeted in treatment to strengthen the therapeutic prognosis and outcome. The aim of this paper is to present a single case study with a patient showing comorbid Anorexia Nervosa (AN) and Obsessive-Compulsive Personality Disorder (OCPD) with perfectionistic traits, using Cognitive Behavioral Therapy for Eating disorders (CBT-E) and Perfectionism (CBT-P).

Methods: The patient, a young girl aged 17 years, was underweight when entering therapy and received an enhanced version of CBT-E with 40 sessions as recommended in the manual. The treatment was adjusted for adolescents with a heightened focus on motivation, therapeutic alliance, and parental involvement. The clinical interventions were structured in accordance with CBT-E for adolescents with six added sessions targeting clinical perfectionism based on CBT-P focusing on over-evaluation of achievements in addition to weight and shape.

Results: The patient showed a gradual decrease in eating disorder symptoms and perfectionism through the 1-year treatment. She was normal weight by the end of therapy, enjoyed varied food, was more socially engaged and balanced clinical perfectionism with more healthy strivings and standards. She was also able to express her need for boundaries and rest to family, friends and her sports team. At the final assessment, she did not fulfill diagnostic criteria for AN or OCPD with perfectionistic traits, but she showed some symptoms in achievement situations that was targeted by information and preventive interventions.

Conclusion: In accordance with the manual for CBT-E, perfectionism should be targeted as part of the treatment for eating disorders when in the clinical range. This was done in the present case with AN and perfectionistic traits within a comorbid OCPD, using elements of CBT-P that showed positive results and meaningful changes for the patient.

1 | Introduction

Several psychiatric disorders have been associated with eating disorders (ED) in addition to comorbid medical conditions. Based on a literature review, personality disorders (PD) and neurodevelopmental disorders are common co-occurring conditions in addition to anxiety disorders, mood disorders, substance use disorders, and reactions after trauma (Hambleton et al. 2022). More specifically, people with eating disorders are more prone to personality disorders (PD) than the general population, with specifically higher rates of paranoid, borderline, avoidant, dependent and obsessive–compulsive personality disorders (OCPD). In line with this, research indicates a substantial genetic and hereditary influence on the development of

eating disorders (Pastore et al. 2023). This has also been highlighted in the clinical field, with a special focus on comorbid personality disorders that may contribute to the complexity and duration of the eating disorder symptoms.

A detailed meta-analysis with regard to personality disorders and EDs reported that anorexia and bulimia had similar comorbidity with borderline and avoidant PD (Martinussen et al. 2017), although with higher mean proportion of OCPD in anorexia (0.23) than bulimia (0.12), respectively. Both obsessive traits and perfectionism can be viewed as common features of eating disorders, but perfectionistic traits appear more closely related to OCPD than isolated symptoms of OCD among those with EDs (Halmi et al. 2005). OCPD is one of the most common personality disorders with prevalence estimates from 1.9% to 7.8% in the general population, encompassing excessive perfectionism in addition to preoccupation with orderliness and control (Pinto et al. 2022). The condition often develops in late adolescence or early adulthood (Rizvi and Torrico 2024). Elevated fixation on details, order and perfection should be consistent over time and give marked functional impairment to fulfill diagnostic criteria for OCPD or "anankastic" personality disorder in the ICD-11 (Gecaite-Stonciene et al. 2021).

OCPD has been associated with elevated perfectionism and personal standards in addition to symptoms of anxiety, and these are symptoms that can be treated with positive outcomes in targeted interventions (Redden et al. 2023). Perfectionism is often defined as striving towards high standards and a need to do things flawlessly. It is understood as a transdiagnostic phenomenon related to PD as well as an increased risk of eating disorders, depression, and anxiety disorders in adolescence (Robinson and Wade 2021). The model of Stoeber and Otto (2006) separates healthy perfectionistic *strivings* and more maladaptive perfectionistic *concerns*, where the latter is associated with self-critical rumination and lowered self-esteem (Fearn et al. 2022) as well as mental health burden among youth (Doyle and Catling 2022). Interestingly, a recent systematic meta-analysis of 95 studies and 32,840 adult participants also found both perfectionistic strivings and perfectionistic maladaptive concerns to be significantly associated with eating disorder symptoms (Stackpole et al. 2023).

Given the evident comorbidities for EDs including the susceptibility of OCPD and elevated perfectionism, treatment should also assess maladaptive personality traits and target these in therapy when in the clinical range. The broad version of the transdiagnostic and enhanced Cognitive Behavioral Therapy for Eating disorders (CBT-E) recommends that perfectionism in addition to core low self-esteem or interpersonal problems should be targeted when in the clinical range to strengthen the outcome and reduce the risk of relapse due to underlying causes of the eating disorder (Fairburn 2008).

CBT-E has been shown to be effective in the treatment for eating disorders in adults (Atwood and Friedman 2020), and it has also been adjusted to adolescent patients (Dalle Grave et al. 2020) with positive treatment outcomes in outpatient settings (Calugi et al. 2021). Thus, CBT-E can be offered when the recommended Family Based Therapy for Eating Disorders (FBT) formulated by Lock et al. (2010) is contraindicated or ineffective. CBT-E is a structured therapy model recommending 20 sessions for normal weight patients and 40 sessions with underweight patients. The patients eligible for this treatment should have a stable medical condition and no current substance use or major depressive episodes (Calugi et al. 2021), and for young patients the inclusion of parents or other caregivers is seen as important for the therapeutic progress (Dalle Grave and Calugi 2020).

Given the structured and collaborative approach of CBT-E, it has been described as particularly suited for adolescent patients with a broad spectrum of eating disorders, focusing on regaining weight control in addition to underlying factors driving the symptoms (Fairburn 2008). According to Dalle Grave and Calugi (2020), the treatment of adolescent patients with eating disorders should target motivation more explicitly as well as working continuously with the therapeutic alliance. This is recommended as adolescents with eating disorders might be even more ambivalent towards treatment than adult patients, who normally seek help themselves and show a clearer understanding of their symptoms as well as the increased risk of psychological burden and somatic problems due to unstable food intake and underweight.

Thus, a common experience for young patients with anorexia in adolescence is an ambivalence towards entering therapy, sometimes with a feeling of being forced into treatment by parents, doctors or others in the surroundings (Lindstedt et al. 2015). They can also be ambivalent regarding the wish to recover or maintain the eating disorders, and this can be a barrier to treatment together with a fear of losing control over food and weight (Williams and Reid 2010). Thus, a literature review concluded that young patients are often reluctant to engage in therapy, and strategies for working with the therapeutic alliance can be challenged by the patients' ambivalence (Westwood and Kendal 2012). These mixed feelings towards both the treatment and condition should be considered in the sessions, offering young patients a possibility to explore the ambivalence and gradually find an inner motivation to recover together with the therapist.

Further, it is recommended in the manual for CBT-E that perfectionism should be targeted if symptoms are in the clinical range and can be seen as an obstacle to the therapeutic outcome, with 9 screening questions offered for assessment (Fairburn 2008). This can also be done for adolescents, deciding in the second phase of treatment whether interventions for perfectionism should be added as a broad version of CBT-E (Dalle Grave and Calugi 2020).

To work with maladaptive perfectionistic traits within the same theoretical framework, Cognitive Behavioral Therapy for Perfectionism (CBT-P) is a relevant option (Egan et al. 2014). CBT-P has been shown to have a positive effect on perfectionistic traits, especially when offered as face-to-face treatment (Egan et al. 2014). This model has also been shown to reduce symptoms of eating disorders, anxiety and depression (Galloway et al. 2022), as well as perfectionism among individuals with OCPD (Redden et al. 2023).

CBT-P offers an understanding of maintaining mechanisms for maladaptive perfectionism in addition to behavioral

experiments and cognitive restructuring to modify personal standards and broadening the individual's frame of self-evaluation (Fairburn 2008). Further, the interventions challenge the elevated focus on achievements and follow similar steps as working with over-evaluation of weight and shape in eating disorders as presented in the Appendix in Supporting Information S1: Figures 1 and 2. Working with over-evaluation of both achievement and physical appearance in the same manner emphasize the integrative approach to treatment for both ED and PD, using CBT as a common framework and contributing to a generalizing effect for the patient.

The present paper aims to describe a treatment of eating disorders with a young girl with anorexia and comorbid OCPD with maladaptive perfectionism, using both CBT-E and CBT-P as therapeutic models guiding the interventions. After presenting the case, initial assessment and treatment plan, the therapeutic process and outcome will be discussed considering the common comorbidity between eating disorders and maladaptive personality traits, supporting that this integrative approach is also relevant for patients in late adolescence.

2 | Case Illustration

2.1 | Presenting Problem

The patient, here called Jenny, was referred to treatment by her general practitioner for the second time to child and adolescent mental health services (CAMHS) as part of the specialized health care system in Norway. She was referred first time at age 14, with anxiety in social situations and achievement pressure as presenting symptoms. Jenny was assessed for both anxiety and autism spectrum disorder, concluding that she showed symptoms of panic attacks in specific situation, rigidity and social problems, although signs of autism were not in the clinical range. She was treated for the anxiety symptoms with positive results and described better functioning at school and with friends after treatment.

The second referral leading to the present treatment was at age 17, describing symptoms of anorexia nervosa with restricted food intake, underweight, amenorrhea and disturbed body image. In addition, she presented as increasingly rigid in social situations and everyday life, showing signs of both OCPD and malaptive perfectionism. According to the referral, Jenny displayed high standards for both dieting, physical activity, academic grades and social relations, showing strong perfectionistic traits and being obsessed with being "productive" in every area of her life. She seldom let herself take breaks or say no to tasks or appointments. Consequently, she was often exhausted during the weekends, needing rest and time alone, yet resisting this and being in conflict when invited to meet friends or family.

The parents tried to guide Jenny and set limits on her behalf, often leading to quarrels and her expressing strong negative emotions when confronted with the strict rules governing her life. The parents also described conflicts between Jenny and her two older siblings during family meals around healthy food and lifestyle, often ending in competitive discussions. The patient presented as fragile for both family and friends, both due to the decrease in weight as well compulsive planning of food intake and exercise. She had also developed strict morning and evening routines that seemed compulsive and differed significantly from the rest of the family's lifestyle. She would wake up early to exercise before 6:00 a.m. and have a healthy breakfast with porridge, then go to bed early after school and other activities.

Due to the serious symptoms and significant underweight with a Body Mass Index (BMI) of 16.42, Jenny was accepted for therapy withing 4 weeks. After a medical and psychological assessment, CBT-E was introduced as treatment model for Jenny rather than FBT due to her age, motivation and cognitive maturity, following the main manual (Fairburn 2008). Further, the treatment was adjusted to adolescents (Dalle Grave and Calugi 2020) and included individual sessions, parental involvement as well as dialog with the patient's teacher and sports trainer.

2.2 | Client Description

Jenny met for the first consultation together with her parents, who explained that they were closely involved in the situation and wanted to be a part of the therapeutic process. She had started dieting last summer despite being normal weighted, 3 months before the first appointment. Initially, she thought the dieting would just be for short period, but she quickly lost control over the situation and began to make stricter rules for both food intake and physical activity. First, she would exclude sweets and snacks from her diet, but this gradually developed to also cutting out all food with sugar, oil, white flour and what she described as "unnecessary calories."

Parallel to this, Jenny started training more besides the regular activities with her soccer team, and the parents described this as "compulsive" concerning intervals and frequency. The patient believed she was "too fat," although the objective and age-adjusted BMI indicated underweight and a weight loss of about 10 kg from the start of her dieting. When talking about this, she started crying and expressed a high degree of subjective distress in the face of body image concerns and dissatisfaction. The parents' reassurances that she was not fat and needed to gain weight did not help, this rather made her feel more frustrated and alone with her difficult thoughts and feelings regarding her physical appearance. In addition, the parents had talked to her soccer trainer and limited her time at the sports center, believing this was important to regain necessary control over her weight. This had caused conflicts between Jenny and her parents, that were targeted in the clinical sessions to strengthen their communication and understanding of the mechanisms of the eating disorder.

The parents had noticed the decrease in weight and changes in exercise pattern around 3 months before the appointment and sought help, partly in accordance with the patient's wish. Jenny realized that she had developed a problematic relationship to food and weight, but she was reluctant to go to therapy and described being afraid of gaining weight and losing control over her food intake. However, she was concerned that lack of energy and focus due to the strict diet would influence her

academic grades in a negative way, displaying high standards for this and time-consuming schoolwork. She reported elevated stress regarding academic achievements and magical thinking associated with school-based activities. This included rituals regarding packing her backpack with elements of OCD and strict rules for both grades and preparations for tests.

The need for high achievements could often conflict with social activities, and Jenny was deeply concerned that her high academic standards, compulsive rules for how much time she should spent on schoolwork, and eating problems would destroy her friendships. This was something that the therapist considered could motivate the treatment process, and we agreed that keeping up her valued relationships with friends would be important to challenge the eating disorder symptoms, compulsive rules, and unhealthy perfectionistic traits that now seemed to govern her life.

2.3 | The Therapist

The therapist (first author) was an experienced female clinical psychologist with a formal training in CBT-E and FBT, as well as research on body image and eating disorders in youth. She received supervision from colleagues working with eating disorders at the out-patient clinic within Child and Adolescent Mental Health Services (CAMHS). In addition, the current case was presented in a team with a broader staff, including medical doctors and therapists with a special knowledge for discussion of the assessment and treatment plan for the patient.

2.4 | Case Formulation

The initial assessment covered eating disorder symptoms with the Eating Disorder Examination (EDE-Q) originally developed by Cooper et al. (1989) and used in a 17th Edition with a Norwegian translation (Fairburn et al. 2014). The EDE-Q has four subscales investigating restraint and concerns regarding eating, weight and shape, respectively. The global score on EDE-Q presents the mean score for the subscales divided by four with clinical cut-off set as 2.8 both for adolescent and adult patients (Velkoff et al. 2023). Before treatment, Jenny fulfilled diagnostic criteria for Anorexia Nervosa (AN) based on EDE-Q with a restrictive eating pattern with severe weight loss (BMI = 16.42) as well as high severity (5/6) and moderate-to-high frequency (4/6) of the symptoms.

Symptoms of personality disorders were assessed by the Structured Interview for DSM-V Personality Disorders (SCID-V-PD) formulated by First et al. (2015). Based on her clinical presentation, we assessed maladaptive personality traits with SCID-V with a focus on Obsessive-Compulsive Personality Disorder (OCPD). It has been shown that being diagnosed with OCPD as adult is associated with prepubertal onset of OCD (Maina et al. 2008), and the patient had reported both symptoms of anxiety and OCD in previous contact with CAMHS. According to DSM-5-TR (Fariba et al. 2025), to meet the criteria for OCPD, the patient must have at least four out of eight symptoms associated with significant distress and impairment. Before treatment, the patient reported the following seven criteria for OCPD, where workaholism also encompassed time spent with studies: Preoccupation with details, perfectionism, workaholism, need for control, over-conscientiousness, miserliness, and rigidity. In sum, Jenny showed symptoms in the clinical range of OCPD based on SCID-V with both high criteria (7/8) and dimension scores (14/16) in the initial assessment.

The AN was diagnosed based on the presenting symptoms during the last 4 months, while the OCPD was concluded based on her developmental history as well as the previous assessment at age 14 from descriptions from Jenny and her parents when she was already displaying signs of rigidity, perfectionism and obsessive-compulsive traits as well as panic attacks and situation specific anxiety. Thus, both self- and parent-reports based on questionnaires and clinical interviews over time were included in the multi-modal assessment before and after the therapy in addition to weekly weight controls at the clinic (see Table 1 for pre- and post-treatment assessment).

In accordance with the CBT-based model of eating disorders, Jenny showed a clear preoccupation with food and weight, partly driving the disturbed attitudes and behaviors concerning eating and exercise as part of the AN. In addition, her elevated perfectionistic and compulsive personality traits were seen as contributing to the strict rules and routines for food intake and physical exercise as part of her OCPD. The case formulation included the patient's eating disorder pathology and maladaptive personality traits expressed as perfectionism, rigidity, and obsessionality. It was based on the model by Fairburn (2008) of eating disorders with clinical perfectionism and high personal standards, but without episodes of binge eating (see Figure 1).

2.5 | Course of Treatment

Introducing CBT-E as the chosen therapeutic model, the treatment targeted the serious eating disorder symptoms with a disturbed body image, strict diet and compulsive exercise resulting in weight decrease and amenorrhea. The most

TABLE 1 | Psychopathology and weight status pre- and post-treatment.

Measure	Pretreatment	Posttreatment
EDE-Q		
Global score	3.62	1.78
Severity of AN symptoms	5/6	1/6
Frequency of AN symptoms	4/6	0/6
SCID-V-PD		
Criteria for OCPD	7/8	2/8
Dimension scores for OCPD	14/16	5/16
Weight status (BMI)	16.42	19.20

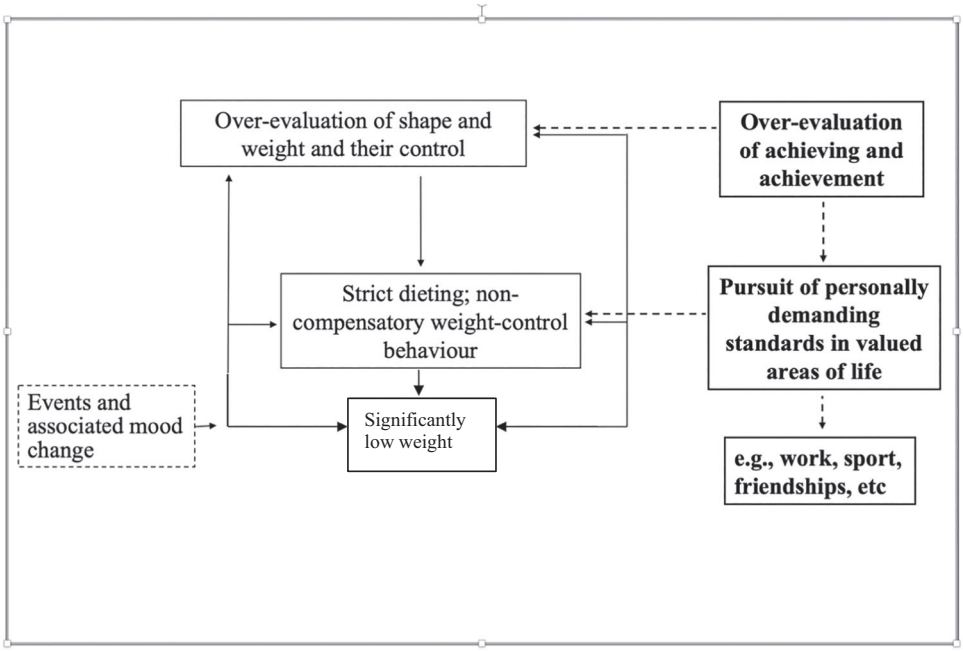

FIGURE 1 | Transdiagnostic CBT-E formulation with perfectionism. Adapted from: https://www.cbte.co/site/download/f13-1-transdiagnostic-cbt-e-formulation-with-clinical-perfectionism-added/?wpdmdl=668&masterkey=5c6fc32d5cab7.

intensive version of CBT-E of 40 sessions for patients with underweight was indicated, as well as adjusting the interventions to adolescents.

The course of treatment will be described in accordance with the four phases of CBT-E with different topics and aims: (1) Starting well and deciding to change, (2) Reviewing progress and planning further treatment, (3) Addressing the change, and (4) Ending well and maintaining change. In the third phase defining the main body of treatment, six sessions targeting clinical perfectionism were added, in line with the case formulation of maladaptive perfectionistic traits as part of the comorbid OCPD. This phase of treatment is also extended when patients are underweight, as was the case for the present patient. The sessions were planned twice a week in the first phase and then weekly. The treatment was performed by an experienced therapist with formal training in CBT-E, receiving supervision from a team working with eating disorders at the clinical unit.

2.5.1 | Phase 1: Starting Well and Deciding to Change

Jenny presented as open and trustful from the beginning of therapy, although displaying anxiety in the face of confronting her weight goals and strict rules of dieting and physical exercise. This was validated and targeted explicitly to establish a therapeutic alliance, normalizing her fears in accordance with the eating disorder, and connecting this to her personality traits with a heightened need for control, rigidity and perfectionism. The patient also trusted her parents to be involved in the process and wanted them to get as much information as possible about the treatment principles.

Jenny was highly compliant to the treatment plan and followed up the daily registration form for food intake and physical exercise in accordance with the CBT-E guidelines (Fairburn 2008), which also contributed to a steady weight gain in cooperation with the parents. Her premorbid weight before dieting was 52 kg (BMI = 19.2) and her original weight goal at the start of her dieting was 45 kg. She struggled with passing 50 kg, and she realized that this was also connected to "magic numbers" that gave her a sense of control and self-efficacy. Therefore, passing 50 kg was a big milestone for her that was celebrated with the family, reflecting a big victory over her eating disorder for her and the surroundings. After that, she kept her weight stable at her premorbid weight that was described as normal by her and the parents and in accordance with her naturally slender figure.

To explicitly target the anxiety Jenny expressed in the early phases of treatment, we paid attention to the eating disorder symptoms she found particularly challenging to face. One of these topics were her strict and rigid rules for physical activity, inferring with her daily routines as well as maintaining her weight status despite increase food intake. Previous studies have reported that both anorexia and OCPD are associated with excessive exercise (Young et al. 2013), and it has also been reported that excessive training in patients with anorexia is associated with mental health problems such as depression, anxiety and somatization (Peñas-Lledó et al. 2002).

This supports the need to target physical exercise in the therapy, and we planned for the patient together with the parents how much exercise was allowed in the first phase of treatment, aiming for less frequent training together with more flexible rules. This was also a possibility of reflecting on her rigid rules on a more general level as part of her OCPD that tended to cause elevated stress. Jenny experienced less anxiety in the face of physical activity when this was regulated to a more healthy

and realistic level that also allowed for a more controlled weight gain, which she found motivation for further change.

Gradually, Jenny gained more energy and looked more vital and healthy, due to both higher weight and food intake as well as more balanced physical exercise. She struggled initially with accepting the bodily changes that followed the weight gain, but targeting this in therapy together with emotional support from family and friends gradually helped her perceive her physical appearance in a more positive way. This was also parallelled with gaining insight into her preoccupation with food, weight and shape, helping her to balance this focus with other personal qualities and areas in life.

2.5.2 | Phase 2: Reviewing Progress and Planning Further Treatment

In the brief second phase of treatment, the progress so far is assessed, as well as barriers to change. Based on this, an updated and extended case formulation is created together with the patient. For Jenny, it became clear that both her eating disorder pathology with anorexia and personality traits defined as OCPD contributed to the symptoms and should be integrated in the further treatment. Thus, a case formulation was made that supported a broad version of CBT-E, targeting both the low weight and underlying personality traits with clinical perfectionism and over-evaluation of achievements (see Figure 1). This was parallelled with gaining insight into and modify Jenny's preoccupation with weight and body shape, helping her to balance this focus with other personal qualities and areas in her life.

2.5.3 | Phase 3: Addressing the Change

In the third phase of the treatment, after gaining adequate weight control and symptom reduction, the therapy targeted the important underlying factors driving the condition in line the case formulation with a focus on her over-evaluation of both body shape, weight control and achievements. In this phase, elements from CBT-P were added, targeting clinical perfectionism by cognitive restructuring, behavioral experiments and broadening her scheme of self-evaluations beyond high standards and achievements. Jenny experienced this as meaningful, generalizing the maladaptive personality traits to other areas in her life, causing stress in her personal relation and achievement situations understood as part of the OCPD in addition to the eating disorder pathology.

More specifically, we targeted her pressure of always being 'productive', questioning the worth of being with family members and friends, instead of exercising or doing academic work. This was emotionally triggering work, confronting her personal standards and rigid perfectionism with the care for her family and friends as well as a moral commitment to maintaining her social relations despite her eating disorder. Jenny was willing to stretch her rigidity and strict rules to keep her commitment to close friends and family, and she could see that this also made her stronger in the face of the 'eating disorder voice' refusing her to eat and enjoy food. In line with this, many of her bigger milestones of trying out new food and being more flexible with mealtimes, were connected to social happening or celebrations.

Thus, the patient's strong commitment to her relationship to family and friends was both valued and used in the process of cognitive restructuring and broadening her underlying schemes for self-worth and identity, strengthening her inner values to restructure and adjust the pre-existing and rigid schemes of achievements and physical appearance.

2.5.4 | Phase 4: Ending Well and Maintaining the Change

The last phase of treatment focused on assessing the progress through the therapy as well as planning strategies to strengthen a long-term positive outcome and reducing the risk of relapse. The sessions focused more on her qualitative experiences with food and exercise as well as monitoring her personality functioning in social relations and academic settings. A big milestone was traveling to one of her favorite countries for a summer break and experiencing her love for food again and being able to truly enjoy the family meals without feeling burdened by guilt. This experience became an important reference for progress and was a memory she could go back to on difficult days. Another milestone was planning her next semester at college, balancing her academic tasks with physical exercise, charity work and time for friends and family in a more realistic way. This also included saying no to prior commitments and new offers from student organizations and other volunteer tasks, which was a big step for her and was supported by her parents in a heartfelt way.

Jenny's new behavior of setting limits was important to keep her energy and follow her values, and this was done without losing realistic academic ambitions or goals for being healthy and physically active. Sometimes small changes in her week plan would mean a lot, for instance adding family meals or time to rest, that was often neglected earlier and caused heightened stress for the patient. Further, she was able to reduce the need of control and always being productive, which also made it easier to spend time with family and friends spontaneously and without detailed plans for food and exercise during the day.

This phase of treatment also focused on preventing relapse and identifying possible triggers that could make Jenny vulnerable for disturbed dieting and exercise. She described some specific symptoms of OCD in the face of challenging academic settings with a focus on achievements. For instance, she would pack the books for school in her backpack in a specific order that could not be broken without considerable stress. These OCD symptoms were targeted by a post-review session 4 weeks after the end of treatment with information on the mechanisms underlying OCD and how she could deal with magical thoughts and rituals when needed. Jenny described this as meaningful and as a completion of the treatment. Neither she nor her parents expressed a need for extended follow-up after this with the eating disorder or the personality traits with symptoms of OCPD and clinical perfectionism.

2.6 | Outcome and Prognosis

The treatment followed the manual of CBT-E with 40 sessions for underweight patients and six sessions with elements of CBT-P targeting clinical perfectionism as part of OCPD. A total of 46 sessions of therapy throughout a 1-year period proved useful for the patient and led to substantial symptom relief. As shown in Table 1, the patient showed remission from both the AN and OCPD after treatment, with normal BMI and symptom scores below clinical threshold on EDE-Q (Velkoff et al. 2023) and SCID-V-PD (First et al. 2015), respectively.

The improvement after therapy regarding the eating disorder symptoms was defined along several criteria (Yang et al. 2023), including normal EDE-Q global scores < 2.5, less than one episode of binge eating and/or compensatory behavior per week, and normal BMI ≥ 18.5, respectively. There could also be less strict definitions of clinical improvement that could still embrace meaningful changes, but this was not relevant for the present case given the substantial reduction in eating disorder pathology as well as gaining normal weight and developing more flexible rules for eating and exercise. In a similar manner, the reduction in maladaptive personality traits and perfectionism within OCPD was evaluated as significant as the patient did not present symptoms in the clinical range by the end of treatment based on SCID-V-P.

3 | Implications for Clinical Practice

The present case has illustrated the importance of including comorbid personality conditions in the treatment of eating disorders, also for adolescents. The patient showed considerable weight restoration and reduced scores for eating-disorder and maladaptive personality traits following an intensive and broad version of CBT-E, including interventions targeting clinical perfectionism understood in light of her comorbid OCPD. The treatment provided was in line with the four-step treatment protocol recommended for the treatment of eating disorders in the context of co-occurring mental health conditions (Wade et al. 2024). More specifically, the eating disorder and OCPD were assessed and a formulation conducted, manualized treatment was provided, followed by a review and the addition of an intervention for maladaptive perfectionistic traits (CBT-P) that was proving a barrier to change and necessary to address. Thus, the present case supports the need of addressing underlying personality traits in the assessment and treatment of EDs (Eielsen et al. 2022).

Even if OCPD is one of the most prevalent personality disorders and patients with this disorder often seek treatment, there is a lack of empirical research on treatments for this condition (Pinto et al. 2022). Yet, several studies suggest positive outcomes for the treatment of OCPD using perfectionism-oriented clinical interventions (Redden et al. 2023), and in the present case this was added by elements of CBT-P to the standard treatment of eating disorders by CBT-E with a positive outcome. Further, OCPD is characterized by being overly rigid, orderly, controlling and perfectionistic, and it has been found that individuals with these personality traits also tend to be more achievement striving as well as having interpersonal difficulties (Mike et al. 2018). Using the same principles for restructuring the patient's over-evaluation of achievements as well body weight in tandem (Fairburn 2008), the treatment also presented as cohesive and meaningful for the patient and her parents. CBT-E has been shown to have positive effect over time (Calugi et al. 2017) and for the transition age from youth to adulthood (Dalle Grave et al. 2023), and the present case support the suitability for this treatment approach for patients in late adolescence.

In addition to targeting maladaptive personality traits while treating eating disorders, one could also keep in mind potential traumatic experiences and stressors associated with AN and OCD (Wang et al. 2023), respectively. In the present case, the patient experienced elevated symptoms of OCD in periods with academic stress, adding to the psychological burden of the eating disorder and clinical perfectionism. This was targeted throughout the therapeutic process and understood as part of her rigidity, need of control and focus on achievements. Moreover, it was specifically emphasized in a follow-up session after therapy to gain insight in the OCD symptoms and reduce the risk of relapse when encountering stressful situations involving academic achievements, which triggered the rigidity and obsessive traits for the patient. Thus, understanding the complexity of the symptoms involved in eating disorders and tailoring the clinical interventions individually regarding comorbid personality traits and other conditions contributing to the illness, seem crucial to strengthen the long-term progress for the patients in both adolescence and adulthood.

4 | Summary

In accordance with extensive literature and the manual for CBT-E, clinical perfectionism can be understood as an important underlying factor for the development and maintenance of eating disorder symptoms. This seems particularly salient for AN, where the patient often presents with rigidity, need of control and strict rules for achievements for both extreme dieting and other areas in life. In the present case, the integration of interventions targeting maladaptive perfectionistic traits as part of a comorbid OCPD proved valid and useful for the therapeutic process with enhanced CBT for eating disorders as a framework.

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Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.