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Research Article

Binge Eating Disorders – Experience of Change in the Relationship with Food and the Body during Treatment

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Keywords

- Binge eating disorder
- Lifeworld
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- Transition theory

Abstract

Background: Binge eating disorder is a multidimensional mental health condition associated with a complicated relationship to food and the body. Non-pharmacological treatments such as psychoeducation are common, but there is a lack of knowledge regarding patients' experience of completing a treatment programme. To our knowledge, no study has been conducted exploring the lifeworld of patients with binge eating disorder regarding changes in their relationship with food and the body during treatment.

Aim: The aim was to develop a deeper understanding of how changes related to food and the body are experienced by patients with binge eating disorder during psychological treatment.

Method: A qualitative approach was employed to explore the lifeworld of the participants. Eight patients were purposely sampled and interviewed, after which the interviews were transcribed verbatim and analysed using systematic text condensation.

Results: Four categories emerged: *Transition from senseless towards sensible handling of feelings*, *Transition from body-hatred towards body-benevolence*, *Transition from anxiety towards confidence in relation to others* and *Transition from mindless towards conscious eating*.

Conclusion: Patients suffering from binge eating disorder experience a disruption in their lifeworld, which creates a sense of distance between themselves and the world. Several transition processes emerged after treatment, which were experienced as unifying in the patients' lifeworld and enhanced their sense of closeness to themselves.

INTRODUCTION

Binge eating disorder (BED) is the most prevalent eating disorder [1]. It is a severe and complex mental health condition and its development is influenced by biological, psychological and social aspects [2,3]. According to the Diagnostic and Statistical Manual of Mental Disorders [4], BED has several diagnostic criteria, but key features include recurring episodes of eating large amounts of food in a short period of time (e.g. 2 hours) and experiencing loss of control during binge eating episodes. BED has been shown to be associated with impaired mental health, social functioning and quality of life [5]. This is not surprising considering the high prevalence of comorbid anxiety disorders in those who suffer from eating disorders [6]. Anxiety in eating disorders is related to marked distress regarding the complicated relationship with food and body image [7,8]. Compared to the general population, patients with BED more frequently interact with the healthcare system, but are often underdiagnosed and receive inappropriate treatment [9-12]. A medical cure for patients suffering from BED is non-existent, thus there is a need for non-pharmacological strategies [13,14]. One possible way to develop such strategies is to gain a deeper understanding of how changes in patients' relationship with food and their body can be utilized and how these changes are experienced by those suffering from BED.

BACKGROUND

Patients suffering from BED have a complicated relationship with food, as reflected in the complex casual relationships that characterize the disorder [2]. Several explanatory models highlight the role of poor emotional regulation and negative affects in BED [15]. In turn, this can influence the relationship patients with BED have with food, with binging as a maladaptive coping strategy when faced with negative affects and distress [16]. It is common for patients with BED to experience difficulties with emotional regulation and depressed mood often precedes binge eating episodes, which may be a strategy for handling emotional distress [17,18]. Binging as a strategy for emotional regulation might be better understood in light of alexithymia, which is a reduced capacity to describe and/or recognize emotions and common in patients suffering from BED [19]. Dietary restraint or restrained eating is another important element that can influence the relationship patients have with food, defined as *"the tendency to control food intake consciously in order to prevent weight gain*

or to promote weight loss" [20]. Dietary restraint is an important risk factor for developing BED [21,22]. It is inherent in most types of weight loss diet and serves to reduce caloric intake by restricting calories [23]. Weight-loss maintenance and long-term adherence to dietary restraints are notoriously difficult [24,25]. Binge eating episodes often occur when adhering to rigid dietary restraints becomes too difficult. As a result, the rigid dietary restraints become progressively stricter and less sustainable over time [26]. Dietary restraint has also been shown to be associated with body image disturbances [16,28], and the two might have a causal relationship with binge eating [29]. According to the French philosopher Maurice Merleau-Ponty, our perception of the body is our way of accessing the world and therefore the primary way of experiencing and knowing the world [30]. Illness has the potential to change our body, and as a result, our perception of and relationship with our body and the world in which it interacts. Therefore, through experiencing illness, a feeling of objectification and alienation of the body can emerge [31]. A previous study on the existential experience of living with obesity concluded that obese individuals have to overcome the burden of objectification and alienation as a human being [32]. Considering that approximately 75 % of patients suffering from BED are overweight or obese [33], objectification and alienation are also an issue for them. Other issues related to the body are body image disturbances [8], which are one of the main psychological risk factors for developing BED [2,3].

About half of the patients suffering from BED recover and approximately one tenth relapse [34,35]. In the recovery process, patients suffering from BED experience transitions in their relationship with food and their body [36,37]. Transitions have been defined as *"..the passage from one life phase, condition or status to another.." [38]*. Transitions are multidimensional and include a range of types and patterns, properties of the transition experience, facilitators**,** inhibitors and indicators based on process and outcomes [39]. The recovery process for patients suffering from BED has many different elements [36,37]. Two important elements are how the patients relate to food and their body [40-42]. However, there is a lack of research on how patients experience and handle change in their relationship with food and their body after a treatment programme. More knowledge about the processes involved in change is needed, in addition to how the suffering and movement towards a better life are experienced. The processes of change involved in the transition might help to create a deeper understanding of the issues encountered in overcoming the suffering inherent in BED.

AIM

The aim was to develop a deeper understanding of how changes related to food and the body are experienced by patients with binge eating disorder during psychological treatment.

The research question was: What changes in the relationship with food and the body are experienced by patients suffering from BED after psychological treatment?

METHODS

This study used a qualitative approach focusing on the lifeworld [43], of the participants. The lifeworld is the pre-reflective lived experience of the world before being interpreted and coloured by cultural context [44]. According to Merlea-Ponty, the subjective experience emerges from the communication between the lived body and the world [30]. Both the phenomenologically lived experience and the interpretive nature of hermeneutics for making sense of experiences are inherent in expressing one's lifeworld experiences [45]. Data were collected by individual in-depth interviews, which allow the researchers to delicately explore the personal and intimate experiences of the participants.

PARTICIPANTS AND SETTING

The psychological treatment comprised a 10-week group programme consisting of three-hour weekly meetings with a mixed approach of cognitive behavioural therapy, therapeutic writing and affect consciousness (46). Although the participants were recruited from a group therapy programme, our study was not aimed at evaluating the programme itself. We emphasized that our study dealt with experiences of changes in the relationship with food and the body and assumed we could obtain such experiences in this context.

All participants had completed the programme and were purposively sampled based on this common experience. They were all deemed to possess qualities that could shed light on and highlight nuances in the research question (47). The participants were identified by one of the authors (K.R), who was one of the therapists in the group therapy programme. They were then contacted and informed about the study by the mercantile staff at the hospital ward. None of the invited participants declined. Eight interviews, which were conducted and transcribed by the first author (O.M.S), took place at a neutral meeting room in a hospital on the West Coast of Norway in February, 2021.

Inclusion criteria:

- Diagnosed with BED.
- Completed a group therapy programme for BED.
- Both sexes (A 50-50% split is desirable).
- + 18 years old.

Able to speak and understand the Norwegian language.

Exclusion criteria:

- Severe comorbid mental disorders such as psychosis.
- Drug or alcohol addiction.

The sample included two men, one non-binary and five women aged between 25-55 years. All participants had been diagnosed with BED and had completed the group therapy programme. At the time of the interviews most of them were not in paid employment and many received disability benefits. The participants had different symptom severity, frequency, intensity and duration and the majority had not attended previous treatments for BED. All participants were either obese (BMI 30-39.9) or severely obese (BMI 40+) with 55.4 being the highest BMI and 32.3 the lowest. Most of the participants had a history of past traumatic experiences, including bullying or abuse. The vast majority also reported currently or previously suffering from other mental disorders, such as post-traumatic stress disorder

and depression.

The researchers' pre-understanding and relationship to the participants

The first author (O.M.S) has clinical experience in the treatment of chronic pain, weight loss and fitness as an osteopath and personal trainer, respectively. This study is part of his master's degree in health science. The second author (V.U) has had a long academic career with experience of caring and of a phenomenological, hermeneutical approach to research based on existential experiences of suffering and health [32]. The third author (K.R) has both a scientific and a clinical background. She is an experienced psychiatric group therapist, with expertise in group therapy targeting different mental health issues. She is leader of the ongoing main project "Talking about binge eating". The project investigates in-depth experiences of patients who seek treatment for BED and obesity from different angles.

DATA COLLECTION

Eight individual in-depth interviews were performed approximately one year after the participants had completed the group therapy programme [46]. Each interview lasted for approximately 45 minutes and was audio-recorded. Individual in-depth interviews were selected because it is an expedient method for developing a deep and personal understanding of a phenomenon [48]. The interviews only had a few pre-designed and open questions, which allowed for more organic follow-up questions and a dynamic conversation. The following pre-designed questions were used: "Can you please tell me about your relationship with food and your body before you were diagnosed with binge eating disorder?", "Can you please tell me about experiences of changes in your relationship with food or your body during the treatment programme?" and "Can you please tell me about experiences of changes in your relationship with food and your body after the treatment programme?". Follow-up questions such as "Could you elaborate?" and "Do you have any examples?" were posed to give the participants a chance to clarify or elaborate in more detail and to avoid misunderstandings.

DATA ANALYSIS AND INTERPRETATION

The data were analysed by systematic text condensation, which is a pragmatic and phenomenologically inspired method for analysing qualitative data [49]. The analysis comprises four steps. In step one, the first author (O.M.S.) read and re-read the transcribed interviews several times to gain an overall impression of the material and formulated seven preliminary themes. In step two, the first author read the material to identify meaning units relevant to answering the research question. The meaning units were then sorted into four code groups. In the third step, the meaning units in each code group were deconceptualized, abstracted and condensed to illuminate the meaning of each group. In the fourth step, by synthesizing the condensed text we reconceptualized the data by forming descriptions and categories. The third and fourth steps were discussed with the second author (V.U) until consensus was achieved. The last author (K.R) was involved in designing the project and the data collection. She took a step back after the interviews were completed in order to gain distance from the material, but was again involved in the reconceptualization of and discussion about the data.

ETHICAL CONSIDERATIONS

This study is in accordance with the ethical principles for medical research on human subjects as stated in the declaration of Helsinki [50]. The Regional Ethics Committee (NO. 25650) and the Head of the Research and Human Resources Department at the hospital granted approval for conducting this study.

RESULTS

Four central categories emerged from the analysis; *Transition from senseless towards sensible handling of feelings; Transition from body-hatred towards body-benevolence*; *Transition from anxiety towards confidence in relation to others;* and *from mindless towards conscious eating*. The findings in this study represent the participants' experiences of how their relationship to themselves, more specifically their relationship to food and their own body, evolved.

Transition from Senseless Towards Sensible Handling of Feelings

Most participants had an emotional relationship with food and eating. They described eating as a way of handling challenging feelings such as shame, sadness and hopelessness. For some participants, food and eating had been a crutch that helped them in life, while others expressed that eating helped them in the present moment when stress and difficult feelings became overwhelming. Participant 3 explained why it was so difficult to stop using food as a means to handle these feelings:

"... it means that to a large extent I have to stop using what I treat my stress with ... It is like that feeling of, not perdition, but powerlessness."

After the treatment programme all the participants reported being more aware of their feelings. They learned how to identify, name and feel them in the present moment. Some also began to face difficult feelings and experienced that their emotional relationship with food and eating weakened. Participant 5 described this change as follows: *" Because if I feel that something is coming now and I become too stressed or it feels too bad... For example, I got a letter from the hospital and the content triggered something in me. Usually, I would buy ice cream and drive by McDonalds, but now it's more like I know it will pass. You have to feel it and work through it."*

Many of the participants experienced being better able to cope with challenging and difficult feelings by facing them, instead of using food to handle or escape them.

Transition from Body-Hatred towards Body-Benevolence

All participants experienced negative thoughts and feelings towards their body. They expressed hatred and disgust when talking about their body and many did not want to relate to their physical self at all. Some of the participants mentioned feeling different with and without clothes and how they were able to hide their "faults" by knowing which clothes to wear. Participants also reported that not having their ideal body was painful. Participant 7

described how she felt when looking at herself naked in the mirror: *" It's just gross... I get disgusted. It's like... I almost start to cry."* After the treatment programme some of the participants started to connect with their body. They described this as a powerful, but difficult experience. Many found it easier to look at themselves in the mirror. They also felt more comfortable wearing less clothes not only when alone, but also in the company of others. This is how participant 5 described this change:

"My friend has a baby, and when I'm at her house there is the possibility that the baby might posset on me. If he does, I can take off my hoodie and only wear my top, but I know my friend very well so it's OK when it's her. That type of thing is easier now without feeling disgusting and like I have to hide, so that's good."

Many of the participants reported that they started to feel more open and kind towards their body.

Transition from Anxiety towards Confidence in Relation to Others

Most of the participants did not appreciate attention. They were affected by what they considered other people thought about them and how they looked at them. Many participants found it uncomfortable to eat with other people present, preferring to eat alone to avoid other people's attention. When eating with other people, the participants changed their eating behaviour and stopped eating earlier, even if they were still hungry. Many participants had the feeling of standing out because of their body size and appetite, and had a strong desire to look normal in relation to others. Participant 3 expressed the importance of other people's thoughts related to his body as follows: «*It's probably because I look at my body from the perspective of "what will other people think about* it?"».

The fear of what other people might think and say about them restricted some of the participants' lives to a great degree, making them prefer a quiet life where they could be more or less invisible.

After the treatment programme, some of the participants experienced that they placed less importance on what other people thought or said about them. They felt more confident and stopped changing their behaviour when eating in front of other people. Several participants experienced no longer eating less for the sake of others. A few expressed being more comfortable in their body in situations where they normally felt uncomfortable, e.g. at the beach or the public swimming pool. Participant 3 explained that despite having experienced changes, he still had some of the old thoughts and feelings:

"I think there is still a bit left, it's a bit like the saying "I feel like a bull in a china shop"."

FROM MINDLESS TOWARDS CONSCIOUS EATING

Most participants reported that they were not mindful regarding their eating habits. Their meal frequency and portion-control deviated from what they considered normal eating patterns. They often had chaotic eating habits, e.g. eating one large meal a day and snacking throughout the day. Many participants also reported challenges with black and white thinking and rules regarding eating and food. Some also explained how they were less aware of their eating than they thought. Participant 8 described this unawareness when eating as follows: *"... when I ate, I did not think of anything, it was just like a dog stuffing its head in the food bowl and just (making eating noises) eating it. That was my experience. I gobbled up everything. There was nothing left, not a crumb."*

Some of the participants also experienced wasting a great deal of energy feeling uncomfortable and almost scared of not being full or feeling hungry.

Most of the participants changed their eating patterns and now ate in a more structured way throughout the day. Feeling the effect of this gave some of them hope that changing their eating habits might be possible. Some also developed an increased interest in cooking, using whole foods and more vegetables than before. Participants who struggled with black and white thinking gained a more nuanced understanding of and perspective on food and eating. Participant 7 summarized these changes as follows:

"I'm in a bad period now, but I have come to the conclusion that I have a healthy diet, because I can ... eat regularly and not eat between meals all the time, and the fact that I can go to dinner and have an ice cream and dessert and don't feel like everything is going to hell."

Many of the participants reported being more mindful when they ate and had greater awareness about feelings of hunger and fullness. As a result, some stopped eating when feeling full and threw the leftovers into the bin instead of eating them like they used to.

These findings suggest that a range of subjective positive changes can develop alongside more objective measures such as weight loss.

DISCUSSION

The aim of the present study was to develop a deeper understanding about how patients suffering from BED experience changes in their relationship with food and their body after a psychological treatment programme. The aim was illuminated by four categories: *Transition from senseless towards sensible handling of feelings; Transition from body-hatred towards body-benevolence*; *Transition from anxiety towards confidence in relation to others;* and *Transition from mindless towards conscious eating.* The categories are interpreted and deepen our understanding with help from Merleau-Ponty's philosophical theory of embodiment and Meleis' theory of transition, as well as previous research.

The first category, *Transition from senseless towards sensible handling of feelings,* illuminates a complicated and emotionally driven relationship with food and how food is used as an unsuitable emotional regulation strategy in BED. In this context, food serves as a way of coping with difficult emotions or negative affect to obtain relief in the present moment. In addition, the category demonstrates how a transition towards an appropriate emotional regulation strategy can be made by learning and cultivating emotional awareness and developing alternative strategies to regulate difficult emotions and negative affect in an expedient way. Previous research reveals that binge eating episodes are often triggered by negative emotions and followed by a feeling of relief [17]. This might be explained

by alexithymia, which is a reduced capacity to describe and/or recognize emotions and common in BED [19]. Alexithymia strongly predicted inappropriate emotional regulation strategies in adolescents with anorexia [52]. Interestingly, Venta et al., also found that alexithymia was associated with maladaptive emotional regulation and mediated by experiential avoidance, which is the unwillingness to tolerate adverse personal experiences. Experiential avoidance has been shown to mediate the relationship between negative emotions and emotional eating [53].

The transition from senseless to sensible emotional handling of feelings can be explained in terms of an increased degree of affect consciousness, which *"refers to the mutual relationship between activation of basic affective experiences and the individual's capacity to consciously perceive, tolerate, reflect upon and express these experiences."* and is the underlying construct of several treatments aimed at improving emotional regulation [54]. Awareness is a property of the transition experience [39]. The increased ability to name, identify and feel the emotions in the present moment reflects a greater awareness of one's emotional landscape. Other relevant properties of the transition experience are preparation and knowledge [39], which a group therapy programme will provide. As a result of the aforementioned transition properties, transition towards more adaptive emotional regulation strategies, which can be viewed as an outcome indicator of the transition process, is more likely to occur [39]. The second category, *Transition from body-hatred towards body-benevolence*, illuminates how body image concerns such as body-hatred, severe body dissatisfaction and difficulties relating to one's physical body have devastating consequences in BED. In addition, the category sheds light on how a transition towards body-benevolence and connecting with one's body is possible after treatment. Previous research by Lewer et al., found that body dissatisfaction is commonly experienced in BED [55]. Other studies have reported a significant difference in body dissatisfaction between obese patients and obese patients with BED, showing that it is not merely obesity that is the reason for body dissatisfaction [56,57]. According to Merleau-Ponty's phenomenology of the body [30], avoiding and distancing oneself from the physical body is to alienate and distance oneself from the lived body. As the lived body and the world in which it interacts are two sides of the same coin, alienation from the lived body is alienation from the world [30], and can be experienced as a disruption in one's lifeworld.

Earlier research shows that feeling better about and more connected to the body is important for BED recovery [37]. Self-compassion is positively related to body satisfaction [58], and may protect against body image concerns [59,60]. The transition can also be interpreted in light of the phenomenology of the body. Being more connected to the physical body means being more connected to the lived body and thereby the world in which it interacts. As a result, one's lifeworld transitions from disruption towards reconciliation. This transition can be viewed as a critical disequilibrating event that can change the perception of one's body and is a property of the transition experience [39]. Feeling more comfortable and connected to the body can be interpreted as a development in confidence, which is a process indicator in the transition experience [39].

The third category, *Transition from anxiety towards confidence in relation to others*, illuminates how social anxiety and fear of judgment restrict one's chances of living a fulfilling life in BED. Moreover, the category sheds light on how it is possible to transition towards more confidence in relationships and reduced fear of being judged by others. Previous research confirms that social anxiety is more prevalent in eating disorders [61]. This is in line with earlier research demonstrating that social anxiety is associated with more eating, weight and shape concerns among patients with bulimia [62] and BED [63]. A recent study showed that social anxiety and eating disorder symptoms were associated with fear of eating and drinking in public [64].

Reduced social anxiety is described in a systematic review on the effectiveness of cognitive behavioural therapy in treating social anxiety [65]. Interestingly, a reduction in social anxiety is also reported in a study using appetite awareness training to improve eating patterns in patients suffering from BED [66]. The transition towards confidence in relation to others can be interpreted in light of the transition process indicator *developing confidence and coping* [39]. According to Meleis, the development of confidence in a transition process is inherent in the various processes in diagnosis, treatment, recovery, living with limitations and the development of strategies for managing the condition. In the present study, the increased confidence in relation to others can be rooted in these processes.

The fourth category, *Transition from mindless towards conscious eating*, illuminates the mindless relationship with food, dichotomous thinking and unstructured eating patterns commonly observed in BED. In addition, the category sheds light on how the transition from mindless towards conscious eating is possible by becoming more aware of internal hunger and satiety cues, structuring eating patterns and becoming more flexible in one's perspective on food and eating. Earlier studies have found that BED is associated with more atypical eating behaviour, such as snacking, nibbling, double meals and nocturnal eating [67]. Atypical eating can be preceded by dichotomous thinking, which often entails detrimental rules regarding eating and types of food. Dichotomous thinking is closely related to rigid dietary restraint [68], which has been strongly associated with frequent and severe binge eating [26,69,70]. The opposite of dichotomous thinking and rigid dietary restraint is a more flexible perspective, or flexible dietary restraint [68], which involves allowing oneself to eat a range of different foods, but still being aware of healthy options and how food affects weight and shape. Flexible restraint has been positively correlated with a reduction in binge eating [71,72], and even the absence of binge eating in BED [71]. Mindful eating [73], and structured and frequent meals [74,67], have also been associated with fewer binge eating episodes in BED. The transition from mindless to conscious eating includes more awareness and engagement in planning and utilizing new knowledge regarding eating patterns and habits. In turn, enhanced confidence and mastery of mindful eating can be accomplished. According to Meleis [39], these transitions can be explained by the transition properties of awareness and engagement, the transition facilitators preparation and knowledge, and the outcome indicator mastery of new skills.

METHODOLOGICAL CONSIDERATIONS

We have provided an elaborate description of the various steps in the analysis, presentation and interpretation of the interviews to establish the trustworthiness and transparency of the study. Two of the authors (O.M.S) and (V.U) discussed the material throughout the analysis and achieved consensus regarding the compliance between the categories and the data material. To ensure further trustworthiness, the third author (K.R) was not involved in the first steps of the analysis in order to create a distance to the material and not be biased by her role as a therapist in the group therapy programme. The transparency and credibility of the findings are substantiated by representative quotations and thereby the voices of the participants are emphasized. This study investigated the experience of change and how change emerges over time. Data were collected at one time point after the group therapy programme. A longitudinal design with two or more data collection time points is optimal for studying change, thus the findings should be interpreted bearing this limitation in mind. We believe that the findings can be transferred to similar disorders if the participants' culture, context and the process of data collection and analysis are considered.

CONCLUSION

This qualitative study provided a deeper understanding of how patients suffering from BED experience transitions in their relationship with food, eating and their body after psychological treatment. Living with BED is experienced as a disruption in the lifeworld with difficulties managing emotional regulation, resulting in a feeling of distance between oneself and the world. Through transition processes this distance moved towards unity in terms of how the self and the world were experienced.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest.

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