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Faculty of Behavioural, Management and Social Sciences

STRENGTH AWARENESS AND ENHANCEMENT IN A POSITIVE PSYCHOLOGICAL INTERVENTION FOR PEOPLE WITH ABNORMAL EATING BEHAVIOUR

Lea Kretzschmar, s1747991

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Supervisors:
Marileen Kouijzer M.S.c
Dr. Stans Drossaert

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Abstract

Objective: Recovering from anorexia nervosa is a rarely understood and researched process. Currently there is a lack of effective treatments to sufficiently treat this complex condition. Severe anorectic symptomatology however highlights the importance of new treatment ambitions. The purpose of this study is to explore the potential impacts and the addressability of the positive psychological strength enhancement approach within a corresponding exercise on people with abnormal eating behaviours, especially in anorexia nervosa.

Methods: Qualitative online questionnaires with open-ended and closed-ended questions were admistered anonymously to fifteen participants with abnormal eating behaviours to explore their perspectives on a strength enhancement exercise. The questionnaire consisted of 30 questions about past experiences with and attitudes towards the concept of strength enhancement, positive and negative evaluations of a presented example strength-based exercise, as well as opinions about the integration of the strength enhancement approach in eating disorder therapies. Answers to the questionnaire were coded inductively from two independent coders using an iterative process.

Results: Qualitative analyses revealed general openness of participants towards the so far mostly unknown concept of strength enhancement. Most of the time the strength-based exercise was positively received and evaluated by participants who expected beneficial effects and felt positive about integrating the exercise into treatment protocols for eating disorders and especially anorexia nervosa. However, some participants were afraid that exerting the exercise may reveal own new shortcoming and therefore felt deterred from it. Frequently preconditions for the use of the concept were mentioned. Participants emphasized caution in providing the exercise to persons with severe symptoms or at the beginning of therapy. A counterproductive effect of the exercise in this disease stadium was expected. Overall participants emphasized the need for a tailored use of the strength enhancement approach as well as the general need for tailored treatment protocols in eating disorders.

Conclusion: The results indicate that people with abnormal eating behaviours, anorexia nervosa included, are open towards strength enhancement interventions, preferably in a tailored design. Insights into the needs and wishes of this patient group are provided about how a potential treatment integration of this concept should look like. The findings stress at the same time the importance to conduct further research in order to explore the potential curative powers strength enhancement may have, especially in anorectic patients.

Keywords: *Anorexia nervosa; eating disorders; strength enhancement; strength awareness, positive psychology; tailored treatments; qualitative research*

1 Introduction

Eating disorders are complex and severe psychiatric disorders that negatively affect the physical, cognitive and social and emotional well-being (Klump, Bulik, Kaye, Treasure, & Tyson, 2009). In the following, the symptoms and prevalences of the different eating disorders will be described. Then different treatments will be introduced, namely medical treatment, Cognitive Behavioural Therapy (CBT), Acceptance and Commitment Therapy (ACT) and positive psychological approaches, especially the strength enhancement approach. The respective strengths and weaknesses of the treatments will be discussed and differentiated for the different eating disorders. Lastly, it will be argued that in order to develop a more optimal treatment for anorexia nervosa, a qualitative research approach seems suitable to assess the needs of the affected patients. The current study wants to make a first step in this direction.

1.1 The different eating disorders: Symptoms and prevalences

The eating disorders, which play a role in this study, are first and foremost anorexia nervosa, but also bulimia nervosa and the binge eating disorder. These conditions represent the three most prevalent eating disorders worldwide, which is why they are addressed in this paper (Hudson, Hiripi, Pope & Kessler, 2007). Recognizing the need to develop more suitable treatments for the severe and often fatal disease anorexia nervosa represents the reason why this condition lies in special focus of this study (Merwin, Zucker & Timko, 2013).

Anorexia nervosa represents the rarest but most severe of the eating disorders, yet increasing (Hoek & van Hoeken, 2003), with a worldwide prevalence rate of circa 0,8% for the entire population (Davey, 2014). Women are ten times more likely to become affected than men. The adolescence represents the main period of disease onset (Davey, 2014). The estimated prevalence in the Netherlands is 0.5% to 1.0% for young women aged between 15 and 29, with the peak of onset of the disease ranging between 14 and 18 years (Clijsen, Garenfeld, Kuipers, van Loenen & van Piere, 2016). Anorexia nervosa represents the most life-threatening psychological disorder generally with a lethality rate from 5%-8% (Davey, 2014). The high lethality is the result of committed suicides and starvation to dead (Vandereycken & Noordenbos, 2004).

The main and defining characteristic of the severe and complex psychological condition anorexia nervosa is that individuals fail to maintain a healthy weight due to self-starvation and an accompanied anxiety of gaining weight. The low body-weight is a result of

under nutrition. Often excessive exercising is conducted in the obsessive pursuit of thinness (Pollice, Kaye, Greeno, & Weltzin, 1997). The underweight is associated with a number of physical and psychological accompanying symptoms. Frequent bodily symptoms are hypotension, chronic tiredness, absence of menses and hypothermia (Davey, 2014).

Typical psychological attendant symptoms are that patients frequently show stereotypic rigidity, perfectionism, and exactness**.** Studies have shown that those characteristics facilitate the exhausting self-starvation (Srinivasagam, Kaye, Plotnicov, Greeno, Weltzin & Rao, 1995). Commonly patients are prone to a distorted body image represented by the feeling of being fat even when underweight, which promotes the self-starvation. Additionally, the self-starvation can be explained by a significant value shift that patients undergo. Weight loss and thinness represent the main pursued and cherished value and leave only limited room for pursuing other aims than starvation (Srinivasagam et al., 1995). Another central feature is the avoidance of negative feelings and thoughts related to weight and body image, which is called experiential avoiding (Heffner, Sperry, Eifert & Detweiler, 2002). Summing up the symptoms it is no surprise that anorexia nervosa is in particular marked by a low self-esteem. Self-doubts are commonly accompanied by self-punishing traits and self-destructive rumination (Beroerte, 2000). Furthermore, it is well-known that anorexia nervosa patients often display comorbidity with psychiatric disorders. The relationship between depression and anorexia nervosa has been studied most extensively. Comorbidity rate lies by approximately 50%. (Wade, Bulik, Neale, & Kendler, 2000). However, depressive symptoms remain in 15% to 18% also after weight restorations (Hsu, Crisp, & Callender, 1992; Morgan & Russell, 1975).

This study focuses first and foremost on the condition anorexia nervosa however are there two other prevalent eating disorders, which play a role in this study. The second eating disorder, which will be covered, is bulimia nervosa. It is mainly characterised by bouts of binge eating, followed by inappropriate compensatory behaviours for the high calorie intake. These behaviours may be excessive sport, use of laxatives or vomiting (Hoek & Vandereycken, 2008). Patients want to avoid weight gain and have in common with anorexia nervosa patients that they have a distorted body image. The prevalence of bulimia nervosa in women is 1-3 %, in men the prevalence is about one tenth of that (Davey, 2014).

The third and last eating disorder, which is addressed in this study, is the binge eating disorder. Generally, it is characterised by bouts of excessive eating, but without the compensational behaviours that are found in bulimia nervosa (Hoek & Van Elburg, 2014). As

a result, the patients are usually overweight. The prevalence of the binge eating disorder in the general population is 3 %. In women the prevalence is only 1.5 times higher than in men (Davey, 2014).

1.2 Types of Treatments

The eating disorders are in general regarded as being difficult to treat, with anorexia nervosa showing the poorest treatment outcomes. While bulimia nervosa and the binge eating disorder can be treated relatively successfully (Heffner et al., 2002), there exists no adequate treatment for anorexia nervosa patients yet (Juarascio et al., 2013; Kaplan, 2002; Fairburn, 2005; Watson & Bulik, 2013, Merwin et al., 2013).

While common treatment initially shows to be successful in interrupting core symptoms (e.g. bodily symptoms), long-term outcomes of anorexia nervosa are variable (Federeci & Kaplan, 2008). Relapse and dropout rates of anorexia nervosa patients are generally high (Halmi, Agras & Crow, 2005). However, the reasons for the variable outcome results of treatments are still unknown (Herzog, Schellberg & Deter, 1997).

One important reason why it seems difficult to treat anorexia nervosa may be that recovering from this condition is a complex and poorly understood process. According to Federeci and Kaplan (2008), most outcome studies defined treatment responses of anorexia nervosa patients by quantifiable physical domains (e.g. body weight), associated physical consequences (e.g. menstruation), cognitions about body weight, and comorbidity measures (e.g. personality, temperament). Those studies however failed to take into account potentially important subjective views of the patients in their response to treatments and relapse (Cooper, 2005; Garrett, 1997)

If one agrees that recovery is more than symptom reduction, then positive psychology could offer new perspectives and methods, which emphasize the enhancement of well-being (Bohlmeijer, Bolier, Westerhof & Walburg, 2016). Overall well-being of treated as well as untreated anorexia nervosa patients appears to be low (Beroerte, 2000, Davey 2014). The focus to increase overall well-being may compensate for the generally poor treatment outcomes in anorexia nervosa and may therefore improve the quality of life.

In the following, different treatment approaches will be described and their strengths and weaknesses will be discussed.

1.2.1 Medical treatment

Current knowledge suggests that medication plays a very restricted role in the treatment of eating disorders. In the case of life-threating starvation medical interventions through gavage feeding are employed on anorectic patients in the first instance. Consent for gavage feeding is not always required when a patient is in an extremely critical condition (Van der Velde, 2016). Later on, when the weight has stabilized or in the case of early detection, psychological treatments are implemented (Draper, 2000).

Diverse pharmaceutical products are frequently used means in all eating disorders. In practice medication is never provided as sole treatment (Van der Velde, 2016). According to a meta-review from Crow, Mitchell, Roerig and Steffen (2009) pharmacotherapy however provided little benefit in the treatment of anorexia nervosa. Treatments dealing with rather intrinsically factors of anorexia nervosa patients are regarded as more effective. Accordingly, psychological treatments are more often applied to treat anorexia nervosa than medical treatments (Van der Velde, 2016) even when showing only limited treatment success (Fairburn, 2005; Merwin et al., 2013; Juarascio et al., 2013).

1.2.2 Pathologic approach: CBT

Traditional pathologic psychology is predominant in establishing treatments for eating disorder patients. Pathologic approaches basically try to diminish risk factors and abnormal behaviours or cognitions (Seligman & Csikszentmihalyi, 2000).

Eating disorders, anorexia nervosa included, are most commonly treated with the pathological approach Cognitive Behavioural Therapy (CBT). CBT for anorexia nervosa addresses specific symptom features of the disorder. These include (1) eating behaviours (2) beliefs with regard to body and food and (3) deficits in the self-concept. CBT focuses on the alteration of dysfunctional thought patterns in all mentioned domains (Vitousek, 2002). Most promising results can be seen in the improvement of bodily symptoms concerning weight, menses and the development of more normal eating behaviours. Besides, CBT can have an impact on weight and shape concerns (Agras, Walsh, Fairburn, Wilson & Kraemer, 2002).

Despite these positive effects, 30-50% of all eating disordered CBT patients claimed to not be satisfied with their treatment outcomes (Fairburn, 2008; Wilson, Grilo & Vitousek, 2007). This could be deducible to the fact that 40% of the treated patients showed persistent symptoms after a CBT treatment. Moreover, approximately one out of three treated patients showed relapse or only partial recovery (Linardon, Brennan & De La Piedad Garcia, 2016).

The evidence of effectiveness of CBT remains weak.

Together these facts show the deficiency of CBT protocols. While CBT attains sufficient therapy outcomes in bulimia nervosa and binge eating patients (Heffner et al., 2002) treatment successes in anorexia nervosa remain limited (Cooper, 2005). This may have several reasons: First, CBT in particularly reduces abnormal eating behaviours like binging and compensational behaviours (Fairburn, 2008; Treasure et al., 1994) and not self-starvation. Second, CBT does not seem attractive to patients with anorexia nervosa. Anorectic patients frequently show low compliance to CBT treatments and dropout rates are generally high. In one research, which examined treatment progresses of 122 anorexia nervosa patients, 17% did not show compliance within a CBT treatment and the overall dropout rate was high with 46% (Halmi, Agras and Crow, 2005). Moreover, anorexia patients are generally reluctant to start therapy in the first place (Nordbø et al., 2012). Third, CBT protocols fail to capture the full range of cognitive phenomena like automatic thought tendencies or perfectionism meanwhile identified in patients with anorexia nervosa (Cooper 1997; 2005; Srinivasagam et al., 1995). Most studies, which have, led to also more recent CBT protocols investigated shape and weight concerns. More specific cognitions however that might be important in the development and maintenance of the disorder were mostly neglected (Anderson & Maloney, 2001; Cooper 2005). Considering these futile developmental efforts, it is no surprise that enduring recovery remains a rare phenomenon in anorexia nervosa patients.

1.2.3 ACT

One most recent CBT protocol, Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), could have the potential to provide anorexia nervosa patients with a more suitable treatment (Heffner et al., 2002).

General aims of ACT are to "increase acceptance of unwanted thoughts and feelings, and to stimulate action tendencies that contribute to an improvement in circumstances of living" (Hofman & Asmundson, 2008, p. 5). Particularly, ACT discourages experiential avoidance, which is the avoidance to experience negative feelings and thoughts (Hayes, Luoma, Bond, Masuda & Lillis, 2006). While CBT yields at the *elimination* of feelings like body dissatisfaction, ACT on the contrary wants patients thus to *accept* thoughts and feelings of body dissatisfaction (Hofmann & Asmundson, 2008). Individuals that score high on experiential avoidance make use of maladaptive control strategies like suppression or avoidance when managing emotional experiences (Hayes et al., 2006).

Both core-aspects, ineffective control strategies (like starvation with the aim to enhance ones' self-esteem) and experiential avoidance (avoiding thoughts related to weight and body image) are key problems in anorexia nervosa patients (Federeci & Kaplan, 2008). ACT for anorexia nervosa addresses those aspects by providing the insight that negative emotions and thoughts are not obstacles. Patients learn to accept negative emotions and simultaneously remain able to exert goal directed behaviours. They learn to identify idiosyncratic life values, others than the mere pursuit of thinness, and receive assistance to achieve them (Heffner et al., 2002).

Despite these promising perspectives, ACT treatments are rarely included in the therapy of eating disorders. Further research is needed to assess the efficacy of ACT for the complex disorder anorexia nervosa. The few available outcome studies implicate, however, that ACT has the potential to provide anorectic patients with a better treatment (Heffner et al., 2002).

Although ACT is formally considered to be a CBT program it has several aspects in common with a positive psychological approach (Heffner et al., 2002), which will be introduced in the following.

1.2.4 Positive psychology

Positive psychology as compared to pathologic psychology enjoys well-deserved attention in the field of psychology and could just as ACT provide anorexia nervosa patients with a more suitable treatment. The founders of positive psychology Seligman and Csikszentmihalyi (2000), point out the importance of focusing on the enhancement of protective factors, strengths and the well-being of individuals, rather than the devotion of attention to pathology and deficits (e.g. body dissatisfaction, low body weight). Positive psychology like ACT focuses on factors besides the elimination of the disorder specific symptomatology. What differentiates them is that positive psychology does not particularly focus on the acceptance of negative symptoms but it especially fosters the development of positive emotion and thoughts (Seligman, 2002).

The fact that the common treatments for anorexia nervosa have limited success suggests that new alternative treatments like positive psychological interventions may provide added value. The positive psychological paradigm is based on the idea that wellbeing and symptoms are two related but different constructs. This is reflected in Keyes' dual continua model (Keyes, 2002). It holds that an increase of wellbeing can happen even in the face of

remaining symptoms. When full recovery of symptoms remains a theoretical idea, the need to provide anorexia nervosa patients with help to live with their disorder becomes apparent. Positive psychology with its focus on the enhancement of positive factors may offer the unique possibility to improve the overall well-being of patients (Savukoski, Määttä & Uusiautti, 2012; Seligman, 2002). When the negativity of the anorectic symptomatology cannot be banned it becomes even more important to show patients the positivity of life.

Success of positive psychological interventions has most extensively been shown in depressive patients where the enhancement of positive factors alleviated depressive disturbances (Seligman, 2002; Sin & Lyobmirski, 2009). Given the novelty of the approach, there exist no outcome studies of positive psychological interventions on anorexia nervosa patients. Yet even when positive psychology, just as pathologic psychology, may not be able to heal the disorder, patients could possibly significantly benefit from the integration of positive psychological concepts into treatment protocols. Solely when considering the high comorbidity rate of 50% between anorexia nervosa and depression (Wade, Bulik, Neale, & Kendler, 2000). Positive psychology already offers a variety of exercises and approaches which so far have rarely been applied to eating disorders. One example is the concept of self-compassion, which has proven to decrease body dissatisfaction in eating disorder patients (Ferreira, Pinto-Gouveia & Duarte, 2013; Hartmann, Thomas, Greenberg, Rosenfield & Wilhelm, 2015; Kelly & Carter 2005).

The current study will focus on the strength enhancement approach, which has not been studied yet in the context of eating disorders. The approach will be introduced in the following.

1.2.4.1 Strength enhancement approach

Strength enhancement represents the core of positive psychology and could be of special value for anorexia nervosa patients (Aspinwall & Staudinger, 2003). Positive psychology discovered that human strengths have the power to work as buffers against mental illnesses. Seligman and Peterson (2003) investigated the power of human strengths on positivity during varying life situations. They identified human strengths, which could improve well-being: Open mind, critical thinking, and courage, caring for other people, justice, self-regulation, optimism and hope, to name several (Seligman, Steen, Park & Peterson, 2005).

Strength enhancement influences individuals via two working mechanisms. Discovering own strengths awareness and exerting them successfully increases positive

emotionality towards one self. First, a more positive attitude towards oneself goes in hand with a better overall self-esteem (Seligman, 2002). Second, the broaden and build theory of Fredrickson (2004) predicts a more general effect of positivity. It implies that positive emotions broaden the scope of attention and cognition of individuals. By consequence do they actuate upward spirals towards an improved overall well-being. More specifically, a happier person automatically keeps an eye on the good things in life. So, what is built according to the model are cognitive, social and physical resources (Bohlmeijer et al., 2016). In sum, first strengths have to be made aware, then they can be consciously enhanced, which finally can lead to greater well-being and more resources.

The exact role strength-based approaches could have in anorexia nervosa is yet unknown and rarely researched. One of the scarce conducted qualitative interview studies with anorexia nervosa survivors identified personal strength as a salient factor with regard to eliciting and maintaining change in the fight against the disorder (Savukoski et al., 2011). Anorexia survivors reported to have used their personal strengths (e.g. perfectionism, assertiveness) during their disease in order to sustain it, to endure the exhausting self-starvation. After treatment, which included a process of personal growth, did they use their strengths to reach the aim of getting healthy (Savukoski et al., 2011). The result of this study indicates that strengths may play a prominent role in the recovery of anorexia nervosa. The precise working mechanisms behind the power of strengths are unknown however and need to be studied. In the current study, participants with abnormal eating behaviour including anorexia nervosa are invited to share their ideas on the effectiveness and addressability of a strength-based exercise with the aim to give first indications of the suitability of the concept of strength enhancement for prospective treatments.

1.3 Current study

The study investigates the experiences and attitudes of participants concerning the concept of strength enhancement. Participants are invited to evaluate whether a strength enhancement exercise suits their needs and wishes and fits into their current life situation. Moreover, participants' opinions about an integration of strength enhancement exercises in treatment protocols are collected. The following research questions will be answered in this study:

1. *What are the experiences and attitudes of people with abnormal eating behaviour concerning the concept of strength enhancement?*

2. *To what extent is the concept of strength enhancement appealing to persons with abnormal eating behavior?*
3. *What do people with abnormal eating behaviour think of the integration of strength enhancement and positive psychological exercises in general in the treatment for eating disorders?*

2 Methods

2.1 Design

To answer these research questions a cross-sectional online questionnaire study was conducted containing open-ended as well as closed-ended questions. To gain rich insights into the impressions, wishes and needs of people with abnormal eating behaviour regarding a strength-based exercise a qualitative research design was chosen. The Ethical Committee of the University of Twente approved of this study.

2.2 Participants

Initially, the researcher was planning to answer the research questions by conducting explorative interviews with anorexia nervosa patients. A collaboration with a clinic for eating disordered patients in Rintveld, Netherlands, was planned. However, several recruitment problems were encountered. First of all, the requested ethical approval for studying inpatients of a clinic could not be obtained in time. So, recruitment took place via targeted self-recruitment. Additionally, a newsletter was created which was sent to former anorexia nervosa patients of the clinic Human Concern (Appendix A). However, also these efforts to recruit participants were without effect. Yet, in order to perform the study, the inclusion criteria were extended and the form of the study modified. Instead of approaching only anorexia nervosa patients, people, who had or still have to deal with any kind of abnormal eating behaviour were included. They were invited to fill in an anonymous questionnaire instead of conducting a face-to-face interview as initially planned.

Participants were recruited by purposive convenience sampling to ensure that participants would meet the inclusion criteria. Inclusion criteria were that (1) participants had or still have to deal with deviant eating behaviour and (2) are at least 18 years old. Whether participants have received a diagnosis of an eating disorder, receiving treatment or not receiving treatment did not matter. All main existing tendencies of divergent eating patterns were included**.**

Recruiting participants took place in four different ways. Personal acquaintances were approached who might have been affected by deviant eating behaviour or who might know someone who has deviant eating behavior**.** Consulting acquaintances had the advantage that the majority of participants were approached via known contacts, which may have increased the response rate. Secondly, clinics specialized on eating disorders were contacted via e-mail. The clinics received a short introductory text about the nature of the study and a request to distribute the online link of the survey. They received the same invitational text about the nature, purpose and aim of the study, as the contacted personal acquaintances. Thirdly, the online platform Sona from the University of Twente was employed. Sona is a test-subject pool system where students can take part in surveys as test subjects. The fourth recruitment took place via the social media websites Facebook and Instagram. Social media websites offered the possibility to reach plenty potential participants with single posts containing the same invitational text and the link to the study. Public profiles of contacted persons ensured that participants would meet the inclusion criteria.

A total of 99 opened the link to the questionnaire, 15 of them participated in the study (Table 2 under 3.1). The group consisted of 1 man and 14 women, with an average age of 25,8 years (SD 10.72). Most of the participants had no personal relationship with the researcher. The participants only knew the name of the researcher and that she was an undergraduate psychology student. If there existed contact between both parties, it was ensured that there was no dependent or subordinate position between these two.

2.3 Materials

A questionnaire with open-ended and closed-ended questions was developed (Appendix B). The software Qualtrics was used to arrange the questionnaire so that participants could fill it in on their computers. Qualtrics is an online survey tool where researchers can set up surveys and collect data. There was a Dutch and a German version of the questionnaire, which were combined for the analysis. It consisted of two positive psychological exercises, one of which was analyzed for this study (the other was an exercise based on the concept of self-compassion, and was used by a colleague researcher). The exercise, which was relevant for this study, is the "Strengths Exercise" (*Sterke kanten oefening*) (Bohlmeijer & Hulsbergen, 2013, Appendix B).

This exercise included four parts: (1) the inventory and reflection on personal strengths, (2) assessment of the pleasure people experience while using these strengths, (3) the perspectives

of the participants' social environment, and (4) an individual formulation of the five most important strengths.

After the exercise, the participants' experiences, attitudes and evaluations concerning a strength-based exercise were collected, as well as opinions about the integration of strength enhancement exercises in the treatment of eating disorders, including specific recommendations for anorexia nervosa. This was done by using a questionnaire that contained 30 questions, which are relevant for this study. Firstly, several multiple-choice questions addressed topics about characteristics of participants with concern to their eating behaviour and potential diagnoses and treatments. Followed by mostly open-ended questions and one five-point Likert scale (1=totally inappropriate, […] 5=totally appropriate) regarding a strength-based exercise with themes like the impression, recommendation and improvement of the exercise. Within two open-ended questions participants had to define and describe their associations with the word "strengths". Subsequently the expected utility of positive psychological exercises for the participants' self and in the treatment of eating disorders were discussed in open as well as one Likert-scale question (1=totally inappropriate, […] 5=totally appropriate). Participants who answered earlier to have been in a treatment received four additional open-ended questions about the duration and structure of their treatment. The interview closed with questions about demographic characteristics like gender, age and level of education with either open or multiple-choice questions. The topics, its content and example questions are presented in Table 1. All questions are based on a preliminary self-developed interview scheme. Interview questions were developed with the aim to broadly cover fields of interest to answer the research questions. After transferring the questions into a questionnaire form the questionnaire was evaluated and revised with the help of two experts.

The aim of the study is to establish subjective insights about the evaluation and suitability of strength-based exercises in general, the integration of the strength enhancement approach in treatment and about the experiences participants already have with the concept of strength enhancement. Mainly open-ended questions were used to encourage participants to express their ideas, thoughts and criticism towards these topics. Within the questionnaire participants were often asked to explain their answers and to give examples. This made detailed exploration of their opinion on the topic possible. However, some closed and Likert-scale questions were added to the questionnaire. On the one hand to minimize the workload for participants, on the other hand to gather some quantifiable data on the most important statements.

Table 1

Overview questionnaire: topics, content and example questions

Topics		Content	Questions
1.	Background	Education Age Gender Kind of deviant eating behaviour Potential diagnosis Potential treatment	Have you ever been diagnosed with an eating disorder? If yes, which of the following?
2.	Past experiences with the concept of strength enhancement	Existing knowledge with strength enhancement Treatment experiences with strength enhancement	Did you come across the term “strengths” during your treatment? If so, where?
3.	Attitude towards the concept of strength enhancement	Associations with the word “strengths”	What does the term “strengths” mean to you?
4.	Evaluation of the concept of strength enhancement	First impression Positive evaluation Negative evaluation Exercise improvements	What did you find positive, important or meaningful in this exercise? /What did you find negative, displeasing or unclear in this exercise?
5.	Treatment integration of the strength enhancement approach	Potential usefulness Recommendation for whom Integration form	What do you think of the integration of strength-based exercises in treatments for eating disorders?

2.4 Procedure

After approaching acquaintances, clinics and employing social media websites participants received a survey invitation. The invitation was either received via mail, or distributed via different Internet platforms with an accompanied text about the purpose, aim and nature of the study. An online link to the survey was attached. The participants could use this invitation either for themselves or forwarded it to known persons who met the inclusion criteria. Based on this information, participants had to decide if they wanted to take part in the study or not.

After reading the information, participants clicked the link in the recruitment text. Upon opening the questionnaire participants were first presented a second briefer introductory text (Appendix B) about the nature and the goal of the study and instructions on how to fill in the questionnaire. Moreover, the contact data of the researchers were given in case the participants had any questions. Second, participants completed an informed consent form in which they were informed about the duration, the option of voluntary termination, anonymity and processing of the data. Third, the exercises with the related questions were presented as

described under point 2.3, Materials. The participants were asked to read the exercises first and then answer the questions either in full sentences or keywords. At the end of the survey, participants were thanked for their participation and invited to inform acquaintances that met the inclusion criteria about the survey. Contact data of the researchers was provided again with the notion to make contact whenever needed.

2.5 Analysis

The data analysis contained an iterative process, in which inductive coding was applied (Appendix C). At first, all transcripts were read by the researcher of this study and a colleague researcher repeatedly to ensure sufficient familiarization with the data. Transcripts were uploaded into the qualitative data analysis and the research software; ATLAS.ti 8.2.3. Codes for each potentially meaningful text fragment in the first four transcripts were co-created by both researchers. Detected discordances were discussed during the development of the coding scheme until consensus was achieved. Subsequently researchers coded independently the answers to the questionnaire of the other participants.

The unit of analysis were mostly meaningful text fragments. The lengths differed from one word to one whole sentence. The three main categories were established deductively on the basis of predefined themes. The codes and code families within the three main categories were created inductively by the researchers in a process of constant comparison (Boeije, 2002). The coding scheme allowed to apply more than one code per fragment. The following main categories arose (with associated code families): (1) Experiences and attitudes concerning positive psychological concepts and the term “strengths“ (code families “Definition strengths”, “Attitude”, “Experiences”); (2) Positive and negative evaluations of a strength-based exercise and its improvements (code families “Positive”, “Negative”, “Improvements”); (3) Treatment integration options and forms (code families “Pro strengths integration”, “Contra strengths integration”, “Target group”, “Timing of exercise”, “Integration form”). The detailed coding scheme can be found in Appendix C.

After coding and comparing of the available data it became apparent that no saturation point could be reached. New themes related to the research question emerged repeatedly and substantial differences in answers could be detected. Presumably there exists more information out there, which should be addressed when answering the research questions overarchingly. The limited amount of participants explains why no such saturation could be reached.

3 Results

In this section, the results of the current study are presented. The duration to complete the questionnaire containing open-ended as well as closed-ended questions took about 30 minutes. Descriptions of the participants are shown in the first paragraph. Then the following parts are presented in the result section: (1) Definitions of the word “strengths“, approachability to and previous experiences with the concept of strength enhancement (2) Positive and negative evaluations of the concept of strength enhancement in the form of an exercise, and suggestions of improvement (3) The needs an wishes regarding an integration of the concept of strength enhancement and positive psychological exercises in general in the treatment of eating disorders.

3.1 Description of participants

The characteristics of the fifteen participants are shown in table 2. Relating to age, gender, and education participants were heterogeneous. Fourteen of the participants were women. Of the seven diagnosed participants, three participants received a treatment. Diagnoses varied between anorexia nervosa, bulimia nervosa and the binge-eating disorder.

Table 2

Characteristics of the participants (n=15)

Characteristics		*n*
Gender	Female	14
	Male	1
	Other	0
Age	Mean (SD)	25.8 (10.72)
	Range (min; max)	19; 55
Education	Low	1
	Middle	10
	High	4
Diagnosis	Yes	7
	No	8
Type of disorder	Anorexia Nervosa	4
	Bulimia Nervosa	3
	Binge Eating Disorder	5
	Other	3
Past treatment	Yes	3
	No	12
Duration treatment	Mean (SD)	2.83 (2.25) years
	Range (min; max)	0.5; 5

3.2 Research Question I: What are the experiences and attitudes of people with abnormal eating behavior concerning the concept of strength enhancement?"

Table 3 gives an overview of the themes mentioned concerning the participants' definition of the word "strengths", their attitude towards, and their past experiences with the strength enhancement approach.

Table 3

Participants' experiences and attitudes concerning the strength-based approach

Concepts	Codes	*n* *Total of quotes*	*n* *Total of participants*	Example quotations
Definition strengths	Talents and competencies	8	7	*R 7: Talents, natural gifts, areas where you are good at and can make a contribution to society.*
	Character traits	9	6	*R14: Positive traits like being social, empathic.*
	Differentiating factor	5	4	*R14: Positive traits in which someone is better than average*
	Evoking positive emotion	3	3	*R12: Positive feelings like satisfaction*
	Value for others	4	2	*R9: Areas with which I can contribute something to society*
	Illness related	5	3	*R2: Food*
Attitude	Openness to experience	4	3	*R 10: I am always open for new things, which I find interesting.*
	Interest in topic	6	6	*R10: I also like to read related magazines*
	Practicability	3	3	*R14: It only takes a little step*
	Openness to topic when feeling well	4	2	*R9: If I am in a good mood the exercise seems good to motivate me even more*
Experiences	Within psychotherapy	4	3	*R10: During my psychotherapy*
	Other therapies	2	2	*R4: Occupational therapy*
	External to clinical settings	2	2	*R10: I also like to read related magazines*
	No experience	3	3	*R1: We did not really touch upon the topic of strengths*

3.2.1 Definition strengths

Analyzing the definitions of the word "strength" resulted in six sub-definitions. According to seven participants, are strengths associated with talents and competencies of one self: "*Having talents, being good at something*." (R1). Multiple participants defined strengths as character traits: "*Your own strong character traits.*" (R15). Strengths were furthermore defined as something that distinguishes you from others: "*What makes me stand out of the crowd.*" (R,9), "*Individuality*" (R7). Another definition concerns the association of strengths as having the power to evoke positive emotions. To illustrate: "*I associate self-confidence and*

being content with yourself with the term "strengths"." (R12). Other participants regarded strengths as something, which makes a person valuable for others: "*Helping others with own strengths.*" (R1). Very interesting was the association of strengths in relation to illness or the own weak spots which was mentioned by three participants: "*Food makes you strong*" (R11), "*Weak points, because if there is strong there must be weak.*" (R5). Thus, while strengths are mostly associated with positive traits and emotions it is also associated with opposite feelings (e.g. feeling weak).

3.2.2 Attitude

The vast majority of participants described themselves as approachable and open to positive psychological exercises in general (n=14). In total four reasons for the openness towards strength-based exercise were mentioned. The first reason concerned openness to experiences: "*I am curious and open towards new things.*" (R13). Secondly multiple participants showed to be interested in the topic: "*I want to change my situation.*" (R8), "*I already read corresponding magazines.*" (R10). Other participants regarded strength-based exercises as easy to do: "*It only takes a little step.*" (R14), "*It is easy.*" (R13). Two participants however mentioned a restricting factor. They regarded themselves as approachable only when they already feeling well: "*If I am in a good mood the exercise seems good to motivate me even more.*" (R9).

3.2.3 Experiences

In total three of the fifteen participants mentioned to have experience with the concept of strength enhancement.

Participants who stated having experience mentioned three different ways of encounters. Two participants have encountered strength-based exercises as a part of their psychotherapy: "*At the end of my psychotherapy.*" (R10), "*In a comparable form. I had to write down my strengths, thus there were no guidelines or summary, or anything like that.*" (R4). Additionally the same participants exerted comparable exercises in other kinds of therapies like: "*Occupational therapy.*" (R4) and "*At my kinesiologist.*" (R10). Besides made respondents ten and four use of such exercises as self-help: "*I like to read corresponding magazines.*" (R10), "*I already did it a couple of times.*" (R4).

Two reasons appeared why participants mentioned to not have any experience with the concept. Two of the twelve participants who have not been in any treatment mentioned this

missing treatment experience as a reason for not having encountered the concept of strength enhancement before. A reason of one treated anorectic participant was that strength-based exercises were not integrated in his treatment protocol: "*The subject "strengths" never came up.*" (R1).

3.3 Research Question II: To what extent is the concept of strength enhancement appealing to persons with abnormal eating behavior?

In table 4 an overview of the participants' evaluations of the strength-based exercise is given.

Table 4

Participants' impressions about the strength-based exercise

Concepts	Codes	*n Total of quotes*	*n Total of participants*	Example quotations
Positive	Liked content	16	9	*R 2: Very detailed. Often I cannot think of strengths, and in this way I have "instructions".*
	Appealing exercise factors	16	8	*R 10: To see how others see you*
	Potentially useful	18	13	*R 12: If I have a problem with my self-esteem or my eating behavior, this exercises could be useful*
Negative	Disliked content	2	2	*R 14: The assumptions over learned and real strengths.*
	Too long	4	4	*R 4: A very long exercise.*
	Doubts effectiveness	5	5	*R 14: I don't think that if you emphasize that someone is very nice that his self-perception of his body becomes more positive.*
	Too difficult	4	4	*R11: Difficult for persons with a bad self-perception.*
	Possible absence of strengths	9	5	*R 1: What if you do not tick anything? A total bummer.*
Improvements	Extension	1	1	*R 2: Next to personal strengths it would be important to learn to appreciate all the other good things in my life.*
	Involvement of fewer parties	6	4	*R 3: Having to involve fewer people.*
	Renaming of the word "strengths"	2	1	*R5: I would prefer a different description of the word strength*

3.3.1 Positive Evaluations

Participants had to indicate whether they found the exercise appropriate for people with eating disorders. Analyses revealed a mean evaluation of 3.93 points (SD=0.88; min=2, max=5) on a five-point Likert scale (1=totally inappropriate, […] 5=totally appropriate). This means that the majority of participants regarded the exercise as appropriate. Next to this general positive

evaluation, more specific evaluations of the exercise focused on the content, the appeal and the potentially usefulness.

The majority (n=7) mentioned to have noticed nothing bad in the content: "*I find nothing negative.*" (R12); "*I like the composition.*" (R1). Three more explicit different reasons were mentioned why they liked the content of the exercise. The first is reflecting on strengths (n=4): "*I like that I get to know my strengths better."* (R2). The second mentioned reason is a positive self-evaluation, which is made within the exercise (n=2). As an example: "*That your attention is pointed to your actual value.*" (R7). Third, three participants liked that the exercise contained a pre-built list of strengths: "*It was positive that I didn't have to come up with strengths by my own. That is usually not easy for me.*" (R9).

In the analysis of the elements, which lead to a positive appeal of the intervention, four subthemes emerged. The first is the involvement of other people's perspectives in the exercise (n=6). To illustrate: "*Especially to hear it from people from your immediate environment makes this exercise very useful.*" (R5). Another appealing factor was to get encouraged to think about own strengths (n=2). Respondent nine said: "*I find it interesting to think about my own strengths*". The third is developing more self-acceptance (n=2): "*Good message, it is important that everybody accepts oneself*" (R14). Again several participants found each part of the exercise appealing (n=6).

When analyzing the potential usefulness of the exercise three different working mechanisms were identified. The first is the development or optimization of skills and strengths (n=3). So mentioned respondent nine: "*Maybe the exercise can help me to optimize my strengths*" (R.9). The second expected positive effect is that the exercise evokes positive feelings like courage and placidity (n=3): "*It provides you with courage and calms you down.*" (R7). Third, the most frequent expected positive effect, which came to the fore, is self-insight (n=12). Three different subthemes emerged in analyzing the expected effect on self-insight. The first is the fact that you get to know hidden strengths of yourself (n=7): "*Through the detailed ideas I just realized that I have more strengths than I thought.*" (R3). Knowing the own personality better presents the second subtheme (n=2): "*Insight in personality".* The last mentioned effect was getting new insights into the own value (n=3): "*That one's attention is pointed towards ones' value.*" (R7).

3.3.2 Negative evaluations

Negative evaluations of the strength-based exercise concerned partly similar topics as in the positive evaluations; the content and the potential effectiveness. Three more special critiques concerned the length of the exercise, the level of difficulty and the absence of strengths. Only two respondents gave negative content evaluations. Respondent fifteen indicated to not have liked the overall content and especially disliked to: "*answer the exercise questions*" (R.15). The other respondent (R14) showed doubts about the correctness of the exercise, especially about: "*assumptions over learned and real strengths*" which were made in the first part of the exercise. Four participants found the exercise simply too long: "*It is a very long exercise.*" (R4). In the analyses of the doubted effectiveness of the exercises two sub themes emerged. The first is that the outcome of the exercise is not processible (n=2). To illustrate: "*I am wondering if what others are saying or thinking would really percolate and how much will be done with this information in the head of the one with the eating disorder.*". The second theme simply is that the exercise would deliver no benefits to people with abnormal eating behaviour (n=3): "*It is not helpful.*" (R15).

Four participants mentioned that the exercise would be too difficult for themselves or for eating disordered who have too severe symptoms: "*I find those exercises about strengths always very exhausting because of the self-reflection I rapidly think too critical about my strengths.*" (R2), "*I think that it is difficult for someone who is still deep in his or her eating disorder to process the information. To hear it is one thing but too really be able to process it is another story.*" (R5). Another topic concerns the possibility of absence of strengths, which results according to five participants in an opposite effect, e.g. increased self-criticism: "*I can imagine that it can drag you down if you "realize" through the questionnaire that you don't have any strengths or talents.*" (R1) and "*I am always afraid to realize that I am incompetent.*" (R2).

3.3.3 Improvements

Analyzing suggestions for improvements of the exercise resulted in three themes. The first recommendation, mentioned by four participants, was to involve fewer parties: "*For me it is always awkward to ask other people for help. I would probably ask good friends if they would help me with such exercises. But not more than three. I would never dare to ask a boss for help concerning those exercises.*" (R2). The same participant mentioned that he would not like to do the exercise: "*Because of all the people I would have to ask*". The second wish of

one participant was to alter the description of the word "strengths" however without making a new proposition: "*I would define the word "strengths" differently.*" (R5).

Only one participant made a proposition for an extension of the exercise: "*Next to personal strengths it would be important to learn to appreciate all the other good things in my life.*" (R2). The participant wished to extend the strength focus with thankfulness aspects.

3.4 Research Question III: What do people with abnormal eating behaviour think of the integration of strength enhancement and positive psychological exercises in general in the treatment for eating disorders?

Table 5 gives an overview of the themes mentioned by participants concerning their opinion about an integration of the strength-based exercise and positive psychological exercises generally in the treatment of eating disorders.

Table 5

Participants' opinions and wishes about strength-based interventions

Concepts	Codes	*n Total of quotes*	*n Total of participants*	Example Quotations
Pro strengths integration	Utility integration	41	14	*R 7: I think that personal strengths should be a part of every psychosomatic therapy, because it enables self-evaluation.*
Contra strengths integration	Dispensability	7	5	*R1: You reflect on yourself in therapy anyway, so I don't know if there is the need [for positive psychological exercises] in the future.*
Target group	Everyone	6	6	*R 4: I would recommend the exercise to everybody.*
	Anorectics	11	11	*R 10: Especially these people [anorectics] need to develop an awareness of their strengths.*
	Eating disordered in general	2	2	*R 14: People with an eating disorder*
Unsuitability criteria	Severely ill	6	4	*R 5: I think it can be difficult to process this information for someone who is heavily affected by his eating disorder.*
	Unmotivated persons	3	3	*R9: I wouldn't recommend it when you are unmotivated towards change*
	Persons with eating disorders	1	1	*R6: People with an eating disorder*
Timing of exercise	Later in treatment	6	4	*R 10: After the identification of problems. At the beginning you have no capacity for other things.*
	Never	8	4	*R 2: Too unpleasant.*
	Occasional self-use	11	11	*R 8: Yes, with practice it does not take much time and I can perform the exercise by myself, everywhere and without materials.*
Integration form	Combination with other treatments	3	2	*R 1: A combination with psychotherapy and maybe these exercises as homework.*

Concepts	Codes	*n Total of quotes*	*n Total of participants*	Example Quotations
	Outside clinical setting	3	3	*R 3: Or integrate my personal strength-list into my everyday life.*
	Prevention	5	4	*R 3: My symptoms were not too serious, so positive psychology could certainly have helped me and there would have been no need for other treatments.*

3.4.1 Pro and contra strengths integration

Participants ranked if they would recommend the exercise to people with deviant eating behaviour. Scores ranged from two to five with a mean of 3.73 points (SD=0.96, min=2, max=5) on a five-point Likert scale (1=totally disagree, […] 5=totally agree). Meaning that the exercise was rather recommended. The general recommendation of the exercise can be found back in the answers participants gave concerning an integration of the concept of strength enhancement in treatments of eating disorders. When analyzing the pro integration arguments, the theme of its utility emerged. Eleven participants simply mentioned to approve the integration of strength-based exercises: "*Useful*" (R.1). While three participants considered the integration of the strength enhancement approach as a necessity: "*It is very positive and necessary.*" (R5).

On the contrary, five participants mentioned to be against the integration of strength-based interventions in treatments of eating disorders. The integration was either considered dispensable (n=3) or superfluous (n=2): "*I would not integrate it because it is not useful.*" (R6) and: "*I think that I would gain more from it now as compared to during my eating disorder.*" (R5).

3.4.2 Target group

Six participants recommended the exercise to anyone, irrespective if someone has abnormal eating behaviour or not. When analyzing the recommendations two subthemes emerged. The first is the benefit for everyone (n=4): "*I would recommend this exercise to anybody, not only eating disordered.*" (R4). The second is that the exercise is not harmful for anyone (n=2). Respondent three mentioned: "*This exercise does no harm to anyone, I think*." (R3).

Participants were explicitly asked whether they would recommend the exercise to anorexia nervosa patients. Three sub themes emerged from analyzing their opinions. The majority of the participants mentioned that especially anorexia nervosa patients would have deficits in self-worth (n=8). They therefore considered them to have the most benefit from

strength exercises: "*They [anorectics] have to learn how to love themselves*" (R.3). Two participants considered strength exercises as appropriate for anorexia nervosa because they are not too confrontational: "*It is not a big intrusion.*" (R14), "*They connect (more or less) to the therapy.*" (R1). One participant said however that his recommendation would depend on individual characteristics: "*Depends on individual.*" (R5).

Two participants recommended the strength-based exercise explicitly to: "*People with an eating disorder.*" (R14). One participant on the contrary would not recommend this exercise to: "*People with an eating disorder.*" (R6). More unsuitability criteria were unmotivated persons: "*People who do not want to change anything.*" (R13) or persons with too severe symptoms: "*I think you have to be further in your recovery to really gain anything from it.*" (R5).

3.4.3 Timing of exercise

Concerning a possible integration of the concept of strength enhancement in treatments three participants preferred an integration after symptom reduction: "*I think strengths are very important but not at the beginning of a therapy.*" (R5). One participant preferred a post treatment integration: "*I think that I would gain more from it now as compared to during my eating disorder.*" (R5).

Participants had to indicate if they would like to perform the strength-based exercise themselves. Answers were regarded as giving indications for potential treatment integrations. Four participants mentioned to would not make prospective use of the exercise. Three reasons were mentioned. The exercise was either regarded as superfluous (n= 2): "*Not again, because I already did a comparable exercise and I still have the results.*" (R4), or unpleasant (n=1): "*I found the second exercise exhausting.*" (R2). Having no more symptoms as a reason was stated by participant eleven: "*No, I do not have any symptoms anymore.*" (R.11).

In total eleven participants stated to would like to make occasionally use of the exercise. Four subthemes emerged when analyzing the reasons for the motivation to exert the exercise. The first is that one participant already applies corresponding exercises: "*I am actually already doing it.*" (R5). Secondly some participants are motivated to make use of it because of the inclusion of others (n=3): "*Yes, maybe, it would be interesting to do it in the friends circle.*" (R7). Thirdly others could imagine doing the exercise when feeling bad or insecure (n=2): "*I think I will do the exercise in the future. Not daily, but if I am feeling bad again I will try to remember me that no human is perfect and that I have strengths as well.*"

(R9). Five participants mentioned to be willing to do the exercise without naming a special occasion, or if it seems convenient to them: "*Yes, why not?*" (R7), "*I do not think that I will do it on a daily basis. This is to time consuming but once in while I could imagine to do it.*" (R1).

3.4.4 Integration form

With regard to the form of integration of the concept of strength enhancement in treatments two participants recommended a combinational integration. The participants mentioned two different types of possible treatment combinations. The first is a combination with psychotherapy: "*A combination of talk therapy and maybe such exercises as homework.*" (R1), "*The sole exercise cannot help, but maybe after therapy or as homework.*" (R9). Another suggestion of participant one was the combination with other positive psychological exercises. In this case the combination with self-compassion exercises: "*It is a good combination.*" (R1).

Three participants regarded the inclusion of strength-based exercises extern to the treatment setting as useful. In the analysis two possibilities of external integrations were mentioned. First as homework's within therapies (n=2): "*A combination of talk therapy and maybe such exercises as homework.*"(R1). Second the integration within every day life after a treatment was mentioned (n=1): "*I can come back to my list of strengths when I have a bad day.*" (R3).

Four participants assessed the integration of strength-based exercises as useful in prevention protocols. In the analysis two subthemes emerged. Participant three mentioned that strength-based exercises may prevent the disease onset: "*My symptoms were not too serious, so positive psychology could certainly have helped me and there would have been no need for other treatments.*" (R.3). The majority of the participants mentioned a prevention of relapses (n=3): "*But if I am feeling bad again I will try to remember me that no human is perfect and that I have strengths as well.*" (R9) and: "*It can be helpful in [recurring] critical moments.*" (R9).

4 Discussion

The findings indicate that the concept of strength enhancement was generally positively received by the participants, who expected beneficial effects and appreciated the integration of comparable exercises into a general treatment of eating disorders, anorexia nervosa

included. However, some participants were afraid to do the exercise because they expected to get to know that they did not have any or just a few strengths and who did not want to discuss this with other people.

4.1 Discussion of Results

4.1.1 Research question I: What are the experiences and attitudes of people with abnormal eating behaviour concerning the concept of strength enhancement?

The majority of participants had no experience with strength enhancement, but still had a positive attitude. However, there was a minority of participants who had a negative attitude, because they expected that strength-based exercises would enhance their occupation with (not) eating which they equate with strengths, as will be discussed in the following.

As said, few participants had experiences with the concept of strength enhancement. Existing experiences were either made in psychotherapy or other therapy sessions however only in a brief and restricted form. The limited experiences participants have with strength-based exercises, demonstrates the novelty of the strength enhancement approach (Seligman, Steen, Park & Peterson, 2005) and its narrow use in eating disorder therapies.

The majority of participants described themselves as open towards the concept of strength enhancement. Reasons for this open attitude were either: openness to experiences, interest in the topic and the little confronting character of the concept. This is in line with the self-determination theory, which holds that intrinsic motivation is based on autonomy, competence and relatedness (Ryan & Deci, 2000). A focus on strengths is likely to foster a sense of competence, while the unconfrontational exercise character ensures the participants' autonomy. Thus, the exercise seems to be in line with at least two basic needs according to the self-determination theory, which might explain the participants' positive attitude.

Most of the participants appreciated the concept of personal strengths. They felt that strengths have the power to evoke positive emotions, make a person valuable for others and distinguishes one from another. Especially the association of strengths with talents, competencies and character traits was mentioned. The importance of positive emotions in life has been acknowledged both by the participants and by theoretical considerations. The "broaden-and-build theory" (Fredrickson, 2004) proposes that the enhancement of positive emotions can have extensive positive benefits regarding social relations, problem solving and creativity.

In contrast, some participants had negative or disorder-related associations with strengths and a fraction of them indicated that they were not interested in strength

enhancement exercises. They seemed to indicate that the exercise made them focus on their eating problem instead of offering a more positive perspective. This might be explained by the fact that some anorectic participants might view their ability to control their eating as their greatest strength. This finding is in line with the assumption that anorexia nervosa is accompanied by a pathological value shift by which being anorectic becomes part of one's identity (Tan, Hope, Stewart & Fitzpatrick, 2006). During the disease, body shape is the main determinant of self-worth, which is why thinness becomes the most cherished and pursued value. Thinness is in turn associated with ambition and being liked by others. If the disease itself is regarded as one's greatest resource, it might explain why patients find it difficult to let go of their disease and focus on other strengths in its place.

The abovementioned findings may be limited by the fact that neither the participants' personalities were assessed (especially with regard to openness to experience), nor were their values measured with a standardized questionnaire. Therefore, the tentative character of the assumptions that openness to experience may result in a positive attitude towards strength enhancement, and a pathological value system may result in a negative attitude must be emphasized.

However, a possible implication is that the strength enhancement approach could be a valuable part of the therapy of eating disorders because it allows the patients to autonomously explore their competencies (Ryan & Deci, 2000). This might counterbalance the other controlling and pathology-oriented aspects of therapy, since the patients' autonomy is undermined through the external control of eating and sports behavior and the conversation circles around dysfunctional thoughts and behavior (Cooper, 2005). Research shows that dropout rates are high in therapy for eating disorders, compliance is low, and that many people with eating disorders do not even want to start a therapy (Fairburn, Cooper, Shafran 2003; Halmi, Agras & Crow, 2005, Nordbø et al., 20012). Reluctance to initiate therapies is also shown in this study where only three of seven diagnosed participants have been in treatment. Thus, it may be hoped that the addition of strength enhancement in eating disorder therapy can make therapy more attractive for patients, which might result in better outcomes.

4.1.2 Research Question II: To what extent is the concept of strength enhancement appealing to persons with abnormal eating behavior?

For the most part, participants expected a positive effect from the exercise, but some were critical about the form, content and potential usefulness of the exercise. One aspect of the intervention, which was evaluated ambivalently, was the involvement of others.

The main expected positive effect was a profound improvement of self-insight and especially insight in their strengths. Interestingly, participants expected an optimization and enhancement of their strengths purely through insight, even though the current exercise does not explicitly aim at strength enhancement. This goes in line with the theoretical assumption that due to the risen awareness of a strength an individual is able to exert it more often and consequently more successfully (Seligman, 2002).

Compared to the number of positive evaluations of the expected effect of the exercise, only few negative evaluations were reported. The exercise was frequently regarded as too long. The exercise required that the participants read 47 definitions of potential strengths. A number of participants asked for a shorter list of strengths to make the exercise more feasible.

A limitation could be that the participants' impression that the exercise was too long was possibly biased by the total length of the questionnaire. It contained two exercises with related questions and was used for two separate studies, so that some questions had to appear twice (once for every exercise). Hence, participants had to spend a significant amount of time reading and answering the questionnaire. This may have led to the impression that the exercise is longer than it is, or that the participants could not differentiate how much time they precisely needed for the specific exercise.

An implication for the improvement of the questionnaire would be to hand out the exercises to the participants separately and to generally shorten the questionnaire.

Another negative evaluation was that the exercise was too difficult. The perceived difficulty was based on the expectation that the participants would not be able to identify any strengths. This may be explained by the negative self-concept, which patients with eating disorders frequently have (Beroerte, 2000; Davey, 2014; Stein & Corte, 2007). This negative self-conception could make it difficult for participants to shift their focus on their positive strengths and talents. The feared absence of strengths is according to Stein and Corte (2007) one representation of typical disorder-specific thoughts. Strengths, which patients with anorexia nervosa frequently value highly, are being skinny, exact and perfectionistic, but they often find it difficult to think of other strengths and resources (Savukoski et al., 201).

From this finding, an implication for the practical application of the strength enhancement approach in the treatment of anorexia nervosa can be inferred. If patients find it difficult to reflect on their strengths it could be beneficial to start with the strengths which anorexia patient tend to naturally appreciate. As described above, anorectic patients typically are perfectionists and are very exact (Srinivasagam et al., 1995). They use these potential

strengths for a negative end, namely the sustaining of their condition (Savukoski et al., 2011). Instead, it could be worked on employing these strengths for positive ends, e.g. in the contexts of healing, professionalism, or academia. It could make the reflection on strengths more approachable if one starts with strengths, which are the most acceptable for anorectic patients.

One aspect of the exercise that polarized was the involvement of others. While the vast majority appreciated the involvement, others were deterred from it.

The wide appreciation is in line with a study of Schmidt and Treasure (2006) that stresses the importance of social interaction for eating disorder patients. Eating disorder patients, and anorectic patients especially, commonly display deficient social networks in both the size and perceived adequacy of relationships (Federeci & Kaplan, 2008; Schmidt & Treasure, 2006). At the same time, eating disorder patients assign special importance to interactions with close others (Federeci & Kaplan, 2008).

The negative evaluation could be explained by the fact that negative encounters with others may at the same time have had such an impact on the individual that closeness to others is perceived as potentially threatening, as it becomes progressively associated with the fear of being exposed to hostility, criticism and conflicts (Schmidt & Treasure, 2006). In this case, reluctance to approach others may simply be too high.

Another explanation is provided by Burney and Irwin (2000) who argued that it can be a taboo to discuss eating disorders. They found that eating disorder patients typically feel ashamed when talking about disorder related topics. This may result in reluctance in initiating conversations with others. Furthermore, participants who were deterred from approaching others found the number of people who they should ask for feedback too high. Having to ask their boss or supervisor was frequently regarded as unfeasible or too confrontational.

A limitation of this finding might be that the participants were recruited through convenience sampling. A great fraction of the participants were acquaintances of the researchers or they were recruited by acquaintances of the researchers (the details of the recruitment problems will be described below). From this it might be assumed that the participants were on average less reluctant to talk about their illness than the typical patient with abnormal eating behavior. Furthermore, some of the participants were psychology students. It may be expected that these participants have an affinity for reflecting and discussing mental health. As a consequence, it might be that the involvement of others was evaluated even more positively compared to a random clinical sample.

From the ambivalent evaluation of the involvement of others, several implications for

an improvement of the exercise can be deducted. Social relations seem to be a core factor for the recovery from eating disorders, but the patients need to be open for them and the feedback needs to be in a feasible form. Therefore, it seems a good idea not to skip the involvement of others altogether, but to keep it at least as a voluntary option. To lower the threshold and to make the involvement of others more appealing, it could be considered not to encourage participants to ask their bosses, since this seemed especially confrontational. Furthermore, it could be emphasized even more strongly that the participants do not have to mention that they ask about strengths in the context of an eating disorder therapy. In this way, the taboo-character of eating disorders might be less influential (Burney & Irwin, 2000).

4.1.3 Research Question III: What do people with abnormal eating behaviour think of the integration of strength enhancement and positive psychological exercises in general in the treatment for eating disorders?

The vast majority recommended the inclusion of the presented exercise as well as strength-based exercises in general. While some participants labeled the integration as merely useful, others were convinced that the integration is a necessity and long due.

Participants frequently recommended the exercise not only to people with abnormal eating behaviors but to everyone. This can be explained in the usually not harmful and little confrontational nature of positive psychological exercises in general. In fact, strength enhancement has been used in a number of different contexts, such as work (Hiemstra & Yperen, 2012), education (Kalke, Glanton & Cristalli, 2007), and social work (Norman, 2000). In literature positive psychological exercises are commonly recommended also to people who are already feeling well with the anticipated aim to reach a flourishing state of being (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000).

Others advised not to confront an individual with this exercise when unmotivated. This notion is consistent with the research of Hsu, Crisp and Callender (1992) and Pettersen and Rosenvinge (2002) who found out that ‘being ready’ and feeling ‘motivated to change’ were important factors in the process of recovery from eating disorders. Generally, it can be said that positive psychological interventions are useful only when the confronted individual is willing to change. Pure symptom reduction may be reached because patients may be able to force themselves to eat, but it seems impossible and even counterproductive to force oneself to have positive emotions (Bohlmeijer et al., 2016).

Concerning the form of integration of strength enhancement into general treatment, several participants advised a later integration after symptom reduction. Strength-based

approaches were considered unsuitable in severe disorder stadia. Participants mentioned predominating negativity as a reason why too severely ill would be unapproachable for strength enhancement. This is in line with findings that severe symptoms or an acute illness stadium hinder an individual to process and to be open towards positive concepts like strengths (Bohlmeijer et al., 2016).

Regarding the form of the performance of the exercise and its integration in treatment, most participants indicated to be interested in performing the exercise by themselves in the form of self-help, which can be seen as proof that people with abnormal eating behaviour are open and motivated towards the concept. No one indicated to expect that sole strength-based interventions could be sufficient to heal an eating disorder. The founders of the strength-based approach Seligman and Csikszentmihalyi (2000) always stressed that their aim is not to erase common work on pathology, and dysfunction. Rather, their aim is to build up an integrative discipline about human resilience, strength, and growth to complement the existing knowledge base of diagnostics and treatment.

Participants viewed the strength enhancement approach as valuable for the prevention of the onset or relapse of eating disorders. Strength enhancement is well known to prevent depression and anxiety in children and adults (Seligman, 2002; Sin & Lyubomirsky, 2009), so it might be assumed that it can be effective in eating disorders, too. Moreover, current CBT approaches regularly fail to prevent relapse (Cooper, 2005). Strength enhancement might address maintenance factors of eating disorders such as a low self-esteem (Beroerte, 2000) due to an absence of strength awareness. So, strength enhancement may help to alleviate a notorious weakness of traditional eating disorder therapy by helping to prevent relapse.

A limitation regarding the participants' expectations of the exercises effect is that due to reasons of practicability, the participants were only required to read the exercise and not to perform it. So, the experience with the exercise is naturally limited, which puts the validity of the answers into question. However, it cannot be ruled out that some participants did perform the exercise. In this way, the participants and their answers would not all be comparable. It would strongly be recommended that future research should ask participants to perform the exercises and to control it, too. In this way it would be ensured that the participants are equally acquainted with the exercise and can competently and validly evaluate the exercise.

These findings implicate altogether that further research should focus on inclusion and exclusion criteria for the performance of the exercises to ensure optimal benefitting and to prevent potential negative effects.

4.2 Strong points and general limitations

The strength enhancement approach has so far not been researched in the context of eating disorders. The study therefore gives first valuable insights into the suitability of this positive psychological construct in this patient group. This helps to increase awareness on the impact strength enhancement may have in treating eating disorder symptomatology. However, the study has a number of serious limitations that should be taken into account when interpreting the results.

First, we encountered severe recruitment problems. Initially the aim was to interview anorexia nervosa inpatients, which proved impossible due to ethical and recruitment issues. In particular participants showed major unwillingness to conduct face-to-face interviews, which may be explained by the earlier mentioned taboo-character of eating disorders (Burney & Irwin, 2000). In order to lower the threshold for participants the decision was made to use anonymous questionnaires, which ultimately could be filled in by all people having abnormal eating behaviours. The revised research method led to several related limitations.

Second, generalizability is limited by the small sample size and the fact that the far majority of the participants were Caucasian, well-educated women, all recruited from a non-random sample. Thus, results must be analyzed with caution. This issue could be addressed in the future by employing a more targeted sampling strategy so that a diverse and greater sample can be created.

A third resulting limitation concerns the design of the study. An online questionnaire had to be used instead of interviews. An online questionnaire had the disadvantages that it was not possible to ask clarifying questions or ask for examples. This might have led to poorer data, an increased risk of misconception and a reduced chance of saturation of the data.

4.3 Implications and Recommendations for Future Research

The result of the study is the corroboration of the important concept of strength enhancement, but relatively little in depth knowledge exists of how strength enhancement might be developed or translated into a coherent, explicit treatment protocol for eating disorders. Future research should therefore focus on result validation by generating quantitative research with large groups, preferably anorexia nervosa patients. Participants in different disease stages could carry out strength-based exercises over a longer period. By using cross-sectional as well as longitudinal research designs it could be checked whether the qualitative findings of this study can be extended and generalized to a broader eating disorder population. Increased

awareness of the power of the strength enhancement approach in eating disorders may have important implications for prospective treatment, relapse- and disease- prevention programmes.

Further research is needed to increase awareness in the topic to establish the exact role strength enhancement may play in different eating disorders and disease stadia, and to develop more sufficient and tailored treatment programmes

This study made a start by examining what participants with abnormal eating behaviour think of positive psychological exercises based on the concept of strength enhancement. The positive results of this study suggest that this topic is indeed valuable for the further optimization of the therapy of eating disorders.

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Appendix

Appendix A. Newsletter Recruitment Call

Ben jij enthousiast de behandeling van Anorexia Nervosa patiënten uit te breiden? - Dan is dit onderzoek zeker interessant voor jou!

Wie zijn wij?
Wij zijn Lea en Franziska, twee Psychologie studenten op de Universiteit Twente in Enschede. Ons afstudeeronderzoek richt zich op de toepasbaarheid van oefeningen uit de Positieve Psychologie in de behandeling van Anorexia Nervosa.

Positieve psychologie- Wat is dat eigenlijk?
Dit is een stroming binnen de psychologie die is gericht op het ontdekken van je sterke kanten, je positieve emoties en persoonlijke groei in plaats van op het verminderen van symptomen en klachten.

Wat gaan wij doen?
Met behulp van jouw deskundigheid op het gebied van Anorexia Nervosa willen we nagaan in hoeverre positieve psychologische oefeningen goed aansluiten bij de belevingswereld van (ex)patiënten en of dit van toegevoegde waarde kan zijn in een behandeling. Hoe doen we dat? - Dit doen we door jou enkele positief psychologische oefeningen voor te leggen tijdens een interview (of telefonisch) waarbij we nagaan wat jouw eerste indruk van deze oefeningen is. Het interview zal in april of begin mei plaatsvinden. Jouw mening als ervaringsdeskundige is hier heel waardevol.

Wie zoeken wij?
Ben jij hersteld van Anorexia Nervosa, ouder dan 16 jaar en heb je zin om de behandeling van Anorexia Nervosa patiënten te verbeteren? Dan is dit jouw kans!
Let op: Als je jonger bent dan 18 jaar, moet er toestemming gegeven worden voor deelname door ouders/verzorgers.

Ben je geïnteresseerd? Stuur ons dan een e-mail (l.k.kretzschmar@student.utwente.nl & f.a.gerlach@student.utwente.nl). Dan nemen we zo snel mogelijk contact met je op om meer informatie te geven en een interview te plannen.

Bedankt voor je interesse!

Groeten,
Lea en Franziska

UNIVERSITY OF TWENTE.

Appendix B. Questionnaire overview including strength-based exercise

Introduction

Beste deelnemer,

Hartelijk bedankt voor je interesse in ons onderzoek. We zijn Lea en Franziska, derdejaars Psychologie studenten op de Universiteit Twente in Enschede.

Ons afstudeeronderzoek richt zich op positieve psychologie. Dit is een stroming binnen de psychologie die is gericht op het ontdekken van je sterke kanten, je positieve en groei in plaats van op het verminderen van symptomen en klachten. Ook het mild en vriendelijk zijn naar jezelf hoort bij positieve psychologie.

Het doel van ons onderzoek is om na te gaan of de actuele behandelmethoden bij patiënten met een eetstoornis kunnen worden uitgebreid met oefeningen uit de positieve p vragen wij leeftijdgenoten die ook een (min of meer) problematische relatie met eten hebben of hadden om hulp. We zijn geïnteresseerd of deze oefeningen goed aansluite mogelijkheden voor verbetering zijn.

Als je vragen hierover hebt kun je ons altijd via e-mail bereiken (l.k.kretzschmar@student.utwente.nl; f.a.gerlach@student.utwente.nl).

Alvast bedankt voor jouw tijd.

Met vriendelijke groeten,
Lea en Franziska

Informed consent

Het invullen van de vragenlijst duurt ongeveer 30 minuten. Je deelname aan deze studie is volledig vrijwillig. Je bent vrij om het onderzoek op stoppen zonder een reden aan te geven. We zijn geïnteresseerd in algemene resultaten, dus er zijn geen goede of foute antwoorden. Je antwoorde anoniem, er zal geen identificerende informatie over je worden verzameld. De gegevens worden alleen voor het doel van deze studie gebruikt.

Ik verklaar op een voor mij duidelijke wijze te zijn ingelicht over het doel van het onderzoek. Ik weet dat de gegevens en resultaten van het ond anoniem en vertrouwelijk aan derden bekend gemaakt zullen worden. Mijn vragen zijn naar tevredenheid beantwoord.

Door op 'Ik ga akkoord' te klikken, bevestig je om deel te nemen aan deze studie. Als je het niet eens bent, beëindigt je de studie nu.

- ○ Ik ga akkoord

Block 3-opening questions

We willen je vragen eerst een aantal vragen te beantwoorden over je eetgedrag.

Heb je zelf te maken gehad met een afwijkend eetpatroon? (bv. langdurige diëten, heftige eetbuien of verliest van eetlust en hongergevoel)

- ○ Ja
- ○ Nee

Ben je ooit met een eetstoornis gediagnosticeerd? Zo ja, welke van de onderstaande?

- ○ Anorexia Nervosa/Magerzucht
- ○ Bulimia Nervosa/ Boulimie
- ○ Binge eating/Eetbuien
- ○ Anders, namelijk
- ○ Ik ben nooit gediagnosticeerd

Als je geen diagnose hebt ontvangen tot welke groep zou je eetgedrag het meest waarschijnlijk passen?

- ○ Anorexia Nervosa/ Magerszucht
- ○ Bulimia Nervosa/Boulimie
- ○ Binge eating/ Eetbuien
- ○ Anders, namelijk

Block 4

We willen je graag vragen om de volgende oefening goed door te lezen.

Sterke kanten oefening

Hieronder vind je een (alfabetisch) overzicht van 47 persoonlijke sterke kanten en een korte omschrijving van elke sterke kant. Deze lijst is ook te vinden in Hoofdstuk 2 van het boek *Dit is jouw leven* geschreven door Ernst Bohlmeijer en Monique Hulsbergen.

1. Lees elke sterke kant en beschrijving rustig door en kruis in de eerste kolom (1) aan of een sterke kant op jou van toepassing is. Vul eerst de hele lijst in (meerdere pagina's), daarna volgt de tweede opdracht.

Overzicht sterke kanten		**1**	**2**
Aanpassingsvermogen *Flexibel, improvisatievermogen, buigzaam*	Je kunt goed inspelen op veranderingen en die waar nodig loslaten.	☐	☐
Anticiperend vermogen *Vooruitkijken, voorlopen*	Je bent goed in het voorzien van mogelijke problemen en het ondernemen van acties om deze problemen te voorkomen.	☐	☐
Authentiek *Oprecht, eerlijk, spontaan, betrouwbaar, openhartig*	Je blijft altijd jezelf en handelt vanuit je waarden, ook in moeilijke situaties.	☐	☐
Avontuurlijk *Ondernemend, ontdekkend, uitproberen*	Je durft nieuwe wegen te bewandelen, risico's te nemen en "out of the box" te denken.	☐	☐
Behulpzaam *Dienstverlenend, collegiaal, zorgzaam, onbaatzuchtig*	Je staat klaar voor anderen en kunt anderen goed ondersteunen.	☐	☐
Bescheiden *Eenvoudig, ingetogen, niet opdringerig*	Je blijft op de achtergrond en erkent de bijdrage van anderen in het succes.	☐	☐

1

Bron: Bohlmeijer, E. T. & Hulsbergen, M. (2013). Dit is jouw leven. Ervaar de effecten van de positieve psychologie. Amsterdam: Uitgeverij Boom

Competitief *Strijdvaardig, winnaars-mentaliteit*	Je daagt mensen uit en gaat de strijd aan. Je wilt graag de beste zijn.	☐	☐
Creatief *Artistiek, origineel, kunstzinnig*	Je komt met nieuwe producten, ideeën, combinaties.	☐	☐
Daadkrachtig *Actiegericht, doortastend, voortvarend, enthousiast*	Je kunt snel en adequaat handelen.	☐	☐
Efficiënt *Doelmatig, snel, kort en bondig*	Je weet de tijd altijd optimaal te benutten.	☐	☐
Emotioneel intelligent *Sensitief, gevoelig, empathie, zelfbewust, fijngevoelig*	Je hebt snel door welke emoties en gevoelens in anderen en jezelf omgaan.	☐	☐
Ethisch *Moreel, moraalfilosofie*	Je hebt een sterk ontwikkelde moraliteit en baseert je handelen op basis van wat je goed en fout vindt.	☐	☐
Evenwichtig *Stabiel, in balans, kalm, verstandig, zelfverzekerd, nuchter*	Je blijft altijd rustig, ook in moeilijke situaties. Je hebt een sterk vertrouwen in jezelf.	☐	☐
Gedreven *Enthousiast, daadkrachtig, ambitieus, bezield, toegewijd, slagvaardig*	Je hebt een sterke motivatie om veel te bereiken en ergens voor te gaan.	☐	☐
Geduldig *Open, ontvankelijk, geleidelijk*	Je bent in staat om zaken hun tijd te geven.	☐	☐
Groeigericht *Leergierig, feedbackgericht*	Je hebt een sterke motivatie om jezelf te ontwikkelen en ziet daar altijd kansen voor.	☐	☐
Humoristisch *Komisch, grappig, speels, geestig*	Je hebt oog voor grappige kanten van situaties en kunt daarmee relativeren, je kunt mensen aan het lachen brengen.	☐	☐
Inlevingsvermogen *Compassie, begripsvol, medelevend*	Je hebt begrip voor hoe andere mensen zich voelen en handelen, hun lijden en beperkingen. Je kunt je in de ander verplaatsen.	☐	☐
Innovatief *Ideeënrijk, vindingrijk, vernieuwend, improvisatietalent*	Je ziet altijd nieuwe mogelijkheden, benaderingen en oplossingen.	☐	☐

2

Bron: Bohlmeijer, E. T. & Hulsbergen, M. (2013). Dit is jouw leven. Ervaar de effecten van de positieve psychologie. Amsterdam: Uitgeverij Boom

Inspirerend *Stimulerend, aanmoedigend, motiverend*	Je weet anderen te enthousiasmeren en te motiveren om dingen op te pakken en te participeren.	☐	☐
Luisteren *Aandachtig, aanwezig*	Met volle aandacht aanwezig zijn en de essentie horen van wat de ander zegt.	☐	☐
Moedig *Dapper, onbevreesd, lef hebben, heldhaftig*	Je handelt en beslist, ook wanneer deze handelingen of beslissingen je angst inboezemen.	☐	☐
Nieuwsgierig *Belangstellend, geïnteresseerd, graag op de hoogte*	Je bent geïnteresseerd in nieuwe dingen en wilt graag weten hoe iets zit.	☐	☐
Ondersteunend *Dienstverlenend, voorwaardenscheppend*	Je ziet steeds mogelijkheden om anderen van dienst te zijn en te helpen.	☐	☐
Oog voor detail *Zorgvuldig, precies, scherpzinnig*	Je let op de details en bent pas tevreden als het helemaal in orde is.	☐	☐
Oog voor rechtvaardigheid *Oog voor gelijkheid, eerlijkheid*	Je bent alert op een gelijke en eerlijke behandeling van alle betrokkenen.	☐	☐
Oog voor verbetering *Optimaliseren, vervolmaken, vooruitgaan*	Je ziet altijd mogelijkheden om processen en producten te verbeteren.	☐	☐
Ontspannen *Luchtigheid, losheid, relaxed, zorgeloosheid*	Je bent in staat om rust te vinden en te ontspannen.	☐	☐
Oplossend vermogen *Ontraadselen, uitpuzzelen*	Je bent goed in het oplossen van problemen.	☐	☐
Optimistisch *Denken in mogelijkheden, geloof*	Je ziet altijd kansen en bent positief ingesteld.	☐	☐

in eigen kunnen, opgewekt			
Ordelijk *Systematisch, netjes, gestructureerd, degelijk*	Je hebt alles overzichtelijk en goed opgeruimd geplaatst.	☐	☐
Organiserend vermogen *Aansturen, regelen, klaarspelen, coördineren*	Je weet op tijd zaken en mensen bij elkaar te brengen.	☐	☐
Overtuigingskracht *Overhalen, voor zich winnen*	Je bent er goed in om anderen jouw visie te laten omarmen.	☐	☐

3

Bron: Bohlmeijer, E. T. & Hulsbergen, M. (2013). Dit is jouw leven. Ervaar de effecten van de positieve psychologie. Amsterdam: Uitgeverij Boom

2. Kijk eens naar de lijst met aangekruiste sterke kanten. Kruis nu in de tweede kolom (2) die sterke kanten aan waar je ook veel plezier aan beleeft, en die je energie geven wanneer je ze actief gebruikt.

   Wanneer je alleen een kruisje in kolom (1) hebt staan, gaat het waarschijnlijk om aangeleerde vaardigheden. Wanneer je een kruisje in kolom (1) en (2) hebt staan, gaat het waarschijnlijk om een sterke kant van jou. Probeer je vooral op die sterke kanten te focussen in je werk en privéleven!

3. Vraag een paar mensen in je omgeving om mee te denken. Je kunt erbij zeggen dat je dit doet in het kader van een programma om tot meer (werk)plezier en inspiratie te komen. Geef drie tot vijf mensen bovenstaand overzicht van sterke kanten. Kies een mix van mensen zoals je partner, buurvrouw, familielid, leidinggevende (spannend maar echt de moeite waard), en minimaal 1 persoon met wie je geen intieme of hechte band hebt.

   Vraag deze mensen om vijf kwaliteiten te kiezen die ze het meest op jou van toepassing vinden. Vraag hen ook om bij elke kwaliteit die ze gekozen hebben een of meer concrete voorbeelden te noemen, waarin ze jou met die sterke kant aan het werk zagen. Voer bijvoorbeeld een gesprek met ieder van hen zodat ze

hun antwoorden kunnen toelichten. Het doel is om inzicht te krijgen in jouw sterke kanten. Een paar tips voor zo'n gesprek:

- Luister goed en laat de antwoorden op je inwerken.
- Vraag door als het je niet helemaal duidelijk is. Dit lijkt onbescheiden, maar dat is het niet: je wilt graag zo veel mogelijk helder hebben. Als je een sterke kant niet direct herkent is dat juist interessant.
- Bedank voor de moeite en voor eventuele complimenten.

4. Leg nu alles eens naast elkaar, van jezelf en van de anderen. Welke nieuwe inzichten heb je gekregen? Bedenk dat een sterke kant van jou voor jezelf "heel normaal" is, je ziet het zelf niet snel als sterke kant maar anderen juist wel! Het kan zijn dat je een eigen beschrijving hebt gevonden van een sterke kant, dat je diverse vaardigheden kunt samenvoegen tot één beschrijving die de lading beter dekt, of dat je het nog iets preciezer kunt formuleren.

5

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Schrijf hieronder nu jouw vijf belangrijkste sterke kanten op. Dus die kwaliteiten die je ook energie en plezier geven wanneer je ze gebruikt.

Sterke kant	Omschrijving van de sterke kant in eigen woorden
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

6

Bron: Bohlmeijer, E. T. & Hulsbergen, M. (2013). Dit is jouw leven. Ervaar de effecten van de positieve psychologie. Amsterdam: Uitgeverij Boom

Block 10

We willen je nu graag vragen om enkele vragen met betrekking tot de tweede oefening te beantwoorden. Er worden voornamelijk open vragen g
mag ook steekwoorden gebruiken om deze vragen te beantwoorden.

Wij vragen jouw om hulp als ervaringsdeskundige en zijn alleen in jouw eerste indruk van deze oefening geïnteresseerd. Er bestaan geen goede
antwoorden.

Block 11

Wat is jouw eerste indruk van deze oefening?

	helemaal ongeschikt	ongeschrikt	noch ingeschikt, noch	geschrikt	h
Hoe geschrikt vond je deze oefening	○	○	○	○	

Wat vond je positief, belangrijk of zinvol aan deze oefeningen?

Wat vond je negatief, onplezierig, onduidelijk of slecht aan deze oefening?

Zou je deze oefening graag terug hebben gezien in je eigen behandeling en waarom wel/niet?

Zou je deze oefening in toekomst zelf willen doen/uitproberen en waarom wel/niet?

In hoeverre ben je met de onderstaande stelling een?

	helemaal mee oneens	mee oneens	noch mee oneens, noch mee eens	mee eens	h
Ik zou deze oefening mensen met een eetstoornis aanraden	○	○	○	○	

Licht je antwoord kort toe. Waarom zou je deze oefening mensen met een eetstoornis aanraden/ Waarom zou je deze oefening niet aanraden?

Welke mensen zou je deze oefening minder aanraden?

Heb je ideeën voor verbeterpunten voor deze oefening?

Wat betekent het begrip 'sterke kanten' voor je?

Waar associeer je het begrip 'sterke kanten' mee?

Ben je dit begrip/ sterke kanten benadering in je behandeling tegengekomen? Zo ja, waar?

Wat vind je van de integratie van sterke kanten oefeningen in een behandeling voor mensen met een eetstoornis?

Block 12

Zou je je kunnen voorstellen dat positieve psychologische oefeningen in de behandeling van eetstoornissen waardevol kunnen zijn?

- ☐ Ja, omdat
- ☐ Nee, omdat

Hoe zou volgens jou de ideale therapie voor mensen met een eetstoornis eruit zien?

Op welke moment in de behandeling zou je behoefte hebben (gehad) aan positief psychologische oefeningen?

Zou je je voor kunnen stellen deze oefeningen in je alledaagse leven (in de toekomst) te gebruiken? (waarom wel/niet)

Zou je je zelf toegankelijk voor dit soort oefening beschrijven?

- ☐ Ja, omdat
- ☐ Nee, omdat

Zou je je voorstellen dat dit soort oefeningen jouw kunnen helpen met je afwijkend eetgedrag?

- ☐ Ja, omdat
- ☐ Nee, omdat

Vind je dit soort oefening voor Anorexia Nervosa patiënten (Magersucht) geschrikt?

- ☐ Ja, omdat
- ☐ Nee, omdat

Block 13 - Algemene/demografische vragen

What is jouw geslacht?

- ○ vrouw
- ○ man
- ○ Zeg ik liever niet

What is jouw leeftijd?

Hoe lang ben je in behandeling geweest voor een eetstoornis?

Wat is je hoogste afgeronde opleiding?

- ○ Basisonderwijs
- ○ VMBO/MAVO
- ○ HAVO
- ○ VWO (Abitur)
- ○ MBO
- ○ HBO
- ○ WO/Bachelor
- ○ WO/Master
- ○ Anders, namelijk

Hoe tevreden ben je met je lichaam in het algemeen?

nog ontevreden nog

	heel ontevreden	onevreden	tevreden	tevreden
Hoe tevreden ben je met je lichaam in het algemeen?	○	○	○	○

Block 14-Afsluiting

We zijn nu aan het einde van de studie gekomen.
Nogmaals bedankt voor je deelname.
Als je vragen of opmerkingen hebt kun je ons altijd via e-mail bereiken (l.k.kretzschmar@student.utwente.nl; f.a.gerlach@student.utwente.nl).

>> We willen je graag vragen, als je nog andere mensen kent die ervaring hebben met afwijkend eetgedrag, om hun de link naar onze studie te sturen.

Bedankt voor het delen!

Appendix C. Codescheme

Code level 1	Code level 2	Definitions of second level codes	Example Quotations
Definition strengths	Talents and competencies	Strengths represented in inherent things or skills someone is good in	*"Having talents, being good at something, to make something with joy".*
	Character traits	Strengths represented in inherent traits	*"Positive traits like being social, empathic".*
	Differentiating factor	Strengths as something that set oneself apart from others	*"Positive traits in which someone is better than average".*
	Evoking positive emotion	Strengths as having the power to evoke positive emotions	*"Positive feelings like satisfaction".*
	Value for others	Strengths as being something of value for other persons or society in general	*"Areas in which I can contribute something to society".*
	Illness related	Strengths associated with aspects of eating disorder symptomatology	*"Food".*
Attitude	Openness to experience	Openness to the concept explained by general interest in new things	*"I am curious and open to new things".*
	Interest in topic	Openness to the concept because of interest in the topic	*"I also like to read related magazines".*
	Practicability	Openness to the concept because of its simple character	*"It only takes a little step".*
	Openness to topic when feeling well	Openness to topic only when feeling good	*" If I am in a good mood the exercise seems good to motivate me even more".*
Experiences	No experience	Having no experience with strength-based exercises in general.	*"We did not really touch upon the topic of strengths".*

	Within psychotherapy	Existing experiences within own psychotherapy sessions	*"In a similar form. I had to write down strengths of myself, thus there was no such a template and no summary at the end".*
	Other therapies	Existing experiences within other therapy forms	*"Occupational therapy".*
	External to clinical settings	Existing experiences external to professional therapy sessions	*"I also like to read corresponding magazines".*
Positive	Liked content	Aspects of or the exercise content itself which were appreciated	*"It was positive that I did not need to think of strengths by myself".*
	Appealing exercise factors	Aspects of the exercise which were especially liked by the participants	*"Especially to hear it from people from your immediate environment makes this exercise very useful".*
	Potentially useful	Areas on which participants expected an effect of the strength-based exercise after reading the exercise instructions	*"It helps to re-learn a respectful handling with yourself".*
Negative	Disliked content	Aspects of the content of the exercise which were not appreciated	*"I do not like answering the questions".*
	Too long	Regarding the length of the exercise as too long	*"Long explanations for the concepts".*
	Doubts effectiveness	Areas or reasons why participants expected no or contrary effects of the strength-based exercise after reading the exercise instructions	*"I do not think that if you emphasize that someone is very nice that this influences the body-image of this person".*
	Too difficult	The exercise was described as too difficult for too severely ill or for eating disordered persons	*"It is hard to think about your strengths when you're self-critical. If I am too perfectionist again (which*

		generally	*can be a strength) it does not help me much. I only think of everything that is bad and how dissatisfied I am. The exercise will not help me then".*
	Possible absence of strengths	The fear of the realization to have no strengths after conducting the exercise	*"What happens if you do not have any of these strengths?".*
Improvements	Extension	Proposition to extend the strength-based exercise in order to improve it	*"Next to personal strengths it would be important to learn to appreciate all the other good things in my life".*
	Involvement of fewer parties	The recommendation to involve fewer parties in the exercise	*"Having to involve fewer parties".*
	Renaming of the word "strength"	The recommendation to rephrase the word "strengths" differently	*"I would describe the concept of 'strengths' differently".*
Pro strengths integration	Utility integration	Expected areas and reasons why the integration of the strength enhancement approach in eating disorder therapies may be of positive influence	*"I think that personal strengths should be a part of every psychosomatic therapy, because it enables self-evaluation".*
Contra strengths integration	Dispensability	Seeing no need for the integration of the strength enhancement approach in eating disorder therapies.	*"I actually think that I would gain more from it now as compared to during my eating disorder".*
Target group	Everyone	The recommendation of the strength-based exercise to everyone, independent of disease features	*"I think for every person it is useful to think about their strengths (but also weaknesses). What sets me apart from others? What is special about me? It can help anyone to understand themselves better".*
	Anorectics	The recommendation of the strength-based exercise especially to anorectic persons	*"Anorectics often have little self-esteem".*

	Eating disordered in general	The recommendation of the strength-based exercise to eating disordered persons in general	*"I would recommend this exercise to people who have a special eating behaviour or are not satisfied with their eating behaviour or with their figure".*
Unsuitability criteria	Severely ill	The recommendation to not confront patients in an acute disease stadium with the concept of strength enhancement	*"I think it can be difficult to process this information for someone who is heavily affected by his eating disorder".*
	Unmotivated persons	The recommendation to not confront unmotivated patients with the concept of strength enhancement	*"I wouldn't recommend it when you are unmotivated towards change ".*
	Persons with eating disorders	The recommendation to not confront people with eating disorders with the concept of strength enhancement	*"People with an eating disorder".*
Timing of exercise	Later in treatment	The preference to integrate strength enhancement exercises on a later point in time in treatment protocols for eating disorders	*"In a late stage of therapy certainly, but in the beginning it is so bad, you cannot answer to this appropriately (one is rather too desperate, frustrated, ashamed, than that one can deal with something like that)".*
	Never	The indication to not being interested in making prospective use of strength enhancement exercises	*"Too unpleasant".*
	Occasional self-use	The indication to show interest in making occasional use of strength enhancement exercises in different life situations	*"I do not think that I would do it daily because it is also time consuming. But now and then I can imagine to do it".*
Integration form	Combination with other treatments	The preference to integrate strength enhancement exercises in combination with common treatments for eating disorders	*"The exercise alone cannot help. But maybe after the therapy or as homework".*
	Outside clinical setting	The preference to integrate or exert strength enhancement exercises extern to therapy sessions	*"Maybe such exercises as homework".*

	Prevention	The recognition of potential preventive powers of strength enhancement exercises	*"But when I'm feeling bad again I try to remember me that no one is perfect and that I have strengths as well".*