p-ISSN: 2184-2205 e-ISSN: 2184-3414 ISBN: 978-989-35106-0-5 © 2023
https://doi.org/10.36315/2023inpact007

DEFENSIVE COPING IN WOMEN WITH EATING DISORDERS

Angelika Kleszczewska-Albińska
Department of Pedagogy and Psychology, University of Finance and Management (Poland)

Abstract

Eating disorders are highly prevalent problems observed across world populations, especially among women. Current analyses lead to the conclusion that with time the issue becomes more serious and it affects more people. It is underlined that people with eating disorders have problems with adequate emotion regulation that leads to emotion suppression in patients with anorexia nervosa. The results for persons suffering bulimia nervosa are ambiguous, whereas no data is given for people with binge eating disorders. One of the approaches to studies concerning coping with difficult emotions states that people differ according to their level of anxiety and defensiveness. Based on those two measures it is possible to identify four independent groups of people: repressors (low level of anxiety, high level of defensiveness), low anxious (low scores of anxiety, and defensiveness), high anxious (high level of anxiety and low level of defensiveness), and sensitizers (high on both anxiety and defensiveness). So far, there were no studies dedicated to verification of defensive coping strategies among people with eating disorders. In the presented study the analysis of this issue was undertaken. In the study participated 127 women, aged 18-69 (M=28.73; SD=7.74). Among all the respondents there were 61 persons without diagnosis, 21 women with anorexia nervosa, 23 respondents with bulimia nervosa, and 22 persons with binge eating disorder. All diagnoses were given by psychiatrists. Respondents filled in Eating Disorder Inventory and Eating Attitudes Test. It was proved that women without eating disorders were recruited mostly from the group of low anxious and repressors. In the group with anorexia nervosa repressors were most frequent. For women suffering bulimia nervosa the most popular was high anxiety, whereas for persons with binge eating disorder low anxiety was the most frequent. The relations between type of disorder and defensive coping style was statistically significant $\chi 2(9)=53.25$; $p<.001$. Based on the ANOVA results it was also proved that there were statistically significant differences between groups identified according to the coping style in their mean attitudes towards eating: $F(3,123)=5.54$; $p=.001$, overeating $F(3,123)=17.46$; $p<.001$, and laxativation $F(3,123)=9.68$; $p<.001$. According to the results it might be stated that repressors, high anxious, and sensitizers are more prone to having eating problems than low anxious, but next studies are needed since gathered results are ambiguous in some respects.

Keywords: *Repression, sensitization, anorexia nervosa, bulimia nervosa, binge eating*.

1. Introduction

Data gathered in the literature proves that there are connections between emotion regulation and eating behaviors (e.g. Patel & Schlundt, 2001). Tendency to overeating is correlated with experiencing negative emotions (Ogden, 2011), while restrictive eating stays connected with high levels of cognitive control (Boon, Stroebe, Schut & Jansen, 1998). Michael Macht (2008) underlined that under emotions a person is able either to control their food intake, decide not to eat any food at all, experience problems with cognitive control over eaten food, decide to use food as a mechanism of regulation of emotions or eat under the influence of emotions. Emotions can disturb processes accompanying nutrition. Affective processes can create needs for food intake or inhibit those desires. They could also be understood as an element of bilateral regulative relationship, where emotions regulate food intake, and food intake regulates emotions (e.g. Evers, Marijn Stok & de Ridder, 2010).

There were studies, in which the connection between emotional control and eating disorders was discovered (Harrison, Sullivan, Tchanturia & Treasure, 2010). Eating disorders quite often co-occur with mood disorders, high levels of anxiety, personality disorders, impulse control disorders, self-injurious behaviors and substance abuse (Keski-Rahkonen & Mustelin, 2016). In some studies it was proved that problems with emotional control may cause or uphold eating disorders, including anorexia nervosa

(Harrison, Tchanturia & Treasure, 2010), binge eating (Dingemans, Danner & Parks, 2017) or obesity (Leehr et al., 2015).

It was discovered that the connection between eating disorders, ruminations and problems with accepting one's own emotions is stronger for people with higher BMI than it is for lower BMI levels (Leppanen, Brown, McLinden, Williams & Tchanturia, 2022). It is possible that problems concerning eating disorders and emotional dysregulation are also connected with defensive styles of coping, that are understood as a relatively stable tendency to cope with difficult or stressful situations through use of repression or sensitization (Weinberger, Schwartz & Davidson, 1979). Up to now studies in which eating disorders and defensive styles of coping were analyzed together were not conducted. It is possible that problems with accepting one's own emotions is connected with repression, while rumination is similar to the tendency for sensitization. Since emotional dysregulation (namely not accepting emotions and ruminations) is correlated with eating disorders, it is therefore justified to empirically verify the connection between eating disorders and defensive styles of coping.

2. Method

2.1. Participants

In the study participated 127 women, aged 18-69 (M=28.73; SD=7.74). Among all the respondents there were 61 persons without diagnosis (age 18-69; M=28.54; SD=8.61), 21 women with anorexia nervosa (age 18-42; M=28.19; SD=7.39), 23 respondents with bulimia nervosa (age 18-39; M=27.7; SD=6.19), and 22 persons with binge eating disorder (age 22-48; M=30.86; SD=7.05). All diagnoses were given by psychiatrists. The number of women without a clinical diagnosis who completed the study was significantly greater than the number of respondents with each type of eating disorder accounted separately $\chi^2_{(2)}$=35,99; p<.001.

It was decided to invite females only to participate in the study, since the general statistics prove that the three mentioned above eating disorders are more common for women than men (e.g. Statistics & Research on Eating Disorders).

2.2. Materials

Four standardized tests were used in the conducted study, out of which two were aimed at measuring different aspects of eating disorders, and two others were introduced to identify the type of defensive coping strategy characteristic for respondents. Problems concerning eating disorders were assessed with Eating Disorder Inventory (Pawłowska & Potembska, 2014) and Eating Attitudes Test (Garner, Olmsted, Bohr & Garfinkel, 1982) in Polish adaptation authored by R. Rogoza, A. Brytek-Matera, A., and D. M. Garner (2016). Defensive style of coping was identified with Polish adaptation of State Trait Anxiety Inventory (Wrześniewski, Sosnowski, Jaworowska, & Fecenec, 2011), and Social Desirability Questionnaire (Drwal, & Wilczyńska, 1980).

Eating Disorder Inventory consists of 37 items with a 5-point Likert scale, and it is used to identify four different attitudes towards eating: (1) negative perception of one's body; (2) overeating; (3) restrictive diet; and (4) laxativation. The questionnaire is reliable, reaching Cronbach's alpha α=.96 for negative perception of one's body; α=.97 for overeating, α=.89 for restrictive diet, and α=.94 for laxativation.

Eating Attitude Test helps to describe eating habits that could be connected to anorexia nervosa, bulimia nervosa or binge eating disorder. The test includes 26 items with a 6-point Likert answer scale. It can be divided into three independent scales: (1) dieting; (2) bulimia and food preoccupation; and (3) oral control, that reach satisfactory reliability of Cronbach's alphas of α=.93for dieting, α=.84 for bulimia and food preoccupation, and α=.89 for oral control. The test results can be also analyzed without the division into certain subscales, and then it reaches reliability of α=.91. When analyzing the general result of the test, reaching the level of at least 20 points is considered as an indicator of possible tendency for eating disorders. This method of interpretation of gathered results was used in the presented study.

Polish adaptation of State Trait Anxiety Inventory (Wrześniewski, Sosnowski, Jaworowska & Fecenec, 2011) was used as an instrument indicating the level of anxiety. The questionnaire includes 20 questions measuring anxiety understood as a temporary state, and 20 other questions for estimation of a stable trait. Each scale includes a 4-point Likert scale. In the described study the scale measuring anxiety understood as a trait was used, and it reached a satisfactory reliability level of Cronbach's alpha α=.88.

The last questionnaire used in the presented study was Social Desirability Questionnaire (Drwal & Wilczyńska, 1980). It was used for assessment of the level of social desirability understood as an indicator of defensiveness level. The instrument includes 29 questions with a true/false response sequence. It includes items that are socially desirable but rather uncommon in society (e.g. "I am never

late for my work"), and other features that are quite frequent in the society, but socially undesirable at the same time (e.g. "I remember I was pretending to be sick in order to avoid something"). The reliability of the test in the conducted study equals α=.84.

3. Results

At first it was checked whether there are any connections between defensive style of coping and type of eating disorder. The crosstab with chi^2 test proved that there is a significant connection between those two variables $\chi 2(9)=53.25$; $p<.001$, with the greatest frequency of repressors among respondents, who declared not having any eating problems. Among females diagnosed with anorexia nervosa there were many repressors as well, whilst in the group with bulimia nervosa there were a lot of high anxious respondents, and in the group diagnosed with binge eating there was a high frequency of low anxious persons. Detailed information is given in table 1.

Table 1. Number of people from low-anxious, high-anxious, repressors, and sensitizers types according to diagnosed eating disorder.

	without a diagnosis	anorexia nervosa	bulimia nervosa	binge eating
low-anxious	16	1	0	10
high-anxious	16	2	16	7
repressors	23	14	0	2
sensitizers	6	4	7	3

Based on the results presented above it could be stated that the most characteristic for respondents diagnosed with anorexia nervosa is a tendency to avoid directing attention toward emotions. People with bulimia nervosa present a propensity towards high levels of anxiety. It is difficult to describe binge eating disorder according to defensive styles of functioning, since most females in that group are recruited from persons with low levels of anxiety. Surprisingly, many repressors were identified in group not diagnosed with any eating disorders.

In the next step, based on the ANOVA analyses, the mean differences between the attitudes toward eating in groups identified based on defensive styles of coping were assessed. There were three significant differences that are given in detail in table 2. below.

Table 2. Results of ANOVA analyses for mean level of attitudes toward eating, overeating and laxativation in groups identified according to defensive style of coping

	low anxious N=27		high anxious N=41		repressors N=39		sensitizers N=20		F	p	η^2
	M	SD	M	SD	M	SD	M	SD			
attitudes toward eating	12.04	7.56	24.22	11.68	24.74	18.09	23.10	14.76	5.54	.001	.12
overeating	15.74	10.45	22.61	9.19	6.82	9.13	16.95	11.44	17.46	.001	.30
laxativation	1.33	2.35	7.98	7.70	3.08	3.86	7.15	7.24	9.68	.001	.19

According to gathered results it is possible to see a certain tendency of representatives of each type to present specific eating attitudes. At the same time it is crucial to be very careful with interpretations of presented data, since in some cases the mean value is not a good descriptive of obtained results. In general, it might be observed that low anxious persons differ from other groups according to their attitudes toward eating. High anxious respondents have the tendency to engage in overeating. In accord with the obtained results disturbances in attitudes toward eating might be observed in repressors. At the same time it is difficult to clearly describe results gained by sensitizers. It seems they might face disturbed eating attitudes; they have a slight tendency toward overeating and probably present an inclination for laxativation as well.

4. Discussion

Based on the gathered results it can be stated that there are differences between groups identified according to their level of defensive style of coping in their mean level of attitudes toward eating, overeating, and laxativation. The healthiest approach toward eating was presented by low anxious

individuals, while high anxious persons and both defensive groups, i.e. repressors and sensitizers presented disturbed attitudes in that area. Based on this data it is possible to hypothesize that repressors are similar to groups declaring high levels of anxiety in some aspects. Overeating was the most frequent for highly anxious persons, and lowest for repressors. It is possible that people experiencing high levels of anxiety engage in overeating as a strategy for regulation of their unpleasant emotions. Repressors on the other hand probably underestimate the level of overeating they truly experience. The results for laxativation are the hardest to explain, especially looking at the standard deviation scores that in all cases are higher than mean values. Since the results for this dimension in all of the groups are very discrepant, other studies in that matter are needed.

The results obtained in the described above study are ambiguous, but in that matter they stay relevant to the data already published in the literature. It was proved that women with eating disorders less frequently use cognitive reinterpretation strategy, and are more prone to apply strategies based on suppression of emotions (Danner, Sternheim & Evers, 2014). Namely, it is underlined that disturbed eating goes in accordance with problems in emotional regulation. Persons with bulimia nervosa have problems using any adaptive coping strategies (Dixon-Gordon, Aldao & De Los Reyes, 2015), while for females with anorexia nervosa quite common is incorporation of repression strategies (Ruscitti, Rufino, Goodwin & Wagner, 2016), and a tendency for withdrawal of positive emotions (Józefik & Pilecki, 1999), that could be considered as a maladaptive strategy.

It was hypothesized that disturbed relations with eating could be differentiated based on the strategies of coping with stress individual uses (Villa et al., 2009). Ineffective styles of coping could result in sustaining unhealthy eating habits that could result in interpersonal conflicts (Holt & Espelage, 2002). Frequent use of disturbed eating behaviors could also result in developing fixed, unhealthy, methods of dealing with difficulties in life (Wiatrowska, 2009). Therefore it is important to plan and conduct further analyses in that area. The results obtained in the study presented above are very hard to interpret. There are no consistent connections between disturbed eating habits and defensive styles of coping, and further analyses are needed in that matter. It is possible that better understanding of relations between eating disorders and defensive styles of coping will help professionals to plan adequate psychological interventions, that most probably should be different for each of the groups identified based on their levels of defensiveness and anxiety.

References

Boon, B., Stroebe, W., Schut, H., & Jansen, A. (1998). Food for thought: Cognitive regulation of food intake. *British Journal of Health Psychology, 3*, 27–40.

Danner, U.N., Sternheim, L., & Evers, C. (2014). The importance of distinguishing between the different eating disorders (sub)types when assessing emotion regulation strategies. *Psychiatry Research, 215*, 727-732.

Dingemans, A., Danner, U., & Parks, M. (2017). Emotion regulation in binge eating disorder: A review. *Nutrients, 9*, doi: 10.3390/nu9111274.

Dixon-Gordon, K.L., Aldao, A., & De Los Reyes, A. (2015). Repertoires of emotion regulation: A person-centered approach to assessing emotion regulation strategies and links to psychopathology. *Cognition & Emotion, 29*, 1314-1325.

Drwal, R.Ł., & Wilczyńska, J.T. (1980). Opracowanie kwestionariusza aprobaty społecznej [Elaboration of the social desirability questionnaire]. *Przegląd Psychologiczny, 23*(3), 569-583.

Evers, C., Marijn Stok, F., & de Ridder, D.T. (2010). Feeding your feelings: Emotion regulation strategies and emotional eating. *Personality and Social Psychology Bulletin, 36*, 792-804.

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. *Psychological Medicine, 12*(4), 871–878.

Harrison, A., Sullivan, S., Tchanturia, K., & Treasure, J. (2009). Emotion recognition and regulation in anorexia nervosa. *Clinical Psychology and Psychotherapy 16*, 348–356.

Harrison, A., Tchanturia, K., & Treasure, J. (2010). Attentional bias, emotion recognition, and emotion regulation in anorexia: state or trait? *Biological Psychiatry, 68*, 755-761.

Holt, M.K., & Espelage, D.L. (2002). Problem-solving skills and relationship attributes among women with eating disorders. *Journal of Counseling & Development, 80*, 346–354.

Józefik, B., & Pilecki, M. (1999). Obraz kliniczny zaburzeń odżywiania się. [Clinical description of eating disorders] W: B. Józefik (red.), *Anoreksja i bulimia psychiczna. Rozumienie i leczenie zaburzeń odżywiania się* (s. 30-39). [Anorexia nervosa and bulimia nervosa. Understanding and treatment of eating disorders]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Keski-Rahkonen, A., & Mustelin, L. (2016). Epidemiology of eating disorders in Europe: Prevalence, incidence, comorbidity, course, consequences, and risk factors. *Current Opinions in Psychology, 29*, 340–345.

Leehr, E.J., Krohmer, K., Schag, K., Dresler, T., Zipfel, S., & Giel, K.E. (2015). Emotion regulation model in binge eating disorder and obesity -a systematic review. *Neuroscience & Biobehavioral Reviews, 49*, 125-134.

Leppanen, J., Brown, D., McLinden, H., Williams, S., & Tchanturia, K. (2022). The role of emotion regulation in eating disorders: A network meta-analysis approach. *Frontiers in Psychiatry, 13*, 793094, doi: 10.3389/fpsyt.2022.793094.

Macht, M. (2008). How emotions affect eating: a five-way model. *Appetite, 50*, 1-11.

(n.d.) Statistics & Research on Eating Disorders. Retrieved December 2nd, 2022, from https://www.nationaleatingdisorders.org/statistics-research-eating-disorders

Ogden, J. (2011). *Psychologia odżywiania się. Od zdrowych do zaburzonych zachowań żywieniowych*. [The psychology of eating: From healthy to disordered behavior]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Patel, K.A., & Schlundt, D.G. (2001). Impact of moods and social context on eating behavior. *Appetite, 36*, 111-118.

Pawłowska, B., & Potembska, E. (2014). Właściwości psychometryczne Kwestionariusza do Badania Zaburzeń Odżywiania u Kobiet (KBZOK) [Psychometric properties of the Women's Eating Disorder Questionnaire]. *Current Problems of Psychiatry, 15*(4), 191-195.

Rogoza, R., Brytek-Matera, A., & Garner, D. M. (2016). Analysis of the EAT-26 in a non-clinical sample. *Archives of Psychiatry and Psychotherapy, 18*(2), 54–58.

Ruscitti, C., Rufino, K., Goodwin, N., & Wagner, R. (2016). Difficulties in emotion regulation in patients with eating disorders. *Borderline Personality Disorders & Emotional Dysregulation, 3*, 3, doi: 10.1186/s40479-016-0037-1.

Villa, V., Manzoni, G.M., Pagnini, F., Castelnuovo, G., Cesa, G.L., & Molinari, E. (2009). Do coping strategies discriminate eating disordered individuals better than eating disorder features? An explorative study on female inpatients with anorexia and bulimia nervosa. *Journal of Clinical Psychology in Medical Settings, 16*, 297-303.

Weinberger, D.A., Schwartz, G.E., & Davidson, R.J. (1979). Low-anxious, high-anxious and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology, 88*, 369-380.

Wiatrowska, A. (2009). *Jakość życia w zaburzeniach odżywiania*. [Quality of life in eating disorders]. Lublin: Wydawnictwo UMCS.

Wrześniewski, K., Sosnowski, T., Jaworowska, A., & Fecenec, D. (2011). *Inwentarz Stanu i Cechy Lęku. Polska adaptacja STAI* [State Trait Anxiety Inventory. Polish adaptation of STAI]. Warszawa, Poland: Pracownia Testów Psychologicznych.