

Emotion Regulation and Eating Disorders

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ABSTRACT

Emotion regulation is a concept of high research interest. Among the most studied areas is its involvement in a variety of psychological disorders, including eating disorders. Eating disorders are mental illnesses that are categorized according to two parameters: body weight and control. Their main types are anorexia nervosa, bulimia nervosa and binge eating disorder. Many studies have identified significant difficulties in regulating emotion in all eating disorders compared to control groups. However, it has been found that difficulties in regulating emotion are not the same in all eating disorders.

Keywords: Emotion Regulation; Eating Disorders; Anorexia Nervosa; Bulimia Nervosa; Binge Eating Disorder

Introduction

Emotion has to do with “a collection of psychological states that contain subjective experience, expressive behavior and peripheral physiological responses”. Emotions are a fundamental characteristic of the human mind (Gross, et al. [1]). The term emotion refers to anything a person feels when assessing an event in a certain way and it is usually accompanied by characteristic changes in behavior (Saarni, et al. [2,3]). Argues that emotions are dynamic processes, created within the brain and influenced by social and evaluative functions, with the aim of preparing the brain and body for action. According to (Lazarus [4]), there is some logic behind the experience of each emotion. Their type, quality and intensity, reflect the way in which each person interprets the events that take place in the environment. The expression of emotion connects intrapersonal and biological processes to interpersonal processes, in a system of interaction. In short, emotions are biological processes that regulate both the brain and the body to respond to internal and external information, which will be subjectively evaluated (Dickman, et al. [5]).

The nature of emotions contains five main characteristics: the stimuli that cause them, nervous system reactions, changes in the physiological functions of the body, external changes of the face and the individual's experiences as a result of experiencing these feelings. Intensity, duration and quality are basic elements of emotions. Tension is about the extent to which we feel a feeling; this can be very strong, moderate or minimal in intensity. Duration is about the time a feeling lasts. Quality refers to the type of mental state it creates and it is divided into positive and negative feelings. Positive can be defined as the feeling that causes mental pleasure in the person and makes him or her feel well about himself or herself and his or her environment. Positive emotions generate various benefits in the individual level, while they can also contribute to a more efficient functioning of organizations (Fredrickson [6]).

Emotion regulation refers to “a distinct set of procedures that either stop the emotion from launching or prevent it from being expressed once it is triggered, primarily by cortical modulation of the subcortical circuits” (Gross, et al. [1]). Emotion regulation

has been a focus in the study of psychological defenses in the contemporary era of psychology (Freud [7]), stress and coping (Lazarus [4]), attachment (Bowlby [8]), and self-regulation (Mischel, et al. [9]). According to (Gross [10]), although the goals for which one regulates emotions are different for everyone, it is obvious that the regulation of emotion includes the reduction of negative emotions and at the same time, the increase of the positive ones. Emotional regulation can be conscious or unconscious (Mauss, et al. [11]). In terms of the strategies followed to regulate emotion, on a broader level, these are divided into those that precede the emotional response (antecedent-focused strategies) and those that focus on the response itself (response-focused strategies).

The first type of strategy refers to the actions one takes before the emotional response tactics are fully activated and modify the behavior and physiology of the response. The second type of strategy, on the other hand, focuses on the actions followed by the individual during the process of producing the emotion, where the corresponding responses to the stimulus are activated (Gross [10,12]). makes reference to reappraisal and suppression. The first is a type of cognitive change that focuses on the antecedents of the emotional response and is defined as constructing a potential state of emotional arousal in non-emotional terms or in a way that changes its emotional impact. On the other hand, suppression belongs to the second type of emotional regulation strategies, focuses on the response itself and is defined as the limitation of a current emotion expression behavior. The research interest in emotion regulation has been rapidly increased last decades (Gross [13,14]).

Among the areas of high interest is that of eating disorders. Patients with eating disorders seem to have much greater emotional regulation difficulties compared to healthy people (Ruscitti, et al. [15]). Eating disorders are mental illnesses that are categorized according to two parameters: body weight and control (Gonidakis, et al. [16]). Eating disorders affect millions of people at any given time, mostly women aged among 12 - 35. The main types of eating disorders are anorexia nervosa, bulimia nervosa and binge eating disorder [17]. Eating disorders are characterized by dysfunctional behaviors, feelings and thoughts regarding food intake and body image, with serious effects on the physical health and psychosocial functionality of the patient. The causality of this type of disorders includes idiosyncratic, family, social and cultural factors. Oppositely to healthy groups, food and emotions become entangled in a health-threatening way in people that are facing eating disorders. In addition to the problems that are generated to the person suffering from the eating disorder, like unhealthy diets to overweight and social isolation, eating disorders are also a huge public health concept [17].

Literature Review

Anorexia Nervosa

Anorexia nervosa is diagnosed by three symptoms. Firstly, a large reduction in the energy intake, in relation to the required intake, leading to a much lower weight than normal. Second, the presence of intense fear in the person not to get fat, even if he or she is underweight. Thirdly, a disturbance in the way the person perceives body weight or shape and a denial of the severity of his or her particularly low body weight. A combination of psychological, environmental, biological and genetic factors are responsible for the presence of anorexia nervosa. People often suffer from tendency towards depression, difficulty in managing anxiety and feelings of obsession and compulsion [18]. Research data suggest that people with psychogenic anorexia consistently show higher levels of emotional dysfunction compared to control groups (Fox, et al. [19-21]). Further, people with psychogenic anorexia report greater trust than healthy control controls in a number of non-adaptive emotion management strategies (Oldershaw, et al. [22]).

According to the study of (Seidel, et al. [23]), it is mentioned that there is a neural correlate of altered emotion regulation in anorexia nervosa, which seems to be detrimental to psychological well-being. Additionally, research states that people with anorexia nervosa express greater alexithymia and personal distress which are both negatively correlated with self-regulation, when referring to depression stage (Beadle, et al. [24]). It is interesting to finally state, with reference to the research of (Brockmeyer, et al. [25]), that people with anorexia nervosa show increased emotion regulation difficulties as compared with healthy controls. This is also supported at the research of (Haynos, et al. [26]), that emotion regulation difficulties are significantly positively associated with symptoms of anorexia nervosa and with clinical impairment only at the case where anxiety levels are low. Further, anxiety seems to be significantly positively associated with anorexia nervosa symptoms and clinical impairment only at the case where emotion regulation problems are not raised. Emotion regulation deficits seem to be associated with symptoms in anorexia nervosa and patients may gain benefit from a strategy focusing at developing emotion regulation skills in the therapy stages.

Bulimia Nervosa

Bulimia nervosa is characterized by a cycle of bingeing and compensatory behaviors such as self-induced vomiting designed to undo or compensate for the effects of binge eating. People with bulimia are engaged in endless diets, soon lose control and experience a temporary retreat of hunger, anger, and other negative emotions. The causes of bulimia nervosa are heredity, psychological factors e.g. low self-esteem or people who cannot express anger,

emotional trauma, family e.g. a mother who is overly anxious with weight and diet etc. People with this eating disorder usually experience depression, low self-esteem and poor body image [18]. According to literature, people with bulimia nervosa have difficulty in regulating their emotions compared to control groups, as people with anorexia nervosa similarly do (Svaldi, et al. [21]). With reference to the two groups – people with anorexia nervosa and people with bulimia nervosa – it seems that both patient groups express more dysfunctional and less functional emotion regulation strategies than controls groups.

People with bulimia nervosa seem to eat more due to their response to negative emotions, while people with anorexia nervosa report that they are eating more than usual in response to positive emotions. Further, less functional emotion regulation related to eating less is mentioned in the case of bulimia nervosa group when being happy (Meule, et al. [27]). Patients expressing bulimic episodes tend to binge and/or purge (Rodríguez, et al. [28]). Research suggests that emotion dysregulation is associated with symptoms in bulimia nervosa, fact that makes clear the importance of interventions that address emotion regulation skills deficits in the treatment of the disorder (Lavender, et al. [29]).

Binge Eating Disorder

This is a severe eating disorder characterized by recurrent episodes of eating large quantities of food, being associated with negative psychological and social problems, but without subsequent purging episodes, such as vomiting (Agüera, et al. [30]). According to literature, people with binge eating disorder have difficulty in regulating their emotions compared to control groups, as people with the other two types of eating disorders similarly do (Svaldi, et al. [21]). As (Weinbach, et al. [31]) support, the presence of binge eating disorder is linked with greater severity of emotion regulation deficits among adolescents with eating disorders. Literature states that patients with binge eating disorder tend to suppress and ruminate on their unwanted emotions, which leads to increased psychopathological thoughts and symptoms. People with binge eating disorder seem to use adaptive strategies less frequently than healthy control group and they are also related to substance abuse and self-harm (Dingemans, et al. [32]). These people use binge eating to cope with their negative emotions and to find relief (Leehr, et al. [33]). As (Lavender, et al. [34]) support, people who experience frequent negative thoughts and feelings about their appearance are more likely to have bulimic symptoms.

Discussion and Conclusion

In recent years, a large number of research studies has been carried out on the regulation of emotions, due to the reason that it is involved in a variety of psychological disorders, including

eating disorders (Aldao, et al. [35-38]). Diet-related symptoms in non-clinical populations seem to be associated with poor skills and emotion management strategies. Many studies have identified significant difficulties in regulating emotion in all eating disorders compared to control groups (Svaldi, et al. [21]). As (Westwood, et al. [39]) suggest, difficulties in recognizing and describing emotions are diagnostic across the spectrum of eating disorders. However, it has been found that difficulties in regulating emotion are not the same in all eating disorders. As literature supports, people with anorexia nervosa consistently show higher levels of emotional dysfunction, greater alexithymia and personal distress, as well as lower self-regulation and higher anxiety, when compared to healthy control groups.

Emotion regulation difficulties are significantly positively associated with symptoms of anorexia nervosa. People with bulimia nervosa also express higher levels of emotional dysfunction compared to healthy control groups and seem to eat more due to their response to negative emotions. Emotion dysregulation is associated with symptoms in bulimia nervosa. Finally, people with binge eating disorder have difficulty in regulating their emotions compared to control groups and tend to suppress and ruminate on their unwanted emotions. These people use binge eating to cope with their negative emotions and to find relief.

References

- Gross JJ, Barrett LF (2011) Emotion Generation and Emotion Regulation: One or Two Depends on Your Point of View. *Emotion review: Journal of the International Society for Research on Emotion* 3(1): 8-16.
- Saarni C (2000) Emotional competence: A developmental perspective. In: Bar On R, Parker JDA (Eds.), *The handbook of emotional intelligence*, p. 68-91.
- Siegel D (1999) *The developing mind: Toward a neurobiology of interpersonal experience*. New York: Guilford.
- Lazarus RS (1999) *Stress and emotion: A new synthesis*. New York: Springer.
- Dickman MH, Stanford Blair N (2002) *Connecting Leadership to the Brain*. Thousand Oaks, CA: Sage.
- Fredrickson BL (2001) The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist* 56(3): 218-226.
- Freud S (1959) Inhibitions, symptoms, anxiety. In: Strachey J (Edt.), *New York: Norton. Trans.*
- Bowlby J (1969) *Attachment and loss: Attachment*. New York: Basic Books.
- Mischel W, Shoda Y, Rodriguez ML (1989) Delay of gratification in children. *Science* 244(4907): 933-938.
- Gross JJ (1999) Emotion Regulation: Past, present, future. *Cognition & Emotion* 13: 551-573.
- Mauss IB, Bunge SA, Gross JJ (2007) Automatic Emotion Regulation. *Social and Personality Psychology Compass* 1: 1-22.

12. Gross JJ (2002) Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology* 39(3): 281-291.
13. Gross JJ (2007) *Handbook of emotion regulation*. New York NY: Guilford.
14. Gross JJ (2010) The future's so bright, I gotta wear shades. *Emotion Review* 2(3): 212-216.
15. Ruscitti C, Rufino K, Goodwin N, Wagner R (2016) Difficulties in emotion regulation in patients with eating disorders. *Borderline personality disorder and emotion dysregulation* 3: 3.
16. Gonidakis F, Varsou E (2013) *Talking about Eating Disorders. "Steps Forward" PROGRAM*. Athens: BETA Medical Publications.
17. (2017) American Psychiatric Association *What Are Eating Disorders?*
18. (2013) American Psychiatric Association *DSM 5*. United States: American Psychiatric Publisher.
19. Fox JR, Smithson E, Baillie S, Ferreira N, Mayr I, et al. (2013) Emotion coupling and regulation in anorexia nervosa. *Clinical Psychology & Psychotherapy* 20(4): 319-333.
20. Harrison A, Sullivan S, Tchanturia K, Treasure J (2009) Emotion recognition and regulation in anorexia nervosa. *Clinical Psychology & Psychotherapy* 16(4): 348-356.
21. Svaldi J, Griepenstroh J, Tuschen Caffier B, Ehring T (2012) Emotion regulation deficits in eating disorders: a marker of eating pathology or general psychopathology? *Psychiatry research* 197(1-2): 103-111.
22. Oldershaw A, Lavender T, Sallis H, Stahl D, Schmidt U (2015) Emotion generation and regulation in anorexia nervosa: a systematic review and meta-analysis of self-report data. *Clinical Psychology Review* 39: 83-95.
23. Seidel M, King JA, Ritschel F, Ilka Boehm, Daniel Geisler, et al. (2018) The real-life costs of emotion regulation in anorexia nervosa: a combined ecological momentary assessment and fMRI study. *Translational Psychiatry* 8: 28.
24. Beadle JN, Paradiso S, Salerno A, Mc Cormick LM (2013) Alexithymia, emotional empathy, and self-regulation in anorexia nervosa. *Annals of Clinical Psychiatry: Official Journal of the American Academy of Clinical Psychiatrists* 25(2): 107-120.
25. Brockmeyer T, Holtforth MG, Bents H, Kämmerer A, Herzog W, et al. (2012) Starvation and emotion regulation in anorexia nervosa. *Comprehensive Psychiatry* 53(5): 496-501.
26. Haynos A, Roberto C, Attia E (2015) Examining the associations between emotion regulation difficulties, anxiety, and eating disorder severity among inpatients with anorexia nervosa. *Comprehensive Psychiatry* 60: 93-98.
27. Meule A, Richard A, Schnepper R, Reichenberger J, Georgii C, et al. (2019) Emotion regulation and emotional eating in anorexia nervosa and bulimia nervosa, eating disorders, p. 1-17.
28. Rodríguez GM, Gempeler RJ, Mayor AN, Camila Patiño Sarmiento, Lyda Lozano Cortés, et al. (2017) Emotion dysregulation and eating symptoms: Analysis of group sessions in patients with eating disorder. *Revista Mexicana de Trastornos Alimentarios* 8(1): 72-81.
29. Lavender JM, Wonderlich SA, Engel SG, Gordon KH, Kaye WH, et al. (2015) Dimensions of emotion dysregulation in anorexia nervosa and bulimia nervosa: A conceptual review of the empirical literature. *Clinical Psychology Review* 40: 111-122.
30. Agüera Z, Lozano Madrid M, Mallorquí Bagué N, Susana Jimenez, Jose M Menchon, et al. (2020) A review of binge eating disorder and obesity. *Neuropsychiatrie* 35: 57-67.
31. Weinbach N, Sher H, Bohon C (2018) Differences in Emotion Regulation Difficulties Across Types of Eating Disorders During Adolescence. *Journal of abnormal child psychology* 46(6): 1351-1358.
32. Dingemans A, Danner U, Parks M (2017) Emotion Regulation in Binge Eating Disorder: A Review *Nutrients* 9(11): 1274.
33. Leehr E, Krohmer K, Schag K, Dresler T, Zipfel S, et al. (2015) Emotion regulation model in binge eating disorder and obesity - a systematic review. *Neuroscience & Biobehavioral Reviews* 49: 125-134.
34. Lavender JM, Wonderlich SA, Peterson CB, Crosby RD, Engel SG, et al. (2015) Dimensions of emotion dysregulation in bulimia nervosa. *European Eating Disorders Review* 22(3): 212-216.
35. Aldao A, Nolen Hoeksema S, Schweizer S (2010) Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review* 30(2): 217-237.
36. Brockmeyer T, Skunde M, Wu M, Bresslein E, Rudofsky G, et al. (2014) Difficulties in emotion regulation across the spectrum of eating disorders. *Comprehensive Psychiatry* 55 (3): 565-571.
37. Mallorquí Bagué N, Vintró Alcaraz C, Sánchez I, Riesco N, Agüera Z, et al. (2018) Emotion Regulation as a Transdiagnostic Feature Among Eating Disorders: Cross-sectional and Longitudinal Approach. *European eating disorders review: the journal of the Eating Disorders Association* 26(1): 53-61.
38. Webb TL, Gallo IS, Miles E, Gollwitzer PM, Sheeran P (2012) Effective regulation of affect: An action control perspective on emotion regulation. *European Review of Social Psychology* 23(1): 143-186.
39. Westwood H, Kerr Gaffney J, Stahl D, Tchanturia K (2017) Alexithymia in eating disorders: Systematic review and meta-analyses of studies using the Toronto Alexithymia Scale. *Journal of psychosomatic research* 99: 66-81.

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