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Bulimia Nervosa: Is Body Dissatisfaction a Risk Factor?

Natalia Solano-Pinto, Miriam Valles-Casas and Raquel Fernández-César

Abstract

Eating disorder studies are often carried out with adolescents. However, having a normal weight and the appearance of a seemingly healthy body makes many young people wait for years before seeking out professional consultation with a specialist. Therefore, after a review of the literature we will reflect on the role of body dissatisfaction in the development and persistence that occur in bulimia nervosa. It will be linked to the data found by our research group, both in samples of adolescents and adult women. Results on risk scores in purgative behaviors associated with bulimia nervosa, dieting, eating habits, physical activity, self-esteem, social skills, and body dissatisfaction will be described. They will be contrasted in a descriptive way with data from clinical study participants diagnosed with bulimia nervosa, leading to a predictive model of the role body dissatisfaction plays as a risk factor in the development of bulimia nervosa.

Keywords: body dissatisfaction, risk factor, predictive model, adolescents, adults

“After a lifetime of wanting to lose weight or 1 cm more around the waist, now I have other things to think about. My mind is out of jail and has many things to do”.

“A woman fighting to overcome her illness.”

1. Introduction

The first definition of the term “body image” is attributed to Schilder who defines it as follows: “the picture of our own body which we form in our own mind” ([1], p. 11). This author alludes to the mental representation of one’s own body as a definition of body image. Currently, there is a general consensus that there is a multifactorial connotation attributed to this interpretation of body image in which cognitive, emotional, perceptive, and behavioral factors are interrelated [2]. Furthermore, the mental representation of the body is built on a basis of personal experience and the relationships with peer and adults, all of which are immersed in a specific sociocultural and historic context [3, 4]. In other words, the personal experience of one’s own physical appearance is part of how we relate to others [5, 6].

The development of a positive body image is considered to be a public health issue by linking it to human well-being [7]. In fact, the existing research suggests that a negative development of body image constitutes a risk factor for psychological problems such as depression, suicidal thinking, low self-esteem, unhealthy behavior in order to control one’s weight, and eating disorders [8]. Furthermore,

body dissatisfaction is considered to be a predictor of physical inactivity and weight gain [9, 10]. It is also suggested that it is one of the most important factors for determining the persistence of eating disorders [11]. The prevalence of body dissatisfaction has been mainly studied in adolescence, considering people at this vital stage the main risk group for its development [12]. Thus, research places the prevalence among girls to be between 57 and 87% and among boys between 49 and 82% [13, 14]. However, in recent years, studies indicate an increase in the desire of boys to lose weight [15]. Along this line, [16] the silhouette scale was used with 1082 participants between 3 and 18 years of age and found that 61.2% presented dissatisfaction with their body with 44.7% of boys and 46% of girls expressing a desire to be thinner. Other research carried out with adults reported that body dissatisfaction is present in 60% of women and 40% of men [17].

The following will provide evidence to support the hypothesis that body dissatisfaction could be a risk factor for eating disorders, especially for bulimia nervosa.

2. Body dissatisfaction and associated factors

Over the past few years, researchers have focused their efforts on identifying the variables associated with the development of body dissatisfaction. Dion et al. [18] conducted a longitudinal study using an adapted version of the silhouettes scale with 413 participants between the ages of 14 and 18, obtaining the following results: one out of two girls wants to be thinner, and one in every five boys makes an attempt to lose weight. The factors that are mostly associated with body dissatisfaction in girls are: a desire to be thinner; the body mass index; exhibiting behaviors for losing weight; and negative comments about their weight. In the case of boys, some factors are: wanting to be thinner or bigger; the body mass index; having had sexual intercourse experiences; and negative comments about their own weight. Other authors, in an attempt to create predictive models in the development of body dissatisfaction, point out the effects that variables such as self-objectification, social comparison, internalization of what is considered to be “ideal beauty,” and the perception that others have of the body and whether it will be accepted or rejected by them [19] have.

A key issue regarding body dissatisfaction is the standard of beauty. Previous studies have reported a positive correlation between the internalization of thinness ideal and the body dissatisfaction and symptoms of eating disorders, mainly in adolescents. In the work of Barajas-Iglesias et al. [21], carried out with a clinical sample of 104 patients aged 13–18 and diagnosed of anorexia nervosa (AN, $n = 66$) or bulimia nervosa (BN, $n = 38$), the authors claim that the influence of the esthetic body shape model is a relevant variable in eating disorders. In addition, they conclude that BN and AN patients are influenced by that model, but BN patients to a higher extent (94.74% BN vs. 68.18% AN). To sum up, the authors report that the esthetic body shape model relates to body dissatisfaction, and acts as a predictor of BN symptoms, especially purging behaviors (vomits, laxatives, or diuretics).

This canon of beauty is also associated with social, professional, and even personal success [20], and has the purpose of encouraging the consumption of esthetic treatments causing discrepancies between ideal beauty and the real body. As Vygotsky, the classic of evolutionary psychology indicates, the people, women and men as part of a given society, appropriate and internalize sociocultural norms making them their own, and normalize them as “appropriate” or expected [22]. In this vein, when a certain type of beauty is internalized, it becomes one’s own ideal and becomes a need, rejecting other body forms that are far from that ideal.

In general, individuals immersed in a culture do not question the beauty guidelines offered in that culture; simply, and in a standardized way, the canon dictated by fashion is assumed.

This ideal-real body discrepancy is associated with body dissatisfaction in both, young people and adults [23]. In this sense, the internalization of an “ideal beauty” is accompanied by the rejection of any difference, being overweight or obese, and the mobilization of a plan to achieve a certain type of beauty. Aligned with that, a peculiar thinness is attributed to women, which is at odds with the biological and expected shapes of adult women: a sunken stomach, a disproportionately small waist in relation to the hips, large breasts in relation to the body’s dimensions, etc. Also, in recent decades, men have exhibited their own contradictions in the attainment of the “ideal body” through a variety of means aimed at promoting muscle growth and thinness, with the most obvious discrepancies in having a full head of hair, muscular abs, and an absence of body hair [24]. In this line, people are educated to pay attention to their body shape, placing emphasis on what is supposedly deemed physically attractive, even if it means sacrificing functionality and competence. They are educated to consume and mold the body following a certain canon of beauty that is associated with success [25, 26].

These aspects, among others, are transmitted through media and technology, stories, toys, fashion, and the main educational and social agents: family, school, and peers [27, 28].

In the described context, social relationships are mediated by body image and awareness of weight [3]. Thus, when levels of dissatisfaction are high, the relationship with peers and the appreciation of friendship could be damaged by centering the conversation on the body, and making continuous comparisons between one’s own body and that of others [14, 29]. In this respect, the person will relate addressing the desire to be liked, to be admired, with the fear of being rejected, and even with the risk of classifying and selecting friends based on body shapes [30]. In short, the individual internalizes that only through a certain body do they achieve success in their lives: have more friends, better jobs, more social or affective relationships. In addition, during childhood and adolescence, unfortunately, it is common to be the object of critical comments and ridicule toward the body, both in appearance and body competence. Having been the object of ridicule contributes to the development of body image based on dissatisfaction [31].

As previously mentioned, the family also contributes, explicitly or implicitly, to the development of body dissatisfaction: explicitly and directly, by comments and labels addressed to the body of their children, and implicitly, vicariously, or indirectly, through the treatment of their own body, as well as through dieting, doing exercise with the purpose of losing weight, flattery toward thin people, etc. [23, 32–34].

In the Critical Eye Research Group of Castilla La Mancha University, various researches in which the central theme has been body dissatisfaction have been carried out. In all the cases, the participants’ informed consent has been obtained, under the principles of the Declaration of Helsinki. Fundamentally, the stages of life evaluated have been adolescence and adulthood. The project to assess body dissatisfaction in adults was performed with a non-probabilistic-intentional sample (233 adults, average age 32.4, 126 women and 107 men) composed by families from schools of Castilla La Mancha (España). The research has included the following instruments: a questionnaire to assess body dissatisfaction [35]; questions about having suffered teasing in childhood; items about muscle-building desire; and anthropometric measurements. Among the most relevant results are the following: 9.9% have marked or severe levels of body dissatisfaction. Compared to those with moderate levels, this group is characterized by being more overweight, having a greater desire for bodybuilding and a greater concern for physical appearance [36].

Along with that, 22.4% of the surveyed men report having been teased in their childhood, although this group is not characterized by high levels of dissatisfaction. In contrast, among women, 25.4% claim having suffered teasing, this group being characterized by high levels of dissatisfaction [37]. The results also indicate that in 22% of the families, at least one parent shows marked or severe levels of body dissatisfaction, a higher desire to be more muscular and a higher concern for health care [38].

Therefore, these results in adults indicate that body dissatisfaction is present in both men and women, and it has been noted that these data should be taken into account in health programs, as other research has also proposed. Similarly, the results obtained in adolescents indicate that body dissatisfaction should be a factor to consider in programs for the prevention of eating disorders and health promotion. This conclusion is reached by several authors. On the one hand, Valles and Solano-Pinto [39] who worked with a sample of 1040 young people, secondary education students from Castilla La Mancha (Spain) between the ages of 14 and 17 (55.7% women and 44.2% men), obtained results showing that 163 participants exhibited high levels of body dissatisfaction, out of which 110 were women and 53 were men, representing about 16% of the sample. On the other, Garner [40] worked with 406 participants with an average age of 12.2, early adolescence. Among this sample, 129 were men and 214 were women, evaluated with the EDI-2. In this case, 28 young people were considered as a group at risk of having severe levels of body dissatisfaction [41].

It seems, therefore, that the sociocultural pressure and the internalization of the desire to have a certain body type are so common that it is considered normal to feel dissatisfaction toward one's body, mainly in women, and increasingly in men. Such dissatisfaction, at moderate levels, is probably present because of the discrepancy between the proposed ideal body and the real one, for both men and women, in our society. The crucial aspect, in the context of eating disorders, is to detect the threshold: when the levels of body dissatisfaction are so high that one becomes obsessive and a possible risk factor for unhealthy behaviors and eating disorders such as bulimia nervosa [42]. If the desire for having a certain body is internalized in such a way that it becomes a necessity, the level of obsessiveness increases, the level of body dissatisfaction becomes so high that it could constitute a risk to one's health, triggering eating disorders.

3. Body dissatisfaction in bulimia nervosa

In light of this information, it seems that among the identified risks associated with body dissatisfaction is the development of eating disorders such as anorexia nervosa, bulimia nervosa, binge eating disorder, which primarily begin in adolescence, although they may also be present or triggered at other ages. In this sense, when the different components of body dissatisfaction in the adolescent population are evaluated through self-reporting [34], it has been shown that the probability of having an eating disorder is 32.2 times higher in young people with high scores in the behavioral component, compared to those with lower scores. For the perceptual component, the risk is 12.7 times higher, and for the cognitive-emotional component, the risk is 13.4 times higher [43].

Similar percentages are obtained in samples of adult women, for whom the risk of suffering the disorder increases by 22.5 when high scores are obtained from the IMAGE questionnaire. Additionally, 106 adult women were evaluated in the same study (55 diagnosed of eating disorders at a Spanish university hospital and 51 as a control group, *estudiantes universitarias españolas*), and it was observed that those

diagnosed with bulimia nervosa obtained the highest scores in all the components of body dissatisfaction, that is, levels of body dissatisfaction in contrast to the diagnostic categories of anorexia nervosa, binge eating disorder or restrictive food intake disorder [44]. For this reason, some authors have emphasized the need to create differentiating profiles for each diagnostic category, considering high levels of internalization of sociocultural norms, social pressure toward the ideal body, and high levels of fear of maturity [21, 45, 46] as important factors for the onset of bulimia, along with body dissatisfaction. Parents' perception of their children's weight throughout childhood, concern about body weight and appearance in middle adolescence, and uncontrolled eating in late adolescence are also considered as predictive factors [47].

In the case of bulimia nervosa, in most people, the manifestations are activated with the decision to follow a strict diet that aims to modify the body quickly. According to some authors, such a decision would not occur if there were not a feeling of body dissatisfaction, that is, an experience of the body that implied discomfort and the desire to modify body forms [45, 46]. Thus, in general, the person varies their diet expecting a miraculous outcome, which will lead to a situation of imbalance, making the appearance of binge eating and vomiting likely. When there is a decrease in weight, and sometimes even without it, one receives a social compliment from the immediate environment that presumably interprets their weight loss or body change as an interest in taking care of their health. That compliment is seen as a reward for their efforts, a positive reinforcement, allowing for the persistence of the behavior to modify their body.

Occasionally, weight loss may have been accidental, due to a disease, or a situation that made it difficult to eat. But whether one starts from being overweight or from having a normal weight, social flattery occurs almost automatically. In addition, body dissatisfaction, which is at the heart of the decision, causes emotional malaise due to the anxiety that their body produces. As a result, in behavioral terms, a negative reinforcement is created when the anxiety is reduced through the modification of the body [48].

As already mentioned, all these situations are more critical in adolescence, which is considered a vital stage in the development of one's body image. This stage is characterized by strong biological, psychological, and social changes; identity is reaffirmed through the search for identification with a group that, in turn, identifies with role models, ways of spending their free time, ways of dressing, self-expression, etc., and in which the influence of the media and sociocultural aspects are of greater relevance. It is also the time when comments from their family and their peer group have the greatest impact on the person, because they are continually going back and forth between the need to be accepted, rule breaking, and group identification, all the while searching for their own individual identity. And in this search, teenagers have to choose how they want to be, what to believe in, who to relate to and how to relate to them, and whether they want to study and what they want to study. They are afraid, very afraid, of making mistakes, feeling rejected, or not feeling accepted. Sometimes, they do not build an identity, feeling out of control, or that they are incapable of facing life problems, and it is at these moments when the sociocultural influence overwhelms them and they can view the changes in their bodies, brought on by normal development, as undesirable. They selectively look at certain body areas as imperfect, compare their body shapes with those of their peers or social models, and feel insecure. They may resolve these conflicts provided that everything they have learned during childhood allows them to develop a protective shield, making them feel they have personal competence. This will depend, in part, on a positive development of body image in childhood. However, the feeling of insecurity or inferiority may also end up winning and make them

feel that they are not good enough or worthy of being loved and accepted, and, as a result, this feeling of body inadequacy opens the door for unhealthy behaviors [31].

Therefore, some event that has made them feel especially bad about their body, or an occasional loss of weight (e.g. as a result of a mild illness such as the flu), may trigger the decision to diet or maintain weight loss, blaming their body for all their angst, and considering it to be the source of their problems. Now, with this new goal of modifying their body, they finally feel special; they feel that they are in control by building communication with and through the body and manipulating it. They turn this into their “project”: a path to security and self-acceptance that they could not achieve through self-confirmation of their identity, even creating a sense of superiority over “all those people who don’t have enough discipline to control themselves” [49].

The aspects commented so far on the role of body dissatisfaction in the development of bulimia nervosa are collected in **Figure 1**.

As indicated in **Figure 2**, thoughts and emotions about the body become progressively more repetitive, and negative beliefs about the body and weight are reactivated. It will become increasingly obsessive and generalized to different situations and in all areas of their life. That is, dissatisfaction with body image increases, and with it, the fear of gaining weight, which compels them to continue the diet. In this sense, the emotional angst caused by body dissatisfaction causes the person to develop an enormous fear of their body, which becomes predominant and augments the fear of gaining weight or of losing control [50].

As shown in **Figure 3**, as the disease takes hold, it is likely that there will be an excessive need for food, binge eating, real or perceived, which may be caused by an imbalance in the body as well as other factors. Such binge eating will initially be assessed as a situation of pleasure, of “forbidden taste” for food, which is also generally forbidden, and a negative reinforcement led by the reduction of the organic imbalance, of hunger [51]. However, after that, the binge eating is seen as

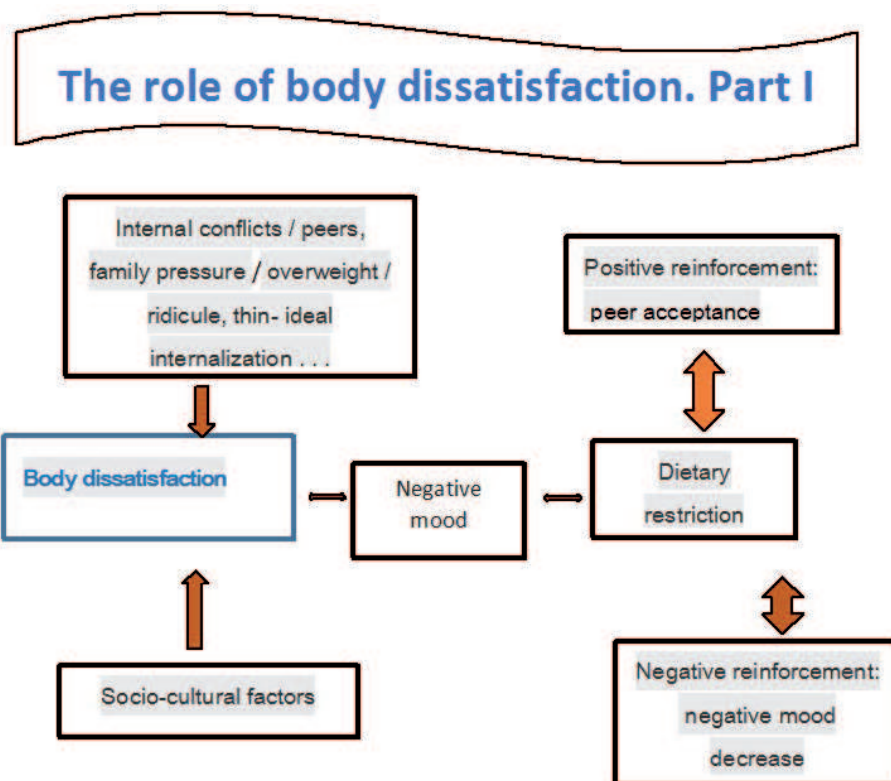


Figure 1.
The role of dissatisfaction. Part I.

The role of body dissatisfaction. Part II

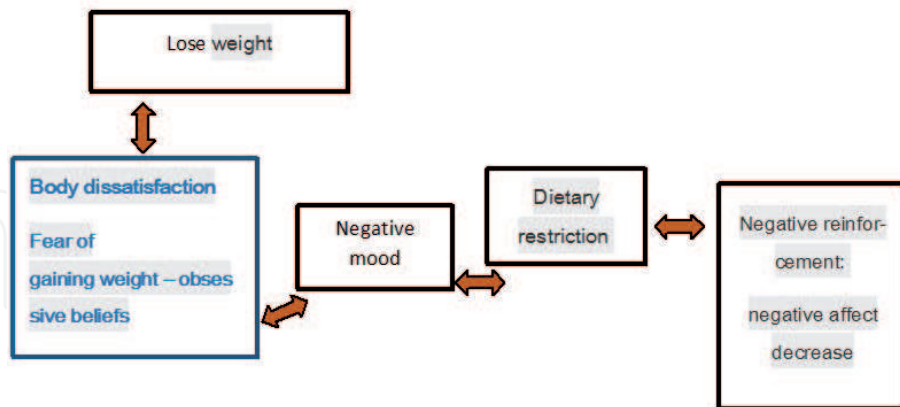


Figure 2.
 The role of dissatisfaction. Part II.

The role of body dissatisfaction. Part III

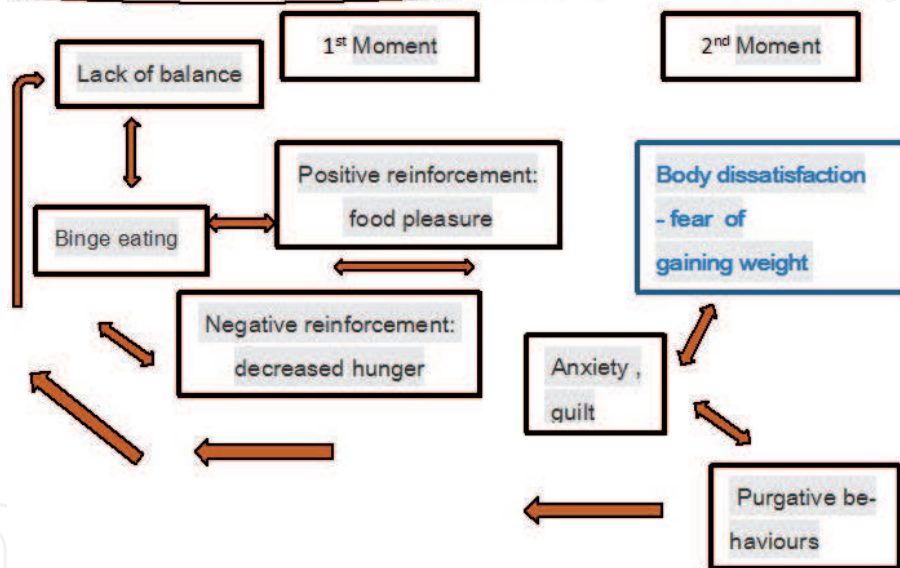


Figure 3.
 The role of dissatisfaction. Part III.

an attack on the body: the obsessive beliefs about the body will be activated, and with them the emotional malaise. They are the insistent beliefs that one imposes on oneself regarding slimness, bodybuilding, and the rejection of obesity, all of which are greatly reinforced by current society and further compel the person to purge with the aim of reducing the anxiety and fear associated with weight gain [52].

The elements shown in **Figure 4** reflect that through the vicious circle of binge eating and purgative behaviors, one begins to formulate the erroneous belief that this is the only way that they can eat and not gain weight. Therefore, binge eating and purging will become more frequent and planned. Thoughts revolve around the need for having a certain body, and beliefs begin to emerge centering on the fact that eating a balanced diet will, irremediably, move them away from their goals. Given this, the role of stress must be considered. Whether caused or not caused

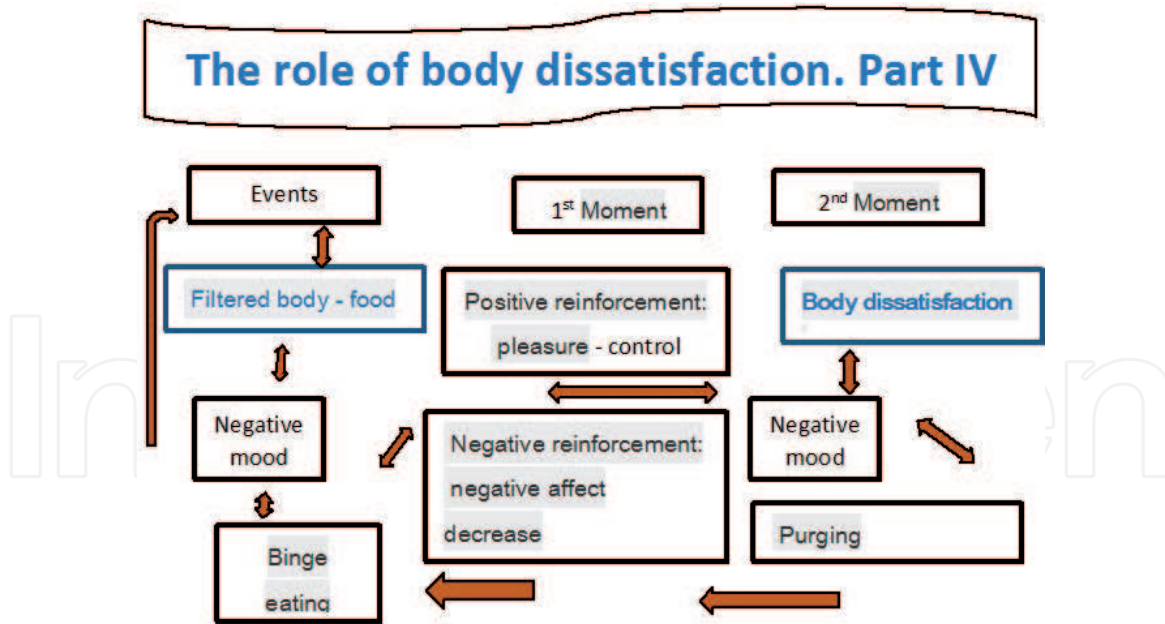


Figure 4.
The role of dissatisfaction. Part IV.

by the body, it is capable of generating anxiety that will increase the need to seek out other mechanisms for resolving the issue. Consequently, at different times, the problematic situation, whether or not it is related to the body, will be interpreted “through” the body. In this way, and depending on these interpretations, emotions of dissatisfaction, anxiety, sadness, and behaviors that sometimes become ritualistic will be awakened [53]. At the same time, emotions and behaviors reinforce distorted beliefs, being able to perceive suffering and pain as a source of pride, living in a dualism between mind and body: the body is undisciplined and must be controlled and the mind is fragmented in a dissociation between “a good me, and a bad me” [54]. In short, they live in ambivalence. What does the word ambivalence mean in this context? It is the internal debate between the desire to continue with one’s objective of controlling the body, or to learn to live by accepting oneself.

In this ambivalence, family, friends, their boyfriends or girlfriends, teachers and professionals can accompany them by encouraging reflection on the suffering and loneliness of living through trying to control the body, and encouraging them to discover their identity, that they can be independent and live in their body in a healthy way. Following the interventions for improving body image which call for decreasing the internalization of sociocultural norms and social comparisons all the while learning to be unique (Stand-Alone), adolescents must be guided well by helping them to listen and interpret corporal sensations, accept their body shape and constitution, be critical of social pressure, confront comments that criticize the body or food, to block obsessive thoughts and to learn to look at themselves in a global way [55–57].

4. Conclusion

By living in a society, all people are exposed to sociocultural norms related to the body, aspects that influence and normalize a certain level of body dissatisfaction. As body dissatisfaction increases, it puts people at risk and moves them away from healthy behaviors. Fortunately, it only affects some people. There are those who will feel ill at ease with their body, but nothing else; others will learn to live with it; while others will intermittently follow restrictive diets. Only a small percentage will

develop an eating disorder. Bulimia nervosa is, unquestionably, a disease with many factors that interact with one another and that, in a vital moment of vulnerability, increase the probability of developing the disease. In this chapter, a hypothetical model has been proposed that needs to be contrasted with future research. The role of body dissatisfaction in bulimia nervosa has been described, reflecting on the four phases of development of the disease, from the decision to lose weight to the use of bingeing and purging in an (unfortunate) attempt to self-regulate when facing everyday problems.

Given the results provided in the studies, it seems clear that body dissatisfaction can be considered a risk factor. It is also present once the disease has been developed, and it seems to maintain the typical manifestations of bulimia nervosa. But more research is needed, mainly longitudinal studies, to determine the role of different variables (anthropometric measurements, age, sex, anxiety, mood and personality traits, among others) in the development of body dissatisfaction. It is also necessary to know exactly what the relationship between body dissatisfaction and the manifestations of bulimia nervosa is in all phases of the disease, and if this dissatisfaction persists in people in clinical remission with respect to control groups. Such research should not be restricted to women, given the growing concern that men have been found to have with their own bodies.

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