



The role of emotional self-regulation in the relationship between eating disorders and well-being

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ABSTRACT

The aim of this study is to analyze the relationship between eating disorders and well-being. Furthermore, we seek to explore whether the relationship between these variables may be mediated by a variable such as emotional self-regulation. The study was attended by 143 people aged between 18 and 74, $M = 27.85$, $SD = 13.42$, of which 18 men (13%) and 125 women (87%). The instruments used were the Emotion Regulation Questionnaire (Gross & John, 2003), the Eating Disorder Inventory – 3 (EDI-3) (Garner et al., 2010), and the Satisfaction with Life Scale (SWLS) (Diener et al., 1985). The results showed that eating disorders are significantly negatively associated with well-being. Additionally, emotional self-regulation manages to moderate the relationship between body dissatisfaction and well-being through its expressive suppression dimension. The practical implications of the study were discussed, in terms of development of psychoeducational programs to raise awareness of the risk of developing eating disorders and their direct implications for well-being, so that individuals seek to learn the most effective ways of emotional regulation strategies for themselves, and use them appropriately.

Keywords: *eating disorders, well-being, emotional self-regulation*

1. INTRODUCTION

Research in recent years has established that there is a strong and clear association between eating disorders and well-being (De Vos et al., 2018; Jenkins et al., 2011). Moreover, the link between increased predisposition to develop eating disorders and decreased ability to self-manage emotions has been demonstrated (Prefit et al.,

2019; Ruscitti et al., 2016). However, other studies confirm that the adoption of emotional self-regulation strategies, appropriate to various situations in everyday life, can be considered a precondition for good functioning and for ensuring an optimal level of well-being and overall health (Nykliček et al., 2010).

Considering these findings, in this paper we propose to study how certain emotional self-regulation mechanisms influence eating disorders, and therefore whether the use of these emotion regulation strategies can improve or even decrease the well-being of individuals who may be at risk of developing an eating disorder. The assumption that led to the choice of the topic of this paper refers to the idea that the way a person chooses to manage their emotions, both pleasant and especially less pleasant ones, can influence both the possibility of developing an eating disorder and their well-being.

Eating disorders

Eating disorders are serious mental disorders with potentially disabling effects on the individual, which carry an increased risk of mortality and can be extremely costly to treat. They considerably affect physical health and produce a major imbalance in the psychosocial functioning of the individual (Van Hoeken & Hoek, 2020). Eating disorders (ED) include specific disorders, such as bulimia nervosa, anorexia nervosa, binge eating disorder, and other less specific disorders involving distorted body image and eating behaviors that are motivated by weight loss (Merikangas & Merikangas, 2016). Eating disorders not otherwise specified (EDNOS) are considered to be the most common eating disorder, with a diagnosis rate of approximately 34% of females (Doll et al., 2005). The age at which a diagnosis of an eating disorder is most commonly reported is somewhere between adolescence and emerging adulthood (Favaro et al., 2018). For men, eating disorders have been noted to be much less common, but this does not necessarily mean that they are less likely to develop them. Anorexia and bulimia cases in men are generally reported for every ten such cases in women (Doll et al., 2005).

Studies that have focused on describing risk factors for the development of eating disorders have identified that these include: having a history of depression or anxiety, body dissatisfaction, excessive weight concerns, internalizing the ideal of being as thin as possible, going on strict diets, the impact of social media content consumption, and prevalent negative affect (Góngora, 2014).

Body dissatisfaction

According to Tylka (2004), body dissatisfaction has become extremely prevalent among women and is considered a normalized symptom in the population rather than a unique characteristic of people with clinical eating disorders. As it happens, Silberstein et al. (1988) pointed out that the sources that generate body dissatisfaction are differentiated for women and men. This may be because today's society idealizes women and men differently. Specifically, women are valued to an exaggerated extent for their body compared to men, who are valued more for their facial construction (Silberstein et al., 1988).

Drive for thinness

The drive for thinness is a condition that affects a considerable proportion of people worldwide, especially in developed countries, being closely related to ever-increased levels of body distortion, disordered eating behaviors and diagnosable eating disorders (Hewig et al., 2008). Eating disorders such as anorexia nervosa and bulimia nervosa include in their diagnostic criteria an exaggerated preoccupation with body shape and fear of gaining weight (American Psychiatric Association, 2013). For both men and women, ideal body models presented through the media were a primary predictor of drive for thinness (Fernandez & Pritchard, 2012).

Bulimia

The tendency to maintain a consistent and significant overeating pattern describes the symptomatology that can be conceptualized by the term bulimia nervosa (Russell, 1979). The root cause of bulimia is unknown. However, there is evidence that genetic factors play an important role in its perpetuation and onset (Bulik et al., 2003). The most common behavior among people with bulimia is purging. This state is characterized by forced vomiting (some patients induce this state of vomiting by placing a finger on their throat), but they may also use laxatives or diuretics to induce this state of release of the digestive tract after episodes of compulsive eating (Mehler, 2003).

Well-being

In order to have a better understanding of the concept of well-being, we consider it is important to mention what it means to be completely healthy. Health, as defined by the World Health Organization (WHO) (1948), is considered to be conditioned by the presence of a general state of physical, mental and social well-being, and not require the mere absence of disease. That being said, the quality of life of individuals ultimately depends on their physical health, but also on their subjective well-being (Camfield & Skevington, 2008). For this reason, we understand how important it is to study the subjective well-being of humans in the context of optimal mental functioning (Magallares et al., 2014).

Previous research in the area of psychological well-being has proposed several different theoretical models to characterize this construct. These models include hedonic well-being (Referring to the extent to which a person feels happiness), evaluative well-being (e.g., a person's satisfaction with his or her life), eudaimonic well-being (having a well-defined purpose in life, which includes having control over one's life and autonomy in making decisions), and other constructs, such as optimism (Trudel-Fitzgerald et al., 2019).

Subjective well-being is that affective component (positive and negative emotional responses) by which a person evaluates his or her own life, and generally involves a global evaluation of all aspects of an individual's life

(Diener, 1984). In contrast, satisfaction with life is considered in other research to be the component that strictly pertains to the cognitive evaluation of subjective well-being (Góngora, 2014).

Eating disorders and well-being

Eating disorders have detrimental implications for the physical health and well-being of individuals (Mond et al., 2012). The literature has indicated that eating disorders are often associated with other disorders of normal mental functioning, the most commonly reported being depression and anxiety (Fairburn & Brownell, 2002). These psychological disorders are predominantly accompanied by negative emotions, which can have a significant negative impact on life and thus on well-being. For example, intense negative emotional states have been reported in individuals who engage in strict dieting or caloric restriction to control body weight (Fairburn & Brownell, 2002). These associations between depressive symptoms and eating disorders have significant implications for well-being (Kenny et al., 2023).

In the study by Magallares et al. (2014), it was found that female participants in the study who already had an eating disorder in their history reported lower levels of subjective well-being than women who had never had an eating disorder, nor did they show evidence of having dissatisfaction with their bodies. Other studies have also found a link between various eating attitudes adopted (including dieting and bulimia) and impaired well-being (Magallares, 2012).

The relation between the predisposition to eating disorders and the use of social media could also be worth considering. Much of the content on social media promotes idealized body images that can attract attention. Specifically, frequent viewing of such content can contribute to body image problems (such as body dissatisfaction or drive for thinness), specific eating disorders or even psychological distress (Marks et al., 2020).

Taking into account the above, we propose to analyze the relationship between eating disorders and well-being, so we formulate the following hypothesis:

H1. *Eating disorders are significantly and negatively associated with well-being.*

Emotional self-regulation

Modalities of emotional self-regulation can be divided into adaptive emotional regulation strategies (active problem solving, emotional awareness and acceptance of emotions, cognitive reappraisal) and maladaptive emotional regulation strategies (rumination, emotional avoidance and emotional suppression) (Leppanen et al., 2022).

From an evolutionary perspective, emotions are considered to have emerged in the evolutionary process of the human species due to their ability to coordinate multiple

response systems (for example, cognitive, experiential or subjective, physiological and behavioral). There are several theoretical models in the literature that explain the mechanisms behind the emotional regulation process. Of these, the most influential is the emotion processing model (Gross, 1998).

Gross and John (2003) observed that there is a differentiation among individuals when they adopt different emotional regulation strategies. Believing that differential use of the two most common emotion regulation strategies may have particular implications for emotional, social and well-being adjustment, they designed a self-report questionnaire on the two emotional self-regulation strategies: expressive suppression and cognitive reappraisal (Gross & John, 2003).

Expressive suppression

Expressive suppression is one of the most studied modalities of response shaping, which involves a continuous effort to inhibit the initially experienced emotional expression (Gross, 2015). This is generally considered a maladaptive form of emotional regulation, with implications for affective, social, and well-being dimensions (Gross & John, 2003). Moreover, expressive suppression can also have implications for cognitive and memory if overused (Richards & Gross, 1999). Expressive suppression can lead to decreased positive emotional experience, but not negative ones (Gross, 2015). However, expressive suppression can be beneficial in certain life circumstances, especially social ones where we are required to behave in a certain way (Richards & Gross, 1999).

Cognitive reappraisal

Cognitive reappraisal is considered an adaptive form of managing emotional states and has a number of benefits for affective functioning, relating to others, and well-being (Gross & John, 2003). In the study conducted by Brans et al. (2013), cognitive reappraisal was correlated with high levels of positive affect. Also, Gross & John (2003) defined cognitive reappraisal as an adjustment strategy centered on the antecedents of personal events, involving an interpretation of a situation according to the accompanying emotion, and modifying the emotional impact before it has fully occurred. Moreover, cognitive reappraisal is largely associated with an increased concern to change negative aspects of cognitions about particular situations, in order to thereby produce emotional regulation (Brockman et al., 2016).

Emotional self-regulation, eating disorders and well-being

Research on the moderating role of emotional self-regulation in the relationship between eating disorders and well-being is limited (Brannan & Petrie, 2011). In contrast, some studies have found that eating disorder symptoms may be mediated by a number of individual factors related

to self-perception and even emotional self-regulation (Brochu et al., 2018). Moreover, studies have shown a strong link between low emotional self-regulatory capacity and various dysfunctional regulatory behaviors, such as excessive drinking or eating when experiencing emotional difficulties. It is thought that individuals at risk of developing eating disorders may adopt such behaviors as self-regulatory strategies (Aldao et al., 2010).

In terms of emotional self-regulation strategies, people with different choose different ways to manage their emotions. With that being said, in the study conducted by Meule et al. (2019), it was noted that people with a diagnosis of restrictive anorexia and those with a diagnosis of bulimia

2. METHODOLOGY

Participants and procedure

A number of 143 people aged 18 to 74 participated in the present study, $M = 27.85$, $SD = 13.42$, of which 18 men (13%) and 125 women (87%). Regarding the place of origin, 38 were from rural areas (27%) and 105 were from urban areas (73%), and regarding weight, this ranged from 41 to 148, $M = 66.31$, $SD = 15.55$. In terms of height, it ranges from 152 to 190, $M = 167.10$, $SD = 7.78$. The inclusion criteria were that participants must be Romanian citizens, aged 18 years or older. The sampling method is one of convenience.

Out of a total of 200 people invited to participate in the study, only 143 agreed to participate to the end by completing the questionnaire (72%). Participants were recruited through online platforms. The data collection was carried out through the questionnaire made in Google Forms. Prior information about the purpose of data collection and the objective of this study was given through the questionnaire, and those details were announced on the questionnaire's introductory section. Respecting confidentiality was also introduced in this section. Completion of the questionnaire was strictly voluntary and anonymous. Participants in this study were not compensated and they also agreed to participate in this study by receiving informed consent beforehand. After giving consent, the survey questionnaires were completed. The research ethics conditions were met with respect to data processing and interpretation, as well as monitoring of data safety conditions.

Instruments

Sociodemographic variables were collected through a list of questions regarding gender, age, weight, height, background, level of education and professional status.

Emotional self-regulation was measured with the Emotion Regulation Questionnaire (Gross & John, 2003). The instrument comprises a total of 10 items and measures

nervosa more frequently used dysfunctional regulation strategies (such as considered expressive suppression) and less frequently those considered functional (such as cognitive reappraisal). This is also cited in the study by Dingemans et al. (2017), with expressive suppression noted as one of the most commonly used modalities of emotional self-regulation among people with eating disorders.

Taking into account the above, we propose to analyze the moderating role of emotional self-regulation in the relationship between eating disorders and well-being, so we formulate the following hypothesis:

H2. *Emotional self-regulation moderates the relationship between eating disorders and well-being.*

several dimensions, namely cognitive reappraisal, which contains six items, and expressive suppression, composed of four items. Responses are provided on a seven-step Likert scale, where 1- total disagreement and 7 – total agreement. This scale is a summative scale, meaning that scores are obtained by summing the scores of each item for each of the two factors. The internal consistency for cognitive reappraisal is $\alpha = .78$, and for expressive suppression is $\alpha = .81$.

Eating disorders were measured with the Eating Disorders Inventory – 3 (EDI-3) (Garner et al., 2010). The instrument comprises a total of 91 items, of which in the present study, we extracted 25 items, which together constitute the composite scale for “Eating Disorder Risk” (SCRCTA) and measures several dimensions, namely drive for thinness (DS) (seven items), bulimia (B) (eighty items), and body dissatisfaction (NC) (10 items). Responses are given on a six-step Likert scale where 1 – never and 6 – always. Scores are obtained by summing the scores of each item. The internal consistency of the scale for bulimia is $\alpha = .88$, of the scale for body dissatisfaction is $\alpha = .86$, and of the scale for drive for thinness is $\alpha = .84$.

Well-being was measured with The Satisfaction with Life Scale (SWLS) (Diener et al., 1985). The instrument comprises five items and measures overall satisfaction with life as part of subjective well-being. Responses are provided on a seven-step Likert scale, where 1 – strongly disagree and 5 – strongly agree. Scores are obtained by summing the scores for each item. The internal consistency of the scale is $\alpha = .86$.

Study design

The present study has a cross-sectional, descriptive, correlational design. Data organization and statistical analyzes were performed using the statistical analysis program IBM.SPSS.24 (IBM Corp, 2016) and Jamovi medmod module (The jamovi project, 2022) .

3. RESULTS

Descriptive statistics

Table 1. *Descriptive statistics*

	M	AS	α	ARRC	ARSE	DS	BU	NC	WB
ARRC	30.17	6.19	.78	1					
ARSE	13.80	5.53	.81	.18*	1				
DS	24.44	8.78	.84	.09	.15	1			
BU	16.72	8.02	.88	-.07	.20*	.54**	1		
NC	30.98	11.66	.86	.02	.11	.70**	.54**	1	
WB	25.97	5.87	.86	.17*	-.29**	-.20*	-.36**	-.32**	1

Note: **. $p < .01$, *. $p < .05$

ARRC = cognitive reappraisal, ARSE = expressive suppression, DS = drive for thinness, BU = bulimia, NC = body dissatisfaction, WB = well-being

The scores for cognitive reappraisal are high, $M = 30.17$, $SD = 6.19$, for expressive suppression the scores are low, $M = 13.80$, $SD = 5.53$. For drive for thinness scores are relatively low, $M = 24.44$, $SD = 8.78$, for bulimia scores are very low, $M = 16.72$, $SD = 8.02$, and for body dissatisfaction scores are low, $M = 30.98$, $SD = 11.66$. For well-being, scores are high, $M = 25.97$, $SD = 5.87$.

At the same time, there are significant positive correlations between cognitive reappraisal and well-being, $r = .17$, $p < .05$, and significant negative correlations between expressive suppression and well-being, $r = -.29$, $p < .01$. Drive for thinness is significantly and negatively associated with well-being, $r = -.20$, $p < .05$ and also bulimia, $r = -.36$, $p < .05$ and body dissatisfaction, $r = -.32$, $p < .01$.

Skewness and kurtosis are in the range (-2, 2), which reflects a normal data distribution. There were no missing

cases and no cases were removed from any of the statistical analyses.

Hypotheses testing

H1. *Eating disorders are significantly negatively associated with well-being.*

H1a. *Drive for thinness is significantly negatively associated with well-being.*

H1b. *Bulimia is significantly negatively associated with well-being.*

H1c. *Body dissatisfaction is significantly negatively associated with well-being.*

In order to test this hypothesis, a multiple linear regression analysis was performed with the three types of eating disorders as predictors and well-being as the dependent variable.

Table 2. *Multiple linear regression analysis for eating disorders as a predictor of well-being*

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	SE	β		
DS	.09	.08	.13	1.14	.26
BU	-.21	.07	-.29	-3.04	.00
NC	-.13	.06	-.25	-2.22	.03

Note: $R^2 = .16$

DS = drive for thinness, BU = bulimia, NC = body dissatisfaction

Eating disorders are found to be responsible for 16% of the variance in well-being, with the regression equation being statistically significant, $F(3, 139) = 8.75$, $p < .01$. Of the three predictors, only two are significantly negatively associated with well-being, namely bulimia, $\beta = -.29$, $t(143) = -3.04$, $p < .01$ and body dissatisfaction, $\beta = -.25$, $t(143) = -2.22$, $p < .05$.

Considering this result, we can say that hypothesis H1 is largely supported by the analyzed data.

H2. *Emotional self-regulation moderates the relationship between eating disorders and well-being.*

Four moderation analyses were conducted to test this hypothesis, with bulimia and body dissatisfaction as alternative predictors, cognitive reappraisal and expressive suppression as alternative moderator variables, and well-being as dependent variable. Moderation analyses could not be carried out for drive for thinness, as no significant correlation was found between the predictor and the dependent variable.

Table 3. Moderation estimation for cognitive reappraisal in the relationship between bulimia and well-being

	Estimate	SE	95% CI		Z	p
			Min.	Max.		
Bulimia	-.25	.06	-.37	-.14	-4.52	< .001
Cognitive reappraisal	.14	.07	.00	.29	1.97	.05
Bulimia * Cognitive reappraisal	.00	.01	-.01	.02	.38	.70

We find that cognitive reappraisal does not moderate the relationship between bulimia and well-being, $b = .00$, $CI = 95\%(-.01, .02)$, $Z = .38$, $p = .70$.

Table 4. Moderation estimation for cognitive reappraisal in the relationship between body dissatisfaction and well-being

	Estimate	SE	95% CI		Z	p
			Min.	Max.		
Body dissatisfaction	-.17	.04	-.25	-.09	-4.24	< .001
Cognitive reappraisal	.18	.07	.03	.32	2.40	.02
Body dissatisfaction * Cognitive reappraisal	.01	.01	-.01	.02	.79	.43

It is observed that cognitive reappraisal has no moderating effect on the relationship between body

dissatisfaction and well-being, $b = .01$, $CI = 95\%(-.01, .02)$, $Z = .79$, $p = .43$.

Table 5. Moderation estimation for expressive suppression in the relationship between bulimia and well-being

	Estimate	SE	95% CI		Z	p
			Min.	Max.		
Bulimia	-.20	.06	-.32	-.09	-3.45	< .001
Expressive suppression	-.26	.08	-.42	-.11	-3.30	< .001
Bulimia * Expressive suppression	-.01	.01	-.03	.01	-1.13	.26

The relationship between bulimia and well-being is not moderated by expressive suppression, $b = -.01$, $CI = 95\%(-.03, .01)$, $Z = -1.13$, $p = .26$.

Table 6. Moderation estimation for expressive suppression in the relationship between body dissatisfaction and well-being

	Estimate	SE	95% CI		Z	p
			Min.	Max.		
Body dissatisfaction	-.13	.04	-.21	-.06	-3.48	< .001
Expressive suppression	-.28	.08	-.44	-.13	-3.59	< .001
Body dissatisfaction * Expressive suppression	-.02	.01	-.03	-.00	-2.30	.021

The relationship between body dissatisfaction and well-being is moderated by expressive suppression, $b = -.02$, $CI = 95\%(-.03, -.00)$, $Z = -2.30$, $p < .05$.

Table 7. *The relationship between body dissatisfaction and well-being at different values of expressive suppression*

	Estimate	SE	95% CI		Z	p
			Min.	Max.		
Mean	-.13	.04	-.21	-.06	-3.42	< .001
Low (-1SD)	-.05	.06	-.16	.07	-.79	.43
High (+1SD)	-.22	.05	-.32	-.12	-4.40	< .001

At average levels of expressive suppression, the negative relationship between body dissatisfaction and well-being weakens, $b = -.13$, $CI = 95\%(-.21, -.06)$, $Z = -3.42$, $p < .01$. This relationship is further weakened at high levels of

expressive suppression, $b = -.22$, $CI = 95\%(-.32, -.12)$, $Z = -4.40$, $p < .01$.

Given this result we can say that the H2 hypothesis is supported to a small extent by the data analyzed.

4. DISCUSSION

The role of emotional self-regulation in the relationship between eating disorders and well-being has been investigated in a number of studies in the literature (Blaszky-Schiep et al., 2019).

Nevertheless, little research has contributed to understanding the moderating role of various variable on this relationship (Brannan & Petrie, 2011).

Considering these aspects and the amount of literature on the topic, the main objective of the present study was to identify possible relationships between eating disorders, well-being and emotional self-regulation. By analyzing the possible associations between these variables, the results obtained can contribute to existing knowledge and at the same time, enhance our understanding of the associations between eating disorders and well-being, and other factors that may amplify or reduce those correlation, such as emotional self-regulation. More specifically, the main objective of this study is to investigate the correlation between eating disorders and well-being and to investigate how emotional self-regulation can moderate this relationship.

The results of this study provide an overview of the research purpose. Participants scores on cognitive reappraisal are high, which may indicate that most respondents have a tendency to change their perspective on a potentially distressing situation in order to reduce the influence of negative emotions about that situation. In the study conducted by Cutuli (2014), it was noted that a number of experimental studies have found that individuals who use cognitive reappraisal as an emotional self-regulation strategy produce a positive impact on their affective state. This is due to the minimization of negative emotional experience and the negative behavior accompanied by this experience, without physiological activation in this sense (Cutuli, 2014). Participants in this study also reported high scores on well-being. We understand from these scores that

the respondents show an adequate level of satisfaction with life and a reasonable level of well-being. A high level of well-being could be an indicator of satisfaction with the way they live their lives as well as an indicator of optimal mental health (Keller, 2019).

The scores for expressive suppression and body dissatisfaction were low. The low scores for expressive suppression may indicate that some respondents in this study do not consistently use this technique to avoid emotional expression, whereas the low scores for body dissatisfaction suggest the idea that most of the participants in this study are not necessarily dissatisfied with their bodies. In other words, they are not overly concerned with the way their bodies look. It has been shown that expressive suppression could effectively shape behavioral expression, but not emotional experience, which is only inhibited (Gross, 2002). We can therefore assume by the low scores in this study that participants are not making an effort to shape their behavioral response. Furthermore, it has been found that limited use of any modality of emotional self-regulation may present more obvious bulimia symptomatology, and further research into expressive suppression in eating disorders is suggested (Vuillier et al., 2021). Studies have shown that there is an association between higher body dissatisfaction scores and bulimic eating disorders (Brannan & Petrie, 2011). This would indicate that the participants in this study were not at increased risk for bulimia. In addition, higher levels of body dissatisfaction are associated in Tylka (2004) research with a greater susceptibility to report higher levels of eating disorder related symptoms. Scores for drive for thinness are relatively low and for bulimia scores are very low. Therefore, it can be said that the low eating disorder scores in the present study indicate a lower predisposition to have some form of eating disorder.

The first hypothesis, which tested whether eating disorders are significantly negatively associated with well-

being, is largely supported by the data analyzed in this study. Our results found that eating disorders are responsible to some extent for the variation in well-being, with regression equation being statistically significant. That being said, the present study indicates that there is a statistically significant negative relationship between both bulimia and body dissatisfaction and well-being. No statistically significant correlation was noted between drive for thinness and well-being. Looking in more detail at the results of the study in comparison to other research, bulimia was a significantly negative predictor of well-being in other studies as well. For example, the study by Magallares (2012) also identified that bulimia determined a lower level of well-being in women at risk of developing eating disorders. In addition, the significant negative relationship between body dissatisfaction and life satisfaction has been recognized in other studies (Góngora, 2014). These results confirm that the possibility of developing an eating disorder can generate lower well-being. This is supported by research that highlights the significant negative impact that eating disorders can have on both psychological and subjective well-being (Tomba et al., 2013).

The moderating role of emotional self-regulation was also investigated in this study. Results indicated that there is a significant interaction of expressive suppression on the relationship between body dissatisfaction and well-being. Thus, at medium values of expressive suppression, the negative relationship between body dissatisfaction and well-being diminishes. This means that when the level of expressive suppression is medium, the negative effect of eating disorders on well-being is reduced. The results may be consistent with other findings in this area. Specifically, studies show that people with eating disorders more frequently adopt emotion regulation strategies considered to be maladaptive than adaptive ones (Leppanen et al., 2022). Moreover, at high values of expressive suppression, the negative relationship between body dissatisfaction and well-being becomes even weaker. At first glance, these results may seem to be counterintuitive, as the literature supports that expressive suppression has negative effects on well-being if used excessively (Gross & John, 2003). The association between expressive suppression and low psychological well-being has also been recognized among patients with other mental disorders, such as major depression (Abler et al., 2010). However, there are also studies that support these findings in this study. Some research states that expressive suppression can be beneficial in different circumstances of everyday life, as it helps to control the expression of emotions in accordance with certain desirable behaviors in specific situations (Kühn et al., 2011). Therefore, the results of this study may point the idea that individuals using this emotional self-regulation technique may improve their well-being to some extent.

Considering cognitive reappraisal as a moderating variable, our results showed no significant interaction with either of the two disorders (bulimia, body dissatisfaction) significantly negatively correlated with well-being. Other studies have found a link between cognitive reappraisal and

body dissatisfaction (McLean et al., 2010). Furthermore, cognitive reappraisal has been related to improved psychological health in areas related to interpersonal functioning and well-being (Cutuli, 2014). A meta-analysis by Hu et al. (2014), examined the association between the two emotional self-regulation strategies, also measured in this study, and mental health. The conclusions drawn suggest that there are significantly negative relationships between suppression and well-being. At the same time, reappraisal would have the greatest positive impact on well-being levels (Hu et al., 2014).

Considering these results, the hypothesis that emotional self-regulation might have a moderating effect on the relationship between eating disorders and well-being is therefore supported to a small extent by the data analyzed in the present study. These results indicate that expressive suppression may be considered a component whose implications for well-being of individuals who manifest body dissatisfaction need to be given more consideration.

Practical implications

Taking into account the results of this study, it would be worth developing and implementing psycho-educational or counselling projects or programs to increase the population's awareness of the threat brought by the probability of developing an eating disorder. In the way, people could become more cautious about their eating habits and the external, as well as internal factors that can influence their health and well-being. Results from other studies confirm that developing emotional self-regulation abilities for people already diagnosed increased their ability to protect themselves from the negative consequences of eating disorders and can be very helpful in their recovery process (Ruscitti, 2016).

Improving emotional regulation ability in therapeutic intervention could be useful for managing negative emotions and stress levels. These manifestations may be commonly present among people who have a strong predisposition to develop an eating disorder. Rumination and difficulties in accepting one's own emotional states can frequently occur in anxiety and depressive disorders, and interventions aimed at increasing emotional self-regulation skills could also be supportive in the follow-up treatment of people with eating disorders (Leppanen et al., 2022). As a result, individuals may also become more capable of changing the negative self-perceptions that can commonly occur in individuals at risk of developing eating disorders (Manaf et al., 2016).

A complete integration of all the variables examined in this study may be provided by Emotional Focused Therapy (EFT). In this therapeutic method, one of the four major principles of the therapeutic process involves the regulation of emotions. Therefore, this therapeutic approach could help individuals to become conscious of their own emotions, to accept them and to make sense of the emotional experience (Greenberg, 2006). Moreover, effective handling of emotions is thus correlated with the promotion of well-being (Greenberg, 2006). In addition, this form of therapy has also

been shown to be effective in treating eating disorders. The potential of individual EFT interventions as a psychological treatment for treating binge eating disorder has been noted (Glisenti et al., 2018). Hence, specific interventions in emotion-focused therapy could teach people regulate their emotions and prevent or lessen the threat of eating disorder in their lives (Ivanova & Watson, 2014).

For these reasons, implementing programs to promote and raise awareness of mental health, and consciousness the role of emotions in everyday life, would be worth considering.

Limitations and further research

As with any study, we must consider limitations and recommendations for future research. For that reason, the present study has a number of limitations, which will be mentioned in the following.

One of the limitations of this study is the relatively small number of participants. In our future research we will consider a greater number of participants, preferably people who already have a certified diagnosis of an eating disorder. This will enable us to gain a more comprehensive understanding of the specific challenges faced by those with an eating disorder diagnosis. A potential limitation of this study may also be the administration of the questionnaire in an online survey. In terms of whether or not the participants in this study were fully honest in their responses, it is possible that the data they provided may be subject to some degree of bias. Taking these aspects into account, we propose to use in our future research both self-assessment tools through questionnaires and structured interviews, managed by qualified personnel, in order to obtain data more consistent with the actual manifestations of the participants (Garner et al., 2010). Also, with regard to the gender of participants, a limitation would be the relatively small number of male respondents. In future research, it is recommended to include more subjects.

Regarding the measurement of eating disorders, the limitation of this study would refer to the fact that only the composite subscale for the risk of developing an eating disorder was used to measure this variable. This is relevant to the sample used, as participants were not required to have a diagnosis in order to complete the study questionnaire. It is recommended that future research should also include the administration of a clinical sample in order to measure specific eating disorders.

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Conclusions

The results revealed a significant negative relationship between eating disorders and well-being. Moreover, significant moderation was observed from expressive suppression, as an emotional self-regulatory strategy, on the relationship between body dissatisfaction, as a predisposition to developing an eating disorder, and subjective well-being. These findings have substantial implications, primarily for understanding the symptomatology manifested by individuals with a tendency to develop eating disorders, but also for understanding the implications of these manifestations for the well-being of individuals. Regarding the confirmed hypothesis H1, this result is consistent with previous studies that have shown that people with a diagnosis of an eating disorder tend to have lower levels of well-being. Referring to hypothesis H2, the result of this study supports this assumption to some extent. This may be because people who choose expressive as a way of regulating their emotions may benefit from an improvement in the relationship between eating disorders risk and well-being. We also need to consider that we can often find ourselves in situations where we cannot change what is happening, but instead the power lies within us, in the choice we make about how we react to the situation. It is recommended that future research examine these relationships in more detail, in a more elaborate context, and attempt to identify and utilize other variables that may have an effect on those correlations.

Although the present study has a number of limitations and inconsistencies, our study can be seen as a significant contribution to the existing literature, as it investigated a relatively unexplored effect in terms of the moderator variable, emotional self-regulation. Further research is recommended on the enhancement of emotional self-regulation strategies and their implications in various mental disorders, as well as their consequences for the well-being of individuals.

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