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Research Article

Predicting Life Satisfaction Based on Difficulties in Emotion Regulation Among Female Students at Dr. Shariati Technical and Vocational College

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Abstract

This study aimed to predict life satisfaction based on difficulties in emotion regulation among female students at Dr. Shariati Technical and Vocational College. The research employed a descriptive correlational design. The statistical population consisted of all female students enrolled at Dr. Shariati Technical and Vocational College in Tehran during the 2022 academic year, totaling 5,301 students. Using convenience sampling and based on the Plant formula for determining sample size, 120 female students were selected as the study sample. For data collection, in addition to a demographic information checklist (researcher-made), the Satisfaction with Life Scale (Diener et al., 1985) and the Difficulties in Emotion Regulation Scale (Gross & John, 2003) were administered. Data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation), Pearson's correlation coefficient, and multiple regression analysis in SPSS version 26. The significance level was set at 0.05. The results indicated a significant correlation between difficulties in emotion regulation and life satisfaction among female students ($r = -0.57$, $P < 0.05$). Significant correlations were also found between emotional suppression and life satisfaction ($r = -0.20$, $P < 0.05$), as well as between cognitive reappraisal and life satisfaction ($r = 0.17$, $P < 0.05$).

Keywords

Difficulties in Emotion Regulation, Life Satisfaction, Students

1. Introduction

Throughout history, human beings have continuously sought to improve their quality of life. Initially, attention was primarily focused on objective indicators of quality of life, such as income and access to healthcare, education, and recreational facilities. However, over time, a subjective indicator known as life satisfaction gained prominence in quality-of-life research and attracted considerable attention from sociologists and psychologists. Life satisfaction is so important that it can be regarded as one of the ultimate goals of human beings. It provides favorable conditions for personal development and serves as a factor contributing to individuals' growth and success [1]. Given the important role of life satisfaction in society, reports from various organizations indicate that life satisfaction has declined in Iran and that a large proportion of the population is dissatisfied with their lives. University students are among the groups in Iran whose life satisfaction has received

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relatively limited research attention. Life satisfaction can be defined as an individual's cognitive judgment of their life as a whole, from birth onward. In other words, life satisfaction reflects the extent to which basic needs have been fulfilled and the extent to which other goals are perceived as attainable [2]. Researchers believe that life satisfaction is distinct from other psychological constructs, such as positive and negative affect, self-esteem, and optimism. Life satisfaction is one of the most important components of subjective well-being and refers to an individual's evaluation of the quality of their life based on personal criteria. Thus, high life satisfaction occurs when an individual's perceived life circumstances are consistent with the standards they have established for themselves [3].

A review of the scientific literature indicates that an individual's satisfaction with life is substantially influenced by their developmental background, including personality characteristics, which are among the fundamental factors in predicting life satisfaction [4]. The university years represent an exciting yet challenging period for students. In the future, university students will be r esponsible for maintaining and improving the health and well-being of society. Therefore, they need to possess greater psychological well-being and self-reliance to achieve increasing success in their academic studies and professional careers [5]. This period is considered a highly sensitive stage in the lives of the competent and active young workforce of every country and is often accompanied by considerable changes in social and interpersonal relationships. Many students may be unfamiliar with the university environment when they first enter higher education. New expectations and roles, separation from family, financial difficulties, heavy academic workloads, and other factors can contribute to psychological problems and distress and consequently place students' mental health at risk. A range of skills can enhance students' adaptability and effective functioning, enabling them to cope effectively with life challenges. One such skill is cognitive emotion regulation strategies [6]. Emotion regulation refers to actions undertaken to alter or modulate an emotional state and encompasses cognitive processes that individuals employ to manage emotionally evocative and arousing information, with an emphasis on the cognitive aspects of emotion management. Emotions influence attention, decision-making, memory, physiological responses, and social interactions at any given moment and are associated with psychological, social, and biological well-being [7]. Therefore, emotion regulation appears to play an important role in maintaining physical and psychological health and may also contribute to life satisfaction. In light of the aforementioned considerations, the present study was conducted to predict life satisfaction based on difficulties in emotion regulation among university students.

A review of previous findings indicates that life satisfaction is influenced by various factors, including emotion regulation [2]. Researchers have suggested that emotion regulation is an important factor in adapting to stressful life events and can influence individuals' life satisfaction Furthermore, previous research has confirmed the association between maladaptive emotion regulation strategies and psychological and behavioral problems. Indeed, the importance of cognitive emotion regulation skills in maintaining mental health has been examined in numerous studies. According to Garnefski et al. (2003), individuals employ a variety of strategies when confronted with stressful situations. These strategies can be classified into positive strategies, including positive refocusing, planning, positive reappraisal, and putting into perspective, and negative strategies, including self-blame, blaming others, rumination, catastrophizing, and acceptance [7].

2. Theoretical Foundations and Review of Previous Research

Life satisfaction is an important factor in well-being, and its assessment within healthcare systems is considered essential because of the close relationship between physical and psychological health. Lower levels of life satisfaction have been associated with poorer health status, depressive symptoms, personality problems, inappropriate health-related behaviors, and poorer social functioning [8]. Pavot and Diener (1993) conceptualized life satisfaction as a judgmental process through which individuals evaluate the quality of their lives according to their own unique criteria. Life satisfaction is a cognitive judgment process and one of the key components of subjective well-being. Although it demonstrates a degree of stability over time, it remains sensitive to changes that occur throughout an individual's life. It is generally defined as an individual's overall evaluation of the quality of their life based on personally selected standards [9]. Life satisfaction is a cognitive component of subjective well-being that refers to an individual's overall judgment of life as a whole. Higher life satisfaction increases the likelihood of successful adjustment across various life situations and contributes to a greater sense of happiness. Enhancing life satisfaction not only promotes subjective well-being and happiness but may also increase the likelihood of successful interpersonal relationships, greater effectiveness and income, better physical health, and even a more pleasurable and longer life [10]. Three fundamental dimensions are commonly associated with quality of life and well-being: physical, psychological, and social dimensions. The physical dimension refers to an individual's perception of their ability to perform daily activities and tasks that require energy and includes aspects such as energy, pain and discomfort, sleep, and rest. The psychological dimension encompasses emotional and mental aspects such as anger, happiness, depression, fear, and calmness, as well as self-image, positive and negative feelings, religious beliefs, memory, and concentration. The social dimension refers to an individual's ability to establish and maintain relationships with family members, friends, neighbors, and other members of society, as well as their occupational status [11]. An individual's attitudes toward the self and their evaluation of themselves play a key role in

interpersonal relationships. For example, a person who perceives themselves as highly incompetent, unattractive, or boring may avoid establishing relationships with others and become more socially withdrawn. In contrast, an individual who perceives themselves as attractive, lovable, and valuable is more likely to welcome social interactions and establish intimate relationships with others [11]. Self-dissatisfaction has been associated with poorer well-being, depressive symptoms and personality problems [12].

2.1. Theories Explaining Life Satisfaction

2.1.1. Ryff's Theory

Ryff (2002) argued that previous studies had largely neglected the positive aspects of human psychological functioning and that these aspects needed to receive greater attention in psychological literature. Accordingly, the concepts of psychological well-being and life satisfaction were emphasized within the framework of positive psychology. According to Ryff (2002), life satisfaction and psychological well-being encompass six major components:

1) Self-acceptance: Awareness and acknowledgment of one's positive and negative characteristics and maintaining self-respect despite these characteristics.
2) Purpose in life: Having meaningful goals in life enables individuals to remain persistent and resilient in the face of difficulties and suffering.
3) Personal growth: Developing and realizing one's full range of abilities, capacities, and potential.
4) Environmental mastery: The individual's ability to manage and exercise control over their surrounding environment.
5) Autonomy: Acting and living according to one's own standards, beliefs, and ideals, even when these differ from commonly accepted social norms.
6) Positive relations with others: The ability to establish close and meaningful relationships with others and to experience affection and love toward them [13].

2.1.2. Franz's Theory

In his cognitive theory of life satisfaction, Franz (2010) identified four major factors as influential in determining life satisfaction: family, socioeconomic status, psychological status, and physical status. These four variables may independently or jointly influence an individual's life satisfaction. At the same time, an individual's perception of their life satisfaction may also affect each of these variables. For example, a decline in life satisfaction may negatively affect an individual's functioning in their occupational and work environment and may consequently lead to deterioration in their socioeconomic circumstances. Low life satisfaction may also result in the use of ineffective coping and adaptation mechanisms, subsequently increasing psychological stress. Increased stress, in turn, is directly associated with physical and physiological factors and may contribute to an increase in the severity of illness. Thus, life satisfaction can be viewed as a complex and multidimensional concept and construct that should be evaluated from multiple perspectives [14].

2.1.3. Seligman's Theory

According to Seligman's theory of positive psychology, one of the positive aspects of human functioning that plays an important role in individuals' lives is life satisfaction [15]. This theory proposes that positive emotions can be considered across three temporal dimensions: (1) positive emotions about the past, (2) positive emotions about the present, and (3) positive emotions about the future. Positive emotions about the past are emotions that individuals experience when reflecting on their past and include satisfaction, pride, and contentment. Positive emotions concerning the present arise from two sources: (a) bodily pleasures, which are sensory, immediate, and transient, and (b) higher or more complex pleasures, which require learning, education, and the development of skills. Finally, positive emotions concerning the future include experiences such as hope and optimism. Positivity in psychology often refers to strategies such as maintaining an optimistic outlook, developing a sense of control over one's environment, changing one's perspective from negative to positive, reexamining negative events, restructuring thoughts, and employing related cognitive strategies. These strategies enable individuals to respond to life events with a positive and nonjudgmental perspective rather than remaining passive in the face of adverse circumstances. According to Seligman's theory, a positive orientation toward life and positive thinking enable individuals to experience a higher quality of life and greater life satisfaction [16].

2.1.4. Maslow's Theory

Maslow maintained that human satisfaction is fundamentally based on the fulfillment of individual needs. His perspective is based on two basic assumptions. First, an individual's behavior is directed toward the satisfaction of their needs. In other words, needs are among the factors that determine human behavior. Second, human needs are organized hierarchically, such that lower-level needs, particularly physiological needs, are generally addressed before higher-level needs are fulfilled [17]. Maslow was one of the psychologists who extensively examined human needs. His hierarchy of needs theory provides a fundamental framework for understanding human motivation and conceptualizes human needs within five categories: physiological needs, safety needs, belongingness and love needs, esteem needs, and self-actualization needs [18]. According to this theory, feelings of satisfaction are closely related to the fulfillment of human needs. The experience of unmet needs motivates individuals to seek their fulfillment, and as each need is satisfied, individuals may experience greater satisfaction with their lives. Since safety needs represent one of the fundamental human needs in Maslow's hierarchy, it can be expected that individuals who experience

greater security within their society and whose need for safety is adequately fulfilled will report greater life satisfaction [19].

2.1.5. Festinger's Theory

According to Festinger's self-discrepancy theory, life satisfaction reflects the discrepancy between an individual's ideals and their current circumstances. The ideal self refers to the attributes and characteristics that an individual would like to possess and hopes to attain. In contrast, the ought self to refers to the attributes and characteristics that an individual believes they should possess based on perceived duties, obligations, and responsibilities. According to this theory, when individuals perceive a substantial discrepancy between "what they are" and "what they would like to be," they may experience psychological distress and problems, including anxiety and depression, and consequently experience lower levels of life satisfaction. Therefore, the greater the discrepancy between an individual's ideals and their current circumstances, the lower their level of life satisfaction is likely to be [20].

2.2. The Concept of Emotion Regulation

Emotions are, to some extent, biological responses to life events. The influence of emotion on cognition plays an important role in people's everyday lives as well as in neurological and psychological disorders. In general, emotions can be described as multidimensional phenomena that encompass subjective, biological, goal-directed, and social aspects. Emotions are considered subjective experiences because they enable individuals to experience feelings such as happiness and sadness. They are also biological responses involving energy-mobilizing processes that prepare the body to adapt to situations encountered in the environment. In addition, emotions are goal-directed, much like hunger, which motivates an individual toward a particular goal. Finally, emotions are also social phenomena that influence and are influenced by interpersonal interactions [21]. Emotion regulation refers to the processes through which individuals influence which emotions they experience, when they experience them, and how they experience and express those emotions. Gross (2015) described emotion regulation as a process through which individuals modify their responses to emotionally relevant situations. One of the most common approaches to regulating emotions and managing emotionally arousing information involves the use of strategies that emphasize the cognitive aspects of coping. These strategies are commonly referred to as cognitive emotion regulation strategies [22]. Difficulties in emotional self-regulation and emotion regulation are characteristic of more than half of psychological disorders and represent a central mechanism underlying many forms of psychological dysfunction. Consequently, emotion regulation is considered a key target in the treatment of various psychological disorders. Emotional self-regulation is not inherently adaptive or maladaptive. As with other forms of behavior, adaptive emotion regulation enables individuals to function successfully within their environment and to engage in goal-directed behaviors when confronted with emotionally challenging experiences. Adaptive emotion regulation requires skills such as emotional awareness and emotional acceptance. In contrast, individuals who rely on maladaptive emotion regulation may have difficulty modifying their behavior appropriately when confronted with challenging experiences and may consequently be unable to pursue their goals effectively within their environment. Maladaptive cognitive emotion regulation may involve emotion overregulation and emotion underregulation. Emotion overregulation occurs when an individual employs cognitive emotion regulation strategies to prevent their emotional experiences from becoming apparent or being expressed. Cognitions and cognitive processes help individuals regulate their emotions and feelings and prevent them from becoming overwhelmed by the intensity of their emotional experiences. Thus, cognitive processes play an important role in enabling individuals to manage emotional responses and maintain effective functioning in emotionally demanding situations.

2.3. Theories Explaining Emotion Regulation

2.3.1. Garnefski and Kraaij's Theory

Garnefski and Kraaij proposed their theory of emotional self-regulation to identify the cognitive coping strategies individuals employ after experiencing negative events or situations. According to Garnefski and Kraaij's theory, adaptive and constructive emotional self-regulation strategies are associated with lower levels of depression and anxiety, whereas maladaptive strategies are associated with higher levels of depression and anxiety [23]. From this perspective, cognitive emotion regulation strategies play an important role in the development of emotional and behavioral problems following exposure to stressful events [24].

According to this theory, individuals' cognitive emotion regulation is examined across dimensions including self-blame (thoughts involving blaming oneself for what one has experienced), other-blame (thoughts involving blaming the environment or other people for what one has experienced), rumination or repetitive thinking (focusing on feelings associated with negative experiences), catastrophizing (thoughts concerning the terrifying or extremely negative aspects of what one has experienced), putting into perspective (downplaying the importance or seriousness of what one has experienced), positive refocusing (thinking about positive aspects rather than focusing on the actual negative experience), positive reappraisal (assigning positive meaning to an experience in terms of personal growth), acceptance (accepting and acknowledging what has happened), and refocus on planning (thinking about the steps that should be taken to manage a negative experience) [24].

2.3.2. Gross's Theory

According to Gross's theory, emotional self-regulation strategies involve cognitive and behavioral responses to emotion-eliciting events. The management and regulation of emotions can occur through various processes and techniques, which may be employed automatically or deliberately and consciously or unconsciously. Emotional self-regulation can be defined as the process of initiating, maintaining, modifying, or changing the occurrence, intensity, or duration of internal feelings and emotions associated with social, psychological, and physical processes. It involves the use of behavioral and cognitive strategies to alter the duration or intensity of an emotional experience. Emotion regulation is a process through which individuals influence the types of emotions they experience, when they experience these emotions—whether positive or negative—and how they experience and express them [25].

2.3.3. Gratz and Roemer's Theory

The Theory of Difficulties in Emotion Regulation was proposed by Gratz and Roemer. Cognitive emotion regulation refers to the internal and external processes involved in the processing, evaluation, and identification of emotional responses. A review of the psychological literature indicates that cognitive emotion regulation is an important factor in successful functioning. Emotional experience is undoubtedly one of the most important aspects of human daily life. Emotions involve situation-response tendencies that encompass emotional states, patterns of perception, information processing, and physiological and interactive responses that occur in response to specific physical and social challenges. One of the most important human capacities is the ability to regulate and adapt individual emotions according to the demands of particular situations. Emotional self-regulation refers to the tendency to control internal states, regulate impulses and behaviors, and adapt them to relevant standards in order to achieve goals. Cognitive emotion regulation encompasses processes through which individuals influence their emotions as well as how they express them [26]. Gratz and Roemer's theory of difficulties in emotion regulation identifies six key dimensions: nonacceptance of emotional responses, difficulties engaging in goal-directed behavior, difficulties controlling impulsive behaviors, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity [26].

2.3.4. Cannon-Bard Theory

Not all researchers accept the claim that autonomic arousal is a necessary condition for emotion. According to the Cannon-Bard theory, proposed by Walter Cannon (1927) and subsequently revised by Philip Bard (1934), emotions and autonomic changes occur simultaneously but independently of one another. In other words, a pattern of sensory information may activate both the autonomic nervous system and the cerebral cortex, allowing an individual to experience an emotion even in the absence of feedback from the autonomic nervous system [27].

2.3.5. James-Lange Theory

According to the James–Lange theory, emotional experiences arise from the perception of physiological changes in the body. Responses such as increased heart rate, trembling, and sweating contribute to the experience of emotion. For example, an individual may experience fear by perceiving their bodily reactions in a threatening situation. Despite the criticisms it has received, this theory remains important for understanding the relationship between physiological responses and emotional experience [28] The first prediction is supported to some extent. Drugs and other interventions that increase autonomic arousal also increase emotional behavior and individuals' ratings of the intensity of their emotional experiences. The second prediction is also partially supported. Different emotions are associated with different physiological changes, although these differences are relatively limited. For example, electrical skin resistance decreases more during sadness than during other emotions, whereas hand temperature increases more during anger than during other emotions.

3. Results

3.1. Demographic Information

Table 1. *Frequency and percentage of demographic information (n=120).*

Variable	levels	Frequency	percentage
Age (in years)	19 to 21	54 people	45 percent
	22 to 24	49 people	41 percent
	25 and above	17 people	14 percent
Marriage	Married	36 people	30 percent

Variable	levels	Frequency	percentage
Occupation	Single	84 people	70 percent
	Employed	48 people	40 percent
	Unemployed	72 people	60 percent

Table 1 presents the demographic information of the participants.

3.2. Descriptive Information

Table 2. *Mean and standard deviation of difficulty regulating emotions in female students.*

Research variable	Number	Mean	Standard Deviation
Cognitive appraisal component	120 peoples	34/56	5/23
Emotional suppression component	120 people	38/19	6/74
Difficulty in emotion regulation	120 people	72/75	11/97

Table 2 presents the descriptive statistics of the variable of difficulty in regulating emotions and its components. According to the results of this table (Tables 2-4), it can be seen that the average total score of difficulty in regulating emotions in female students participating in the study was 72.75.

Table 3. *Mean and standard deviation of life satisfaction among female students.*

Research variable	Number	Mean	Standard deviation
Life satisfaction	120 people	42/13	8/76

Table 3 presents the descriptive statistics of the life satisfaction variable. According to the results of this table (Table 3), it can be seen that the average life satisfaction score of female students participating in the study was 42.13.

3.3. Research Assumptions

3.3.1. Assumption of Normal Distribution of Scores

Table 4. *Results of the Kolmogorov-Smirnov test to check the normality of the distribution of scores.*

Research variable	K-S statistic	Significance level
Cognitive appraisal	0.336	0.382
Emotional suppression	1.489	0.266
Difficulty in emotion regulation	2.768	0.373
Life satisfaction	1.583	0.512

Table 4 shows the results of the one-sample Kolmogorov-Smirnov test. As can be seen, the distribution of the scores of the research variables is normal with 95% confidence. Therefore, the significance levels of the normality statistics are greater than 0.05 (P<0.05), so the distribution of scores has a normal distribution. Accordingly, parametric tests of Pearson's correlation coefficient and multivariate regression can be used, and the results are reliable.

3.3.2. Assumption of Independence of Errors

Table 5. *Results of the Durbin-Watson test to check the independence of errors.*

Research Models	Durbin-Watson (Autocorrelation)
Life satisfaction ** Difficulty regulating emotions	1.806

Based on Table 5, it can be said that if the value of the Durbin-Watson statistic is between 1.5 and 2.5, the independence of the errors can be accepted and the analysis of the Pearson correlation coefficient and multivariate regression can be followed. The concept of independence means that the result of one observation does not affect the result of other observations. In regression, most often when the behavior of the dependent variable is studied in a time interval, we may encounter the problem of the errors not being independent. This type of relationship in the data is called autocorrelation. If there is autocorrelation in the errors, linear regression cannot be used. Since the Durbin-Watson statistic is between 1.5 and 2.5, it indicates that the correlation between the errors is rejected, that is, the errors are not correlated. Therefore, the Pearson correlation coefficient and multivariate regression can be used and the results of these statistical tests are reliable.

3.3.3. Multiple Noncollinearity Assumption

Table 6. *Tolerance and variance inflation coefficients for checking multiple noncollinearity.*

Research variable	Tolerance factor	Variance inflation
Cognitive appraisal	1.287	2.605
Emotional suppression	2.066	1.423
Difficulty in emotion regulation	1.834	4.678
Life satisfaction	1.823	2.067

Based on the results of Tables 4-7, the tolerance coefficient and variance inflation have been calculated to examine multiple non-collinearity. When the tolerance (tolerance coefficient) approaches zero, there is a large multiple collinearity and the standard error of the regression coefficients will be large. The tolerance (tolerance coefficient) values in the relevant column in the table above show that none of the tolerance coefficients are close to zero and as a result there is no problem in the regression analysis. The variance inflation factor is also the inverse of the tolerance coefficient and as it increases (greater than 10) it causes the regression coefficients to increase and makes the regression unsuitable for prediction. The values related to the variance inflation factor show that none of the indices are much larger than 10 and are close to it, as a result there is no problem in using linear regression. Therefore, since multiple collinearity was not observed in the predictor variables, parametric tests of Pearson's correlation coefficient and multivariate regression can be used, and the results are reliable.

3.4. Statistical Analysis of the Research Question

Can life satisfaction be predicted based on difficulty in emotion regulation?

Table 7. Correlation coefficient between difficulty in emotion regulation and life satisfaction in female students.

Predictor variable	Criterion variable: Life satisfaction	
	r (correlation coefficient)	P (significance level)
Cognitive Assessment	0/179	%29
Emotional Suppression	-0.208	%16
Difficulty in Emotion Regulation	-0.578	%21
		P>0.05

Based on the results of Table 7, there is a negative and significant correlation between the difficulty of emotion regulation and the emotional suppression component with life satisfaction in female students, and a positive and significant correlation between the cognitive reappraisal component and life satisfaction in female students.

Table 8. Summary of the regression model of emotion regulation difficulty and life satisfaction in female students.

Model	Multiple Correlation (MR)	R-squared (coefficient of determination)	Adjusted R-squared
1	0.523	0.273	0.271

As can be seen in Table 8, the multiple correlation coefficient between life satisfaction and difficulty in emotion regulation in the sample is 0.523. Also, based on the value of the coefficient of determination, 27 percent of the changes related to life satisfaction in the sample are explained by difficulty in emotion regulation.

Table 9. Regression coefficients of life satisfaction based on difficulty in emotion regulation in female students.

Predictor Variable	Non-standard coefficients		Standard coefficients	t	Significance level
	B	Standard error	β		
Constant	53.612	22.709	-	10.349	%28
Cognitive Reappraisal	1.665	0.203	0.127	4.867	%12
Emotional Suppression	-1.867	0.154	-0.186	-6.362	%17

F=302.74; Modified=0.271; R=0.523.

Based on the adjusted coefficient of determination, 27 percent of the variance in life satisfaction in the sample was explained by the difficulty of emotion regulation. Finally, Tables 4-10 of the standard and unstandardized coefficients of simultaneous regression showed that the dimensions of emotion regulation difficulty, including cognitive reappraisal (P<0.05 and β=0.127) and emotional suppression (P<0.05 and β=-0.186), can predict changes in life satisfaction in the sample. Therefore, the first hypothesis of the study is confirmed.

4. Discussion and Conclusion

The result of the present study showed that there is a positive and significant correlation between the difficulty in regulating emotions in students and life satisfaction. Also, regression analysis showed that cognitive reappraisal can explain 12% and emotional suppression can explain 18% of changes related to life satisfaction. Therefore, the present hypothesis is confirmed. This finding of the research is in line with the results of many previous studies, including [2, 23, 27, 29-33].

Regarding this finding, it can be said that emotions are socially useful and can be constructive in transferring emotions to others, social interactions, creating and maintaining and breaking relationships with others, and it increases or decreases a person's ability to do work and attitude to life, and increases or decreases awareness of emotional needs. As Thompson et al. (2009) believed that awareness and acceptance of emotions, timely expression of emotions and re-evaluation as a positive strategy of emotional regulation play an important role in positive adaptation, increasing positive emotions and reducing negative emotions. Students who do not use the re-evaluation strategy enough, suppress issues and problems more and use ineffective coping strategies instead of solving them. In the case of students, one of these inefficient solutions is to use more discussion and suppression in order to regulate the mood and avoid facing problems, which intensifies this vicious circle and subsequently causes a decrease in life satisfaction. Also, in general, it can be acknowledged that emotional regulation plays an effective role in increasing all dimensions of communication and emotional skills, which are essential for achieving satisfaction in life, because dissatisfaction with life is a type of emotional disorder that may be affected by various factors. Therefore, the skills related to the amygdala brain center, which is the center of emotion control, can cause students to have a deficiency and dysfunction in increasing their skills to manage their emotions. In students, even though emotions can influence thoughts and beliefs, they can distance themselves and pay attention to their emotions and feelings, become aware of them, and pay attention to their influence on thoughts and themselves. At the same time, they learn to moderate their emotions, but this ability is not possible in people who do not have defects in the amygdala system.

Also, it can be stated that emotional regulation is an important factor in adapting to stressful events in life and can be effective on people's life satisfaction, so that the use of negative cognitive regulation (self-blame, blaming others, rumination and catastrophizing) as incompatible solutions is associated with a high level of stress, anxiety, depression, etc. In other words, it can be said that using the dimension of negative cognitive regulation makes a person susceptible to emotional and behavioral disorders, and as a result, instead of reacting appropriately to stressful events, he reacts to them with confusion and anxiety, while using the dimension of positive cognitive regulation (such as planning and positive evaluation) does not lead to these consequences. People who use the dimension of positive cognitive regulation when faced with stressful events, report less mental disorders and, as a result, higher life satisfaction. In fact, the negative relationship between the dimension of positive cognitive regulation and mental and emotional disorders is due to the fact that the use of this dimension causes a person to evaluate negative events with a different perspective and to pay attention to the positive aspects and possible benefits that the event will bring to him in the long run, as a result, he will experience less discomfort and tension and cope with the event more easily, and as a result, he will have higher life satisfaction.

As stated in the theories of life satisfaction, the feeling of needs in humans causes them to seek to satisfy these needs and with the satisfaction of each need, they feel more satisfied with life (Maslow) or based on the perceptual theory (France), the four main factors of family, social and economic status, psychological status, and physical status are considered effective in the feeling of life satisfaction. These four main variables can independently or together affect life satisfaction. Or according to Festinger's theory, according to this theory, when a person feels a large gap between "what is" and "what he would like to be", he suffers from psychological discomfort and problems, including anxiety and depression, and experiences less life satisfaction. When a person has a high sense of satisfaction in life, this feeling of satisfaction is associated with indicators such as favorable conditions for the development of flourishing and success [1]. increased likelihood of successful adaptation in various life situations and feelings of happiness, feelings of well-being, likelihood of successful relationships, greater efficiency and income, better physical health, enjoyable and longer life [10] High quality of life [34], lower stress [34]. and higher well-being, and dissatisfaction with life is associated with poorer health status, depressive symptoms, personality problems, inappropriate health behaviors, and poor social status [8] are correlated. In fact, life satisfaction occurs in three dimensions: spiritual, physical, and psychological. Based on what was stated about life satisfaction and based on the definition of emotion regulation that refers to cognitive processes that are related to mental, social, and biological health, the relationship between life satisfaction and emotion regulation is explained as deduced from the results of the research at hand. Obviously, based on the theories and results of the research conducted, this relationship is two-way. In a way that on the one hand, emotion regulation affects life satisfaction, and on the other hand, life satisfaction affects how emotion is regulated.

Abbreviations

ANS	Autonomic Nervous System
CER	Cognitive Emotion Regulation
CERS	Cognitive Emotion Regulation Strategies
DER	Difficulties in Emotion Regulation
ER	Emotion Regulation
LS	Life Satisfaction
PWB	Psychological Well-Being
SWB	Subjective Well-Being

Author Contributions

Sepideh Barani: Conceptualization, Data curation, Formal Analysis, Investigation, Writing – original draft, Methodology Project, administration

Shahab Kaskeh: Resources, Supervision, Validation, Writing – review & editing

Conflicts of Interest

The authors declare no conflicts of interest.

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