

The Effect of a Training Program Based on the Bar-on Model for Emotional Intelligence to Improve Body Image in Jordan

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Abstract

Objectives: The study aimed to investigate the effectiveness of an emotional intelligence-based training program on improving body image among a sample of adolescent girls aged between 12 and 15 years.

Methods: The study sample consisted of 28 adolescent girls who scored the lowest on the body image scale, randomly assigned to an experimental group and a control group. To achieve the study objectives, a training program consisting of 21 sessions was developed based on the dimensions of the Bar-On model: Personal dimension, Interpersonal dimension, Adaptability, Stress Management, and General Mood.

Results: The Mann-Whitney U test and Wilcoxon signed-rank test revealed the effectiveness of the training program in improving body image among adolescent girls at a significance level of ($\alpha \leq 0.05$) in favor of the experimental group. The results also showed improvements in the dimensions of overall appearance, weight, face, and body areas for the experimental group in the post-test, but no significant changes were observed in the attitude towards cosmetic procedures. This might be attributed to the models presented to adolescents through media, modern communication, and intensive promotion of cosmetic procedures via these platforms.

Conclusions: Based on the results, it is evident that the emotional intelligence program was effective in improving body image among adolescent girls.

Keywords: Emotional intelligence, Bar-On model, body image, adolescence stage.

أثر برنامج تدريبي مستند إلى نموذج بار- أون في الذكاء الانفعالي على تحسين صورة الجسد في الأردن

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ملخص

الأهداف: هدفت الدراسة إلى الكشف عن مدى فاعلية برنامج تدريبي مستند إلى نموذج بار- أون في الذكاء الانفعالي على تحسين صورة الجسد لدى عينة من المراهقات تتراوح أعمارهن من (12-15) سنة.

المنهجية: تكونت عينة الدراسة من (28) مراهقة ممن حصلن على أدنى الدرجات على مقياس صورة الجسد، موزعة عشوائياً إلى مجموعة تجريبية ومجموعة ضابطة. ولتحقيق أهداف الدراسة تم بناء برنامج تدريبي مؤلف من (21) جلسة تدريبية مستندة إلى أبعاد نموذج بار- أون: البعد الشخصي، البعد بين الأشخاص، بعد التكيف، بعد إدارة الضغوط والتوتر وبعد المزاج العام.

النتائج: كشف تحليل اختبار مان- وتني وتحليل اختبار ويلكوكسون عن فاعلية البرنامج التدريبي على تحسين صورة الجسد عند المراهقات عند مستوى دلالة ($\alpha \leq 0.05$) لصالح المجموعة التجريبية. كما أظهرت نتائج درجات المتوسطات الحسابية والانحرافات المعيارية الظاهرة على أبعاد مقياس صورة الجسد على تحسنه في أبعاد المظهر العام، والوزن، والوجه، ومناطق الجسم لصالح المجموعة التجريبية في الاختبار البعدي، ولم ينطبق ذلك على بعد الاتجاه نحو عمليات التجميل. وقد يعزى ذلك للنماذج المقدمة للمراهقات من خلال وسائل الإعلام والاتصال الحديثة والترويج المكثف لعمليات التجميل غيرها.

الخلاصة: بناءً على النتائج يتضح أن برنامج الذكاء العاطفي كان فعالاً في تحسين صورة الجسد لدى المراهقات.

الكلمات الدالة: الذكاء الانفعالي، نموذج بار- أون، صورة الجسد، مرحلة المراهقة.



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1. INTRODUCTION

The transition into adolescence requires adaptive preparations for adolescents to cope with both physical and emotional developmental changes. For this study, we included adolescents who found it easy to adapt and others who faced some difficulties, which caused confusion for them and their caregivers on how to best deal with the situation. Adolescents are exposed to environmental self-experiences in their direct and indirect environments (via modern media), which helps them form concepts for themselves. This includes a mental image, thoughts, directions, perceptions, and feelings toward one's self with physical, cognitive, and social dimensions (Al-Abadisah, 2013).

Adolescence is when an individual increases his awareness through experiences in which he approaches adult roles and makes behavioral decisions in two ways: adopting behaviors to confirm the existence of a self-image, or through motivation for self-enhancement. Both methods determine adolescent behavioral decisions, both individually and socially (Weiss, Mouttapa, Cen, Johnson, & Unger, 2011). Body image and its appearance is an essential aspect of adolescents' life, if a positive pattern forms, this will lead him to interact appropriately with his surroundings, but if a negative pattern forms from his self-concept, it will lead to inappropriate behavior with his surroundings (El-Amrousy, 2015).

Body image is a mental image, or a (positive or negative) perception, that an individual form about himself, which contributes to the formation of environmental experiences that the individual is exposed to. Accordingly, this image is subject to change in light of new experiences that the individual may encounter (Al-Desouky, 2006), where the perceived body image affects the adolescents' personality and behavior. Each part of his body is seen as self-standing, especially in light of rapid changes in the developmental aspects, and acceptance of the developmental phases, which are influenced by comments and evaluations of others in addition to what is presented by various media (Breda & Heflinger, 2004). This causes him to attach great importance to his body, and becomes more self-aware and extremely sensitive to criticism. In addition, he makes comparisons between his body and the bodies of others, either directly or through various media. If the desired body image is fulfilled, capability of adapting to his environment increases, but if he feels dissatisfaction with his personal image, it potentially leads to many behavioral, emotional, and social disorders (Kafafi & El-Nial, 1995).

Body image consists of three components: the perceptual component, which indicates the individual's awareness of his body's size and its components; the subjective component, shows the individual's satisfaction and anxiety about his body; and the behavioral component, which means avoiding individual situations that cause discomfort (Attia, 2013). Numerous studies found that female adolescents are more affected by comments about their body image than males (Kim & Kim, 2006; Smith & Rieger, 2006). Females are more preoccupied with the excessive thinness of their bodies, the size of their breasts, etc. Which threatens their psychological health (Akos & Levitt, 2002; Al-Abadisah, 2013; Al-Hajji, 2007; Al-Mutairi, 2011; Melhem, 2012; Sharman, 2007).

1.1. *Body Image and Emotional Intelligence*

Emotional intelligence plays a large role in helping individuals acquire social skills that help them interact efficiently and adequately in social situations, and even in emergencies (Mayer & Salovey, 1997). Mayer and Salovey published an article in (1990), they consider emotional intelligence to be a type of social intelligence, and its function is to guide thinking, identifying capabilities, and activating them efficiently to solve problems. They defined emotional intelligence as "the extent to which an individual can monitor his feelings, emotions and the emotions of others, distinguish between them, and use knowledge to guide an individual's thinking and behavior" (Salovey & Mayer, 1990).

Goleman (1995) included much of what was written in research, studies and programs on emotions, the brain, social behavior, and academic programs designed to help individuals improve and develop their social and emotional skills whilst improving their emotional intelligence capabilities to become more social compared to others (Abu Ghazal, 2015).

Economic Form's Future of Jobs Report (2020) ranks emotional intelligence among the 15 most in-demand skills needed for success in 2022 and beyond (Maharaj & Ramsaroop, 2022).

Many researchers have studied the relationship between emotional intelligence and life variables due to the emergence of multiple intelligence theories. Some believe that emotional intelligence predicts success better than general intelligence, whereas cognitive intelligence contributes to 20% at the highest level in an individual's success in life. In comparison,

other factors contribute to 80%, the most important of is emotional intelligence (Al-Alwan, 2016). Therefore, an individual who is emotionally intelligent has a high degree of importance, as its elements are essential requirements for progressing and achieving success in many aspects of life, whether at personal or academic levels. Generally, individuals with high emotional intelligence are healthier and more adaptive in their private and working lives, can establish strong social relationships and have strong leadership capabilities compared to individuals with low emotional intelligence (Abu Ghazal, 2015; Kelly & Moon, 1998; Saikia & Mathur, 2015).

Emotionally intelligent people are more aware of their emotions, making them capable of formulating logical decisions and controlling impulsive emotions, especially when exposed to social pressures. This means that they respond logically in difficult social situations and avoid making decisions that lead to adverse results characterized by poor adaptation or inappropriate behavior (Elias & Weissberg, 2000). Many models demonstrated emotional intelligence, which indicates their ability of teaching and helping others develop their own emotional intelligence. Most of them agreed on the possibility of teaching the components of emotional intelligence at any time, the sooner they're trained, the easier it will be. The emotional intelligence of an individual develops from the experiences he encounters over time, which may either change or crystallize behavior as a result. Therefore, these skills may make an individual more adaptable to the requirements of changing environments, which increases the possibility of success in life (Abu Ghazal, 2015).

An extensive review of educational literature, studies, and research related to emotional intelligence refers to the diversity and multiplicity of theoretical approaches. Although the novelty of the concept emerged in the mid-eighties last century, this difference of opinion is due to the vast amount of research that has addressed the concept from different theoretical premises over the past two decades. However, three main directions or models can be identified:

1. The direction of dealing with emotional intelligence is a capacity, and both Mayer and Salovey represent this trend.
2. Goleman represents the trend of dealing with emotional intelligence as a group of competencies—personal, social, and motivational skills.
3. A tendency viewing emotional intelligence as a concept in which non-cognitive elements and components overlap, and personality traits can be described by the personality model and represented by Bar-On (Al-Awaidi & Al-Rousan, 2013).

Mayer and Salovey presented a model in emotional intelligence, known as the 'Ability Model', which indicates that emotional intelligence is a set of mental capabilities that contribute to logical thinking and emotions that enhance thinking. They reached four dimensions of emotional intelligence—first, awareness of emotions, which refers to the ability to determine feelings in ideas, language, and behavior of others; the second dimension is the use of emotions, which refers to how individual's ideas and other cognitive activities form from their emotional experiences; the third dimension is understanding and analyzing emotions, focusing on understanding emotions and emotional knowledge; the fourth dimension is the management of emotions, which is the ability to open up to feelings and emotions modifying oneself and others (Al-Alwan, 2011).

Goleman presented an emotional intelligence model that included five dimensions: emotional self-awareness, self-regulation, and motivation, empathy for others, and social skills.

Bar-On's model developed by Reuven Bar-On (1997a) have been described as being integrated into the personality framework, and behavior consistency across situations has been evaluated, focused its analysis of emotional intelligence on its effects and results in the field of mental and non-cognitive dynamic capabilities, which explains why some individuals are more successful than others. He presented an emotional intelligence model known as the Mixed Model, which is a set of non-cognitive abilities and skills that influence an individual's adaptation to environmental requirements and pressures (Abu Odeh, 2014).

Bar-On's identified the properties of emotional intelligence by employing an individual's characteristics and capabilities related to emotional and social knowledge to address the requirements of the environment effectively and successfully. He divided emotional intelligence into five competencies or non-cognitive abilities: emotional self-awareness, which is determined by the extent of the individual's ability to understand and perceive his feelings,

emphasizing the individual's ability to express his feelings, beliefs, and thoughts, and consider the extent of his self-esteem in an accurate manner; self-realization in terms of the individual's awareness of their potential, and independence, so the individual can direct and control his thinking and actions so that he is emotionally independent.

The components of interpersonal relationships explain an individual's relationship with others. This component includes three capabilities: personal relationships: that an individual can find and maintain satisfactory relationships that are characterized by emotional intimacy, and social responsibility: The individual appears as a collaborator, contributor, and constructor within the group he belongs to, and the emotional reincarnation (empathy) in which he realizes and values others' feelings.

Adaptability: This component includes three capabilities: problem-solving skills and identification to find practical solutions to them, and the ability that indicates how an individual adapts to other people's feelings and thoughts and tests the realism in the ability to verify the sincerity of others' emotions.

Stress management: This component includes two capabilities—enduring stress and difficult circumstances without yielding to them, and controlling emotions and resisting impulsive responses.

General mood: this component includes two capabilities—interaction in the individual's view of life; and happiness in the sense of contentment in life, and enjoying it either by himself or with others (Al-Alwan, 2011).

From the foregoing, we can see that many researchers agree there is a positive relationship between the levels of emotional intelligence, social and psychological skills of individuals concerning self-image, self-esteem, and self-confidence; this prompted the current study to investigate the depth of changing body image for adolescent girls and the extent of the influence that these changes have on emotional intelligence.

In a study conducted by Pollatos et al. (2020) of (1047) males and females in the primary stage of third and fourth grade. The objective was studying the relationship between body image dissatisfaction (BID) and emotional intelligence (TEL) traits according to the Bar-On model, and improvement in quality of life Health Related (HRQOL). The results found a positive association between (BID), (Tel) and (HRQOL) for students. Whereas emotional intelligence includes an important factor in determining self-regulation skills for health-related behavior and resistance to obesity. Also Wong et al, (2014) found a statistically significant positive correlation between emotional intelligence, body image satisfaction in adolescents and the association of these two variables with eating disorders, especially among adolescent females, Costarelli et al, (2009) found the same results when studying the relationship between emotional intelligence and body image in weight and body mass in athletes and their relationship to eating disorders.

Cuesta et al, (2018) and Modrzejewska et al, (2022) both reviewed the literature on the positive and negative effects of social media on adolescent body image and eating behaviors. However, it was assumed that adolescence with emotional intelligence traits contribute to positively identifying these behaviors, whereas the opposite is true. Kirqt and Dilmac (2021) study on the existence of a positive linear correlation between emotional intelligence and body image confirmed this.

Studies focused on emotional intelligence in adolescents have found that high levels of it improves many personality traits such as self-concept, self-esteem, mood, and Internet addiction (Calero et al, 2018; Gardner & Lambert, 2019; Peng et al, 2019). Gugliandolo (2020) and others found that adolescents with high emotional intelligence and positive parenting practices serve as a protective factor against adolescent body uneasiness in a study aimed at understanding the mechanisms that link traits of emotional intelligence and parenting nurture in contributing to the development of body uneasiness for (405) adolescents. A study by Casino-Garcia et al. (2021) and a study by Villanueva et al (2020) concluded that emotional intelligence is a key factor in the development of well-being and decreases anti-social behavior (Garaigordobil, 2020). the importance of guiding institutions to develop programs aimed at its development among ordinary and talented students aged 8-18 years.

Many researchers have found a strong, positive correlation between emotional intelligence in terms of an individual's ability to adapt to his surroundings and regulate his emotions by developing the ability to manage their own feelings and responses to those who interact with them socially (Petrides, Frederickson, & Furnham, 2004).

Researchers also found that individuals have some level of emotional intelligence represented by empathy and independence, and emotional control has contributed to the prediction of social adaptation among them (Crick, 2002; Henley & Long, 1999; Lopes et al., 2004). In a qualitative study, Chimhenga (2002) aimed to reveal factors that cause behavioral problems among adolescents (In the Lviv- Blauayu region in Europe) and their manifestations. He concluded that these problems occur due to two main factors: environmental factors represented by patterns of parenting, schooling, and social upbringing that adolescents are exposed to; and other factors related to psychological causes (such as low self-esteem and mental disorders), brain damage, and audio or visual imbalances. Consequently, exhibit anti-social behavior, such as lying, theft, alcohol and drug abuse, stress and anxiety, and in some cases, depression, which may lead to suicide in severe cases.

Many studies have dealt with the relationship between body image and the media and concluded that females are more affected by slim models and this leads them to change their eating habits (Al-Abadisah, 2013; Grabe & Hyde, 2006). Studies that have dealt with body image and its relationship with levels of depression, anxiety, self-esteem, and psychological and social functions, all found a statistically significant correlation (Davidson & McCabe, 2006; Holsen, Kraft, & Røysamb, 2001; Kim & Kim, 2006).

Many foreign Arabian studies designed training programs to develop emotional intelligence among a variety of individuals. The results largely improved adaptation, social relationships and complacency, reduced behavioral disorders and associated problems among the study participants (Al-Abdullah, 2008; Al-Alwan, 2016; Freedman, 2003; Matar, 2004).

This research began without finding a single study directly related to this topic, and this places a burden on any researcher, even if the studies mentioned above have illuminated some relevant problems.

1.2. Study Focus

The study's aim is to reveal the effectiveness of emotional intelligence training programs based on Bar-On's mixed model to improve adolescent girls' perceptions of their bodies in light of the rapid developmental changes at this stage of life and in the presence of a huge amount of modern means of communication and media.

1.3. Study Justifications

This study is one of the few undertaken at Jordanian institutions on training adolescents on how to enhance their perceptions of their body image. Adolescents are influenced by their peers' and those close to them's opinions, and the most important thing now is that adolescent girls are addicted to following body image models on social media, so educators must address how young people view their bodies, reinforce body positivity, and try to encourage a good image rather than a bad one, regardless of external or social factors.

1.4. Study Hypotheses

The present study aimed to validate the following hypotheses:

1. There were no statistically significant differences at the $\alpha \leq 0.05$ level between the experimental group's mean scores and the control group's mean scores on the body image scale in adolescents after completing the training program in emotional intelligence.
2. There were no statistically significant differences at the $\alpha \leq 0.05$ level between the average scores of the experimental group members before and after training the program.
3. There were no statistically significant differences at the $\alpha \leq 0.05$ level between the experimental group's mean scores and the control group's mean scores in the pre- and post-tests for the five dimensions of the body image scale in adolescents as a result of the training program in emotional intelligence.
4. There are no statistically significant differences at the $\alpha \leq 0.05$ level between the experimental group's mean scores on the body image scale after the training program and their scores in the postponed test.

1.5. The Importance of the Study

The theoretical importance lies in:

- The novelty of the topic of the study and the need for further research. This program is a new addition to existing

programs used to address the concept of body image in adolescents and how modern media may cause issues regarding the acceptance of body image.

- The potential to guide caregivers, whether in a family or school setting, and the importance of developing emotional intelligence in adolescents and its significant role in encouraging acceptance of their body image.

Practical importance is represented by the following:

- Building a training program, in which consideration was given to identifying sessions, their characteristics and goals, and the roles of teachers and learners in understanding the effectiveness of this program on the body image of adolescent girls.
- Orienting the practices of Adolescents caregivers on the importance of developing their emotional intelligence at this particular age and in light of modern means of communication. As this age group accepts developmental changes in a positive way, they are more able to socially and emotionally adjust to their surroundings and avoid any problems within this context that hinder this development.

Finally, the importance of this research is highlighted due to the scarcity of Arab, foreign and local studies in this particular area, which focuses on the application of the practical side according to the researcher's view.

1.6. Procedural Definitions

- Emotional intelligence: A set of emotional abilities affecting the overall capabilities of an individual allowing him to adapt to the requirements and pressures of the environment (Bar-On, 1997). Emotional intelligence includes internal personal components, interpersonal relationship components, adaptive components, components of pressure and stress management, and the components of general mood. The participants completed the training program specifically designed for this purpose, which included 12 training sessions, each of which were 50 minutes and was implemented over the course of two months.
- Body image: is an image the individual forms in his mind of his body's shape, size, and composition, along with emotions associated with this image, which can be either positive or negative. This image is illustrated by a set of accompanying behavioral tendencies (Al-Desouky, 2006) measured by the body image scale used in the current study.

1.7. Study determinants and Limitations

- The study's results are determined by the characteristics of the tools that the researcher uses in terms of development, construction, honesty, reliability, and psychometric significance procedures.
- The training program is limited to preparations for developing emotional intelligence and its components within the framework of social situations identified by the researcher by referring to the theoretical literature.
- The study sample was restricted to adolescent girls registered at the Summer Sports Club in Al Hussein Sports City for Youth in 2021.

2. RESEARCH METHODOLOGY

Study population and its samples:

The study population included all members of the summer club in Al-Hussein Sports City for Youth in 2021, which comprised 58 female adolescents ranging in age from (12-16) years.

2.1. The Study Sample

The researcher used the accidental sampling method to extract the sample from the original population members. A total of (28) adolescents, whose ages ranged between (12–15) years, were chosen based on their low body image scores, and that is among those whose scores fell below the cutoff score, which is equal to (3) on the body image scale, they were then randomly divided into two groups of (14): an experimental group and (14) a control group. Table (1) shows the distribution of the study sample individuals according to group and age.

Table 1: Distribution of study sample individuals according to group and age.

Age	Experimental Group	Control Group	Total
12-15 years	14	14	28

To verify the pre-equivalence between the experimental and control groups on the body image scale, a T-test was performed to examine the differences between the pre-test scores for both groups Table (2).

Table 2: Test results examine the significance of differences in the pre-test scores on the dimensions of the body image scale and the overall scale according to the experimental and control groups variables.

Dimensions of Scale	Number	Group	Arithmetic Average	Standard Deviation	Degrees of Freedom	Value of t	Items
Satisfaction with overall appearance	6	Experimental Control	5/2.51 5/2.80	0.45 0.77	34	1.59	1, 2, 3, 18, 19, 20
Satisfaction with weight	5	Experimental Control	5/2.52 5/2.54	0.89 0.91	34	1.23	4, 5, 6, 38, 42
Satisfaction with facial areas	15	Experimental Control	5/2.69 5/2.72	0.95 0.93	34	1.55	7, 8, 9, 16, 17, 21, 22, 23, 30, 31, 32, 36, 37, 43, 44
Satisfaction with body parts	9	Experimental Control	5/3.38 5/3.53	0.46 0.62	34	1.18	10, 11, 12, 24, 25, 26, 39, 45, 46
The trend toward plastic surgery	13	Experimental Control	5/3.48 5/3.34	0.47 0.48	34	1.13	13, 14, 15, 27, 28, 29, 33, 34, 35, 40, 41, 47, 48
Total summation	48	Experimental Control	5/2.96 5/2.99	0.43 0.42	34		

It is clear from Table (2) that there are no statistically significant differences between the pre-test averages for the experimental and control groups in the various dimensions of the body image scale, as the T-test values were not significant at the $\alpha \leq 0.05$ level for any of these dimensions, which indicates the parity of the two groups before applying the study.

2.2. Study Tools

First: Body Image Scale

This scale was prepared by Attia (2013) in a Syrian environment, and it consists of 48 items. It was used in this study due to its psychometric efficiency and its application to a sample similar to the current study sample. In addition to the similarities between the Syrian and the Jordanian environments, the items in this scale revealed the extent of adolescents' satisfaction with their body image. The scale items were graded according to the Likert five-point scale (always, often, sometimes, rarely, never). The positive-orientated items were given values that ranged from 5–1, while the negatively oriented paragraphs were given values ranging from 1–5.

The researcher modified this measure for the Jordanian environment on a sample of 30 adolescents outside the study sample, whose ages ranged between 12–18 years, with an average age of (12 and 13) years and a standard deviation of 0.98. The apparent validity of the scale was calculated by presenting it to (8) doctoral specialists in the branches of psychology to review and validate the clarity of the items, its suitability for the Jordanian environment, adolescence in particular, and the suitability of the phrasing of the five dimensions of body image. The specialists suggested

improvements to the phrasing and gave final approval.

The validity of the internal structure of the scale was checked after applying it to the above-mentioned sample, and the correlation coefficient of each paragraph was calculated for the dimension to which it belongs. These values ranged between 0.286 and 0.701, as shown in Table (3). In addition, the correlation coefficients were extracted for each level in the overall degree of the scale, which ranged between 0.339 and 0.78, all of which are statistically significant at the $\alpha = 0.05$ level, as shown in Table (4). These results indicate the validity of the scale's construction and its suitability for use in this study.

Table3: Correlation coefficients between the scores for each level and the total scores on the body image scale.

Phrase Number	Correlation Coefficient	Phrase Number	Correlation Coefficient	Phrase Number	Correlation Coefficient
1	0.411	17	0.552	33	0.515
2	0.382	18	0.574	34	0.310
3	0.584	19	0.341	35	0.634
4	0.483	20	0.471	36	0.451
5	0.491	21	0.292	37	0.701
6	0.113	22	0.473	38	0.286
7	0.492	23	0.603	39	0.572
8	0.286	24	0.305	40	0.291
9	0.291	25	0.513	41	0.481
10	0.382	26	0.381	42	0.304
11	0.653	27	0.316	43	0.305
12	0.294	28	0.203	44	0.461
13	0.543	29	0.567	45	0.471
14	0.441	30	0.661	46	0.394
15	0.385	31	0.591	47	0.567
16	0.631	32	0.69	48	0.291

Table 4: Correlation coefficients between dimensions and overall scores on the body image scale.

Dimension	Correlation Coefficients	Significant Level α
Satisfaction with overall appearance	0.339	0.01
Satisfaction with weight	0.479	0.02
Satisfaction with facial areas	0.721	0.00
Satisfaction with body parts	0.78	0.00
The trend towards plastic surgery	0.66	0.00

The researcher also conducted a peripheral comparison to calculate the discriminatory honesty of the scale between the average score of those who got higher scores on the scale and the average score of their peers who obtained lower grades ($n = 30$) by calculating the critical ratio for scores above 27% and scores below 27%, as shown in Table 5. The differences between the mean of the upper category and the mean of the lower category were extracted through a =T-test of two independent and equal samples; the results showed that all the values of T extracted for each paragraph, and the scale as a whole, are more significant than the tabular value of T at the degree of freedom (F), which indicates that the difference is statistically significant at the $\alpha = 0.01$ level, confirming the ability of the scale to distinguish between higher and lower levels of body image.

The stability of the instrument was verified by Cronbach's alpha equation, which reached 0.78. Regarding the

reliability of the scale in the Jordanian environment, the researcher applied the scale and re-applied it to 30 adolescents outside the study sample over a period of two weeks. The correlation coefficient between them was calculated, and it was found to be 0.79.

Second: The Training Program

The general objective of the training program is to improve the emotional intelligence of adolescent girls. In terms of specific objective, the evidence shows that adolescent girls practice the emotional intelligence-related behaviors they are taught and use them in everyday life situations, and are more open to the different experiences and perspectives of others, thus emotional intelligence becomes part of the personality of the adolescent and a fixed pattern in his thinking.

The training program for this study was corrected based on the Bar-On's model of emotional intelligence, which includes five dimensions: the internal personal components, the components of interpersonal relationships, adaptive components, stress and pressure management components, and general mood components. The program consisted of 21 training sessions at 40 minutes per session. The first session was a preliminary introduction to the program, its objectives, and contents. The remaining 20 sessions included emotional intelligence and its components within the hypothetical situations of adolescent training to increase their emotional intelligence. After preparing the program, it was presented to six arbitrators who specialize in educational psychology and general psychology, who were asked to express their views on the program's attitudes and goals and their suitability to be the subject of emotional intelligence training.

The program was piloted on a sample of 12 adolescents outside the study sample to ask their opinions regarding the clarity of situations and goals, the extent of their understanding of them, the extent of the suitability of the procedures for their level, to ascertain whether the session length is sufficient to implement the training in one session, and to reveal any developments that may appear during application. The sample returned very positive responses, with only one session being extended from 40 minutes to 50 minutes.

2.3. Procedures and Study Design

The researcher prepared the experimental design for the study after examining its hypotheses and chose one of the designs with tight control, a semi-experimental (pre-dimensional) design for two equal groups. The study included the following variables:

- Independent variable: the training program in emotional intelligence has two levels: the experimental group subjected to training on the program and the control group that was not subject to the program.
- Dependent variable: Adolescents' scores on the body scale. The mean and standard deviations were extracted to process the statistical data, the Mann–Whitney test was used for the medium-sized samples, the Wilcoxon test and T-test were used for two independent samples, the Pearson correlation coefficient and the Chi-square test were used to validate the study hypotheses.

3. RESULTS AND DISCUSSION

First: Results Related to the First Hypothesis

The first hypothesis states that “there are no statistically significant differences at the $\alpha \geq 0.05$ level between the mean scores of the experimental group and the control group on the body image scale after completing a program in emotional intelligence”. The Mann–Whitney U test was applied to balance two independent, medium-sized samples, as shown in Table (5).

Table5: Statistical values of the Mann–Whitney test for the two experimental and control groups on the body image scale in the post-test.

Group	N	Total Rank	Average Rank	Mann–Whitney Values	Sig.
Experimental	14	39	7.8	1	0.011
Control	14	16	3.2		

Table (5) shows differences between the averages for the ranks of the experimental group scores and the mean of the controlling group's grade levels on the body image scale, as they reached 7.8 and 3.2, respectively. When applying the Mann–Whitney U test to balance two independent medium-sized samples, its value (1) was at the 0.011 significance level. This value is smaller than $\alpha \leq 0.05$, indicating statistically significant differences between the degrees of the experimental and control groups on the scale of body image. These differences were in favor of the experimental group who underwent the training program in emotional intelligence. Based on the above, the null hypothesis is rejected.

Second: Results Related to the second Hypothesis

The second hypothesis states that “there are no statistically significant differences at the $\alpha \leq 0.05$ level between the average score of the experimental group members before and after completing the training program”.

The Wilcoxon test was applied to calculate the statistical values that balance two medium and interrelated samples.

Table 6: The pre& post values of the Wilcoxon test for the individuals of the experimental group on the body image scale.

Group	Number	Total Rank	Average Rank	Wilcoxon Values	Sig.
Pre-test	14	3.05	0.02	2.015	0.0041
Post-test	14	51	4.01		

Table (6) shows the differences between the arithmetic mean levels for the experimental group scores on the body image scale. The result was achieved by applying the Wilcoxon test, which produced a value of 2.015 and a significance level of 0.0041, which is a smaller value ($\alpha \leq 0.05$) and indicates the presence of statistically significant differences in the pre- and post-tests in the experimental group scores on the body image scale. These differences were in favor of the post-test, and based on the above results, the null hypothesis is rejected.

Third: Results Related to the third Hypothesis

The third hypothesis states that “there are no statistically significant differences at the $\alpha \leq 0.05$ level between the mean scores of the experimental group and the mean scores of the control group in the pre- and post-tests for the dimensions of the body image scale due to the training program in emotional intelligence”.

The arithmetic averages and standard deviations were extracted for the experimental group and the control group scores for each dimension of the body image scale for the post-test, verifying the training program's effectiveness for each dimension Table (7).

Table 7: Arithmetic averages and standard deviations for the dimensions of the body image scale in the post-test.

Dimensions of the scale	Group	Arithmetic Average	Standard Deviation
Satisfaction with overall appearance	Control	2.95	1.12
	Experimental	4.19	0.92
Satisfaction with weight	Control	2.80	1.03
	Experimental	3.89	0.67
Satisfaction with facial areas	Control	2.70	0.94
	Experimental	4.19	0.86
Satisfaction with body parts	Control	3.60	0.48
	Experimental	4.31	0.82
The trend towards plastic surgery	Control	3.35	0.46
	Experimental	3.20	0.54

The results in Table (7) indicate clear differences between the arithmetic averages of the experimental group and the control group in the post-test for the body image scale dimensions. They indicate satisfaction with overall appearance in favor of the experimental group, which also applies to satisfaction with weight, satisfaction with areas of the face, and satisfaction with areas of the body. Regarding the trend towards plastic surgery, the arithmetic averages were not statistically significant. The statistical values did not change for this dimension, and they remained fairly stable before and after the start of the training program by returning to the values shown in Table (2). The emotional intelligence training program did not have a statistically significant effect on this dimension.

Fourth: Results Related to the Fourth Hypothesis

The fourth hypothesis stated that “there are no statistically significant differences in the scores of the experimental group for body image and their grades in the postponed test after applying the emotional intelligence training program”.

The researcher extracted the statistical values using the Wilcoxon test for the experimental group on the body image scale in the post-test and showed the values one month after the end of the training program. Table (8) contains the results.

Table 8: Statistical values of the Wilcoxon test for individuals of the experimental group on the body image scale in the postponed post-test.

Group	Number	Total Rank	Average Rank	Wilcoxon Value	Sig.	Significance Level
Post-test	14	3.71	0.14	-0.76	0.489	0.485 Not significant at the 0.05 level
Postponed	14	3.57	0.15			

The above table indicates that the average rank of the experimental group scores on the body image scale in the post-test was 0.14 and the average rank of their grades on the postponed test was 0.15. When applying the Wilcoxon test to balance the two parallel medium-sized samples, the value of -0.76 and significance of 0.485 are not statistically significant at the level of $\alpha \leq 0.05$, and hence we accept the null hypothesis.

4. CONCLUSION

The application of the body image scale is shown in the pre-test by extracting arithmetic averages and statistically processing the data and standard deviations. The decrease in body image of the experimental and controlled adolescent samples in all dimensions of the scale indicates a decline in body image among these adolescents. This finding was consistent with previous studies (e.g., Cuesta-Zamora et al., 2018). The above result has confirmed the current problem that the care patterns, upbringing, and learning in our family and school environments do not consider methods of awareness and training on the rapid physical and psychological changes in adolescence. In addition to preparing adolescents to accept and understand these changes, this makes them more likely to enter the maze of psychological and social misalignment, especially in light of the media revolution and its dominance in the minds of all members of society, to which individuals are attracted outside the framework of proper guidance by caregivers. After examining many of the problems related to this topic, the researcher was prompted to design a program in emotional intelligence based on the Bar-On model to improve the body image in adolescents.

The Mann-Whitney test results showed statistically significant differences between the mean scores of the experimental group and the mean scores of the control group in the post-test in favor of the experimental group. Thus, the emotional intelligence training program based on the Bar-On model prepared by the researcher has contributed to the overall improvement of body image in adolescent girls, which is consistent with previous studies, such as (Wong et al. 2014).

After investigating the program's effect on dimensions of the body image scale, the researcher extracted the arithmetic averages and the standard deviations for each of the five dimensions (Table 7) for the experimental and control groups.

The results show an apparent improvement in the values of the mathematical averages in favor of the experimental group for satisfaction with general appearance, satisfaction with weight, satisfaction with facial areas, and satisfaction with areas of the body. The training sessions that included raising the awareness of adolescents regarding the components of personality and stress management, relationships, and general mood reflected improvements in adolescent girls' satisfaction with their body image, acceptance, and adaptation to the rapid physical and psychological changes that accompany them. This result is consistent with the study conducted by Petrides et al. (2004).

Regarding the dimension of the trend towards plastic surgery in the body scale, the results of the apparent arithmetic averages of the members of the experimental group and the control group showed that there was no change in this dimension in the post test. It is exaggerated, which pushes many of them to look forward to it and seek it outside the framework of community guidance, which suffers in recent times from the media chaos that pushes many members of society to ill-considered practices. Unfortunately, family and school counseling services do not focus on these behavioral patterns. Instead, they focus on academic achievement issues and neglect other problems as they are not classified as important. This finding was consistent with studies by Grabe & Hyde (2006) and Al-Abadisah (2013).

After completing the training sessions, the Wilcoxon test showed a statistically significant effect of the emotional intelligence program on improving adolescent girls' body image in the experimental group. This test also showed stable results for the experimental group one month after the end of its application, and this indicates that this period did not detract from the positive impact on this sample and that it has maintained a strong influence on the group. Therefore, improving awareness and developing emotional intelligence will enable adolescents to adapt to changes, both in themselves and with others; this is reflected in the improvement in their satisfaction with their body image in general.

The meetings that the researcher held with the experimental group, and the dialogue, discussions, role-playing, and the presentation of negative models and subsequently showing them as positive models concerning managing self-feelings and understanding the feelings of others and how to deal these feelings all had a great impact on the results that were concluded in this research.

5. RECOMMENDATIONS

According to the results of the current study, the researcher recommends the following:

1. Including emotional intelligence as a subject in educational institutions, either through systematic or extracurricular activities. This is important to improve self-acceptance and compatibility with others in general.
2. Adopting emotional intelligence training in schools with adolescent students and provide discussion-based lectures aimed at increasing their awareness of what they see through modern media and communication from models that may be exaggerated and teaching them skills to help them identify any issues regarding the extent of their adaptation to their reality.
3. Organizing training workshops on emotional intelligence for caregivers to educate them about the importance of emotional intelligence and how to instill it in future generations.

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