

The Effect of Group Counselling on Body Image Coping Strategy among Adolescent Girls

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Abstract

Background

Adolescents, pay particular attention to their body image. Dissatisfaction with body image in people can lead to stress. Accordingly, this study aimed to investigate the effectiveness of group counselling on body image and coping strategies among adolescent girls.

Materials and Methods

This clinical trial study was conducted on 60 adolescent girls in Karaj City, Iran. The samples were selected using a multi stage sampling technique. For the intervention group, four counseling sessions were held weekly and each session lasted 60 to 90 minutes. The control group received an educational body image package at the end. The Multidimensional Body-Self Relations questionnaire and Body Image Coping Strategy Inventory were completed by participants in both groups before and two weeks after the intervention. The collected data were analyzed using the SPSS-19.0 software.

Results

The mean score of the positive rational acceptance before the intervention in intervention and control groups were 43.541 ± 2.798 and 41.875 ± 13.146 , respectively. These values after the intervention were 62.708 ± 2.484 and 46.972 ± 16.545 in the intervention and control groups, respectively. There was a significant difference between the intervention and control groups in the mean score of body image and the positive rational acceptance two weeks after the completion of the intervention ($P = 0.0001$).

Conclusion

The overall results of this study indicated the effectiveness of intervention (Group Counseling) in improving the body image score and increasing the positive strategic skills.

Key Words: Adolescent, Body image, Coping strategy, Girls, Iran.

***Please cite this article as:** Irani N, Akbari Kamrani M, Mahmoodi Z, Farid M, Hajian N, Dinpajouh F. The Effect of Group Counselling on Body Image Coping Strategy among Adolescent Girls. *Int J Pediatr* 2018; 6(5): 7709-16. DOI: **10.22038/ijp.2018.29364.2573**

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Received date: Jan.27, 2018; Accepted date: Mar.12, 2018

1- INTRODUCTION

Adolescence is a stage full of physical and mental transformations when one encounters more problems related to his/her body image. At no age like this period, there is sensitivity to the emotional stress caused by biological disorders (1). Adolescents, during a biological, psychological and social development are involved in a series of changes, such as willingness to gain independence, search for patterns outside the family and actually a need to be approved by others (2). Adolescents, especially females within puberty, pay particular attention to their body shape and weight for a variety of reasons, including cultural, social and racial factors (1). During the period of adolescence, the person begins to fantasize and pays all their attention to their physical appearance (3-6).

Adolescents' biggest problem is regarding the mental image in one's physical self, because the person experiences physical and mental changes during this period, and the increase in height, weight and appearance of secondary characteristics over a short period of time affects their mental image (7). Body image is one of the most important dimensions of physical appearance and self-evaluation during this period (8), and comprises not only physical, emotional, social, and attitudinal perception, but also various aspects of the psychological, social, sexual, family, and adaptive identity of the individual (7). The change in the body image following visible or invisible transformations in the body can have a great effect on one's personality (9). Adolescence is considered as a transitional period, change, and susceptibility peak. During this period, the adolescent is suffering from a lot of pressure due to the conflict between his/her inner needs and the expectations of the society he/she lives in. Therefore, if he/she does not use an appropriate approach to face such sensitive period of

life, this leads to a lot of stress (8). Mental image is an abstract word which includes information, emotions, conscious and unconscious perceptions of a person on his/her body (10). This concept consists of individual feelings about the size, sex, function, and the ability of the body (11). Although body image has a multidimensional structure, it is most frequently defined as a degree of satisfaction with physical appearance (size, shape, and general appearance) (12). This image is formed from birth and will be completed as the individual grows and changes during the life stages of the individual and is very important because of its association with eating disorders, psychological disorders and decline in self-confidence (13).

Due to its complex psychological effects on self-concept in this period, body image in adolescence can be considered as a fundamental factor in determining how adolescents interact with others (14). Body image consists of three basic aspects of body reality, which refers to the body as it really is, body ideal– the body which one wishes, and body presentation–the body that the person represents, and the two categories of the personal moderating response–adaptation methods and social support network (15). Body image is a multidimensional and complex psychological structure that includes the perception and attitude of the individual towards self as well as thoughts, beliefs, feelings and behaviors (16). A negative self-image can lead to body dissatisfaction and feeling of unattractiveness, and finally the obsession regarding the physical appearance of the part of one's own body as a functional disorder (17). Furthermore, undesirable body image or dissatisfaction with body weight and size in adolescents may increase the likelihood of the occurrence of hazardous health behaviors, such as inappropriate dietary patterns and as a result, inadequate food intake (18).

Dissatisfaction with body image in people can lead to stress. In fact, adaptation is a mental mechanism that a person uses in order to reduce physical, mental and psychological pressures in dealing with distressed situations (19). Coping styles are the special cognitive and behavioral efforts to overcome, tolerate, or encounter the internal and external demands that exceed personal resources (20). Not a single coping strategy and style are used at all times and situations; however, individuals react differently across different situations, times and stressors (21). Coping styles are strategies that one uses to reduce the tension caused by stressful events in everyday life. According to Cash, the three strategies regarding control of dissatisfaction and body image challenges are identified: avoidance, appearance fixing and positive rational acceptance (16).

Since during adolescence, the individual pays all attention to one's own appearance in order to attract the attention of others and create the feeling that he is constantly exposed to the eyes of others (3). Among effective training methods, group counseling is a dynamic human process in which counseling techniques are applied to normal people. Group members with the consultant are actively considering their problems and feelings about them. The Chronological Age and Puberty Coping Strategy among Iranian adolescent females with educational and evolutionary problems are taken into account (22). In this study, the effect of group counseling on body image and coping strategies was investigated.

2- MATERIALS AND METHODS

2-1. study design and population

This was a randomized control trial study (IRCT.2017052927557N5). It was performed from March to Jun 2016 on 60 adolescent girls of second year students in high school of Karaj city (the center of the

province of Alborz situated northern of Iran). The participants were selected using multi stage sampling technique.

2-2. Inclusion and exclusion criteria

Inclusion criteria were: the 15–18 age range, the willingness to participate in the study, obtaining the score of less than 170 of the multidimensional body-self relations questionnaire, lack of specific diseases (such as diabetes and organ failure), a lack of severe family problems, living with both parents, consent of parents and have not recently faced a severe psychological crisis. Also the exclusion criteria were: absence from four consultation sessions and unwillingness to continue to participate in the study.

2-3. Ethical consideration

This study was approved by the Ethic Review Board of Alborz University of Medical Sciences (ID-number: ABZUMS.REC.2016.148) and eligible participants signed informed consent.

2-4. Methods

For the intervention group, four group consultation sessions were conducted under guidance of psychiatrist, reproductive health expert and counselor weekly and each session lasted 60 to 90 minutes. The content was: first session—beautiful body image, second session—self-awareness, third session— the effect of parents, peers and media on body image, and fourth session— social skills and healthy life. The control group did not receive any intervention during the consultation. After the end of the study, participants in the control group received a body image booklet (containing all items of the consultation sessions of the intervention group), and answered the questions in this regard. Two weeks after the end of the consultation, the participants in both intervention and control groups were asked to complete the questionnaires once again.

2-5. Sample size

We used test of Means - difference between two dependent means (matched pairs) in power analysis (G * Power 3.1 software) to calculate sample size. Using results of study conducted by Rahati (2004) study (23), and considering $\alpha=0.05$ and $\beta=0.8$ we needed at least 5 in each group. We added 20 sample sizes considering 3 grades in high school and then, we increased the sample size to 30 regarding loss to follow up of about 5 people.

2-4. Measurement tools

Demographic characteristics, body image score and of body image coping strategy were obtained. A demographic questionnaire included 10 items: age, number of children in a household, the order of a child in the family, an older sister's presence in the family, menstrual experience, age at first menstruation, mother's education and occupation, father's education and occupation. The Persian version of Multidimensional Body-Self Relations Questionnaire (MBRSQ) containing 46 items evaluated the body image (23). The type of coping strategy against body image was measured by Cash Body Image Coping Strategy Inventory (BICSI) (19). The questionnaire included 29 items relying on three strategies of Avoidance, Appearance Fixing and Positive Rational Acceptance. Psychometric evaluation of the Persian version of this questionnaire was performed by Farid et al. (16). Based on the results of factor analysis, five items were removed from the questionnaire and the final questionnaire was used with 24 items in this study. The removed items included: question 8 (regarding appearance fixing), questions 11, 15 and 21 (regarding positive rational acceptance), and question 28 (regarding avoidance). Cronbach's alpha of the Persian version of the questionnaire was in each aspect of appearance fixing, positive rational

acceptance and avoidance, respectively: 0.81, 0.86 and 0.92. Also, in this study, Cronbach's alpha was in each aspect, respectively: 0.87, 0.59 and 0.72.

2-5. Data analysis

The obtained data were analyzed using SPSS software. Therefore, mean, standard deviation and absolute frequency were used for descriptive tests and both paired and independent t-tests were used for analytical tests. P-value less than 0.05 were statistically significant.

3- RESULTS

Of the 275 girls who were screened at the beginning, 115 individuals were eligible for inclusion in the study, of which 60 ones were included in the study. There was no significant difference between the two groups in terms of age ($p=0.069$), number of child ($p=0.220$), order of child ($p=0.393$), older sister presence ($p=0.500$), menstrual experience ($p=0.500$), age of menstruation ($p=0.399$), mothers' education ($P=0.554$), mothers' job ($p=0.838$), fathers' education ($p=0.866$) and father's job ($p=0.549$) (**Table.1**).

The mean score of body image before the intervention was 161 ± 10.488 in the intervention group, and 159.666 ± 11.262 in the control group. These values after the intervention were 189.2337 ± 16.606 and 162.633 ± 13.129 in the intervention and control groups, respectively (**Table.2**). The findings showed that in the intervention group, there was a significant difference ($p=0.0001$) between the mean score of the positive rational acceptance strategy before counseling (43.541 ± 2.798), and the mean score of positive rational acceptance strategy after the intervention (62.708 ± 2.484). Also, the findings of this study indicated that in the control group there was no significant difference ($p=0.063$) between the mean score of positive rational acceptance strategy before counseling (41.875 ± 13.146), and the

mean score of positive rational acceptance strategy (46.972 ± 16.545). There was no statistically significant difference between the mean scores of avoidance and

appearance fixing strategies in both groups i.e. intervention and control before and after the intervention (**Table.3**).

Table-1: The Characteristics of participants in the intervention and control groups (n=60).

Demographic factors		Interventional group Number (percent)	Control group Number (percent)	P-value
Age, year		16.30 ± 0.466	16.53 ± 0.507	0.069
An older sister's presence in the family		13(43.3)	17(56.7)	0.500
Menstrual experience		100(30)	29(96.7)	0.500
Age at first menstruation, year		12.36 ± 1.098	12.90 ± 1.322	0.399
Mother's education	Under Diploma	6(42.9)	8(57.1)	0.554
	Diploma	11(45.8)	13(54.2)	
	Higher Diploma	13(59.1)	9(40.9)	
Mother's job	Housewife	24(80)	25(83.3)	0.838
	Civil servant	4(13.3)	4(13.3)	
	Self-employed	2(6.7)	1(3.3)	
Father's education	Under Diploma	5(16.7)	4(13.3)	0.866
	Diploma	15(50)	17(56.7)	
	Higher Diploma	10(33.3)	9(30)	
Father's job	Unemployed	1(3.3)	2(6.7)	0.549
	Civil servant	12(40)	15(50)	
	Self-employed	17(56.7)	12(43.3)	

Table-2: The Comparison of mean and standard deviation of body image score in both groups

Variable	Group	Before the intervention mean (SD)	After the intervention mean (SD)	P-value
Body image	Intervention	161 ± 10.488	189.233 ± 16.606	0.0001
	Control	159.666 ± 11.262	162.633 ± 13.129	0.149

SD: Standard deviation.

Table-3: The Comparison of mean and standard deviation of the coping strategies in both groups

Variables	Group	Before the Intervention mean (SD)	After the Intervention mean (SD)	P-value
Avoidance	Intervention	28.571 ± 20.527	28.452 ± 17.127	0.980
	Control	23.690 ± 14.021	23.333 ± 12.290	0.894
Appearance fixing	Intervention	51.018 ± 22.560	46.753 ± 19.358	0.361
	Control	50.000 ± 18.309	52.963 ± 22.161	0.211
Positive rational acceptance	Intervention	43.541 ± 2.798	62.708 ± 2.484	0.0001
	Control	41.875 ± 13.146	46.972 ± 16.545	0.063

SD: Standard deviation.

4- DISCUSSION

The results of this randomized control trial study indicated that group counseling was effective in increasing body image score. Also, the results of this study generally showed that counseling has an impact on improving the coping strategy of

positive acceptance; however, it does not have any significant impact on reducing the coping strategy. Moreover, the intervention has not changed the predominant strategy of the study participants. The overall results of this study showed the effectiveness of group counseling in improving body image score

and increasing positive strategic skills. Changing the attitude of participants on body image by increasing body image score of participants in the intervention group has led to the improvement of the strategic skill of positive rational acceptance. According to the results of other studies, the change in negative strategies requires more time, and people who are more likely to ignore it are more resistant against change (24, 25).

Negative strategic skills are stronger in people with negative thoughts and feelings on their body image, and require more time to change these skills to the positive rational acceptance strategic skill. The study conducted by Diedrich et al. (2015) examined the effectiveness of a designed program by school on adolescents' body image (24). The results were consistent with those obtained in the present study. They evaluated effectiveness immediately and one month after the intervention. Positive effects on improving the body image score were observed in the intervention group, but in some cases, there was no significant effect on the level of their appearance fixing. Their advice was to hold more sessions (24).

The ineffectiveness on the predominant strategy can be the insufficient timing of the follow-up and length of sessions. According to Patterson and Richardson (2010), during the 3-30-month follow-up period, one can expect the effectiveness of these sessions on changing strategy (25). Similar results were found in the study carried out by Bird et al. (2013) who examined the effectiveness of an educational intervention based on body image in the school context (26). Their study was conducted in three educational sessions. Immediately after three months of studying, the results of the intervention on body satisfaction and body image were observed. However, they did not run BICSI questionnaire for coping strategies in their study; whereas they evaluated

appearance fixing and body acceptance. In the study by Bird et al., a significant difference in body satisfaction was observed after three months of intervening. On the other hand, their age group was 10-11 years old. There was no significant difference in the avoidance strategy (26). In the study by Tirla et al. (2013), after 3 to 6-month follow-up period, designing ten-week sessions between 1-3 hours for each session, there was a significant difference in the three coping strategies (27). The participants consisted of two age groups including elementary and secondary school students. The results of their study suggested the effectiveness of the interventions based on body image in the lower age group (27).

In our study, the mean age of participants was 16 years old. In the Richardson and Paxton (2010) study, an educational intervention based on the body image in school was conducted on students in the seventh grade. Interventions were three 50-minute sessions and performed immediately after three-month follow-up (22). The results showed the effectiveness of the educational intervention in the body image and body dissatisfaction. The average age group of participants in the study was 12 years and 4 months old.

In this intervention study, there was a moderate effect on appearance and appearance comparisons with others, but there was no significant difference in body harassing behaviors. The mean age of participants in the study was 12 years and 4 months old. In this study, intervention had a moderate impact on appearance fixing and comparison of his/her physical appearance with others, but there was no significant difference in body harassing behaviors (25). In the Aklaïman and Eryilmaz (2017) study, an attempt was made to investigate the effect of group counseling of body image on adolescent girls coping strategies (28). The mean age group was 15 years and 4 months old. In

this study, BICSI questionnaire (19) was used to investigate the coping strategies of body image. The number of sessions was 10 at one-week intervals. There was a significant difference in their body image score immediately after the intervention. Also, scores increased significantly during the 6-month follow-up period. In their study, the positive rational acceptance strategy was significantly increased in the intervention group, in which the significance level had increased during the follow-up period. There was no significant difference in the avoidance and appearance fixing strategies not (28).

4-1. Limitations of the study

The limitations of this study were the study time and the amount of time spent on following the samples and the participants' sessions. Due to the end of the academic year and onset of the exam time, there was no possibility of follow-up for more than two weeks.

5- CONCLUSION

Change in the attitude of adolescent girls toward body image by increasing their body image score in the intervention group has led to the improvement of the strategic skill of positive rational acceptance.

6- CONFLICT OF INTEREST: None.

7- ACKNOWLEDGMENT

This paper was part of a research project conducted with the support of Alborz University of Medical Sciences. We are hereby grateful to the participants for their collaboration during this research.

8- REFERENCES

1. Farid M, Akbari Kamrani M. Tendency toward Weight Loss among Iranian Adolescent Girls: Study on Perceived Weight, Ideal Body Mass Index and Attitude toward Eating Disorders. *International Journal of Pediatrics*. 2016; 4(7):2203-11.

2. Omidvar N, Egtesadi Sh, Ghazi TM, Minaie S, Samareh S. Body image and its association with body mass index and eating attitudes in young adolescents in Tehran. *Journal of the Shaheed Beheshti University of Medical Sciences and Health Services*. 2003; 4(26): 264-57.
3. Aghakhanee N, Feizi A, Shams Sh, Baghaee R, Rahbar N, Nikbakhsh AS. Study of body image and self-esteem in high school students in Urmia, Urmia Medical Journal. 2006; 4(17): 254-59.
4. Khadaee Gh, Saeidi M. Increases of Obesity and Overweight in Children: an Alarm for Parents and Policymakers. *Int J Pediatr* 2016; 4(4): 1591-1601.
5. Taghizadeh Moghaddam H, Bahreini A, Ajilian Abbasi M, Fazli F, Saeidi M. Adolescence Health: the Needs, Problems and Attention. *Int J Pediatr*. 2016; 4(2): 1423-38.
6. Saeidi Z, Vakili R, Ghazizadeh Hashemi A, Saeidi M. The Effect of Diet on Learning of Junior High School Students in Mashhad, North-east of Iran. *Int J Pediatr*. 2015; 3(2.2): 517-26.
7. Amidi M, Ghofranipoor F, Hosseini R. Body image dissatisfaction and body mass index in adolescent girls. *Journal of Research in Behavioral Sciences*. 2006; 1(4): 59-65.
8. Rasooli M, Gharebagh Z, Safavi M, Haghani H. Psychometric Evaluation of youth hope scale. *Journal Faculty of Nursing and Midwifery Quarterly Shahid Beheshti University of Medical Sciences*. 2010; 20(68): 25-31.
9. Salter M. Altered body image. The nurses role. 2nd Edition. Louis Mosby Co. 1997.
10. Ignatavicius D. D, Marilyl V.B, et al. Medical surgical nursing-A nursing process approach. 2nd ed Philadelphia, W.B. Saunders company. 1991, p. 161.
11. Moosavi S, Pourhosein R, Moghaddam A, Hejazi S, Gomnam R. The body image in psychological perspective and theories. *Rooyesh-e- Ravanshenasi Journal*. 2016; 2(15); 209-66.
12. Chehrzad M, Jafri Asl M, Soleimani R. Assessment the relationship between body image satisfaction by socio- cultural patterns

among Rasht adolescent girls. *Journal Hamedan Faculty of Nursing and Midwifery*. 2013; 3(20): 26-34.

13. Alah-gholilo K, Abolghasemi A, Dehghan H, Imani H. The Relationship between Friendly Behavior and Body Image with Life Satisfaction in Women. *Journal of Mazandaran University of Medical Sciences*. 2013; 22(97):139-46.

14. Amidi M, Ghofrani F, Hosseini R. Relationship between body image dissatisfaction and body mass index among adolescent girls. *Journal of research in behavioral sciences*. 2007; 4(1); 59-65.

15. Antfolk J, Ålgars M, Holmgård L, Santtila P. Body dissatisfaction and disordered eating in androphilic and gynephilic men and women. *Personality and Individual Differences*. 2017; 117:6-10.

16. Farid M, Kamrani MA, Jafarian S. Psychometric Evaluation of the Persian Version of Body Image Coping Strategies Inventory (BICSI) (In Press). *Iranian journal of psychiatry and behavioral sciences*.

17. Shamsaldin S. N, Azizzadeh F, Mohammad Alizadeh S, Haghdoost AA, Gharousi B. Relationship between body image and eating disorders. *Iranian Journal of nursing research*. 2010; 4 (15): 33-43.

18. Spear B. Does dieting increase the risk for obesity and eating disorder? *Journal of the American dietetic association*. 2006; 106(4): 523-25.

19. Cash TF, Santos MT, Williams EF. Coping with body-image threats and challenges: Validation of the Body Image Coping Strategies Inventory. *Journal of psychosomatic research*. 2005; 58(2):190-9.

20. Kamrani MA, Farid M. Chronological Age and Puberty Coping Strategy Among Iranian Adolescent Females. *International Journal of School Health*. 2017; 4(4):1-6.

21. Bagaei P, Zande M, Alave N, Baghere M. Self-care in diabetic's patients of kashan diabetes center. *Feyz*. 2004; 12(1):88-93.

22. Sadock BJ, Sadock VA. Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry. Lippincott Williams and Wilkins; 2011.

23. Rahati.A. Evolutionary study of body image and its relationship with self – esteem based on comparison between adolescent, middle age and old people. (Dissertation), Tehran: Shahed University; 2004.

24. Diedrichs PC, Atkinson MJ, Steer RJ, Garbett KM, Rumsey N, Halliwell E. Effectiveness of a brief school-based body image intervention 'Dove Confident Me: Single Session'when delivered by teachers and researchers: Results from a cluster randomized controlled trial. *Behaviour research and therapy*. 2015; 74:94-104.

25. Richardson SM, Paxton SJ. An evaluation of a body image intervention based on risk factors for body dissatisfaction: A controlled study with adolescent girls. *International Journal of Eating Disorders*. 2010; 43(2):112-22.

26. Bird EL, Halliwell E, Diedrichs PC, Harcourt D. Happy Being Me in the UK: A controlled evaluation of a school-based body image intervention with pre-adolescent children. *Body Image*. 2013; 10(3):326-34.

27. Tirlea L, Truby H, Haines TP. Investigation of the effectiveness of the "Girls on the Go!" program for building self-esteem in young women: trial protocol. *Springer Plus*. 2013; 2(1):683.

28. Keven-Aklıman Ç, Eryılmaz A. The Effectiveness of a Body Image Group Counselling Program on Adolescent Girls in High School. *International Journal of Psychology and Educational Studies*. 2017; 4 (2): 10-23.