

THE STUDY OF COMPARISON OF TWO EDUCATIONAL METHODS OF LECTURE AND TRAINING PACKAGE ON SELF-ESTEEM AND SELF-EFFICACY 9-12 YEARS OLD GIRLS STUDENTS IN RELATION WITH ADOLESCENT HEALTH

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ABSTRACT

Juvenile as a large part of the world population has been faced to many physical and psychological changes during puberty. Without paying attention to girls' puberty, it may have a negative impact on their mental health, self-esteem and self-efficacy. Necessity performance of health educational programs designed and continued in the field of girls' adolescent health and choosing the appropriate educational method, it is essential in succession of educational program. This study with the aim of comparing two teaching methods, lectures and training package on self-esteem and self-efficacy of 9-12 years old girls students at primary schools 2 district education Alborz Province in the academic year 1391-1392 where were designed and conducted. This study is a randomized clinical trial that has been performed on 270 girl's students 9-12 years of primary schools education Alborz Province with range certain age (9-12 years), that they did not have any experience of participation in educational programs puberty in 1392 year. Students were divided into three groups of 90 persons (two interventional groups and one control group). In the first test group, they got adolescent health education presentations during three consecutive 45 minute sessions in per week for one week and the second group, adolescent health training package, which they should have studied it for a week. Self-esteem and self-efficacy questionnaire were that at the beginning and end of 3 months study was completed. For the analysis of the data was performed using SPSS version 17. The comparison of self-esteem and self-efficacy scores mean difference before and after training (training effect) than the control group in both intervention groups showed meaningful difference ($P < 0/001$). But later the comparison of self-esteem scores mean difference before and after training in group training package showed that it is more than the lecture group was statistically significant ($P = 0/007$). Mean difference of self-efficacy scores before and after training in training package was also more than the lecture group and showed meaningful difference ($P < 0/001$) statistically. The mean comparison of scores difference in two groups has been suggested more effective training package for increasing scores mean of self-esteem and self-efficacy. Both teaching methods have been effective in promoting self-esteem and self-efficacy students, array of adolescent health training package as an effective training method for increasing self-esteem and self-efficacy of female students have been proposed.

KEYWORDS: Adolescent Health, Self-Esteem, Self-Efficacy, Training Methods, Lecture, Training Package

One of the most important periods of human life is adolescence. Adolescence is one of the most critical stages of life and as a bridge linking childhood to adulthood¹. Adolescence is a very chaotic drastic change in physical, mental and social. Extensive psychological issues such as depression, antisocial behaviours and academic failure may occur during this period². Maturity is one of the important aspects of this stage that informed of natural process and the problems it causes a successful transition to adulthood and fertile³. Most girls didn't have primary and essential information about mental and physical situations and mental health behaviours to

appropriate with them during adolescence. Lack of education, misinformation, embarrassment, and avoid getting into a discussion about genital hygiene, prevents access to social and mental health of young girls and makes them feel good about themselves and their abilities and it cause problems frequency⁴.

Adolescence is very important for the formation of self-esteem and studies have shown that adolescent girls experience a type of free fall in self-esteem that some never doesn't get it again⁵. Self-esteem is concerned positively with health, mental wellbeing and

welfare⁶. Increased self-esteem is directly related to adolescent health, especially in adolescent girls. Self-esteem among community members is an important factor in psychological health that the lack of individual and social life has negative effects on social relationships - family, employment and life expectancy plays and since the formation of the personality is established in childhood and adolescence is important to pay attention to this issue in adolescents⁷. The issues of self-esteem and self-worth issues are basic factors of personality development in children and adolescents. Having a strong will and self-confidence, decision-making and innovation, creativity and innovation, health and mental health directly related to the amount of thought and how self-esteem and self-worth are individuals⁸. Teri showed that increase in self-esteem, to prevent problems that it may create because of low self-esteem for teenagers is essential⁹.

Concept of self-efficacy in 1977 by Albert Bandura, a Stanford University professor has been defined and According to Bandura, self-efficacy is an important prerequisite for behaviour change¹⁰. From the perspective of cognitive theory-social, self-efficacy in relation to their understanding of the ability or desire to change or continue a behaviour to be successful. Based on this understanding of self-efficacy in relation to perseverance, effort and consistency in every aspect of life¹¹. Studies show that people with high self-efficacy tends to participate in the exhibit challenging behaviours and better interpretation offer of the behaviours associated with health and wellness and can easily they control their behaviour and in addition to self-efficacy factor play an important role in modification of relationship between knowledge and behaviour. Thus, Michael, et al (2010) as they strategies to increase self-efficacy should seriously be recommended to the general population¹³ and one of the factors that plays an important role in the development of self-efficacy is educational factors¹⁰. Because individuals have more information about health problems, trying to fight it and be informed, is not impossible through education¹⁴. Safavi (1385) believed that it is impossible to separate teaching from learning, his learning will lead to behaviour change because of new information or skills, learning to deal with events before returning the comparison of learning will change¹⁵. And verbal encouragement or persuasion that it is one of the important ways acquisition and upgrade of self-efficacy and more through higher education by family members or

others who are important to the person applies¹⁶. So the basic theory of self-efficacy can be used as a theoretical base for many applications in training staff in order to creating and promoting healthy behaviours¹⁷.

Among the important issues facing adolescents are receive inadequate training on adolescent health issues through standard data sources, and designed¹⁸. Nowadays in our society, many organizations, such as municipalities, education, radio and television media have focused on adolescent health education and they do considerable research in this area, at the school: Abdollahi and colleagues in research on 1746 Iranian girl students in 1383 to have achieved the results that adolescent education should not be limited only to the mechanisms of puberty and menstruation, but should lead to a deeper understanding of adolescents' physical and mental changes puberty¹⁹. Puberty complications and problems are easily preventable and health education is the fundamental strategy of successful health promotion program to improve awareness, ideas and trends, it acts acquired behaviour and healthy lifestyle²⁰. Adolescent health include cares and principle that lead to the maintenance and promotion of health-mental and emotional person at times and other times will need more than anything is the training²¹. We discuss the method and time of adolescent health education for adolescents is important. About training on issues related to puberty, the importance of schools and hold a special place is the best place to play²². It is one of the best ways to modify health behaviours in adolescents²³. With regard to basic education in different ways, choosing the right method of teaching has an important role in position of teaching²⁴. Among the most common and most traditional teacher-centered teaching method, is the lecture²⁵. This method has a long history in educational systems concepts are presented orally by the teacher and learning through listening and taking notes on the student pays. In this method, a subjective relationship occurs between teacher and student learning²⁶. Along with other methods, can be student-centered methods, such as training packages are also used²⁷. Today, a lot of emphasis is on student-centered methods, such as learning package to use. Since this method is tutorial way, all the information you need is available in a same place and time are accessible and each student can be adapted to them ability to use and something that are more difficult to replicate²⁸. Among the responsibilities and duties of all those involved in health and medical letters, create Health behaviour and

health behaviour detection is prevention in the community²⁹. In general we can say midwife has an important role in the health of women of all ages, including adolescents and adulthood³⁰.

So given this and given the age of maturity in our country like other countries is declining. Most girls school before entering secondary school stage or stages of maturity leaving behind. It is recommended that adolescent health education programs are needed to start from school late³¹. According to the above adolescent health education because of the special situations and spiritual crises of adolescence and alleviate fears of the situation, also avoid from incorrect information or of the competent adolescent health at this point it seems necessary. In our country, many studies have been done on adolescent health and adolescent but mostly acting traditional, so researchers with their experiences in the areas of health education to adolescent girls with the resources is available that it to improve the mental health of adolescent girls and promoting quality of life and promote public health, further research studies are designed and implemented in the country. Therefore, this study with the aim of determining and comparing the effectiveness of two teaching methods, lectures and training package on self-esteem and self-efficacy of girls teenagers in order to design the relevant training protocol is carried out by the authorities.

MATERIAL AND METHODS

This study is a clinical trial in which 270 female students 9-12 years old Primary school education participated in Alborz Province. The researcher after receiving permission from the ethics committee of Tehran Medical Sciences University with license number 3429/130/3/91 and agreement the education authorities sampling, stratified multi-stage random, among the elementary school education Alborz Province, there school randomly (two intervention groups, lectures and educational package and one school for the control group) were selected. The researcher visited the selected school principals and verified by license and the number needed for the study to provide the necessary explanations, using samples randomly selected from a list of students from third grade to sixth (22 students for grades first and second, 23 students for grades five and six). Study inclusion criteria included female students attending government schools 9-12 years were adolescent health education programs. Exclusion criteria included a

relative died during the study, did not attend the training sessions, the lack of training in adolescent health package, given a lack of exercise during the study and three months later. Thus, students are eligible to enter the study after an informed consent form by parents and students voluntarily enrolled. In this study, the data in two ways pre-test and post-test were collected during three months. Intervention group 1 has done in the way three sessions of 45 minute presentations (separately for each base) and training tools such as marker boards, educational PowerPoint. Adolescent health education program in the first group during the first session: Introduction to the maturation, puberty changes, second session: nutrition, exercise, rest and sleep, personal hygiene, menstrual hygiene, religious orders, menstruation third session: Mental Health and emotional changes of puberty were held and the other group was used as a training package. Training package for educational booklet contains five chapters (Chapter I: The concept of maturity, Chapter II: changes of puberty, Chapter III: health behaviours during adolescence, Chapter IV: menstruation religious orders, Chapter V: Mental health and emotional changes of puberty) and evaluation exercises are included at the end of each chapter were presented to the students. After 12 weeks of self-esteem and self-efficacy questionnaire survey was completed again by the same students. Means of data collection for this study were gathered from the three questionnaires used in this study was included demographic information, the questionnaire survey self-esteem, which includes 58 questions, five major themes including social relationships, family relationships the notion of their perceptions, understanding the future and measures of individual assignments. Method of grading the test is all or nothing (0 and 1). 8 questions regarding lie detector scale is neutral and will not be involved in the calculation of the remaining questions is divided into two parts that was given in 19 questions to answer yes, score 0 and the remaining questions to answer no score 1. The scores range from zero to 50 subjects who had the grades to be closer to 50, reflecting the high esteem and whatever is closer to 0, it indicate low self – esteem³². Johnson, Redfield, Miller & Simpson, Taylor and Ritz to earned with method of split-half reliability 0/9 for those who reported the test-retest reliability coefficient and Cooper Smith 0/88 after five weeks and 0/7 after three years to earn. The Iranian version (1375) reliability 0/89 for the acquired Sajjad (1385) using the split-half reliability for boys 0/84 and for girls 0/89 for it to be achieved³³. General self -efficacy questionnaire included 17 questions

submitted to problems in areas such as the lack of ability to deal with problems, the ability to achieve the objectives and stability to conduct activities. Each question has five options strongly agree, agree no opinion, disagree, and completely disagree that each question has only one correct answer. Grading self-efficacy questionnaire and colleagues so that each question is given one to five points. Rating below 25% (score of 17 to 33/9) as low self-efficacy between 25% to 75% (score of 34 to 67/9) as the average self-efficacy 75% (points 68 to 85) as high self-efficacy were considered³⁴. The alpha reliability coefficient for the self-efficacy questionnaire Scherer and colleagues have reported the following general self-efficacy scale to 0/86. In Iran, Ali Nyakruee (1382) in his study reported 0/78 for Cronbach's alpha or the overall

consistency questions that is acceptable. Also Asghar Nejad and colleagues (1385), Cronbach's alpha of this scale to 0/83 were reported³⁵. In order to determine the scientific reliability and internal stability tools, Cronbach's alpha was used to confirm that reported 81% and for the external validity of data collection has been used from test-retest method. Thus, the questionnaire by 10 students of primary school education in Alborz Province that have characteristics of the subjects included in this study but does not include samples have been completed within 2 weeks. Answers of two-phase reliability are over 95% approval.

In this study a statistical analysis computer software SPSS version 17 was used.

Results

Table 1: Frequency distribution of female students personal characteristics in primary schools

P-value	Department						Student Profile	
	Control		Training Package		Lecture		Status	
Chi-square test $\chi^2 = 0/596$ P= 0/996	Percent	Number	Percent	Number	Percent	Number		Age
	20	18	21/1	19	18/9	17	9	
	23/3	21	22/2	20	20	18	10	
	31/1	28	30	27	33/3	30	11	
	25/6	23	26/7	24	27/8	25	12	
Fisher's exact test F=10/61 P=0/09	4/4	4	2/2	2	2/2	2	Illiterate	Father education
	45/6	41	28/9	26	36/7	33	Elementary and Middle School	
	42/2	38	47/8	43	43/3	39	High School Diploma	
	7/8	7	21/1	19	17/8	16	Collegiate	
Chi-square test $\chi^2 = 11/03$ P=0/087	8/9	8	2/2	2	5/6	5	Illiterate	Mother education
	43/3	39	32/2	29	33/3	30	Elementary and Middle School	
	41/1	37	47/8	43	50	45	High School Diploma	
	6/7	6	17/8	16	11/1	10	Collegiate	
Fisher's exact test F=8/13 P=0/62	2/2	2	2/2	2	2/2	2	Unemployed	Father job
	34/4	31	34/4	31	26/7	24	Employee	
	21/1	19	14/4	13	22/2	20	Worker	
	36/7	33	42/2	38	38/9	35	Self-employed	
	5/6	5	3/3	3	5/6	5	Retired	
	0	0	3/3	3	4/4	4	Other	
Chi-square test $\chi^2 = 12/58$ P=0/051	95/6	86	80	72	88/9	80	Housekeeper	Mother job
	4/4	4	19/9	18	11/1	10	Other	
Chi-square test $\chi^2 = 3/01$ P=0/556	15/6	14	13/3	12	16/7	15	Menstruation	Menstrual status
	84/4	76	86/6	78	83/3	75	No Menstruation	

Table 2 and 3 shows the comparison of student self-esteem and self-efficacy mean scores were studied before and after training, to examine differences between self-esteem and self-efficacy scores mean of students at the beginning and end of the study in three groups of

Paired-Samples T Test were used for statistical analysis. Table 4 shows the examination of relationship between students' self-esteem and self-efficacy in three groups studied was used in this part of the Pearson test.

Table 2: The comparison self-esteem scores mean of students before and after the training in primary schools

Result of test Paired- Samples T Test	Effect of training	After intervention	Before intervention	Statistics index	Self-esteem Group
Paired- Samples T Test t =-13/12, df=89, P<0/001	7/62	42/57	34/95	Mean	Lecture
	5/51	3/91	7/63	Standard deviation	
Paired- Samples T Test t =-12/93, df=89, P<0/001	10/16	43/28	33/36	Mean	Training Package
	7/45	3/09	7/87	Standard deviation	
Paired- Samples T Test t =-2/61, df=89, P=0/011	0/8	35/53	34/73	Mean	Control
	2/9	6/93	7/53	Standard deviation	

Table 3: The comparison self-efficacy scores mean of students before and after the training in primary schools

Result of test Paired- Samples T Test	Effect of training	After intervention	Before intervention	Statistics index	Self- efficacy Group
Paired- Samples T Test t =- 8/25, df=89, P<0/001	12/9	73/48	60/58	Mean	Lecture
	14/82	7	16/22	Standard deviation	
Paired- Samples T Test t =-16/54, df=89, P<0/001	24/74	79/12	54/37	Mean	Training Package
	14/19	3/77	14/05	Standard deviation	
Paired- Samples T Test t =- 3/24, df=89, P=0/002	2/55	57	54/44	Mean	Control
	7/48	11/99	12/71	Standard deviation	

Table 4: Examine the relationship between self-esteem and self-efficacy of students before and after the training in primary schools

Relation	P-value	Pearson Correlation	Variable	Group
significance	P<0/001	R=0/664	self- esteem and self-efficacy	Lecture
significance	P<0/001	R=0/620	self- esteem and self-efficacy	Training Package
No significance	P=0/801	R= 0/027	self- esteem and self-efficacy	Control

DISCUSSION

According to the findings of this study was to compare self-esteem scores of the students after teaching

adolescent health in two intervention and control groups showed that the average of self-esteem scores in the first intervention group 42/57 and in the training package

intervention group 43/28 and in the control group 35/53 was based on ANOVA statistical test showed a significant difference ($P < 0/001$). These findings are consistent with studies conducted by Naseri and Nick Poor³⁶ and Ghotaslu³⁷ in Iran. In this study the effectiveness of training in various aspects of health, particularly mental health is reviewed and determined: Education has a positive effect on mental health. In a study conducted by Mokarie et al in Tehran in 1391, accepted³⁸ showed that the educational programs of puberty in adolescent girls can increase self-esteem and reduce anxiety that the objective of this study is that the effect of health education on self-esteem during adolescence is a time direction. the study is currently comparing the scores of self-efficacy students after training in adolescent health in two intervention and control groups showed that the mean of self-efficacy scores in the first intervention group 73/48 and in the intervention training package group 79/12 and in the control group 57 was based on ANOVA statistical test showed a meaningful difference with control group ($P < 0/001$). The findings of research conducted by Alizadeh and colleagues in Tehran in 1387 isa time direction and showed that encourage education based on Adler's approach can increase students' self-efficacy³⁹. In this study, the effects of education on the psychological aspects of self-esteem and self-efficacy is reviewed and determined. The results of this study based on ANOVA statistical test on the most effective teaching methods, educational packages on self-esteem than the lecture method with a statistically meaningful difference ($P < 0/007$) and the efficacy with significant differences ($P < 0/001$) has been implied. These findings are consistent with the study conducted by Khakbazan and colleagues that took place in Tehran in 1385 that in this study, a comparison of two methods of lecture and training package on knowledge girls on puberty health would be the study of the effect of education closed to the lecture method of teaching packages with a statistically meaningful difference test ($P < 0/001$) was shown⁴⁰. According to a study cited in the choice of the appropriate method of training young students have a significant role in raising awareness. About the relationship between self-esteem and self-efficacy in present study a significant relationship ($P < 0/001$) in both groups, lectures and training package appeared on adolescent health education which in this case can be concluded that the self-esteem and self-efficacy are related to each other. Possible explanation for this finding is that the teenage years are an important step leading social and mental development is

considered. In the course of different problems can cause teenagers to have a sensitive and fragile mood disorders variety of behavioral, social, emotional, and mental traits. One of the adolescent unaware of the issues of puberty and adolescence and also the lack of information source is to inform juvenile about it. A teenager who has acquired the necessary skills to deal with this critical period, has no emotional, mental and personality balance, cannot have a healthy relationship with others, cannot express to the community and develop a sense of disorientation and confusion, While teaching issues related to adolescent health (physical, mental) can solve many problems in their construction and proper interaction with the surrounding environment, resulting in increased their self-esteem and self-efficacy helped.

CONCLUSION

According to the results of research and theory discussed above, we can conclude that adolescent health education is effective on rising from student self-esteem and self-efficacy. According to the findings of this study and various studies on the importance of adolescent health educations by awareness resources in order to increase the mental health of students is clearly evident. Therefore the active participation of the people involved in this issue is to increase the physical and mental health of adolescents into adulthood. Accordingly, it is recommended as textbooks adolescent health and adolescent girls were included in the curriculum of the primary school education system. Thus, midwives and other medical personnel in good times to attend school based on systematic curriculum design and training of youth activities. The results of the analysis findings indicate that both methods are effective in improving self-esteem and self-efficacy of teaching students about adolescent health. However, due to the fact that the way of training package with a statistically meaningful difference ($P < 0/007$) on self-esteem and a statistically meaningful differences ($P < 0/001$) on self-efficacy that was based on ANOVA statistical test to be more effective than the training method of lecture. Accordingly, it is recommended that, if possible, in conjunction with other methods, depending on the method of teaching in other schools will be used to educate adolescent health.

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