

The Effects of Mental Health Education on the Happiness of 6th-Grade Female Students: An Interventional Study

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Abstract

Background: Adolescent mental health needs, particularly among girls, are of utmost importance and encompass social, behavioral, emotional, and cognitive aspects. The objective of this study was, then, to evaluate the impact of mental health education on the happiness of sixth-grade female students.

Methods: In this controlled interventional research, the statistical population included 6th-grade female students in Sarakhs City during 2021-2022. 44 female students were selected by the available sampling method and placed into two intervention and control groups with 22 participants in each group. The interventional group underwent 7 sessions of mental health training, while the control group did not intervene. The Oxford Argyle et al. (1989) happiness questionnaire was used and SPSS 25 software was implemented for data analysis using the multivariate covariance analysis (MANCOVA) to measure the desired variables.

Results: According to the results, there was a significant difference, in the post-test, between the interventional and control groups in the examined components, indicating that mental health education has a positive impact on students' happiness ($f = 37.30$). Also, the results showed statistically significant differences, in the post-test, between the two groups in the positive mood component ($F_{37,1} = 8.26$; $P < 0.05$), efficiency ($F_{37,1} = 12.58$; $P < 0.05$), satisfaction ($F_{37,1} = 21.82$; $P < 0.05$), health ($F_{37,1} = 12.99$; $P < 0.05$), and self-esteem ($F_{37,1} = 6.78$; $P < 0.05$).

Conclusion: According to the results, the mental health education program was effective in female students and can potentially improve education and quality of life. Therefore, it is recommended to implement mental health training programs for students at other educational levels and in the form of skills training.

Key Words: Happiness, Mental Health, School Student.

* Please cite this article as: Moniri A, Mohammadi Y, Raeisoon M. The Effects of Mental Health Education on the Happiness of 6th-Grade Female Students: An Interventional Study. *Int J Pediatr* 2023; 11 (12):18440-18448. DOI: [10.22038/ijp.2023.75589.5378](https://doi.org/10.22038/ijp.2023.75589.5378)

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Received date: Oct.13,2023; Accepted date: Dec.25,2023

1- INTRODUCTION

The psychological condition of children and adolescents is crucial for the development and progress of any country, as they are the future; and the backwardness of countries can be caused by neglecting it (1). Happiness is among the six major and significant emotions (2, 3) and it is called a positive mental state, which is characterized by a high level of satisfaction with life, a high level of positive emotions and a low level of negative emotions (4, 5) and it refers to the emotional degree with which a person judges the overall quality of his life as a completely desirable life (6). Happiness is a generator of energy, enthusiasm, vitality, and protects a person like a shield against mental pressures (7) and has three basic components: positive emotion, satisfaction with life, and absence of negative emotions such as depression, and anxiety. Positive relationships with others, being purposeful in life, personal development, loving others and life are other components of happiness (8, 9). The fields of mood and personality, culture, social skills, the level of optimism and pessimism, social support and individual cognitions have a direct effect on the level of happiness (10) and high levels of negative emotions such as anger and sadness will lead to a decrease in the beneficial social effects of happiness and attention control in adolescents (5). One of the effective ways to increase happiness among students is to improve their mental health (11). Improving the level of mental health of students, especially girls during puberty, can prevent illness and mental abnormalities in them (12). Puberty is the developmental period towards adulthood (13). Because girls at this age do not share their problems with their parents and others (14), the educational system of the school can play a very important role in health education and its promotion during

adolescence and after that. It causes the formation of students' personalities, attitudes, and skills and also their awareness (15) the educational system can also provide the context for answering their questions (16). Therefore, training to improve the level of mental health can be considered one of the most effective methods to make schools healthy and prevent maladjustments among students. Also, considering the importance of happiness in various aspects of the personal, social and academic life of students as the future-making stratum of society and since female students are one of the most sensitive sections of society, this study aimed to answer the question of whether mental health education affects the happiness of sixth-grade female students in Sarakhs city, east of Iran.

2- MATERIALS AND METHODS:

2-1. Design and participants

In this controlled interventional study conducted in a pretest-posttest design, the statistical population included all sixth-grade female students of Sarakhs Elementary Schools in the academic year of 2021-2022. The participants were selected based on a similar study (17). They were then randomly divided into two groups (22 interventional and 22 control) based on the block randomization method.

2-2. Inclusion and Exclusion criteria

Sixth-grade female students of Sarakhs City in the academic year of 2021-2022 who consented to participate in the study were included in the study, and students who did not complete the questionnaire were excluded from the study.

2-3. Instrument

In this research, Oxford Happiness Questionnaire of Argyle et al. (1989) was used to measure the desired variables. This questionnaire is the opposite of Beck's depression questionnaire. The final

form of the questionnaire with 29 questions covers the five factors of satisfaction (questions 1,2,3,4,5, and 6), positive mood (questions 7, 8, 9, 10, 11, and 12), health (questions 13, 14, 15, 16, 17, and 18), efficiency (questions 19, 20, 21, 22, 23, and 24), and self-esteem (questions 25, 26, 27, 28, and 29). The reliability of different indicators of the happiness questionnaire has been examined in various research studies, such as those by Birami et al. (2013) 0.84 (18), Danesh (1389) 0.73 (19), Keshavarz et al. (1386) 0.82 (20), Salehi Imran et al. (1383) 0.82 (21), Francis et al. (1998) 0.89 (22); and Argyle (1990) reported a

reliability coefficient of 0.90 (23). Also, the researcher used face validity to determine the validity of the questionnaire, and Cronbach's alpha reliability was estimated as 0.84.

2-4. Educational content

The mental health education package in the current research was approved by two experts. After making the necessary arrangements with the girls' school in Sarakhs city in the spring of 2022, the interventional group were educated based on Felder and Silverman's thinking (24) taken from Moein et al. 's research (2013) (25).

Table 1: Educational content

Session	Contents
1	Introducing the members; talking about the physical characteristics of girls in this era and presenting different strategies to match their situation
2	Discussing the behavioral characteristics of adolescence and puberty in students and presenting different solutions to match their situation
3	Discussing the mood characteristics of adolescence and puberty in students presenting different solutions to match their situation
4	Discussing the role of family and friends in developing and maintaining people's health and promoting happiness in students
5	Getting to know the causes and effective factors causing mental disorders
6	Defining and explaining the concept of happiness; discussing the factors affecting happiness; defining and explaining the concept of happiness; ways to increase it; presenting a different solution in this field
7	Discussion and review of the training course; general conclusions from the sessions

2-5. Study implementation

After the orientation meeting and coordination with the school principal, teachers, and students, the questionnaire of the students of both groups was completed. Then, the students of the intervention group received the necessary training based on the mental health training package in spring 2022. The training was held for two months (one session per week), according to the plan during 7 face-to-face training sessions, by a graduate student in the field of

educational sciences majoring in elementary education. Each training session lasted 45 minutes and 4 weeks. After the seventh session, the post-test questionnaire was distributed in both groups.

2-6. Data Analysis

Data analysis was done in SPSS 25 software using frequency percentage, mean and standard deviation and multivariate analysis of covariance (MANCOVA) test.

3- RESULTS

According to the results of Kolmogorov-Smirnov test, the data had a normal distribution ($P > 0.05$) (**Table 2**); Also, based on the results of the independent t-test ($P > 0.05$) and Levin's test ($P > 0.05$), the two groups were equivalent in the baseline and the variances were homogeneous.

The results of covariance analysis showed that there is a significant difference between happiness scores in the intervention and control group ($f = 37.30$, $p = 0.001$); Therefore, it can be concluded that mental health education affects students' happiness (**Table 3**).

Table 2: Data distribution result (Smironov's-Kolmogorov test) by happiness components in pre- and post-test

Dimension	Test time	No	Kolmogorov-Smirnov test	p-value
Satisfaction	Pre-test	44	0.89	0.41
	Post-test	44	0.64	0.80
Positive mood	Pre-test	44	1.04	0.23
	Post-test	44	0.84	0.48
Health	Pre-test	44	0.95	0.33
	Post-test	44	1.15	0.14
Efficiency	Pre-test	44	1.34	0.05
	Post-test	44	0.66	0.78
Self-esteem	Pre-test	44	1.09	0.19
	Post-test	44	0.79	0.57
Happiness	Pre-test	44	0.49	0.97
	Post-test	44	0.60	0.87

Table 3: The results of multivariate covariance analysis of happiness in the case and control groups

Sum squares	df	mean square	F	p-value	Impact rate	Test power
848.89	1	848.49	37.30	0.001	0.48	1
910.25	40	22.76				

Also, the results showed statistically significant differences, in the post-test, between the two groups in the positive mood component ($F_{37,1} = 8.26$; $P < 0.05$), efficiency ($F_{37,1} = 12.58$; $P < 0.05$), satisfaction ($F_{37,1} = 21.82$; $P < 0.05$), health ($F_{37,1} = 12.99$; $P < 0.05$), and self-esteem ($F_{37,1} = 6.78$; $P < 0.05$). Therefore, it can be concluded that there is a significant difference between the post-test scores of the components of

happiness in the interventional and control groups, and mental health education has an effect on the happiness of the sixth-grade female students of Sarakhs Elementary Schools (**Table 4**).

4- DISCUSSION

In this study, which was conducted to investigate the effectiveness of mental health education on the happiness of sixth-grade female students in Sarakhs

City, it was shown that education is effective in improving happiness and all its components. The results of the study are consistent with the results of Jafari

Harandi et al. (2018) (26); Sahaghi (2017) (27); Moeini et al. (2015) (28), Padash et al. (2019) (29) and Bieda et al. (2019) (30).

Table 4: The results of multivariate covariance analysis on the post-test mean scores of happiness components in case and control groups

Dimension		Sum squares	df	mean square	F	p-value	Impact rate	Test power
Group	Satisfaction	80.73	1	80.73	21.82	0.00	0.37	1
	Positive mood	27.28	1	27.28	8.26	0.01	0.18	0.80
	Health	42.16	1	42.16	12.99	0.00	0.26	0.94
	Efficiency	31.63	1	31.63	12.58	0.00	0.25	0.93
	Self-esteem	20.82	1	20.82	6.87	0.01	0.16	0.72
Error	Satisfaction	136.87	37	3.70				
	Positive mood	122.15	37	3.30				
	Health	120.13	37	3.25				
	Efficiency	93.04	37	2.51				
	Self-esteem	112.14	37	3.03				

The results of the study by Jafari Harandi (2018) showed that there is a positive and significant relationship between mental health and happiness. Also, happiness had a significant relationship with the components of mental health, including physical health, anxiety and insomnia, social maladjustment, and depression; and the variables of age, education and marital status were known to be effective factors on students' happiness (26). Sahaghi (2017) reported a positive and significant correlation between happiness and academic progress ($r=0.426$) at 0.01 level (27). Moeini et al. (2015) showed in their research that there is a negative and significant correlation between poor mental health status and happiness in female high school students ($r = -0.678$) and also there was a significant relationship between happiness and mental health status with economic status (28). Padash et al. (2013) considered the quality of life training to be effective in the happiness of married men and women (29). Bieda et al. (2019) reported life

satisfaction and positive mental health as predictors of happiness (30).

Happiness is a mental and internal phenomenon. Positive emotions, which are the main components of happiness, increase the person's behavioral-cognitive reserve and attention, and the person will experience more happiness and vitality (31). On the contrary, depressed moods are a result of the person's turning to negative thoughts instead of trying to think positively, which ultimately leads to the limitation of the behavioral treasury, the reduction of attention, and as a result lack of progress (32). The feeling of cheerfulness and vitality in dealing with various events in many cases depends on the type of attitude and feeling of the person, how much these people can enjoy happiness in the path of life, decision-making power, interest in others, feeling of encouragement and have the ability to communicate with the surrounding world. Therefore, when relationships with trust develop in the environment of a professional group, the probability that

people will spend more time and effort to achieve the goals of the group instead of focusing on personal needs will increase (33).

It has been shown that when the father is unemployed and the parents are divorced, the happiness score decreases and the enjoyment of going to school, spending quality time with peers and having fun with them; on the other hand, having higher self-esteem and feeling safe in the school environment are positively related to the level of happiness of students (34). Family strength is known as the most important factor in promoting happiness in students (35). Parents have the greatest influence on their adolescent's happiness when they help their children avoid social deviance and substance use (36). Religiosity has been mentioned as another factor affecting students' happiness (36, 37). People's religion provides emotional support and helps to solve their problems. This type of problem-solving is one of the tricks used to increase adaptability and flourishing. So having faith and religious attitudes have been considered the best predictors of satisfaction with life and well-being (38). Also, the appearance, ecology, and physical condition of the school, and the facilities and equipment of the school are effective in improving and strengthening the happiness of students (39-41).

The educational system of the school plays a very important role in health education and its promotion in childhood and later through training in problem-oriented coping styles (35) and causes the formation of students' personalities, attitudes, skills and also their awareness. Based on this, ensuring the health of students is of particular importance (39). Teaching social skills (42), positive thinking skills (43), and problem-solving skills (44) are educational skills that can be effective in increasing the happiness of female students. Students who use social

skills in different situations and have more social and adaptive behaviors, are noticed by their peers, and are more successful in having positive interpersonal experiences. Therefore, the encouragement and feedback they receive from others improves their positive self-esteem, the result of which is a sense of worth and happiness (42).

4-1. Limitations of the study

One of the most important limitations of this research is that the research tool was self-report.

5- CONCLUSION

Considering the positive effects of attending mental health training sessions on students' happiness, it is recommended to implement mental health training programs for students at different educational levels and in the form of skills training.

6- ETHICAL CONSIDERATIONS

This study was approved by the ethics committee of Birjand University of Medical Sciences with the code of IR.IAU.BIRJAND.REC.1402.016. Also, before the start of the study, all participants completed an informed consent form and were assured that their information would be confidential and would be published anonymously.

7- CONFLICT OF INTEREST

None.

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