

# The effect of life skill training on self-esteem and locus of control

Mahnaz Modanloo<sup>1</sup>, Mahya Okhli<sup>2\*</sup>, Mohammad Zaman Kamkar<sup>3</sup>, Habib Abdollahi<sup>4</sup>, Moein Manouchehri<sup>5</sup>, Layla Falsafi<sup>6</sup>

<sup>1</sup> Associate professor, Nursing Research Center, Golestan University of Medical Sciences, Gorgan, Iran. <sup>2</sup> Msc psychology, Nursing Research Center, Golestan University of Medical Sciences, Gorgan, Iran. <sup>3</sup> Assistant professor, Department of Psychiatry, Golestan Research Center of Psychiatry, Golestan University of Medical Sciences, Gorgan, Iran. <sup>4</sup> Ms in Medical Education, Golestan University of Medical Sciences, Gorgan, Iran. <sup>5</sup> MA of clinical psychology, Golestan Research Center of Psychiatry, Golestan University of Medical Sciences. <sup>6</sup> Msc psychology, Golestan University of medical sciences, Golestan, Iran.

## Abstract

**Introduction & Objective:** Nowadays, many of people are not able to deal with negative events of life and it make them inadequate in solve the problems of everyday life, thus enhancing coping skills and psychosocial capabilities is very effective in Life improvement. In this study we aimed to investigate the effect of life skills training on self-esteem and locus of control in medical students of International school of Golestan University of Medical sciences. **Materials and Methods:** All of medical and dentistry students of Gorgan were entered to the study. After selecting the samples with? method, demographic information were collected, standard questionnaires of "locus of control" and "self-esteem" were completed by them. The students then participated in the eight-week training program. after Two weeks of the training program, then questionnaires were completed by the students again. Data were analyzed by SPSS software. **Results:** self-esteem and locus of control were increased after the training program. But there was no significant relationship between self-esteem and locus of control before and after training. Self-esteem and locus of control were not significantly related between male and female students. The education and job of parents, place of residence and birth rate, had no significant effect on the variables of our study. **Conclusion:** In our study, there was no significant difference between self-esteem and the locus of internal and external control in students before and after the training program. Further planning for such studies at an earlier age, as well as their impact on other psychological factors, is suggested in future researches.

**Keywords:** self-esteem -locus of control- life skill-training

## INTRODUCTION

Nowadays, despite drastic cultural and lifestyle improvements, many people lack the ability to cope with, and are therefore vulnerable to, challenges of day-to-day life. Numerous studies have shown that many health problems and psychological disorders are stemming from psycho-social roots. Cultivating coping and psycho-social skills, would improve one's quality of life and help them with life's daily struggles, while providing them the required compatibility of living in any society, culture and environment. All of us, throughout our lives, will face challenges and difficulties, and to overcome them, we need to have certain resources and capabilities <sup>[1]</sup>. Lifeskill training is the most effective prevention program in life's early stages <sup>[2]</sup>. According to World Health Organization (WHO) life skill is the ability of a person to have a positive and compatible approach to life which would enable him or her to face challenges and necessities of daily life. Any individual may be placed in a difficult situation which he or she does not have any control over, in such circumstances, those who have equipped themselves with appropriate life skills are more successful than others. WHO divides life skills in the following ten categories; self-awareness, communication, assertiveness, inter-personal, decision making, problem solving, creative

thinking, critical thinking, dealing with anxiety, and stress management <sup>[1, 3]</sup>.

College students, who play an important role in building the future of societies, are more exposed to psychological pressures and more vulnerable to them than other social cohorts. Part of this vulnerability is inherent in being a student, and part of it is caused by others expectations <sup>[4]</sup>. Life skills training programs for college students, who are a large

**Address for correspondence:** Mahya Okhli, Msc psychology, Nursing Research Center, Golestan University of Medical Sciences, Gorgan, Iran.  
Email: Mahyaokhly@gmail.com

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 3.0 License, which allows others to remix, tweak, and build upon the work non commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**How to cite this article:** Modanloo, M., Okhli, M., Zaman Kamkar, M., Abdollahi, H., Manouchehri, M., Falsafi, L. The effect of life skill training on self-esteem and locus of control. Arch Pharma Pract 2020;11(S4):119-24.

section of our youth population, in order to increase their psycho-social capabilities in facing daily life's struggles and challenges, has increasingly been the focus of educational paradigms. The pressures that this young population has to endure, puts them at high risk of developing many psycho-social disorders<sup>[1]</sup>. One of the problems which has a negative effect on young people's productivity is lack of self-esteem (SE). Research finding showed that there is direct correlation between low SE and depression<sup>[5, 6]</sup>. If a person does not believe in his or her capabilities and self-worth, he or she would probably face stress and psychological pressure. Also, individuals with low SE may chose anti-social lifestyles as a way to avoid negative feelings<sup>[7]</sup>, and punish themselves because of their weak social skills, both of which will lead to loneliness. Studies have shown that assertiveness, which is one of the pillars of life skills training, can lead to higher SE, higher self-confidence, better inter-personal skills, more internal locus of control (LOC) and forming character in individuals<sup>[8]</sup>. A number of studies show a correlation between assertiveness and SE in college students.

There is a theory in social psychology called Social Learning Theory, developed by Rotter. Rotter explained in his theory that people either attribute their successes and failures to internal and controllable sources, or to external and out of control sources. The first group are those who possess internalLOC, while the other have externalLOC. Individuals who have been trained on life skills and believe they have control over events in their lives, are at a lower risk for anxiety and depression, they are also less likely to develop alcohol dependencies<sup>[9-12]</sup>. They experience less anxiety and depression, and are more adaptable when facing psychological issues<sup>[11]</sup>. Ahmadian also demonstrated in his research that there is a positive correlation between LOC and test anxiety, and the more external the LOC, the higher the level of anxiety<sup>[13]</sup>. There is also a correlation between internal locus of control and academic success. Therefore, based on the aforementioned information, gaining life skills to counter stress and anxiety, and to attain assertiveness and improve social skills, could play an effective role in developing higher SE and more internal LOC. Since students, and medical students in particular, are under more psychological stress and are more prone to psychological disorders than most other sections of society, they were selected as target population for this study. the aim of this research was to determine the effects of life skills training on SE and LOC in students of Golestan University of Medical Sciences.

## METHODS

This single group experimental study with pre-test and post-test design was done on 50 medicine and dentistry students of Golestan University of Medical Sciences in 2016. Students were recruited using convenient sampling method considering inclusion criteria. Inclusion criteria were; willingness to participate in research, being a freshman, no history of physical disabilities or psychiatric disorder, and no experience of participating in the life-skill training or

workshop with the same content. Exclusion criteria were; unwillingness to continue participating in the study and missing two or more sessions.

Data was gathered using questionnaire comprised demographic characteristics, (age, gender, major of study, SAT score, number of immediate family members, number of older siblings, parents' level of education, parents' occupations, and residency status), Cooper Smith Self-Esteem Inventory (CSEI) and Rotter's Locus of Control Scale (LOC),

The Cooper Smith Self-Esteem Inventory (CSEI) was designed to measure in any individual evaluated attitudes toward the self. The CSEI consists of 58 dichotomous items; 50 self-esteem items and 8 items constituting the Lie Scale. All items are short statements and are answered "Like Me" or "Unlike Me". There is no right or wrong answers and higher scores are more favorable. The possible scores range from 0 (low self-esteem) to 50 (high self-esteem). This CSEI was used in several studies in Iran and its reliability and validity was proven<sup>[14-17]</sup>.

The Locus of Control Scale was developed by Rotter (1966) which is the most widely used questionnaire to measure locus of control<sup>[18]</sup>. This 23-item (plus six filler items that their scores do not affect the overall score), forced-choice scale with two options as "A" and "B", is a self-administered instrument. One item of each forced-choice pair of statements is internally-oriented and another one is externally-oriented. Respondents were asked to choose between pairs of internal and external items relating to everyday situations. In some questions "A" score is 1 and "B" score is 0 and vice versa. Scores range from 0 to 23. A low score (less than 9) indicates an internal control while a high score (9 or more) indicates external control. The Internal-External Locus of Control Scale has been used in several studies to recalculate and confirmed the reliability of the questionnaire which demonstrated satisfactory coefficient alphas<sup>[14-16, 19-22]</sup>.

The mention questionnaires were administered twice; one week before intervention and 11 weeks afterwards (two weeks after the end of their training).

The researchers begin intervention after obtaining written informed consent, explanations on research objectives, confidentiality of data, and voluntary participation were provided to the participants.

Then students participated in the Life-Skills Group Trainings Program which was an eight-session workshop. Each session was four-hour, held once a week. Initially to start program, researchers arrange material pertaining to the life skill training based on the Life-Skills Trainings Program developed by Iran ministry of health. The program comprised the five following contents; self-awareness, empathy, communication, assertiveness and stress management. (Table 1)

**Table 1.** Description of Life-Skills Group Trainings Program

Session	Objective	Agenda
One	Introduction and self-awareness	<ul style="list-style-type: none"> <li>- Introduction</li> <li>- Presenting goal and rules of the workshop (being respectful toward others, right to share one's opinion, etc.)</li> <li>- Highlighting the importance of teaching life skills, and defining the fundamentals               <ul style="list-style-type: none"> <li>- Self-assessment skills</li> <li>- Positive thinking skills</li> <li>- Positive self-image skills</li> <li>- How do I see myself?</li> </ul> </li> <li>- How can we change our self-perception and what would we feel about ourselves if we improve our weaknesses?               <ul style="list-style-type: none"> <li>- Recognizing one's own likes and talents</li> <li>- Elements which affect self-awareness</li> </ul> </li> </ul>
Two	Empathy	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week               <ul style="list-style-type: none"> <li>- Dining empathy</li> <li>- Aspects of empathy</li> </ul> </li> <li>- How to empathize with others in different situations               <ul style="list-style-type: none"> <li>- Problems caused by lack of empathy</li> </ul> </li> </ul>
Three	communication skills	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week</li> <li>- Defining the importance and attributes of communication               <ul style="list-style-type: none"> <li>- Components of the communication process                   <ul style="list-style-type: none"> <li>- Types of communication</li> <li>- Communication functions</li> </ul> </li> <li>- Techniques for active listening</li> <li>- Techniques for effective communication</li> <li>- Obstacles to effective communication</li> </ul> </li> <li>- Suggestions for more effective verbal and non-verbal communication               <ul style="list-style-type: none"> <li>- Healthy and unhealthy ways of communication</li> </ul> </li> </ul>
Four	Assertiveness	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week               <ul style="list-style-type: none"> <li>- Definition of assertiveness                   <ul style="list-style-type: none"> <li>- My rights</li> <li>- Passive behavior</li> <li>- behavior</li> <li>- Aggressive behavior</li> </ul> </li> </ul> </li> </ul>
Five		<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week               <ul style="list-style-type: none"> <li>- Problems caused by                   <ul style="list-style-type: none"> <li>- Types of behavior</li> </ul> </li> <li>- Cognitive impediments to                   <ul style="list-style-type: none"> <li>- Steps to behavior</li> </ul> </li> <li>- Suggestions for saying "no"</li> <li>- Special techniques for behavior</li> </ul> </li> </ul>
Six	stress management	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week</li> <li>- Introduction to the concept of stress and related factors               <ul style="list-style-type: none"> <li>- Recognizing a model for explanation of coping                   <ul style="list-style-type: none"> <li>- Recognizing signs of stress</li> </ul> </li> <li>- Recognizing strategies to cope with stress</li> </ul> </li> <li>- Defining each of the above mentioned strategies               <ul style="list-style-type: none"> <li>- Practicing calming</li> <li>- Practicing adaptive sentiments</li> </ul> </li> </ul>
Seven	stress management	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week               <ul style="list-style-type: none"> <li>- Time management</li> </ul> </li> <li>- Managing academic pressures               <ul style="list-style-type: none"> <li>- Problem solving</li> </ul> </li> <li>- Coping with irrational thoughts               <ul style="list-style-type: none"> <li>- Role of exercise and nutrition in coping with stress</li> </ul> </li> </ul>
Eight	Summarizing	<ul style="list-style-type: none"> <li>- Reviewing homework and concepts discussed last week</li> <li>- Last exercise: how to prepare ourselves for coping with stress?</li> <li>- Conclusion and summarizing concepts presented in previous sessions using scenarios that are a combination of behaviors discussed in previous sessions.               <ul style="list-style-type: none"> <li>- Question and answer</li> </ul> </li> </ul>

For setting the group, researchers divided students into five smaller groups of 6-7 in each. The sessions were held at the conference hall of the faculty, based on students' preference time, to encourage them for highly participation. The instructors had over 5 years of experience life skill training.

The sample size was estimated using the outcome data from previous study [23] using the following formulas:

$$n = \frac{(s_1^2 + s_2^2) \left( z_{1-\frac{\alpha}{2}} + z_{1-\beta} \right)^2}{(\bar{x}_1 - \bar{x}_2)^2}$$

Therefore, 40 subjects was needed, with a power of 90% and error of 1%. Taking into consideration potential 20% drop-outs, 50 students were recruited (25 medical and 25 dental students).

Data was analyzed using paired t-test and Wilcoxon test. For the statistical analysis, the statistical software IBM SPSS Statistics for Windows version 21.0 (IBM Corp. 2012. Armonk, NY: IBM Corp.) was used. Significance level was considered 0.05%.

## FINDINGS

The findings showed that the mean age of students was 20±2years. Most of the students were female (88%). The major of half of the students was medicine (n=25) and half of them was dentist (n=25).

The findings showed that the mean and SD score of SE before and after the intervention was 34.56±6.26 and 36.92 ±6.08 respectively, the students mean score of LOC before and after the intervention was 12.96±4.16, and 14.23±4.03 respectively.

Comparing student's SE and LOC before and after participation in life skills trainings showed that there is a significant difference between the mean score of SE and LOC before and after the training program. The mean scores of the SE increased significantly from 34.56 ±6.26 before the intervention to 36.92 ±6.08 after the intervention ( $P < 0.001$ ), also the mean scores of the LOC increased significantly from 12.96±4.16 before the intervention to 14.23 ±4.03 after the intervention ( $P < 0.001$ ). (Table 2)

**Table 2.** Comparing mean and standard deviation of student's LOC and SE before and after intervention.

Variable		Mean +SD	P-Value
LOC	Before	12.96±4.16	<0.0001
	After	14.23 ±4.03	
SE	Before	34.56 ±6.26	<0.0001
	After	36.92 ±6.08	

There was a direct and significant correlation between students' LOC and SE ( $r=0.32$ ,  $P=0.001$ ) in which with increase in SE, LOC increases as well.

There was no significant difference between SE and gender, Parent's job, level of education, living location and birth rank. Self-esteem has direct correlation with age and number of siblings and reverse correlation with GPA, however, this is not a significant correlation. (Table 4)

**Table 3.** Correlation between SE and demographic characteristics

Variable	SE	Age	GPA	No. of Siblings
SE	1	0.139	-0.067	0.116
P-Value	-	0.169	0.518	0.243

There was no significant difference between men and women mean score of LOC. Parent's job and level of education, living location and birth rank do not have significant correlation with students' self-esteem. But age and number of siblings have a significant correlation with LOC, such that with increase in age and number of siblings LOC also increases. GPA has a reverse, but not significant, correlation with LOC. (Table 5)

**Table 4.** Correlation between LOC and demographic characteristics.

Variable	Self Esteem LOC	Age	GPA	Number of Siblings
Self Esteem LOC	1	0.369	-0.081	0.252
P-Value	-	<0.0001	0.435	0.010

## DISCUSSION

According to the finding, there is no significant difference between students' SE and LOC before and after the trainings but group life skills training might improve both SE and LOC as important aspects of human life. In the study conducted by Farideh [15], it was determined that life skills training does not have an effect on students' esteems which is consistent with our findings. Also in Amali's [16] study, it was determined that teaching decisiveness did not increase subjects' self esteem, which is consistent with the results of our study showing there was not a significant increase in self esteem. This consistency could probably be explained by the fact that both of the above mentioned studies and our studies were using adult subjects. SE as a variable affected by one's character could change in younger ages and be completely formed by adulthood. Therefore self esteem in adults is less likely to be affected significantly by training. Such trainings would probably be more effective on elementary school students than college students. Our findings were not consistent with those of Pourmohammadi which showed life training skills increases students' mental health and self esteem. In the study conducted by FribaNasiriZiba, the results show that life skills training will increase the decision making and self control



abilities, which is not consistent with our findings. Also in the study by Zoffmann *et al.* findings were contradictory to our findings. Additionally, results from study by Ali Arzandeh Far *et al.* was also inconsistent with ours. Furthermore, findings by Hamid BarzinManesh *et al.* also demonstrated that life skills trainings has significant effects on mental health and locus of control of individuals, and after the training period most of the subjects in their study, identified learning about life skills as necessary and helpful for everybody<sup>[14]</sup>.

These inconsistencies could be explained by the fact that our subjects were studying in the international college and therefore, in most cases, came from wealthy households; it is possible that having wealth has caused a relatively higher base of self esteem in our subjects, which were not significantly improved by trainings. The reason could also be the short time dedicated to trainings and the fact that all subject matters were explained in short time intervals, which reduced their effectiveness. Our results that our subjects were demonstrating more and more external locus of control, could be explained by the fact that the more an individual attributes successes and failures of his or her life to elements that are out of his or her control, as opposed to recognizing them as results of their own decisions and actions, the more external their locus of control would be. Considering that in the most basic level, life skill instructors discuss the effectiveness of their teachings and their effect on changing people and improving their quality of lives, student may recognize the training as an outside element having an effect on their lives and therefore develop more external locus of control. Based on this argument all direct and indirect training should lead to the same result, I.e. external locus of control in subjects.

## CONCLUSION

Teaching life skills will not have an effect on some psychological factors, such as self esteem and locus of control. More detailed planning to alter training concepts and methods of training, especially in younger ages and also training individuals gradually and over longer periods of time and with more detail, and also measuring their effects on other psychological factors are suggested for future studies. Studies on methods of indirect trainings to increase locus of control, is also suggested. We emphasize taking caution when attributing the findings of this study to other target groups.

In conclusion, they have to accept the fact that in spite of they could not change some events of their lives; they could acquire skill to accept some stressful experiences. If they can modify the stressful experiences. As a result, considering psychological course as routine educational intervention is required for them to control their stress and change the threat to opportunities.

## ACKNOWLEDGEMENTS

The present article was approved by a committee for ethical research at Mazandaran and Golestan University of Medical

Science and registered in Iranian Registry of Clinical Trials . We hereby thank all the students for their time and effort to complete this study. Moreover, we are grateful to the administrators of the university (International unit) for their valuable contributions to this study. We would like to thank the Research Deputy of Golestan University of Medical Sciences, which financially supported this study.

## Authors' Contribution

Mahya Okhli and mahnaz modanloo collected and analyzed the data, and wrote the manuscript. Hannaneh poorbagher and habib abdollahi participated in sampling, data collection, supervised the study and critical revisions for important intellectual content. Layla falsafi performed the intervention and participated in manuscript writing. Mahin Tatari determined the sample size, analysis the data and participated in manuscript writing. Mahnaz Modanloo supervised the study and wrote the manuscript. All the authors approved the content of the manuscript<sup>[24]</sup>.

## REFERENCES

1. World Health Organization. The development and dissemination of life skills education: An overview. Genf: World Health Organization. 1994.
2. Jones MI, Lavalley D. Exploring the life skills needs of British adolescent athletes. *Psychology of Sport and Exercise*. 2009;10(1):159-67.
3. A'shour M, Jalilabkenar S S, Hasan-Zadeh S, Pourmohammadreza-Tajrishi M. Effectiveness of Life Skill Instruction on the Mental Health of Hearing Loss Students. *RJ*. 2013;13(4):48-57. [Persian].
4. Ni C, Liu X, Hua Q, Lv A, Wang B, Yan Y. Relationship between coping, self-esteem, individual factors and mental health among Chinese nursing students: a matched case-control study. *Nurse Educ Today*. 2010 May;30(4):338-43.
5. Panahandeh S, Mashhadi A. A Comparison of Implicit Self-esteem in Depressed and Non-depressed Individuals. *Journal of Cognitive Psychology*. 2014;2(1):22-31. [Persian].
6. Sowislo JF, Orth U. Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological bulletin*. 2013;139(1):213.
7. Eisenbarth C. Does self-esteem moderate the relations among perceived stress, coping, and depression? *College Student Journal*. 2012;46(1): 149-57.
8. Rhimi H, Mehrabizadeh U, Honarmand M, Bashlidesh K. Courage tillage on social skills and anxiety and self of expression in first year male high students. *J Psychol Train Sci*. 2006;3(1):5012.
9. Botvin GJ, Kantor LW. Preventing alcohol and tobacco use through life skills training. *Alcohol Res Health*. 2000;24(4):250-7.
10. Helvik AS, Bjørkløf GH, Corazzini K, Selbaek G, Laks J, Østbye T, Engedal K. Are coping strategies and locus of control orientation associated with health-related quality of life in older adults with and without depression?. *Archives of Gerontology and Geriatrics*. 2016 May 1;64:130-7.
11. Jain M, Singh S. Locus of control and its relationship with mental health and adjustment among adolescent females. *Journal of Mental Health and Human Behavior*. 2015;20(1):16-21.
12. Rizza F, Gison A, Bonassi S, Dall'Armi V, Tonto F, Giaquinto S. 'Locus of control', health-related quality of life, emotional distress and disability in Parkinson's disease. *J Health Psychol*. 2015 Nov 26.
13. Ahmadiyan N. Relationship between Personality Factors and Locus of Control with Test Anxiety in Birjand's High school Students. *Journal of Educational Psychology Studies*. 2015;10(18):1-20. [Persian].
14. Hosseini SN, Mirzaei Alavijeh M, Karami Matin B, Hamzeh B, Ashtarian H, Jalilian F. Locus of Control or Self-Esteem; Which One is the Best Predictor of Academic Achievement in Iranian College Students. *Iranian journal of psychiatry and behavioral sciences*. 2016;10(1):e2602.

15. Hasanvand B, khaledian M. The Relationship of Emotional Intelligence with Self-esteem and Academic Progress. *Int J Psychol Behav Sci.* 2012;2(6):231–6. doi:10.5923/j.ijpbs.20120206.06.
16. Mirzaei Alavijeh M, Rajaei N, Rezaei F, Hasanpoor S, Pirouzeh R, Babaei Borzabadi M. Comparison of selfesteem, locus of control and their relationship with university students' educational status at Shahid Sadoughi University of Medical Sciences- Yazd. *Journal of Medical Education and Development.* 2012;7(1):58-70.
17. Javanbakht M, Ziaee A, Homam M, Rahnama M. Effect of Ramadan fasting on self-esteem and mental health of students. *J Fundam Ment Health.* 2010;11(4):266-73.
18. Rotter JB. Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied.* 1966;80(1):1-28.
19. Rasouli Z, Farahbakhsh K. The Relationship between attachment styles and locus of control with marital adjustment. *Andisheh va Raftar (Applied Psychology)* 2009;13 (14):17-24. [Persian].
20. Kooranian F, Khosravi A, Esmaeeli H. The relationship between hardiness/locus of control and burnout in nurses. *Ofogh-e-Danesh.* 2008;1(14):58-68. [Persian].
21. Koushki S, Khalilifar M. Religious attitudes and locus of control *Andisheh va Raftar (Applied Psychology).* 2010; 15(4):33-40. [Persian].
22. Rashidei E, Shahr Aray M. Survey relationship between creativity and locus of control. *Journal of fresh ideas In Educational Sciences.* 2008 3(3):83 -99.
23. Ebrahimi Sani E, Ebrahimi Sani N, Ebrahimi Sani N. The effects of life skills training on students' self-esteem and public health. *quarterly journal of north Khorasan police science.* 2015;4(1): 7-20
24. Modanloo M, Jafarpour M, Haghani H. Relation self-esteem and locus of control in delinquent male adolescence. *Journal of Gorgan University of Medical Sciences.* 2001;3(7):41-5. [In Persian]