The effectiveness of life skills training program on the reduction of anxiety sensitivity and meta-worry among students at Islamic Azad university science and research branch, Tehran, Iran

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Abstract

This study is intended to examine the effectiveness of life skills training program on the reduction of anxiety sensitivityand meta-worry among undergraduate students at Islamic Azad University Science and Research Branch, Tehran, Iran using a semi-experimental research method. Study participants were classified into two groups of experimental and control. There were 30 subjects (15 experiment and 15 control) selected by simple random-assignment sampling. We used the following questionnaires to identify the difference between the groups: Anxiety Sensitivity Index (ASI) and Wells Anxiety Thoughts Inventory (AnTI). For data analysis, SPSS20 was used, and ANCOVA test was applied for the total group. ANCOVA test results showed a significant difference between pre-test and post-test in experimental group for anxiety sensitivity ($F=4.41$ $P \leq 0.05$) and meta-worry ($F=33.63$ $P \leq 0.05$) after intervention. It is concluded that life skills training program has a significant effect on the reduction of anxiety sensitivityand meta-worry among university students. Therefore, researchers can consider the same issues in future research.

Keywords: life skills program, anxiety sensitivity, meta-worry, anxiety

Introduction

University students are a considerable group in each society. They spend much of their time on campus, therefore naturally it would require an environment providing them with scientific pleasure and energy. Nevertheless, there are always certain concerns for them: for example, educational and financial problems as well as problems related to anxiety. Not all the students entering higher education can cope with these issues and increase their talents properly; on the other hand unless students fail to adapt to their new conditions, they will face with developmental disorders. One of the common disorders in students is about anxious disorders. As noted above, Social Anxiety Disorder (SAD) is a common anxiety disorder characterized by persistent and excessive fear and anxiety in response to social or performance situations in which one may be (negatively) evaluated(1).This disorder is the third most common psychiatric condition in the United States following major depression and alcohol or substance abuse (2) Onset for "generalized" social anxiety usually occurs in childhood or early adolescence and the course of the disorder is typically chronic or lifelong (3). This indicates early interference in ages of growth that could have a lasting impact on one's personal and occupational life. Moreover, social anxiety disorder is significantly associated with distress and excessive discomfort related to a deficiency in intimate interpersonal and occupational relationships (4). Studies have shown that anxiety sensitivity (AS) may increase the risk of developing morbid anxiety, acting as a risk factor. Recent theoretical models put

more emphasis on how to deal with stressful experiences (5). Anxiety sensitivity refers to the fear of anxiety-related sensations, which is thought to arise from beliefs that these symptoms have harmful physical, psychological, or social consequences. AS is considered to a dispositional trait that amplifies fear and other anxiety reactions and places individuals at risk for the development of anxiety-related conditions, particularly panic disorder (6). AS may lead to biases in information retrieval and processing of anxiety evocative stimuli paving the way for the development of mental disorders, including social phobia(7). in fact, a various array of studies have suggested that AS may be considered as a risk factor for anxiety problems(8). AS is a trait-like cognitive characteristic that predisposes individuals to the development of panic problems; it can encompass fears of physical, mental, and publicly observable experiences, all of which are believed to amplify preexisting anxiety(8) Deacon and Abramowitz (9) examined the relationship between AS dimensions, assessed by factor analysis derived subscales of the Anxiety Sensitivity Index - Revised (ASI-R), and anxiety-related psychopathology in a sample of treatment-seeking patients with anxiety disorders and compared them with normal people. They concluded that patients with anxiety disorders - as compared to normal subjects - reported higher levels of anxiety sensitivity; while those with panic and social anxiety were the highest reported. Furthermore, patients with social anxiety had the highest scores on *fear of being negatively evaluated* subscale. Rector, Shimizu, and

Leybman (10)examined various aspects of anxiety sensitivity in subjects with anxiety disorders (including generalized anxiety disorder (GAD), social anxiety, and panic) and found that patients with panic experienced more physical sensitivity than other groups with generalized anxiety or social disorder, while patients with social anxiety, evidenced higher social sensitivity than other groups. Patients with generalized anxiety sensitivity experienced greater cognitive sensitivity than the two other groups. They also showed that patients with anxiety disorders joined with major depression sensitivity, experienced higher cognitive sensitivity than those without major depression.

Anderson and Hope (2009) (11) studied the relationship among social phobia, objective and perceived physiological reactivity, and anxiety sensitivity in an adolescent population suggested that youth with social phobia indicate heightened levels of anxiety sensitivity, which may lead to the interpretation of physiological arousal as dangerous or distressing, and, as a result, in avoidance of situations which produce increased physiological arousal. Other works suggest that anxiety sensitivity is uniquely related to escape and avoidance behavior (12). These findings show that for those who have higher levels of anxiety sensitivity, expectations can increase the following: (1) fear of experiencing anxiety (first level); (2) arousal, anxiety; and (3) use of cognitive or behavioral strategies to escape inner feelings Meta-worry is another psychological factor evaluated in the present study. Individuals with anxiety disorders often expressed that they had concerns for most of their lives. Worry is usually defined as a series of negative thoughts that are often verbal and tend to solve the problem, while meta-worry emerges from negative met-cognitive beliefs about worry itself. Meta-worry (also known as Type 2 worry) is a variable consisting of the negative appraisal of worry (13). Several studies have suggested that generalized anxiety disorder (GAD) and meta-worry are closely linked (14). Usually associated with inflated predictions of catastrophe, worry is really difficult to be controlled in a mental process. Worry involves attempts at problem-solving to prevent the occurrence of negative events or to devise coping strategies in case such events should occur; however, these attempts are largely unsuccessful, and the worrying produces significant additional disadvantages (5). Whenever normal worry becomes pathological, meta-worry arises. In other words, meta-worry is worry about worry. Not only as a symptom of anxiety but as a motivational style, is the worry of great importance in assessing and dealing with fear. Although, meta-worry leads to exacerbation of anxiety, it may be individuals with generalized anxiety disorder, by positive beliefs about worrying, use worrying as a predominant means of appraising and dealing with the threat or predicted fear. For these people worrying is a coping strategy, in which chains of negative "what-if" catastrophizing questions are asked, so the individual attempts to generate ways of coping(13). Then, worry acts as a factor in avoiding future failures in a process of adaptation. A study of patients with phobia, social anxiety, and depression suggested that pathological anxiety and positive beliefs about worry (meta-worry) were linked in these participants (15). Results of various studies have indicated that individuals with anxiety disorder assess stronger anxiety beliefs than normal people(16-17). On the other hand, some more factors can influence

people's feelings of anxiety, such as: Joyful and peaceful environments, intimate relationships with peers, internal locus of control, rational beliefs, thoughts and etc. Life skills are one of the major factors that have adaptive function and can impact on people's physical and mental health. World Health Organization (2004) defines these skills as psycho-social abilities for adaptive and effective behavior enabling individuals to deal effectively with the demands and challenges of everyday life. WHO considers 'life skills training' as a great help to the promotion of personal and social development, human rights protection, and prevention of psychosocial problems. Learning life skills increase the "psychological capacity" of individuals or their ability to cope with the "expectations and difficulties of everyday life." The main purpose of a 'life skills training program' during college periods is to provide students with opportunities to obtain life skills besides academic ones. Indeed, this program emphasizes psychosocial factors such as self-esteem, self-perception, stress, anxiety, and how to cope with them - generally increasing the ability to adapt to the conditions of life. It is a training program focusing on the necessary skills to promote mental health and prevent social damage (18) Scientific studies indicate the effectiveness of life skills training on mental health. A various array of researches suggest that life skills training is effective in improving mental and physical health (19),healthy development of ego strengthening, self-confidence, and self-respect(20) helping to strengthen interpersonal relationships (21),decreasing anxiety and depression (18) prevention of smoking, alcohol and drug abuse (19). Life skills strengthen intelligence as well to review the rightness or wrongness of issues and making decisions about moral routes of activities and solving life's problems (12). Therefore, they lead people to healthy and appropriate ways of solving the problems of life and support them in maintaining their health, particularly mental health.(16). All things considered, the life skills program can influence physical and mental health, especially among youth, identifying their impact is extremely important, in addition to a research necessity. Accordingly, the present study is intended to examine the effectiveness of life skills training program on the reduction of anxiety sensitivity and meta-worry among Students at Islamic Azad University Science and Research Branch, Tehran, Iran? Generally, this study is asked to two major questions:

1. Is the life skills program effects on the reduction of anxiety sensitivity in students?
2. Is the life skills program effects on the reduction of meta-worry in students?

Material and Methods

This is a semi-experimental study. The subjects are undergraduate male at Islamic Azad University Science and Research Branch, Tehran, Iran enrolled in the academic year 1396-97 in different fields of educational sciences and psychology. The research was conducted in two stages. (A) First, questionnaires were distributed among a large group of students (N=1500); (B) 50 students who had earned scores above average on the Social Anxiety Scale were invited for interviews, cooperation, and preliminary procedures. This part of the research was done individually. 15 students out of the 50 invited ones expressed their willingness to cooperate voluntarily

and participated in the study. Then, the control group was randomly selected from normal students who had similar conditions to the control group in terms of age, gender and education.
Measuring Instruments

Wells Anxiety Thoughts Inventory (AnTI)

In this study to measure social anxiety and meta-worry, Wells (16) An TI social anxiety and meta-worry subscales were applied. This 22-item scale (21 items for Iranian culture) measures three dimensions of worry proneness: social worry (8 items), health worry (6 items) and meta-worry (7 items) on separate subscales. Each subject gets three scores for the subscales. Scores for each subscale are rated on a four-point Likert-type rating scale. AnTI is validated in Iran by (22) Fata, Mutaei, Moloudi, and Ziaei (2010) and the internal consistency of meta-worry, health worry, and social worry have been respectively reported as 0.81, 0.85 and 0.74; moreover, the total validity of the scale by test-retest and halving methods were respectively obtained 0.92 and 0.89.

Anxiety Sensitivity Index (ASI)

ASI is considered the most popular measure of anxiety sensitivity (AS). It is a 16-item self-report measure in which respondents indicate on a five-point Likert-type scale (0 = "very little" to 4 = "very much") the degree to which they are concerned about possible negative consequences of anxiety symptoms. Total scores range from 0 to 64. Higher scores indicate higher levels of fear of anxiety symptoms (Floyd, Garfield & Marcus, 2005). ASI is made up of one higher-order factor (ASI Total Score) and three lower-order factors: Physical (8 items), Psychological (4 items), and Social Concerns (4 items) (23). The ASI has demonstrated excellent internal consistency and adequate validity in various studies and is distinct from trait anxiety. Re-test validity after 2 weeks was 0.75 and 0.71 for 3 years, indicating ASI as a stable personality construct (24). ASI validity in the Iranian population has been measured by internal consistency, test-retest, and halving methods resulting in reliability coefficients for the total scale respectively as 0.93, 0.95, and 0.97. For the present study, validity was calculated by three methods: concurrent validity, correlation of subscales with each other and with total scale, and factor analysis. Concurrent validity was calculated through the simultaneous implementation of «SCL90» which yielded a correlation coefficient of 0.56. Correlation coefficients were satisfactory for the total score ranging from 0.74 to 0.88 (33).

Implementation Method

After selecting a random sample of students and assigning them in control and experimental groups, An TI and ASI questionnaires were carried out for all the volunteers. Then, the students in each group were divided into experimental and control groups based on their scores by two questionnaires. The experimental group received eight 1-hour sessions of life skills training based on WHO education model (1996 and 1999) by study and work books (34), within a period of 8 weeks (one session per week). The training program contained ten elements of self-awareness, coping with negative emotions, coping with stress, problem-solving, decision-making, effective relationships, adaptive interpersonal relationships, creative thinking, critical thinking, etc. To train the skills, a variety of teaching techniques such as role-play, teamwork, presentations, etc. were applied. Training sessions provided awareness and necessary knowledge about life skills (semantic knowledge) and exercises for the actual application of them in classroom and real-life environments (procedural knowledge). By the termination of training sessions, participants once again filled out the questionnaires (AnTI and ASI) for post-test.

Data Analysis

In this part, the data were analyzed in two descriptive and inferential sections.

Table 1: Descriptive statistics of variables by groups

Max	Min	SD	Mean	N	Test	Group	Statistical index
2.20	49.00	2.20	51.64	15	Pre-test	Control	Anxiety sensitivity
1.97	54.00	1.97	48.92	15	Post-test	Control	
62.00	52.00	4.09	56.12	15	Pre-test	Experimental	
50.00	27.00	9.64	36.62	15	Post-test	Experimental	
65.00	52.00	3.81	59.57	15	Pre-test	Control	Meta-worry
60.00	51.00	7.51	66.07	15	Post-test	Control	
60.00	42.00	5.63	56.37	15	Pre-test	Experimental	
61.00	37.00	7.90	45.75	15	Post-test	Experimental	

According to Table 1, a total of 30 subjects that make up the research sample were randomly assigned in control group (n = 15) and experimental group (n = 15). Also as shown in the table, there is a difference between control and experimental groups, and the mean of the experimental group evidenced a decrease in post-test.

Table 2: Levene's test for homogeneity of variances

Sig. level	F	Df₂	Df₁	Statistical index
0.16	2.04	28	1	Anxiety
0.61	0.25	28	1	Meta-worry

As indicated in Table 2, considering that the significance level is greater than 0.05 and variances are homogeneous, parametric tests can be recruited to test research hypotheses.

Table 3: Covariance test for differences between groups in pretest and posttest

Effect size	Sig.	F	MS	Df	SS	Statistical index	Variable
0.43	0.01	20.36	576.39	1	576.39	Pre-test	Anxiety sensitivity
0.14	0.04	4.41	124.97	1	124.97	Group	
			28.30	26	736.04	Error	
				30	56425.00	Total	
0.13	0.05	3.97	199.64	1	199.67	Pre-test	Meta-worry
0.47	0.001	23.63	111.86	1	111.86	Group	
			50.21	26	1305.54	Error	
				30	96277.00	Total	

As shown in Table 3, by eliminating the effect of the pre-test variable and according to F coefficient of Anxiety Sensitivity variable (4.41), it can be noticed that there is a significant difference between the modified mean scores of participants in Anxiety Sensitivity, in terms of group membership by post-test (P <0.05). The 'practical significance' of this variable is 0.14, i.e. 14% of the total variance or individual differences in Anxiety Sensitivity of students were related to the training method of life skills program. Since the obtained F for Meta-worry variable is 23.63, which is significant at a significance level of 0.05, it can be concluded that the second hypothesis is confirmed. The 'practical significance' of this variable is 0.47. Therefore, both hypothesized questions are positively answered.

Conclusion
The purpose of this study was to determine the effectiveness of life skills training programs in reducing anxiety sensitivity and meta-worry among Students at Islamic Azad University. The findings indicated that life skills training improves mental health and reduces students' anxiety. These findings are consistent with Smite(21)on the effect of anxiety skills on the reduction of anxiety symptoms and aggression; (25) on the impact of life skills on the reduction of anxiety and the increase of joy and happiness (26)concerning the effects life skills training on the prevention of substance abuse; Caldwell (37) on the role of life skills in the healthy development of the ego, and (27) concerning the reduction of depression and anxiety states in students by life skills training, leading to a more positive attitude towards oneself and others. Hence, it is concluded that life skills training provides individuals with functions urgently needed to prevent life's problems, to deal effectively with them, and to improve decision-making, thus helping maintain and improve mental health.

 The same statistical population can be considered as one of the limitations of the present study. The study population is comprised only of students and thus whose results cannot be reliably generalized to all sections of society. Another limitation was the application of only one type of measuring instrument, namely questionnaires. It is recommended that future studies consider other groups, such as patients in hospitals and medical centers. Because this study showed that life skills training program is effective on the reduction of anxiety sensitivity and meta-worry among students, it is suggested that universities prepare a comprehensive context for training all students in such skills.

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