



The effect of life skills training on psychological well-being and satisfaction among female adolescents

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Abstract

The period of adolescence is a stressful time. Comprehensive training plan in this period is very important. Life skills training is one of these programs. This study was done to investigate the effect of life skills training (assertiveness, problem solving, stress management) on psychological well-being and school satisfaction in adolescent girls. This research was a semi-experimental study with pre and post test. 60 participants were selected randomly and divided into 3 experimental groups and one control group (n=15). The experimental groups received life-related skills during five sessions. Psychological well-being scale (SWBS) and school satisfaction scale (SWSS) were administered pre and post intervention. The data were analyzed using T-test and analysis of covariance. The results showed that life skills training (self-assertion, problem solving and stress management) caused an improvement in psychological well-being and school satisfaction. The results of MANCOVA indicated that self-assertion training had a more profound beneficial effect on the psychological well-being and school satisfaction compared to other training. In conclusions, life skills training may be as a useful strategy for improvement of these factors.

Keywords: Adolescent, Life Skills, Psychology, Satisfaction, Well-being

Introduction

Adolescence is a bright developmental stage, separable from both childhood and adulthood, which presents specific challenges and opportunities [1]. Adolescence is the period of pressure and stress because it is concurrent with maturity and the personality style shaping

[2]. Particularly, adolescence is challenged by a dramatic increase in developmental tasks as well as normative stressors. More specially, girls are affected adversely during the transition to adolescence [3]. In earlier decades, psychologist concluded that most disorders and injuries of people

are caused by their disability in analyzing the personal problems accurately, feeling competence to face with difficult situations and being prepared to solve life difficulties appropriately [2]. Thus, Comprehensive training plan in this regard is very important [4]. Life skills training are one of these programs. The main purposes of life skills training include increasing the individual's ability to take the responsibility of better options, resist against negative pressure (i.e. pressure from peer group), avoid dangerous behaviors [5] Prevent from harmful behaviors and finally promote their mental health [6]. Psychological well-being is one dimension of mental health. Psychological well-being can be defined as cognitive and emotional reactions of individuals to their environment and the ways in which people use to interact with it [7]. Psychological well-being includes 3 major components which are associated with each other: the relative presence of positive emotions, the absence of negative emotions and the satisfaction with life [8]. School satisfaction is an important aspect of satisfaction with life during adolescence. Satisfaction with school is determined as the subjective and cognitive appraisal of the overall school life quality. Satisfaction with school is a major part of general life satisfaction and is often considered within the framework of multidimensional models of life satisfaction [9]. Research on the training effect of self-assertion, problem solving and stress management on mental health and its related field indicated positive results. For example, self-assertion training increased self-esteem [10], the ability of self-assertion [11], and academic achievement among male and female students of middle schools [12]. Self assertion training also decreased social anxiety and increased social skills and the academic performance of the students at the first grade of high school [13]. Finally, this training improved significantly social adaptability of the participants [14]. Adler believed that people who are not able to assert themselves clearly find it difficult to

get adapted to social life psychologically. [15]. Self-assertion promotes human's self-efficacy and internal control, improves his interrelationship with others, encourages his self-confidence and self-esteem and increases his adaptability [16]. Problem-solving training has promoted life quality and mental health among the First-year university students [17] and also decreased the parent-child conflicts and concurrently, encouraged the use of rational strategies among high school students [18]. Moreover, training of problem-solving skills reduced depression and increased the efficiency of coping skills among 15 to 18 year-old adolescents. Moreover, after problem-solving skills training, the ability of mathematics problem solving was improved compared with control group [7]. In general, it seems that enjoying the life skills like problem solving, has effect on the general quality of life and the components associated with psychological well-being [17]. Therefore, adolescents' achievement of this skill is a priority. Stress management training was effective in the field of mental health. For instance, stress management training improved mental health and the adaptability among the first-year college students [20]. In one study about the Effect of stress-management training on the academic progress of female students showed that, the group under training of stress management participated actively and were influenced positively [21]. In addition, it shows that stress management training programs in a test group of students had increased mental health and motivation [22]. A former research showed that students' perceived stress had reduced by stress management after a six-week training [4]. In addition, it has been shown that stress management training has increased the self-efficacy and simultaneously decreased perceived stress among the elementary and middle school students [5]. Albeit, students are often unaware of the accurate manifestations of

stress and underestimate the effect of stress on their physical and psychological well-being. Awareness about the long-term effects of excessive stress can motivate students to acquire more effective skills regarding stress management [4]. Therefore, children and adolescents have a greater need to learn about life skills to use them effectively in their daily life [23]. In addition to being costly, education of all skills is a time consuming manner. Therefore, the development of such skills is restricted. The present study aimed to investigate the effectiveness of life skills training, (assertiveness, problem solving, stress management) on psychological well-being and satisfaction with school among adolescent girls.

Method

This study was a semi-experimental study with pre-test and post-test. The study was done in adolescent girls of Urmia, Iran, 2011. The statistical population consisted of the students at the third grade of the middle schools of Urmia. According to Gall et al, the appropriate sample size for each experimental group is at least 15 people. Therefore, 60 participants were randomly selected and randomly divided into 3 experimental groups and one control group (n=15). The experimental groups received life-related skills during five sessions. In this study, the descriptive statistical methods including Frequency, percentage, mean, variance, standard deviation and Inferential statistics Such as T-test for independent groups and ANOVA were applied. Psychological well-being scale (SWBS) and satisfaction with school scale (SWSS) were administrated before and after intervention.

- Ryff psychological well-being scale was designed in 1980. The original form included 120 questions. Later the shorter forms of this questionnaire (with 84, 54 and 18 questions) were introduced. In the current study, the 84-item questionnaire was used. This scale consists of six subscales which follow: self-acceptance, positive relationships

with others, autonomy, mastering the environments, personal development, and purpose in life. In order to investigate the reliability and validity of SWBS) Bayani & Ashuri kochaki performed a study among 145 (96 female and 49 male) university students of Azadshahr.

The reliability coefficient for the scale of ryff psychological well-being by using test-retest method (0/82) was statistically significant ($P>0.01$). They concluded that since the psychological well-being scale has a suitable reliability and validity, it is acceptable to assess the well-being of Iranians students [25].

- Huebner introduced the scale of satisfaction with life within a paper which was on designing and constructing a scale for children. This scale had five components, including family, friends, school, oneself, environment and peoples' judgment [26]. Internal validity of this scale was reported as 0/84. The correlation between this scale and the scale of life quality was also 0/60. In the present study, the component school from the scale of satisfaction with life has been used.

The instructional content of this study was obtained from the training package of life skills which is produced by the Social Ills Prevention Office of Deputy Director of Cultural and Preventive Affairs of State Welfare Organization of Iran. Each group received one of the following training skills, including self-assertion, problem solving and stress management. Each of skills was trained in 5 one-hour sessions separately for each test group. The control group did not receive any training. Life skills were educated through active training and the techniques like brainstorming, role playing and group discussion were used. Training protocol is presented in the following table:

Results

In this section, the results from T-test of independent groups and pre-post test scores of psychological well-being and

Table 1 *The protocol of life skills training*

| Training | Session | Session Summary |
|--------------------------|-------------|---|
| Self assertion | Session I | - Implementation of the pre-test - Introduction - Assigning the rules to manage the classroom |
| | Session II | - Division of life skills into three categories: social, cognitive and behavioral - Students' Personal expression about the concepts of communication, reasons for communication with others, expression of personal requests, approach to request of others |
| | Session III | - Understanding and expressing actual instance about the types of response behavior (assertive, aggressive and passively) - Recognition of different kinds of reactions (assertive, aggressive and passive) - debate on the best method of communication and beneficial effects of assertive communication styles (assertiveness) |
| | Session IV | - The definition of the assertiveness - debate on the assertiveness-required positions - Outlines to say no |
| | Session V | - Introduction to the requesting skill - debate on the advantages and disadvantages of criticism - education of the first, second and third steps of request skill |
| Problem solving | Session I | - Implementation of the pre-test - Introduction - Assigning the rules to manage the classroom |
| | Session II | - Introduction to the concept of problem - determination of problem solving - definition of Problem-focused method and emotion-focused method |
| | Session III | - Introduction to the first and the second step of problem solving - Implementation of the related activities |
| | Session IV | - Identification and practice of the third step in problem-solving - Practicing the selection of the best solutions of the supposed positions |
| | Session V | - Practicing personal problems solving with brain storming |
| Stress management | Session I | Implementation of the pre-test - Introduction - Assigning the rules to manage the classroom |
| | Session II | - Understanding the mental pressure or stress - Understanding the different kinds of mental pressures) the type, severity and duration(- Symptoms identification of mental pressure and the overall effects of stress on different systems of the body and recognizing physical, mental and behavioral effects of stress |
| | Session III | - Understanding the relationship between daily mental pressures and the the schedule of daily life. - Discussion on the balanced daily schedule and its effects on the mental balance of individuals. |
| | Session IV | - Discussion about the control of the mental pressure - Instruction of abdominal breathing and gradual muscle relaxation |
| | Session V | - The recognition of healthy and unhealthy coping with distinguish between them - Instruction of self-confidence, self-esteem and coping with depression and anxiety |

satisfaction with school for control and experimental groups are provided: T-test analysis of the difference between the scores of pre-test and post-test showed

that psychological well-being score was significantly different between experimental and control groups ($P < 0.05$). The analysis of the mean difference in

Table 2 The results from T-test of independent groups and pre–post test scores of psychological well-being and satisfaction with school for control and experimental groups

| Variables | Groups | The average difference in pre test and post test | Standard deviation of the difference in pre test and post test | Degree of freedom | T | Level of significance | |
|--------------------------|-------------------|--|--|-------------------|----|-----------------------|--------|
| Psychological well-being | Self assertion | Experiment | 84.85 | 5.87 | 28 | -6.26 | 0.00** |
| | | control | -39.75 | 5.02 | | | |
| | Problem solving | Experiment | 55.25 | 7.10 | 30 | -4.46 | 0.00* |
| | | control | -39.75 | 4.33 | | | |
| | Stress management | Experiment | 53.06 | 5.18 | 29 | 4.68 | 0.00** |
| | | control | -39.75 | 5.02 | | | |
| Satisfaction with school | Self assertion | Experiment | 4.06 | 7.10 | 28 | 1.17 | 0.00** |
| | | control | 0.78 | 8.13 | | | |
| | Problem solving | Experiment | 4.06 | 7.10 | 30 | 3.06 | 0.24 |
| | | control | -2.31 | 4.33 | | | |
| | Stress management | Experiment | 4.06 | 7.10 | 29 | 2.47 | 0.02* |
| | | control | -1.66 | 5.75 | | | |

**P< 0.01 *P< 0.05

psychological well-being variable indicated that experiments showed beneficial effect compared with control group. Accordingly, it is logical to claim that training of life skills like problem-solving and stress management has improved the level of psychological well-being in the experimental group. In addition, the average difference for the variable of satisfaction with school did not show any significant difference between 3 groups. However, t analyses showed that problem solving group had a higher grade

(Table 2). The results from the analysis of homogeneity of variances (Levin test) indicated that there was no significant difference between the variances of the control group (P= 0/115, F= 2/60) and the experimental groups of self-assertion (P= 0/283, F=1/20), problem solving (P=0/149, F=2/19) and stress management (P=0/112, F=2/69). Furthermore, Covariance analyses (MANCOVA) was applied to determine the most effective training on the improvement of the psychological well-being among the

Table 3 The analysis of the components for the psychological well-being and satisfaction with the school

| Variables | Groups | The average difference in pre test and post test | Standard deviation of the difference in pre test and post test | Degree of freedom | T | Level of significance | |
|--------------------------|-------------------|--|--|-------------------|----|-----------------------|--------|
| Psychological well-being | Self assertion | Experiment | 84.85 | 5.87 | 28 | -6.26 | 0.00** |
| | | control | -39.75 | 5.02 | | | |
| | Problem solving | Experiment | 55.25 | 7.10 | 30 | -4.46 | 0.00* |
| | | control | -39.75 | 4.33 | | | |
| | Stress management | Experiment | 53.06 | 5.18 | 29 | 4.68 | 0.00** |
| | | control | -39.75 | 5.02 | | | |
| Satisfaction with school | Self assertion | Experiment | 4.06 | 7.10 | 28 | 1.17 | 0.00** |
| | | control | 0.78 | 8.13 | | | |
| | Problem solving | Experiment | 4.06 | 7.10 | 30 | 3.06 | 0.24 |
| | | control | -2.31 | 4.33 | | | |
| | Stress management | Experiment | 4.06 | 7.10 | 29 | 2.47 | 0.02* |
| | | control | -1.66 | 5.75 | | | |

**P<0.01 *P<0.05

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Table 3 *The analysis of the components for the psychological well-being and satisfaction with the school*

| Source of change | SS | DF | MS | F | Significant level | ETA -square |
|------------------------------------|----------|----|----------|--------|-------------------|-------------|
| Positive relationships with others | 3255.86 | 1 | 3255.86 | 43.78 | 0.000** | 0.43 |
| Autonomy | 1213.86 | 1 | 1213.86 | 34.85 | 0.000** | 0.38 |
| Mastering the environment | 2634.71 | 1 | 2634.71 | 62.52 | 0.000** | 0.52 |
| Personal Development | 3209.63 | 1 | 3209.63 | 67.29 | 0.000** | 0.54 |
| Purpose in life | 1989.25 | 1 | 1989.25 | 40.246 | 0.000** | 0.41 |
| Self acceptance | 2755.41 | 1 | 2755.41 | 52.84 | 0.000** | 0.48 |
| Satisfaction with school | 26930.21 | 1 | 26930.21 | 41.41 | 0.000** | 0.42 |

**P<0.01

Table 4 *The results for multifold comparisons of LSD*

| Components | Group I | Group J | AD (I-J) | Standard deviation | Significant level |
|------------------------------------|-----------------|-------------------|----------|--------------------|-------------------|
| Positive relationships with others | Self-assertion | Control | 10.88 | 3.15 | 0.00** |
| | | Problem solving | 6.75 | 3.10 | 0.03* |
| | | Stress management | 3.67 | 3.21 | 0.25 |
| | Problem solving | Control | 4.12 | 3.01 | 0.17 |
| | | Stress management | -3.08 | 3.11 | 0.32 |
| | | Stress management | Control | 7.20 | 3.11 |
| Autonomy | Self-assertion | Control | 4.83 | 2.14 | 0.02 |
| | | Problem solving | -3.30 | 2.17 | 0.13 |
| | | Stress management | -0.518 | 2.19 | 0.80 |
| | Problem solving | Control | 8.13 | 2.07 | 0.000 |
| | | Stress management | 2.78 | 2.12 | 0.195 |
| | | Stress management | Control | 5.35 | 2.08 |
| Mastering the environment | Self-assertion | Control | 8.74 | 2.40 | 0.001** |
| | | Problem solving | 3.46 | 2.43 | 0.160 |
| | | Stress management | 1.90 | 2.44 | 0.43 |
| | Problem solving | Control | 5.27 | 2.33 | 0.02* |
| | | Stress management | -1.56 | 2.36 | 0.51 |
| | | Stress management | Control | 6.84 | 2.28 |
| Personal Development | Self-assertion | Control | 10.14 | 2.56 | 0.000** |
| | | Problem solving | 2.90 | 2.57 | 0.26 |
| | | Stress management | 2.52 | 2.59 | 0.33 |
| | Problem solving | Control | 7.24 | 2.42 | 0.004** |
| | | Stress management | -0.381 | 2.43 | 0.87 |
| | | Stress management | Control | 7.623 | 2.43 |
| Purpose in life | Self-assertion | Control | 7.96 | 2.61 | 0.003** |
| | | Problem solving | 0.33 | 2.61 | 0.90 |
| | | Stress management | 3.25 | 2.46 | 0.22 |
| | Problem solving | Control | 7.63 | 2.46 | 0.003** |
| | | Stress management | 2.93 | 2.47 | 0.24 |
| | | Stress management | Control | 4.71 | 2.47 |
| Self acceptance | Self-assertion | Control | 11.71 | 2.65 | 0.000** |
| | | Problem solving | 5.39 | 2.66 | 0.04* |
| | | Stress management | 6.38 | 2.74 | 0.02* |
| | Problem solving | Control | 6.31 | 2.46 | 0.01** |
| | | Stress management | 0.988 | 2.61 | 0.70 |
| | | Stress management | Control | 5.33 | 2.60 |
| Satisfaction with school | Self-assertion | Control | 56.93 | 9.48 | 0.000** |
| | | Problem solving | 16.18 | 9.46 | 0.09 |
| | | Stress management | 16.24 | 9.60 | 0.09 |
| | Problem solving | Control | 40.74 | 8.95 | 0.000** |
| | | Stress management | 0.055 | 9.18 | 0.99 |
| | | Stress management | Control | 40.69 | 9.13 |

**P<0.01

*p<0.05

three offered education. The results of the analysis of covariance (MANCOVA) for psychological well-being and satisfaction with school are presented in Table 3: The covariance analysis showed that all components between the groups were significantly different. In another word not only the average of all components was significantly different among control and experimental groups, but also triplet training had different effects on the reduction of each component. In these analyses eta-square indicated that how much of the variation in post-test scores is followed by the changes in the group membership (control group or experimental group). Evaluation of the coefficients for these six components showed that the largest square was related to the autonomy component. Therefore, 27 percent of the difference in post-test scores of group's derived from participation or lack of participation in training sessions. Moreover, the evaluation of eta-squared about satisfaction with school demonstrated that the 43 percentage of the difference in post-test scores is resulted from changes of group membership. To evaluate the most effective training, LSD test was used. The findings are presented in the following table (Table 4).

The binary comparison among means showed that the self-assertion training is the most effective training among all components of psychological well-being compared to other skills. Problem solving training and stress management training had a similar effect on psychological well-being. Finally, the binary comparison of means related to satisfaction with school indicated that self-assertion training had a more beneficial effect compared to other groups. Training of problem solving and stress management had not any significant effect on the satisfaction with school.

Discussion

This study aimed to investigate the effect of life skills training (self-assertion, problem solving and stress management) on psychological well-being and satisfaction with school in adolescent girls in the city of Urmia. The results of the

present survey indicated that self-assertion training had more effects on the improvement of psychological well-being and satisfaction with school compared to other skills. Also results showed that, however training of problem solving and stress management had a similar effect on psychological well-being, but stress management had a better effect on satisfaction with school than problem solving. Our results are similar with some of prior studies. In this regard, prior surveys demonstrated that self-assertion training had beneficial effects on improvement of subjective well-being [27], academic achievement [28], mental health of adolescents [29], self-esteem as a potent predictor of psychological well-being and mental health in the first-year male students of high school [31]. In the present study, self-assertion training was able to improve the psychological well-being and satisfaction with school in the experimental group. Training of self-assertion can alter the people viewpoint of themselves, the others and surrounding society; improve self-efficacy [32], self confidence, acceptance of others viewpoints [33], self-confidence promotion, privacy defense and having the same respectful relationships with others [34]. These entire factors act as a basis for promoting some components of psychological well-being including mastering the environment, positive relationship with others and personal development. People with assertive behavior follow suitable manners in order to meet their needs and reach satisfaction [35]. This behavior as an internal stimulus reinforces having purpose in life. On the other hand, an assertive person accepts the responsibility of his behaviors and choices [11]. This fact shows that enjoyment of self-assertion enables individuals to have self-esteem which causes the person to accept himself with all positive and negative characters, and therefore to consider himself the responsible of his choices and the result of his behaviors. Yoshimura previously showed that students with assertive skills were indeed more satisfied with the school. These students

had a better relationship with their friends and collectively were more satisfied with their education life [15]. Moreover, training of self-assertion has a beneficial effect on students' academic achievement [36], self-esteem and as a result promotion of satisfaction with life [27, 37]. Collectively, it can be concluded that self-assertion training is a suitable manner in order to increase the level of psychological well-being and satisfaction with school among students. Our results showed that problem solving training improved autonomy, purpose in life, mastering the environment and self-acceptance in the experimental groups. Notably, autonomy depends on independence and the internal power of behavior regulation. Problem solving teaches how to independently manage a problem and find an appropriate solution to it in difficult situations [3]. Therefore, it can be concluded that training of problem solving has enhanced the development of independence and autonomy among the students in the experimental group. In addition, for setting the goals and reaching to them understanding the process of problem solving seems necessary. In this line, students who have learned problem solving are more successful in the setting the goals and reaching to them [38]. In the process of problem solving individuals focus on the current goals and try to find the best solutions to it [39]. Training of problem solving can enhance the sense of control and mastery among students [17]. Training of problem solving can also affect self-acceptance. In this line, people must have positive perspective toward themselves, universe and future; have satisfaction with their past life, accept the positive and negative points of them in order to accept themselves [40]. However, this situation, especially among adolescences, needs the access to mental health and freedom from depression and anxiety. Depression causes a negative orientation in life and as a result followed by failure in self-acceptance [38]. In similar, a positive relationship between mental health and problem solving ability was shown in the prior studies [39]. Nevertheless, we could not find similarities between our

results about satisfaction with school and previous researches in this line. The short time of the training in the present survey may to somewhat explains the differences. Satisfaction with school is a semi-stable quality and changes over the time. Therefore, satisfaction with school is a time consuming manner. Furthermore, this survey was performed in the second semester of the academic year, when the satisfaction with school was formed. Therefore, failure in its change is not logical. Training of stress management on psychological well-being and its component had logical interaction. Training of stress management to students was based on the formation of a good sense about themselves and also the universe positive performance. This training can improve self-acceptance. Meanwhile, knowing the way to cope with stressful situations can decrease inter and intrapersonal problems and has a positive effect on the development of relationship with others. However, the self-confidence caused by training of this skill enables individuals in choosing or creating suitable environments to operate, control and manipulate complex situations. Thus, training may enhance the mastering of environment for these children [40]. In fact; these changes have positive relevance with the factors which provide autonomy, including internal regulation of behavior, resistance to external pressure and freedom from standard norms. Stress management is important to be taught to the students (especially to female students) because adolescence is defined by a significant increase in stress [3]. Lack of stress management skills in students is a threat to their mental health and as a result to their psychological well-being. It is noted that a person with appropriate self-assertion has a specific internal stratification [31]. Consequently, this person has an appropriate social relationship and will be easily accepted by peers. The students who are accepted in peer group have more social skills. Moreover, they can easily control their negative emotions, have more stratification

and suffer lower in their social relationships [32]. Former studies also indicated that training of stress management was associated with the components of stratification with school, including satisfaction with life, academic achievement, learning, improving the academic performance and promotion of academic self-conception. Thus, it can be concluded that training of stress management would enhance the satisfaction with schools among the students.

Conclusion

Generally speaking, it can be concluded that self-assertion training enhances the level of psychological well-being and satisfaction with school among the students. Problem solving training without any change satisfaction with school can promote some components of the psychological well-being including autonomy, purpose in life, mastering the environment and self-acceptance. Furthermore, stress management training enhances the psychological well-being and its components. Stress management training also improves the satisfaction with schools among the students. Collectively, self-assertion training showed a more profound beneficial effect compared with other trainings. Despite the limitations of the research in the training of life skills as a single skill, impossibility to generalize the results to other grades or male students, the restriction of research in the field of stratification with school and finally the limitation of proper references in the field of psychological well-beings, the results of this paper can help the mental health authorities of adolescence, especially for the girls and women; psychotherapists, clinical psychologists and psychiatrists in order to provide practical and affordable programs for increasing the level of social mental health and decreasing social injuries. School counselors and health teachers can train these skills to students over the academic years. These trainings can absolutely prevent some academic problems and behavioral disorders during the life of students. In order to enrich the debate, we suggest that a new study investigate

the training effects of other life skills on the psychological well-being and satisfaction with school. Also, due to the lack of proper studies concerning the satisfaction with the school, appropriated studies in this regard are suggested. Finally, it is necessary that the training of all skills be investigated among both male and female students with different ages and grades.

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Contributions

Study design: FGH

Data collection and analysis: FMM

Manuscript preparation: AI

Conflict of interest

"The authors declare that they have no competing interests."

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