

## Designing and validating a mental health promotion model for elementary students based on the 4H model

Jabbari Zahirabadi A.,<sup>1</sup> Shariatmadari M.,\*<sup>2</sup> Dlgoshae Y.,<sup>3</sup> Kordestani F.<sup>4</sup>

### Abstract

**Introduction:** The purpose of this study is to design and validate a model for promoting the mental health of primary children based on the 4H model (World Health Organization life skills training model) using a combined study. By studying the research literature, dimensions, components and indicators have been identified and the result is presented in the form of an executive model.

**Research method:** In this research, a combined method (quantitative and qualitative) has been used. The statistical population in the quantitative section of primary teachers working in Rafsanjan city includes 1457 people. Using Cochran's formula, the number of samples was estimated at least 304 people and were selected using simple random sampling method. In order to better explain the results and reveal the neglected cases in the quantitative section, 13 in-depth interviews in the qualitative section were conducted using purposive sampling method in the form of snowballs. The data collection tool for the components of life skills training is a researcher-made questionnaire whose validity is measured by confirmatory factor analysis as well as face validity and reliability by Cronbach's alpha calculation with a value of 0.830 and the executive model of the research using aggregate data. Were collected through a questionnaire and also using descriptive and inferential statistical techniques.

**Results:** The research model including 4 dimensions and 15 components of effective life skills in promoting the child's mental health was presented and then validated.

**Conclusion:** Prioritizing the components of the model was as follows: work ethic, self-awareness, management, healthy living skills, available skills, goal setting, creative thinking, self-esteem, attention to others, problem solving, critical thinking, self-responsibility, Decision making, communication and cooperation, all of which are listed in order of promoting the child's mental health, have a significant positive relationship.

---

<sup>1</sup> - PhD Student in Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University, Central Tehran Branch

<sup>2</sup> - Corresponding author, Assistant Professor, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University, Central Tehran Branch, Tehran, [mehdishariatmadari@yahoo.com](mailto:mehdishariatmadari@yahoo.com)

<sup>3</sup> - Assistant Professor, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University, Central Tehran Branch, Tehran

<sup>4</sup> - Assistant Professor, Department of Educational Management, Faculty of Psychology and Educational Sciences, Islamic Azad University, Central Tehran Branch, Tehran

**Keywords:** Accreditation, Elementary Students, Pattern, Promotion, Mental Health

**Received:** 13/September/2022    **Accepted:** 2/February/ 2022

**Citation:** Jabbari Zahirabadi A., Shariatmadari M., Dlgoshae Y., Kordestani F.. Designing and validating a mental health promotion model for elementary students based on the 4H model, Family and health, 2022; 12(2): 26-51

## **Introduction:**

Life skills are skills that promote the mental health of people in the community, the richness of human relationships, increase health and health behaviors at the community level and enable the individual to deal effectively with the demands and conflicts of life. Learning these skills is essential for everyone in the community, but is especially important in adolescence and young adulthood. Along with physical and mental development, society and family expectation from adolescents and young people increases; So that they accept to limit part of their desires due to social life and from the point of view of Fazl Alizadeh and Masoumi Fard (1) to be within the framework of social and group norms. In this regard, adolescents and young people who have not learned the correct behavioral methods and if they do not learn the necessary skills to adapt to family and society, they will face serious and transient injuries. Therefore, it is noteworthy that according to Amosaltani et al. (2) life skills training is an important part of the curriculum of most educational systems in the world.

The importance of life skills to face the problems of everyday life and its impact on improving individual and social life and increasing the ability of individuals, has caused this issue to be considered in school curricula in most educational systems. Life skills basically require a basic developmental basis from family, education, social and occupational skills and efficiency in life skills. (3)

In our country, life skills training is provided in primary school by writing student workbooks and teacher guides; At first, this course was part of the class program, then its teaching has been assigned to parenting hours. Life skills training involves the teacher and the student in a dynamic learning process. In this learning, different methods are used such as small group or double group activities, brainstorming, role playing, play, and discussion (4, 5).

However, despite profound cultural changes in lifestyle, many students lack the necessary basic skills and abilities to deal with life issues, and traditional teaching in the form of in-school learning has failed them. Help solve life problems. This issue has made them vulnerable in the face of problems and issues of daily life and its requirements now and in the future. In addition, lack of awareness of life skills will lead to many social ills. Therefore, it is necessary to study students' life skills as the future makers of society. Given that students, like other people in society, are exposed

and affected by social harms due to lack of awareness of life skills, so life skills training at the level of education to gain knowledge in the field of life skills leads to Positive attitudes and values become in the person; And this attitude leads to positive behaviors and as a result prevents problems and promotes mental health in the community. In addition, since the nature and definition of life skills are different in different countries and cultures, it seems necessary to study and present a model of indigenous and comprehensive life skills based on international standards and taking into account the characteristics of the country. Domestic research in this area is usually based on the World Health Organization's ten-life skills model and neglected according to the H4 model. In the United States, the H4 is a youth organization affiliated with the National Food and Agriculture Foundation and the It is run by the United States Department of Agriculture (USDA), and its mission is to "employ young people to maximize their talent as well as advance youth development." The name H4 represents the four areas of personal development (head, heart, hand, health) of the organization. (6) Therefore, in this study, we try to increase the psychosocial abilities of children by providing an executive model for promoting the mental health of primary children based on the 4H model, and by equipping children with these skills, they can And cope with the struggles of daily life in a harmonious way. These skills and abilities enable a person to act positively and adaptably in relation to other human beings, society, culture and environment, and to maintain his mental health.

Life skills training is one of the basic necessities in health education so that social factors such as self-esteem, self-concept, social support networks and stress affecting the behavior of children and adolescents are considered. The life skills program is based on the principle that children, adolescents and young people have the right to be empowered and need to be able to defend themselves and their interests in the face of difficult life situations. Life skills training has an attitude system that does not consider only one skill and has a general view, on the other hand, the experiences of countries have been diverse; Therefore, it is necessary to provide an executive and indigenous model based on individual, cultural and local characteristics, and since according to the research literature, the 4H model for teaching life skills seems to be compatible with the characteristics of primary school learners. This issue has not been done in Iran, considering all the factors affecting it; Hence, the question always arises as to what are the dimensions of the life skills of elementary students? The aim of this study is to investigate the different dimensions of life skills of primary school students and also to provide an executive model for promoting the mental health of primary school children based on life skills training.

### **Research background:**

Regarding the empirical background of the research, the researchers examined the relevant sources in most of the available books, articles, sites and scientific journals, the results of which are described as internal and external research. Due to the fact that in Iran and abroad, a study entitled "Presenting an executive model for promoting mental health in primary children based on life skills training based on the H4 model" has not been done so far and few studies in the field of life skills are more with ten life skills approach. Also, each of these studies has examined the effects of a

specific component or all components of life skills on one or more variables, so the researchers decided in this section, in addition to using research that has more or less addressed the role of life skills, Also refer to other studies that have examined the components affecting the components of life skills.

Bahrami (8) showed that the effect of life skills training on the tendency to high-risk behaviors (drug use, alcohol and smoking) is significant and the mean scores of high-risk behaviors in the experimental group in the pre-test (76.46) and post-test (46.46) 67) indicates a decrease in the tendency to risky behaviors due to life skills training, and by teaching life skills to children can help reduce the tendency to high-risk behaviors and promote mental health in them.

Yousefi (9) showed that from the teachers 'point of view, students' interest in learning problem solving skills and reviewing various solutions and choosing the best solution, evaluating selected solutions and group participation and interaction in problem solving is acceptable, but Students still need more detailed training and planning in problem recognition, information gathering skills, ability to produce and create different solutions and the ability to implement problem solutions. In general, the results of this study showed that in the opinion of teachers, the success rate Islamic life etiquette and skills training program (Dignity Plan) requires more growth and development for students to acquire problem-solving skills.

Azami et al. (10) in a study examined the effect of life skills training in increasing the creativity of primary school children. Six elementary school students in Zanzan province were randomly selected as a multi-stage cluster and randomly selected as a sample and were divided into experimental and control groups. Torrance Creative Thinking test was performed in both groups and then life skills were taught to the experimental group in 20 sessions (40 hours). After the training sessions and three months later in both groups, Torrance's creative thinking test was performed again. The obtained data were analyzed by independent and dependent t-methods and analysis of variance and Scheffe post hoc test were performed to compare the groups. There was a significant difference between divergent thinking from third to fourth grade and also from third to fifth grade, but no significant difference ( $P < 0.01$ ) was observed between the creative thinking scores of third and fifth grade children. It can be concluded that by teaching life skills, the creativity of primary school children can be increased.

Aflakifar (11) in a study showed that life skills training has a significant effect on self-efficacy and increase student happiness and by teaching life skills, a person will be able to be aware of themselves and their abilities, stressful situations Recognize and control, and as a result, feel happier with the greater satisfaction he feels with himself and his surroundings.

Rezapour (12) showed that life skills training has a significant effect on increasing the quality of life of experimental group participants. This effect was also significant in all four subscales of this variable. Findings in this study showed that life skills training can be used to improve the quality of life of homeless women.

In a study, Mir examined students' perceptions of developing life skills in project-oriented schools. The study focused on three questions: 1) What is students' perception of life skills development in project-oriented schools? 2) How do students perceive the increase in their life skills over a period of time? 3) What is the relationship, if any, between the grade level and students' perceptions of their life skills? For this purpose, 275 students aged 6 to 12 years were selected from two project-oriented schools, one in the urban context and the other in the rural context in Minnesota as a research sample. For data collection, triangulation method including Likert scale questionnaire, semi-structured interview and focus group were used. Quantitative data analysis was performed using SPSS software and qualitative data analysis was performed using open and axial coding. Qualitative results indicate that from the students' point of view, most of their skills have improved (time management, self-efficacy, communication, participation and collaboration); While quantitative results show improved problem-solving skills, self-efficacy, work ethic, and responsibility. Findings indicate that students' attitudes toward the development of life skills are positive and project-based education has a significant impact on promoting their mental health, helping children to be ready to participate in the international community.

### Research Method:

The present research is a mixture of consecutive transformations (qualitative and quantitative) in terms of applied objectives and in terms of data, and in terms of the type of study and the nature of the research in terms of qualitative exploratory search and quantitatively cross-sectional survey. This research is practical in terms of purpose. Since in the present study, the purpose in the qualitative dimension of using available resources to identify the assumptions and dimensions of the 4H model effective in promoting mental health in primary children, the coding method was used, which is described in the table below, given:

Table 1. Indicators obtained from the axial coding stage

Row	The main component	Wisdom component	Indicator
1	Mental skills	Skill Decision making	Ability to list options before making decisions
2			Thinking about the consequences of your decision
3			Ability to evaluate decisions made
4			Ability to make decisions based on accurate assessment of situations
5			Be prepared to change the decision to choose the right option
6			Select the appropriate option using the relevant criteria
7			Adhere to and ensure the implementation of your decisions
8			Learn the basic steps of decision making
9			Ability to make difficult decisions

10			Decision-making skills about important life plans
11		Skill Creative Thinking	Ability to identify new solutions to life problems
12			Make an effort to overcome the limitations of your knowledge and ability
13			Paying attention to different perspectives and initiatives in life
14			Develop thinking capacity in creative ways
15			Ability to create new ideas from ordinary things
16			Adaptation to changing social conditions
17			Having creativity and innovative ideas at work
18			Have creative thinking
19		Skill Critical Thinking	The skill of carefully examining situations by asking questions
20			Ability to distinguish right from wrong
21			Awareness that others are not always right
22			Ability to reason
23			Give ideas alone
24			Decide on your own
25			Learn the basic processes of critical thinking
26			Necessary resistance to media advertising of alcohol and drugs
27		Skill targeting	Properly deal with failures and setbacks
28			Familiarity with goals and their importance as needed
29			Ability to formulate short-term goals
30			Ability to formulate long-term goals
31			Choose the right goals and activities to achieve the goal
32			Having enough self-motivation at your age
33			Planning skills
34			Ability to complete your plan or tasks
35		Skill Problem solving	Skills in using problem-solving steps to deal with life problems
36			Ability to deal with various issues in life
37			How to think and solve a problem in a critical situation
38			Familiarity with centers and organizations that help solve problems
39			Learn the basics of problem solving correctly
40			Finding solutions to difficult problems or dilemmas
41			Possess conflict resolution skills
42			Problem solving of new solutions

43			Examine the various solutions before making a decision
44			Ability to make a good choice alone
45			Understand how to do things
46	Mental skills	Skill Self-awareness	Pay attention to one of your characteristics as a special person
47			Self-control
48			Know your rights and responsibilities
49			Awareness of your strengths and weaknesses
50			Self-confidence and a positive attitude towards yourself
51		Skill Management	Goal setting skills
52			Proper planning or organizing skills
53			Proper use of the archive
54			Ability to record events for future use
55			Flexibility in your work
56			Organize a group to achieve the goal
57			Use different leadership styles
58			Involve others in leadership
59	Emotional skills	Skill connections	Ability to make a good introduction
60			Listen carefully to others
61			Express your thoughts, feelings, and ideas easily
62			Resolve disputes win-win
63			Ability to communicate effectively verbally
64			Ability to communicate non-verbally and understand the feelings of others
65			The skill of saying no to unreasonable requests
66			Communicate using appropriate methods
67			Communication skills with others
68			The patient stone of others
69			Establish and evaluate relationships with friends and family
70			Build a new relationship as well as maintain friendships with old friends
71			Ability to get help or advice from others when needed
72			Respect for those who are different from him
73			Ability to work or have fun with those who are different from him



74		Skill Cooperation	Understanding and accepting all kinds of roles in the group
75			Balance your group and individual needs
76			Effective and active participation in group interactions
77			Ability to distinguish between group and individual roles
78			Share your ideas with others
79			Ability to work with others
80			Participate in teamwork
81			Help others make decisions
82	Hand skills	Skill social	An initiative in relation to social services or voluntary services
83			Leadership skills
84			Accept responsibility
85			Helping the group
86			Acceptable social skills
87		skills Available	Ability to solve problems
88			Follow the instructions as given to him
89			Join the team as a member
90			Ability to take responsibility for doing a job
91			Properly record events for future use
92			Ability to apply for a job
93		Skill Self-responsibility	Wise use of the natural resources of your environment
94			Planning to use financial resources
95			Wise use of time
96			Take care in using your personal belongings
97			Commitment in your work
98			Having credibility with others
99			Trust others
100			Take responsibility for your actions
101			Do your homework correctly when accompanying groups
102			Admit your mistakes
103			Understand doing what you commit to
104			Control over your personal goals
105		Skill work ethics	Try new approaches and things in your work
106			Ethics at work
107			Strive hard to achieve your goals
108			Able to continue working in difficult conditions



109	Healthy living skills	Skill Self-esteem	Self Confidence
110			Self-responsibility
111			Pay attention to your personality
112			Manage your emotions
113			Self-regulation
114		Skill Pay attention to others	Understanding the same and differences in people
115			Avoid bigotry and discrimination against different people
116			Patient care
117			Understanding, kindness, attention and love for others
118		Skill Pay attention to others	Empathy with others
119			Share with others
120			Develop your relationships with others
121		Skill healthy life	Recognize your emotions
122			Recognize the emotions of others
123			Dealing with failure and failure
124			Dealing with sadness and fear
125			Coping with situations that can be changed
126			Share your fears, feelings and problems with others
127			Identify the source of your stress
128			Use methods to deal with stressful situations
129			Dealing with difficult situations
130			Choose healthy foods
131			Choosing the right activities to promote mental and physical health
132			Avoid risky behaviors
133			Manage your stress
134			Know the ways to prevent the disease
135			Know the ways of safety and personal security

The statistical population in the quantitative section includes all primary teachers employed in teaching in Rafsanjan, 1457 people. The sampling method in the qualitative part is targeted and snowball and in the quantitative part is simple random. In the qualitative part, using purposive sampling method, 30 people were selected as a sample (it should be noted that the data obtained in interview 12 reached theoretical saturation.) In the quantitative part, the sample using the Cochran's formula. The minimum number of required samples was estimated to be 304 people. In the qualitative section and in the context of the 4H model, a semi-structured interview form made by

the researcher was compiled with the help of open coding and axial coding. Come on. In the quantitative part, the final form obtained from the analysis of resources related to the 4H model with 135 questions was provided to 30 experts to check the final agreement using the Delphi technique. Finally, 104 questions were identified according to the content validity indicators and the desired content validity ratio. And was performed on the final sample. To determine the internal validity (validity) of the findings, first the data were confirmed by studying the theoretical foundations, research background, sources, interviews with experts, then the views and guidelines of a group of experts were considered and then for confirmation. Accuracy of the data, regarding the validity of the study, the survey method was used by reviewing the development of the participants (in this way, the results of analysis and categorization obtained from the review of sources and exploratory interviews were provided to experts who Confirmed). To determine the external validity (transferability) of the findings from the following techniques: achieving complete theoretical saturation of experts, using coding and data analysis procedures, rich description of data and to determine the validity (verifiability) of the findings from three Technique: Data collection from multiple sources (data sources were varied and synchronization was used), method flexibility (interview schedule, evaluated several times, and its content and processes revised In the interpretations, suggestions and findings, complete flexibility was observed), Delphi technique (validity and reliability in the qualitative part) were used in the mentioned order. The validity of the life skills questionnaire data collection tool was calculated through Cronbach's alpha and composite validity (CR) which was 0.7. The validity of the Life Skills Questionnaire was assessed through divergent, convergent validity and exploratory and confirmatory factor analysis methods. Desirable, decision-making skills, problem solving, self-awareness and self-esteem between 0.7 to 0.8, creative thinking skills, management, communication, cooperation, attention to others and healthy living skills between 0.8 to 0.9 And critical thinking skills, available skills, self-responsibility, and work ethic had a reliability above 0.9, all of which indicate a favorable status of skills reliability.

In the qualitative part, both library and field methods were used to collect data. In the first step, in order to get acquainted with the basic concepts and theoretical foundations of national and global theories, models, models and findings about the 4H model, it was studied and examined in detail, and finally 135 concept items for the 4H model questionnaire were obtained. Was obtained. In the second step, in order to collect data, the field method was used. With the help of open coding, the tool indexes were calculated by the researcher. In the third step, with the help of axial coding, the indicators were categorized by the researcher. In the fourth step, the categorized indicators of the 4H model were sent in the form of a semi-structured interview form to 30 experts. In the fifth step, this process continued with the help of Delphi technique until the experts saturate it. And 104 indicators for the 4H model were approved by experts. In the sixth step, the dimensions, components and indicators and their priority were drawn in the form of a model and with the help of experts' points of view, the model of life skills training was theoretically validated. In the quantitative part, the field method was used to collect data. The tools used in this stage were researcher-made questionnaires that were obtained during the qualitative stage. These

questionnaires included 4 main dimensions and 15 micro dimensions for the life skills questionnaire effective in promoting the child's health and were set on a 5-point Likert scale. The number of indicators related to the research model questionnaire in Table 2 is as follows:

Table 2. Dimensions, components and number of indicators of the research model

MAIN DIMENSIONS	COMPONENTS	NUMBER OF INDICATORS
<b>MENTAL SKILLS</b>	Decision making	4
	Creative Thinking	6
	Critical Thinking	6
	targeting	5
	Problem solving	5
	Self-awareness	5
	Management	6
<b>EMOTIONAL SKILLS</b>	connections	7
	Cooperation	7
	Available skills	6
<b>SOCIAL SKILLS</b>	Self-responsibility	9
	work ethics	6
<b>HEALTH SKILLS</b>	Self-esteem	4
	Pay attention to others	7
	<b>HEALTHY LIVING SKILLS</b>	8

In the quantitative part, the field method was used to collect data. The tools used in this stage were researcher-made questionnaires that were obtained during the qualitative stage. The questionnaires included 4 main dimensions and 15 micro dimensions for the Life Skills Questionnaire, which were set on a 5-point Likert scale. First, the interview form approved by the experts was turned into a questionnaire by giving weight to the indicators, then the questionnaire was performed on a randomly selected sample group, and then the answers were coded and entered into SPSS23 software. Exploratory and confirmatory factor analysis were analyzed in SPSS and LISREL software package.

**A) Data analysis in the qualitative part:** Data analysis method In the qualitative part of this research, open, axial and selective coding methods were used. The analysis of the data obtained in this study was performed sequentially and where necessary, quantitative or qualitative methods were used to complete the data. Qualitative data were analyzed using open and axial coding to finally develop a life skills training model. Therefore, open and axial coding was used to analyze the obtained data.

**B) Data analysis in quantitative part:** After compiling the questionnaires and collecting the data obtained from the questionnaires, data analysis was performed using conventional descriptive and inferential statistical methods. First, with the help of conventional descriptive statistics methods such as drawing frequency distribution tables, drawing graphs and drawing tables of statistical characteristics, the demographic description of the sample and the description of research variables were described.

### Research Findings:

In order to answer this question, the available resources in this field were examined and the initial data obtained from these sources were analyzed using the open and axial coding method (coding report after Delphi technique in Table 3). Stage of the research, concepts and key points obtained from the two processes of studying the theoretical literature and research background were listed. First, the concepts and key points obtained regarding the 4H model in relation to the main elements of life skills training at home and abroad were reviewed. The expressions, concepts and items extracted from the research were identified by careful analysis (selection of more correct words, deletion of common concepts), at which point 135 items were obtained. The list was provided to the experts. According to the experts, some of the questions were removed or corrected and 104 items were counted, which are detailed in the table below. All these dimensions, components, micro components and indicators of the research model presented in the table below are shown. Has been:

Table 3. Indicators obtained from the Delphi fan stage

ROW	THE MAIN COMPONENT	WISDOM COMPONENT	INDICATOR	CVI	CVR
1	Mental skills	Skill	Ability to list options before	87	86
2		Decision making	making a decision.	1	87
3			He thinks about the consequences of his decision.	8	89
4			Has the ability to reconsider its decisions.	1	81
5			If the selected solution is unsuitable, it easily chooses another solution.	87	81
6		Skill	Adheres to the implementation of your decisions	1	85
7		Creative Thinking	Has the ability to identify new solutions to life problems.	87	85
			In the face of a quick problem, he can find a solution.		

8		Has the ability to create new ideas from ordinary things.	89	<b>85</b>
9		By changing social conditions, it has the ability to adapt to them.	1	<b>1</b>
10		He has creativity and innovative ideas in his work.	87	<b>89</b>
11		Has creative thinking.	87	<b>85</b>
12	Skill	Has the skill of carefully	1	<b>85</b>
	Critical	examining situations by asking		
	Thinking	questions.		
13		Has the ability to reason.	1	<b>1</b>
14		Can give ideas alone.	1	<b>1</b>
15		Can decide on his own.	1	<b>88</b>
16		Often looking for new ideas	92	<b>85</b>
17		It is important for him to understand the opinions of others.	87	<b>85</b>
18		He usually thinks about the consequences of a decision before taking action.	1	<b>86</b>
19		He often thinks about his actions to see if he can improve them.	85	<b>85</b>
20	Goal setting	Deals with failures in a proper way.	89	<b>86</b>
	skills			
21		Has the ability to formulate long-term goals.	88	<b>86</b>
22		He tries hard enough to achieve his goals.	87	<b>86</b>
23		Has planning skills.	87	<b>85</b>
24		Has the ability to complete your plan or tasks.	87	<b>86</b>
25	Problem solving	Has the ability to deal with various issues in life.	89	<b>86</b>
	skill			
26		Can find solutions to difficult problems or dilemmas.	1	<b>1</b>
27		Has conflict resolution skills.	89	<b>86</b>
28		Alone has the ability to make a good choice.	1	<b>1</b>
29		Understands how to do things.	1	<b>1</b>

30	Emotional skills	Skill Self-awareness	Everyone knows that everyone has different characteristics and talents.	89	85
31			It has the necessary control over itself.	1	1
32			He knows his rights and responsibilities.	1	1
33			He is aware of his strengths and weaknesses.	1	1
34			Has self-confidence and a positive attitude.	1	86
35		Skill	Has the skill of goal setting.	1	86
36		Management	Has good planning or organizing skills.	1	1
37			He is flexible in his work.	1	86
38			Can organize a group to achieve a goal.	1	1
39			Involves others in leadership	1	87
40		Skill connections	Can introduce himself well to others.	1	88
41			Can listen carefully to others.	1	1
42			Can express his thoughts, feelings, and ideas well.	1	1
43			Has the ability to communicate effectively verbally with others.	1	1
44			In non-verbal communication, he has the ability to understand the feelings of others.	1	85
45			He does not easily say no to the unreasonable demands of others.	1	86
46			Uses appropriate methods in communicating with others.	1	85
47			Communicates easily with others	89	86
48			Skills finding new friends as well as not losing old friends.	1	85
49			He can get good help or advice from others when needed	1	1
50			Can work or have fun with people who are different.	1	87

51	Self-responsibility	Skill Cooperation	Can take on a variety of roles in working groups	89	86
52			Can easily distinguish between group and individual roles	1	85
53			Shares your ideas with others	1	87
54			Can work with others	1	86
55			Can participate in team work.	1	1
56			Can help others make decisions.	1	85
57			He has more leadership skills than his peers	91	86
58			When he is given a responsibility, he does it best.	91	87
59			Willing to help the group.	91	88
60			Easily interacts with others in different social situations.	91	88
61		skills Available	Has the ability to solve the problems he faces.	1	76
62			Follows the instructions as given to him	1	85
63			Participates in the team as a member	91	87
64			Ability to accept responsibility for doing something.	1	88
65			Has the ability to plan to do things	89	85
66		Skill Self-responsibility	Use the natural resources of its environment wisely.	1	87
67			Can plan to use financial resources.	89	87
68			He is careful in using his personal belongings.	1	1
69			He has a commitment in his work.	1	1
70			Others can trust him.	89	86
71			Takes responsibility for its actions	1	1
72			He admits his mistakes.	1	1
73			He understands that he must do what he is committed to.	89	86
74		Skill work ethics	In his work he tries new approaches and things.	88	85
75			He has ethics in his work.	90	86



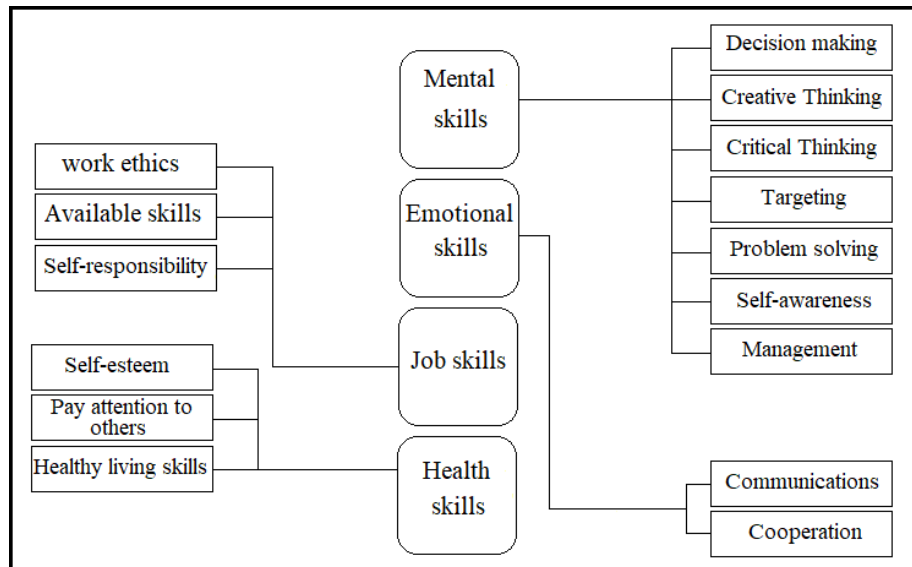
76			He will not give up until he has finished his work	91	86
77			It helps and helps others	1	1
78			He is polite	1	1
79			It is subject to regulations	92	86
80			He works hard to achieve his goals.	1	1
81			Able to continue working in difficult conditions.	92	86
82	Health skills	Skill	Has confidence.	1	86
83		Self-esteem	It has a responsibility.	92	86
84			He respects himself	1	1
85			Can manage his emotions.	91	86
86			It has self-regulation.	91	86
87		Skill	Understands similarities and differences in people and can learn how to understand these differences..	88	86
88			Takes care of patients.	1	1
89			He has understanding, kindness, attention and love for others.	1	1
90			Can empathize with others.	1	1
91			He lends his equipment to others at their request	92	86
92			Always developing relationships with others.	92	86
93		Skill	He knows about his emotions.	1	88
94		healthy life	Knows the emotions of others.	1	86
95			Can deal with failure.	1	1
96			Can deal with sadness	1	1
97			Can deal with fear	1	1
98			Can share his fears, feelings and problems with others	1	86
99			Can deal with difficult situations	1	1
100			Eats foods that are good for your health.	1	86
101			Avoids high-risk behaviors.	1	1
102			Can manage his stress.	87	86
103			Knows ways to prevent disease.	1	86

**The second research question:** What is the executive model of promoting mental health in primary children based on life skills training?

The results of Table 4 show the fit indices of the analyzed model. The results showed that in the initial model (model with all possible paths) the value (SRMR = 0.028, RSMEA = 0.085,  $p = 0.000$ ,  $df = 105$ ,  $\chi^2 = 539.83$ ) indicates the undesirable fit of the model in Community, in the secondary model (modified model after elimination of non-significant paths) the value (SRMR = 0.036, RSMEA = 0.057,  $p = 0.000$ ,  $df = 226$ ,  $\chi^2 = 644.01$ ) indicates that The fit of the model is acceptable in the society. In order to determine the suitability of the model with the data, the fit indicators were used. The results showed that the softened fit index was = 0.90 (NFI), and the adaptive fit index was = 0.93 (CFI), which indicates the acceptable fit of the model with the data, especially the CFI value, which according to Müller (1999) It should be above 0.9 and from the point of view of Weston and Gore Jer (2006) it should be above 0.95 in order for the model to have a good fit with the data because it is not affected by the sample size. Also, if the root of the estimation of variance of the approximation error (RMSEA  $\leq$  0.05) is very good, between 0.05 and 0.08, the fit is acceptable, and if it is higher than 0.08, the fit is poor, and the root mean square of the standardized error is (SRMR 0.08). 4) Optimal fit and higher shows undesirable fit. In this study, RMSEA was between 0.05 to 0.08 and SRMR was below 0.08, which indicates acceptable fit .

Table 4. Pattern fit indicators

PATTERN	AGFI	GFI	CFI	NNFI	NFI	SRMR	RMSEA	SIG	DF $\chi^2$	DF	$\chi^2$
INITIAL TEMPLATE WITH ALL ROUTES	79	93	93	81	92	28	85	0	52/2	105	83/539
MODIFIED TEMPLATE (REMOVE NONSENSE PATHS)	88	92	93	91	90	36	57	0		226	1/644



Pattern 1. Pattern of promoting mental health in primary children based on life skills training

The results of prioritization of life skills components based on the 4H model affecting the promotion of child mental health are presented in Table 5 according to Friedman test. The results showed that there is a significant difference between the importance of life skills components ( $p < 0.01$ ,  $2 \times (25) 56.25 / 56.56$ ), and skills in order of importance are work ethic, self-awareness, management, healthy living skills, Available skills, goal setting, creative thinking, self-esteem, attention to others, problem solving, critical thinking, self-responsibility, decision making, communication and collaboration.

Table 5. Prioritization of life skills components based on 4H model affecting the promotion of child mental health

Components	Average ratings	Degrees of freedom	The amount of square chi	Prioritization
<b>Decision making</b>	67/5	14	**56/2524	<b>13</b>
<b>Creative Thinking</b>	61/8			<b>7</b>
<b>Critical Thinking</b>	99/6			<b>11</b>
<b>targeting</b>	95/8			<b>6</b>
<b>Problem solving</b>	1/7			<b>10</b>
<b>Self-awareness</b>	81/1			<b>2</b>
<b>Management</b>	27/9			<b>3</b>
<b>connections</b>	51/4			<b>14</b>
<b>Cooperation</b>	61/3			<b>15</b>
<b>Available skills</b>	96/8			<b>5</b>
<b>Self-responsibility</b>	96/6			<b>12</b>
<b>work ethics</b>	9/12			<b>1</b>
<b>Self-esteem</b>	45/8			<b>8</b>
<b>Pay attention to others</b>	95/7			<b>9</b>
<b>Healthy living skills</b>	<b>24/9</b>			<b>4</b>

Validation of the mental health promotion model of elementary students based on the 4H model was developed according to a questionnaire with 35 questions, of which 20 questions related to the 4H model (15 components and 4 main factors and the whole model) were asked to experts in each case. Rated on a 5-point Likert scale (strongly disagree, disagree, disagree, agree, strongly agree). At this stage, a questionnaire was sent again to 25 primary professionals who had initially evaluated the model, and 21 people answered the questionnaire. The results were compared with the level of agreement (theoretical average 4, the minimum acceptable level) and the agreement coefficient and the percentage of agreement were estimated for the final evaluation of experts on the components of the model and the relationships between them. The results are given in Table 6. According to Table 6, the results of t-test at 95% confidence level are significant for all questions. Therefore, experts in evaluating each component, the overall model and the relationships between them have evaluated a theory higher than the level I agree with. Based on this, it can be concluded that the developed model has sufficient credibility in the opinion of experts. Also, the average opinions of experts about the main factors and the total components indicate the appropriateness of the model. The agreement coefficient and agreement percentage results also confirmed the t-test results.

Table 6. Accreditation of the theoretical model from the perspective of experts about the components of the model and their relationship with each other

<b>Component</b>	<b>Average</b>	<b>The standard deviation</b>	<b>Degrees of freedom</b>	<b>The value of t</b>	<b>Coefficient of agreement</b>	<b>Percentage of agreement</b>
<b>Decision making</b>	57/4	67	20	**87/3	89	<b>5/9</b>
<b>Creative Thinking</b>	57/4	67	20	**87/3	89	<b>5/9</b>
<b>Critical Thinking</b>	61/4	58	20	**81/4	9	<b>3/95</b>
<b>targeting</b>	71/4	46	20	**07/7	92	<b>100</b>
<b>Problem solving</b>	61/4	49	20	**7/5	9	<b>100</b>
<b>Self-awareness</b>	47/4	51	20	**26/4	86	<b>100</b>
<b>Management</b>	66/4	48	20	**32/6	91	<b>100</b>
<b>Mental skills</b>	38/4	49	20	**5/3	84	<b>100</b>
<b>connections</b>	28/4	46	20	**82/2	82	<b>100</b>
<b>Cooperation</b>	42/4	5	20	**87/3	85	<b>100</b>
<b>Emotional skills</b>	38/4	58	20	**96/2	84	<b>4/95</b>
<b>Available skills</b>	38/4	49	20	**5/3	84	<b>100</b>
<b>Self-responsibility</b>	28/4	56	20	*33/2	82	<b>2/95</b>
<b>work ethics</b>	33/4	57	20	*64/2	83	<b>2/95</b>
<b>Job skills</b>	38/4	49	20	**5/3	83	<b>100</b>
<b>Self-esteem</b>	33/4	57	20	*64/2	83	<b>2/95</b>
<b>Pay attention to others</b>	33/4	57	20	*64/2	84	<b>2/95</b>
<b>Healthy living skills</b>	33/4	57	20	*64/2	82	<b>2/95</b>
<b>Health skills</b>	38/4	49	20	**5/3	83	<b>100</b>
<b>The whole model of life skills</b>	<b>28/4</b>	<b>46</b>	<b>20</b>	<b>*82/2</b>	<b>83</b>	<b>100</b>

### **Discussion and conclusion:**

The results of the present study showed that the executive model of promoting mental health promotion of elementary children based on life skills training includes the following components: work ethic, self-awareness, management, healthy living skills, available skills, goal setting, creative thinking, self-esteem, attention To others, problem solving, critical thinking, self-responsibility, decision-making, communication, and collaboration are all effective in promoting mental health and are directly related to children's mental health. Work ethic can have a significant impact on mental health by including components such as: honesty, honesty, transparency, confidentiality, impartiality, respect, obedience to the law and loyalty. Having a quality life. With proper self-knowledge, human beings are able to control their negative emotions in many critical situations and as a result, make correct and logical decisions that lead to safe mental health and prevent serious damage to it. Self-awareness, as one It is one of the life skills that can be considered. Most schools and methods of counseling and psychotherapy in psychological topics and even before them, the divine schools, especially Islam, have called people to reflect on themselves. Since

self-awareness is the prelude to effective communication with others, every human being needs to maintain and strengthen their self-esteem, and the destruction of self-esteem in each person will cause a feeling of inferiority and as a result anxiety and damage to mental health. The next component is management skills. By learning social management skills, including issues such as addiction, sexuality, and social disorders, children can prevent and even improve their mental health. The fourth priority in life skills that promotes mental health is healthy living skills, which includes choosing a healthy lifestyle; stress management; Disease prevention and personal safety. The fifth priority in life skills that promotes mental health are the skills that can be offered, personality, behavioral, communication, job skills, idea generation, creativity and innovation are all of these types of skills that promote the mental health of the child. The sixth priority in life skills that promotes mental health is goal setting skills. A child who can use this skill well and in the right place should be able to deal with failures in a proper way and improve their mental health. Provide. The seventh priority in life skills that promotes mental health is creative thinking, according to Kalantar Qureshi et al. Unity, flexibility and openness, self-sufficiency and self-control, appropriate decision-making, finding new and constructive ways, valuing oneself, etc., which are all effective and influential factors on mental and physical health, They are also considered as characteristics of creative people, so the results of the present study can be considered in line with the results of that research in the sense that creative thinking is effective in mental health. The eighth priority in life skills that promotes mental health is self-esteem. Many studies including Heidarnia et al. (15), Karami et al. (16), Soghari Sina (17), Amirkhani (18), Mostafaei Yonjali and Azad Mard (19), have shown that there is a relationship between self-esteem and mental health. There is meaning. Lack of self-esteem leads to severe self-criticism, the consequences of which are anxiety, depression, mistrust, emptiness and futility. Such a person suffers from many problems due to lack of self-confidence and always damages his mental health. The ninth priority in life skills that promotes mental health is the skill of caring for others. A child who has the skill of caring for others, caring for patients, understanding, kindness, attention and love can empathize with others. And enjoy good mental health. The tenth priority in life skills that promotes mental health is problem solving skills. According to Mohammadi (20), Abedini et al. (21), Khedri and Tannery (22), Rahaei et al. (23), Amini et al. (24), Amini Zare and Aghaei (25), Tahernejad et al. (26), Problem solving skills are significantly positively related to the mental health of primary school children. Therefore, it can be acknowledged that all the problem-solving indicators in the present study that were mentioned, including: the ability to deal with various problems in life, the ability to find solutions to difficult problems or difficulties, the ability to resolve conflict, the ability to choose individually Understanding how to do things is effective and useful in children's mental health. The eleventh priority in life skills that promotes mental health is critical thinking skills. According to Amini et al. (24), Kordloo and Ahmadi (27), Heidari Beidakhti and Ajam (28), Karimi and Fatemi (29), Jahani (30), Safaei Tabalvandani (31) Teaching critical thinking plays an important role in promoting children's health has it. According to Naro and Laura (32), strategies of analysis, comparison, reasoning and reflection focus on decision making, discovering meaning and communicating with past learning are effective components in critical thinking that can be effective in promoting children's health. Children are not born with the power

of critical thinking, and they do not naturally acquire this ability beyond the size they need to survive. Many people never learn it. Also, this method is not easily taught to students by ordinary parents and teachers; Rather, it requires special trainers to teach critical thinking skills. The twelfth priority in life skills that promotes mental health is self-responsibility, self-responsibility skill means responding to one's behavior and commitments; The choice for oneself is between right and wrong and according to the results of the present study is directly related to mental health and it should also be acknowledged that these results are in line with the results of research by Ghanbari et al. (33). The thirteenth priority in life skills that promotes mental health is decision-making skills. Choosing the right option was sticking to the implementation of the decision and being confident in their decisions that are directly related to promoting children's mental health. The fourteenth priority in life skills that promotes mental health is communication skills. This skill in the present study includes basic verbal and non-verbal communication skills, coping skills against peer pressure, pressure resistance skills to engage in activities. It was harmful to health, which is directly related to the promotion of children's mental health. The 15th priority in life skills that promotes mental health is the skill of cooperation. Dividing your group and individual role, sharing your ideas with others, being able to work with others, participating in teamwork, helping others make decisions that are directly related to promoting children's mental health.

### **Limitations**

- The research sample group has been selected exclusively in the qualitative part of 30 experts in this field and in the quantitative part only teachers working in teaching in Rafsanjan city, so in order to use the model presented in other schools, it should be localized with caution. And then be executed.
- Experimental data of this research have been obtained by implementing a scale of 118 items for the sample group, so if other scales with different themes and longer lengths are used, the result can be generalized.
- Overall, the results of confirmatory factor analysis indicate that all dimensions, components, indicators and identified items of an underlying factor in the form of mental health promotion model for elementary students based on the 4H model, but certainly the components And other indicators can be identified that, despite much effort, remain hidden and can be discovered.
- Lack of cooperation of some academic specialists and experts to conduct face-to-face interviews due to the prevalence of coronary heart disease
- This research has been done in the elementary school community, so it could have included teachers and parents of elementary students on a larger scale.
- Since the subject of the present study was the first to be performed, so there was no comparison of the results of this study with the results of previous studies..

### **Proposal:**

- Holding workshops and training courses to acquaint primary teachers as well as other educational officials with the executive model of research based on life skills training in schools and other educational institutions



- Designing and establishing a center for measuring and evaluating human resources based on the dimensions, components and indicators of the executive model of teaching life skills to elementary students as well as other educational levels based on the models presented in future research
- In order to obtain a standard and more comprehensive scale that is widely used, it is better to conduct research on a larger scale, to increase the generalizability of the results.
- Conducting research in order to review the current situation and determine the distance between the current and desired situation based on the research model
- Conducting research that can examine the effects of policies and macro programs of the educational system on strengthening the identified dimensions and components of the executive model of the present study.
- Using students' opinions in identifying the components and indicators of the research model
- Identifying the new components and indicators of the research model in accordance with the native culture of other cities in other provinces
  - Conducting further research with the aim of providing a comprehensive model of life skills training in primary education in Iran to promote mental health
  - Conducting further research with the aim of providing a separate model based on triangular factors
  - Considering the basics of technology and biology in presenting the model as mentioned in the National Document on the Fundamental Transformation of Education.

## References

- 1-Fazalizadeh S., Masoumi Fard M. How to Realize Life Skills in Elementary Education Curricula, Second National Conference on New Findings of Teaching-Learning in Elementary School, Bandar Abbas; 2020
- 2-Amoosoltani S., Yazdkhasti F., Oreyzi H., Abbasi Jondani J.. The Effectiveness of Psychodrama with the Content of Life Skills on Loneliness, Happiness, Affective Relationship and Parents' Social Support in Adolescent Girls Dependent on the Cellphone. Counseling Culture and Psychotherapy, 2021; 12(45): 239-268.
- 3-Mantegh A., Gholtash A.. The effect of life skills training on the expression and self-esteem of female first year high school students in District 1 of Shiraz, 8th Scientific Conference on Educational Sciences and Psychology, Social and Cultural Harms of Iran, Tehran; 2020
- 4-Foroozeh S.. A Study of Attention to Creative Thinking Skills in Story Books of Age Group "C" Based on Guilford Creative Thinking Components, Master Thesis, Faculty of Psychology and Educational Sciences, Ferdowsi University of Mashhad: 2015
- 5-Jahani J.. Investigating the extent of using Gilford's components of creativity in Persian children's magazines. Library and Information Sciences, 2019: 1-26.

- 6-Asadi M., Aghaei A., Atashpour S.. The effect of life skills training on the spiritual intelligence of female high school students. *Scientific Journal of Women and Culture*, 2019; 3 (9): 21-31
- 7-Khanifar H., Karimzadeh K., Yazdani H., Rahmati M.. Qualitative design of elementary school life skills curriculum based on expert opinions, *Scientific Journal of Training & Learning Researches*, Serial 30, Autumn & Winter, 2019-2020; 16(2): 57-72.
- 8-Bahrami M.. The Effectiveness of Life Skills Training on Reducing Tendency toward High-Risk Behavior in High-School Adolescents in Tehran. *Policewomen Studies Journal*, 2017; (27): 49-67.
- 9-Yousefi R., Samadi P.. Success rate of Islamic life etiquette and skills curriculum (dignity plan) in students' problem-solving skills, *Quarterly Journal of Curriculum Planning Research*, 2017; 3: 47-68
- 10-Azami M., Jafari A., Karimi N.. Investigating the effect of life skills training on increasing the creativity of primary school children; *Quarterly Journal of Initiative and Creativity in the Humanities*, 2012; 2(2):11
- 11-Aflaki Fard H.. Investigating the effect of life skills training on self-efficacy and increasing happiness of female high school students in Isfahan's 4th district; *Quarterly Journal of Counseling Research*, 2015; 3: 47-69
- 12-Rezapour M., Fallah Y., Saberi M.. Evaluation of the effectiveness of intervention based on life skills training on the quality of life of women heads of households, *Journal of Women and Society*, 2016, 7 (1): 11
- 13-Meyer K.A.. Students' Perceptions of Life Skill Development in Project-Based Learning Schools, *Journal of Educational*, 2015; 2(1): 11
- 14- Kalantar Ghoreishi M., Einolah Zadegan R., Rezaei Kargar F.. Study the relationship between personality traits with creativity and general health in adolescents. *Journal of Innovation and Creativity in Human Science*, 2012; 2(3): 45-59.
- 15- Heydarnia A., Sanaei Zakir B., Taleghani N.. Mental health and self-esteem of male middle school students in normal families under the custody of the father and under the custody of the mother. *Social Welfare Issues of Children and Adolescents in Iran*. 2004: 55-74.
- 16- Karami S., Dehghani Y., Saadatizadeh M.. Investigating the relationship between self-esteem and mental health with psychological well-being of divorced and normal children in Kohgiluyeh, the first national conference on modern science and technology in Iran. Tehran: 2015

17- Sogharisina F., Hosseini Tabaghdahi SL.. Women's self-esteem and mental health. Provincial Conference on Women's Health, Aliabad: 2016

18- Amir Khani M.. Investigating the relationship between self-esteem and mental health with psychological well-being of parents of normal children and borderline children in Baghmalek. National Conference on Professional Research in Psychology and Counseling with a Teacher Perspective, Minab: 2021

19- Mostafaei Yunjali M., Azad Mard Sh.. The Relationship between Self-Esteem and Mental Health with Exam Anxiety of Secondary School Students in Ardabil, 9th International Conference on Research in Psychology, Counseling and Educational Sciences, Ardabil: 2021

20- Mohammadi N.. Relationship between problem solving styles and general health. Journal of Psychology, 2004: 8; 4: 32

21- Abedini M., Asadi S., Hosseinpour Khaghani SH.. The Effectiveness of Teaching Emotional Intelligence Components in Problem Solving Skills and Mental Health of Female Middle School Students in Rasht, The First National Student Conference on Social Factors Affecting Health, Tehran: 2010

22- Khadri B., Dabaghi P.. The effectiveness of problem-solving skills training on soldiers' mental health. Ibn Sina Magazine, 2014; 16:1-2 (Series 46-47)

233- Rahaii F., Beidakhti A., Daneshzadeh F., Namiranian F.. The effect of problem-solving skills training on students' general health and self-esteem, First National Conference on Sustainable Development in Educational Sciences and Psychology, Social and Cultural Studies, Tehran: 2014

24- Amini N., Niayesh A., Rahmani M.. Evaluation of the effectiveness of problem solving and critical thinking training on mental health of male and female middle school students in Mehr and Lamerd counties, First International Conference on Psychology and Educational Sciences, Shiraz: 2015

25- Amini Zare S., Aghayi J.. The effectiveness of problem-solving skills training on general health and self-esteem of tenth grade students of 17 Shahrivar High School in Karaj. The Second National Conference on New Approaches in Education and Research, Karaj: 2017

26- Tahernejad A., Amini Zare S., Saadi P.. Explain the relationship between problem solving skills and improving students' self-esteem and health. Fifth National Conference on New Approaches in Education and Research, Tehran: 2020

27- Kordloo A., Ahmadi A.. The Relationship between Social Skills and Critical Thinking with Mental Health in Islamshahr Elementary School Students, Islamic Azad University, Buin Zahra Branch: 2017

- 28- Heydari Bidokhti F., Ajam A.. Comparison of mental health of male and female students and its role in the tendency to critical thinking of ninth grade students in Gonabad, the first national conference on applied research in humanities and psychology, Tehran: 2018
- 29- Karimi M., Fatemi N.. Relationship between the quality of parent-child interaction with the tendency to critical thinking and components of mental health in adolescent female students, Quarterly Journal of Counseling Research, 2018; 17(68): 11
- 30- Jahani N.. The Relationship between Critical Thinking Skills and Information Literacy with Health Literacy of Students Members of Babolsar Public Library, Fifth National Conference on New Approaches in Education and Research, Mahmoudabad: 2020
- 31- Safaei Tabalvandani R., Safaei Tabalvandani R.. Comparison of critical thinking with the general health of students of Islamic Azad University and Applied Science, the first national conference on the realization of unattainable ideas in the field of information technology and technology (electronic), Ghaemshahr: 2020
- 32- Naro Alayna Laura L.. Designing a 4-H Residential Summer Camp Experience, The Mississippi State University site, Greenhaw: 2017
- 33- Ghanbari A., Haghanipour F., Babaei Z., Haj Ahmadi Jahromi M.. Investigating the Relationship between Quality of Life and Mental Health with Responsibility of Junior High School Students, Fourth National Conference on Sustainable Development in Educational Sciences and Psychology, Social and Cultural Studies, Tehran: 2016