Iranian journal of educational Sociology
(Interdisciplinary Journal of Education)
Available online at: http://www.iase-idje.ir/
Volume 3, Number 2, June 2020

Develop a Narrative Philosophy Education Program and Evaluate its Effectiveness on Moral Intelligence, Epistemological Beliefs and Emotional Self-Awareness in Adolescents

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Article history:
Received date: 20 March 2020
Review date: 16 May 2020
Accepted date: 18 May 2020

Keywords:
Narrative Philosophy Teaching, Moral Intelligence, Epistemological Beliefs, Emotional Self-Awareness

Abstract

Purpose: The aim of this study was to develop a program for teaching philosophy in a narrative manner and to evaluate its effectiveness on moral intelligence, epistemological beliefs and emotional self-awareness in adolescents.

Methodology: The method of quasi-experimental research was pre-test-post-test design with control and follow-up group, also in terms of exploratory data type. The statistical population in the qualitative section consisted of 15 specialists in educational sciences and philosophy that were selected by purposive sampling method. Also, the statistical population in the quantitative part included 30 students in 2019 that were tested in two groups of 15 using stepwise cluster sampling. The experimental group underwent 8 sessions of 90-minute philosophy training in a narrative manner. The data collection tool was exploratory in the qualitative part of semi-structured individual interviews. In the quantitative part, Lenick and Kiel (2011) Moral Intelligence Questionnaire, Biles (2009) and Grant et al. (2002) Emotional Self-Awareness Questionnaire were used. Qualitative data analysis was used for content analysis and in quantitative part for confirmatory factor analysis; analysis of variance with repeated measures was used.

Findings: The findings showed that among the components of teaching philosophy in a narrative way were responsibility, forgiveness, honesty, courageous behavior, moral values and communication skills. The results also showed that teaching philosophy in a narrative way is effective on moral intelligence, epistemological beliefs and emotional self-awareness of adolescents.

Conclusion: paying attention to the mentioned variables in prevention and designing more appropriate treatments will help researchers and therapists in the field of adolescents.

Please cite this article as: Karamad J, Fallah V, Salimi L. (2020). Develop a narrative philosophy education program and evaluate its effectiveness on moral intelligence, epistemological beliefs and emotional self-awareness in adolescents, **Iranian journal of educational Sociology.** 3(2): 96-109.

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[DOR: 20.1001.1.26453460.2020.3.2.10.6]
[DOI: 10.52547/ijes.3.2.96]

1. Introduction

Throughout life, man goes through ups and downs that are full of challenges and opportunities. A significant part of life challenges is related to adolescence, which brings with it educational challenges. The academic year is a period of life in which rapid cognitive and social changes occur (Datu & Valdez 2019). One of the important goals and tasks of education is to create a ground for the all-round growth of the individual and to train healthy, efficient and responsible human beings to play a role in individual and social life. Since students, as the basic element of the country's educational system, have a special role and position in achieving the goals of the educational system, attention to this segment of society in terms of education, training, fertility and the flourishing of the educational system of the society. However, of the total number of students entering the education system, few can develop their talents and overcome life problems and challenging academic conditions (Soleimani, 2016).

Intelligence is a concept that has long been interested in research and study of its dimensions, manifestations, characteristics and types (Jeffery & Shackelford 2018). In the meantime, one of the dimensions of intelligence called "moral intelligence" is one of the areas in which there is not much systematic research to identify and explain its features and components to the extent of other types of intelligence, and this itself has many difficulties in It creates a precise distinction between its components and characteristics for researchers (Zamanian Qozhdi, Barghi Irani, Akbari Dehkordi, 2018). One of the most important and effective cases in educating children and adolescents is educating his moral intelligence. Moral intelligence means the ability to understand right from wrong. This phrase means having and practicing strong moral beliefs. In such a way that the person behaves in a correct and respectful manner (Steinbuchel, 2012). Research has shown that children and adolescents who have not acquired moral intelligence for any reason are at serious risk (Aisyah 2018). These people, due to a shaky conscience, weakness in controlling desires, immaturity, moral sensitivities and misguided beliefs, are greatly affected by moral and social backwardness and become abnormal characters in adulthood (Toprak & Karakus, 2018). Perhaps it can be said that the most important point in the subject of moral intelligence is that this intelligence is completely learnable and learnable and has no hereditary aspect and is transmitted to children only through education (Azar & Samari, 2018).

Epistemology, on the other hand, is a subject that has received a great deal of attention in recent years from many experts in the field of philosophy and educational issues. This area discusses the nature, origin, limitations and validity of knowledge (Orgun & Karaoz, 2014). In other words, epistemological beliefs refer to people's beliefs about the nature and structure of knowledge and the acquisition of knowledge (Ulucinar, Akar, Demir, Demirhan, 2012). Epistemological beliefs can determine the ability and capacity to go to school and help to increase one's beliefs about the nature of knowledge and learning. Hofer (2001) argued that understanding epistemological beliefs helps us understand how to solve scientific problems, evaluate new information, and make fundamental decisions that affect our own lives and the lives of others. The development of epistemological beliefs plays an important role in facilitating conceptual change, organizing scientific knowledge, and students' learning opportunities (Buehl, 2008). Some experts, such as Anderson (1984), also believe that epistemological beliefs are the result of home education and formal education, during which individuals gain experience and interpret it. Many educational variables such as cognitive processes of thinking (Lin et al, 2013), learning perceptions (Sadi & Lee (2015); Bahcivan & Cobern (2016); Chiou, Lee, Tsai (2013), selection of learning approaches (Phan, 2008), Self-efficacy (Sevari 2018) and emotional self-awareness (Sungur & Senler, 2010), are influenced by epistemological beliefs

An effective factor in arousing educational environments is the role of emotion (Wright et al, 2018). Emotions identify automated performance patterns that are important for survival. Our cognitive ability creates opportunities to modify these early emotional patterns and to develop better adaptive patterns. This means that emotional self-awareness plays an essential role in adapting to the environment (Yamac,

[DOR: 20.1001.1.26453460.2020.3.2.10.6]
[DOI: 10.52547/ijes.3.2.96]

2014). According to Szczygieł, Buczny, Bazińska (2012) have defined emotional self-awareness as an ability that characterizes and describes the emotions of oneself and others. According to this model, which pays attention to the levels of cognitive development of emotional self-awareness; Emotional self-awareness is a cognitive skill that has stages and these stages correspond to Piaget's cognitive classification (Kahu, et al, 2015). High emotional self-awareness can affect people's moral intelligence. Thus, an influential component on epistemological beliefs and moral intelligence is the role of emotional self-awareness (Asrar-ul-Haq, Anwar, Hassan, 2017). To regulate emotion, one needs to be aware of specific emotions for which the term emotional self-awareness is used (Mohanna, Talepasand, 2016). Reading your emotions, like the emotions of others, requires awareness of these emotions and includes paying attention to emotions and the ability to recognize different emotions by distinguishing between different psychological experiences and using a variety of words to decode emotions (Smith, et al, 2018).

In Brunner's view, the school should encourage students to be intellectually independent and give them the opportunity to pursue their natural interests in developing and satisfying their curiosity. In this situation, the narrative philosophy curriculum that Lippmann devised in 1969 to teach children thinking skills is a good curriculum for teaching moral intelligence, emotional self-awareness, and epistemological beliefs. Lippmann theorized that if we engage the child's mind in philosophical discussions, we can develop his thinking. He believes that if we connect children's natural curiosity and their desire to know about the world with philosophy, we can turn children into thinkers who are already more critical, flexible and effective. To this end, he proposed a program to teach philosophy to children. The main emphasis of the program, however, is based on the view that the habits of free-thinking and capable thinking can be established and institutionalized through experience and practice. He believes that education can transform children, and of course, to achieve this, it must transform itself and put thinking at the top of its agenda instead of information. Lippmann therefore wants to add the subject of philosophy to the curriculum (Fisher, 2017). The goal of philosophy is to lead children to scrutinize everything with their keen and critical eyes, and to help them understand the truth by raising their level of thinking and to be able to solve their own problems and those of the community around them (Fathi, Ahghar, Naderi, 2018). In this regard, Duytschaever & Conredie (2016), in their research, concluded that if the program of teaching philosophy to children is consistently designed and implemented, it will facilitate the development of deep and thoughtful thinking. On the other hand, teaching philosophy can have a positive and significant effect on developing students' reasoning skills.

According to the researches, it can be said that despite paying attention to the implementation of the philosophy education program for children in the educational process, the responsible institutions have paid less attention to it in the process of their activities and students are still trained in such a way. Get a good grade, learn the material. But the main goal of education today should be to train highly morally intelligent human beings, epistemological beliefs and emotional self-awareness and to have the right judgment, therefore; School curriculum design should include methods by which students learn the ability to apply moral reasoning, hypothesizing, high moral intelligence, emotional self-awareness and epistemological beliefs, and to move beyond self-centeredness and try to enter the thoughts and feelings of others through intellectual discipline. . One of the effective ways is to conduct research on the implementation of philosophy education program in a narrative method based on moral intelligence in educational institutions so that its results can be used in educational and curriculum planning and teaching logical thinking and reasoning to children. In this study, the researcher seeks to: What effect does the teaching of philosophical thinking in a narrative way have on the moral intelligence, epistemological beliefs and emotional self-awareness of adolescents?

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2. Methodology

The present research project is among the research projects of the hybrid method that was carried out in two stages. In the quantitative part, the present research in terms of environment is of library and field type; Based on the purpose of the research, applied-fundamental; In terms of data collection time, it was cross-sectional and in terms of research method, it was a quasi-experimental pre-test-post-test design with a control and follow-up group. The statistical community in the qualitative section includes experts and academic experts (specialists in the philosophy of education) as well as people who have specialized studies and research in this field. In this study, using the saturation principle and purposive sampling method, 15 people were considered as the sample size. Semi-structured interviews were used to collect qualitative data from this study. In individual interviews with the interviewees, five interview questions were used for a preliminary review. In addition, other sub-questions were asked along with each question to understand the experiences of the participants during the interview. During the interview, the researcher checked the accuracy of his / her interpretation of the statements of the interviewees by asking guiding questions. In the process of sampling participants, the researcher analyzed the data to complete the cases that were incomplete by receiving new information from the new participant. After 15 interviews, the main and sub-factors were repeated in previous interviews and the researcher was saturated. During the interview, opinions were collected on appropriate indicators to determine the components and indicators of philosophy education in a narrative method based on moral intelligence, and the main and sub-factors were considered and finalized. The statistical population consisted of a small section including all second and third grade high school students in Tehran in the academic year 2018-19, who were studying. For a small part, the stepwise cluster sampling method was used, so that first 7 districts out of 22 districts of Tehran and 4 schools from each district were randomly selected and 2 classes from each school and the number of samples from each class were randomly selected. 30 students were selected and replaced in experimental and control groups. The experimental group was trained in the designed protocol and the control group remained on the waiting list. It should be noted that the necessary explanations about the knowledge of the objectives of the study and voluntary participation in the study were presented and the subjects' consent to participate in the study was obtained.

Measuring instruments included the following:

Ethical Intelligence Questionnaire Lennick & Kiel (2011): Lennick & Kiel (2011) presented this questionnaire which consists of 40 questions in a five-point range (never, rarely, sometimes, often and all the time). These questions are equated to 10 dimensions or subsets of moral intelligence including cohesion, honesty, courage, confidentiality, fulfillment of individual obligations / responsibility (accountability) to personal decisions, self-control and self-limitation, helping others (accepting responsibility to serve others) Caring for others (kindness), understanding the feelings of others (philanthropy and civic behavior), and understanding one's spiritual needs (faith, belief and humility) are divided, and each competency has 4 questions. Also, these 10 competencies are divided into 4 general categories under the general dimensions of moral intelligence including honesty (with 4 sub-dimensions), responsibility (with 3 sub-dimensions), forgiveness (with 2 sub-dimensions) and compassion (with 1 sub-dimension). The reliability of this test was obtained using Cronbach's alpha coefficient of 0.94 and its face and content validity and internal coordination of its components were confirmed by experts. The highest correlation is between morally intelligent forgiveness and compassion with 0.86 and the lowest correlation between morally intelligent honesty with 0.66. The results of factor analysis of the components of moral intelligence also showed that honesty with a factor load of 0.64, responsibility 0.81, compassion 0.84 and forgiveness 0.83 have 80% in common, which can be called a common factor of moral intelligence (Siadat et al , 2009).

The Epistemological Beliefs Questionnaire was developed by Bayless (2009) and has 34 items. It has 4 subscales, which are: belief in the inherent or acquired nature of learning, belief in the gradual or rapid

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learning process, belief in the complexity or simplicity of knowledge, and belief in the absolute or relative knowledge. The answer method is that the subject selects the answer based on a 5-point Likert scale. The reliability score of the total score of the Epistemological Beliefs Questionnaire using Cronbach's alpha method is 0.86 (Bayless, 2009). In the study of Sepahvand et al (2017), in order to determine the validity of the Epistemological Beliefs Questionnaire, a confirmatory factor analysis was performed on the items of this scale. They had a factor load of less than 0.3, a high factor load. Its reliability coefficients for the whole questionnaire and for the subscales of belief in knowledge of simplicity or complexity, belief in gradual or rapid learning, belief in absolute or relative knowledge and belief in innate or acquired knowledge, respectively, 0.94, / 75 0, 0.83 and 0.94 were obtained. The Grant et al (2002) Emotional Self-Awareness Questionnaire contains 33 questions developed by Grant et al In 2002 (Grant et al, 2002). Its subscales include recognition (with 6 questions, it is difficult for me to say what mood I am in now), identification (with 5 questions, it is difficult for me to describe my mood), transformation (with 7 questions, expressing emotions, it is easy for me), Environmentalism (with 10 questions, I analyze my personality to try to understand why I am upset) and problem solving (with 5 questions, I evaluate my feelings and then decide to do something) are on a 5-point Likert scale. (From never to too much) were measured. In Mohanna & Talepasand (2016) study, the validity of the Emotional Self-Awareness Scale based on Cronbach's alpha was 0.79.

Table1. Content of Islamic philosophy teaching sessions in a narrative method

Meeting	Content of training sessions
1	Introducing and introducing the members of the group, expressing the rules of the meetings (such as respect, listening, secrecy, length of sitting, order, times, dates of the meetings), the importance of teaching philosophy in a narrative way, during this meeting, the concept and necessity of philosophical thinking and Teaching the principles and rules of the philosophical research community. Homework: Reading the story of Sheikh Gorgani and the cat and discussing the content of the story.
2	Familiarity with philosophical stories, methods of strengthening moral intelligence, emotional self-awareness and epistemological beliefs, providing exercises and right-thinking tasks to strengthen interpersonal relationships. Homework: Reading the story of good and evil and discussing the content of the story
3	Reflections on learning and philosophical thinking, methods to strengthen moral intelligence, identifying the prerequisites for empathy, obstacles to achieving moral intelligence, providing exercises and assignments to strengthen self-esteem, homework: reading your story is good and in the Tigris and discussion About the content of the story
4	Teaching how to define philosophical problems, suggest solutions and provide reasons, methods to strengthen emotional self-awareness, identify behaviors that indicate emotional self-awareness in students, provide exercises and assignments to strengthen students' self-awareness. Homework: Reading the story of the flower eater and the sugar seller Attar and discussing the content of the story
5	Teaching attention to the consequences, importance and necessity of epistemological beliefs, benefits and methods of strengthening human virtues such as fairness, forgiveness, techniques for improving fair behavior skills, practicing respect for differences, practicing coping with prejudice, practicing emotion expression steps, homework: Reading the Turtle story Fili and discussion about the content of the story
6	In this session, self-management skills were examined, which include: collecting information by taking notes and summarizing, asking and evaluating oneself, homework: reading the story of the seventh western class and discussing the content of the story
7	In this session, simultaneous attention to detail and generality for logical judgment, the role of thinking alongside the senses for a more accurate perception of events are examined. Homework: Reading the story of a prisoner who cursed and discussing the content of the story.
8	In this session, the skill of recognizing moral fallacies was examined, which includes the concept of moral fallacies and familiarity with moral fallacies (in the position of reasoning and in the position of criticism and response). Homework: Review the sessions before and take the post-test

Qualitative data analysis was performed using content analysis, as well as data collected from the quantitative part through descriptive and inferential statistics (confirmatory factor analysis, repeated measures analysis of variance) and using SPSS-V22 and Amos software, were analyzed.

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3. Findings

To collect qualitative data, 15 experts and academic experts (specialists in psychology and educational sciences) as well as individuals with specialized and research studies in this field were interviewed. From the above specialists and experts, 4 professors, 6 associate professors and 5 assistant professors, of whom 10 were men and 5 were women. The study group was 7 of them in psychology and 8 in educational sciences. Using heuristic factor analysis after rotation, 6 factors were identified. Based on a study conducted in the field of literature in this field, the first factor was called responsibility skills, the second factor was forgiveness skills, the third factor was honesty skills, the fourth factor was bold behavior skills, the fifth factor was time management skills and the sixth factor was communication skills. Table 2 also shows the content of Islamic philosophy teaching sessions in a narrative manner taken from the identified components.

Table2. Statistical description of respondents' views on the dimensions of "green management (GM)",

Components of teaching philosophy in a narrative way	Question
Responsibility skills	- The purpose of human creation - The dynamic nature of man - Human perfectionism - Fulfillment of individual obligations -Self-control
Forgiveness skills	- Ability to recognize - God is the fundamental good - Honesty
Integrity skills	- The role of evaluation in the growth of thinking - The concept of evaluation and its steps - Identify criteria and criteria in evaluation and judgment - Identify strengths and weaknesses - Principles of rational judgment
Bold Behavior Skills	- Convert cryptographic signs to speech signs - Creating a logical relationship between new concepts and previous experiences - Expressing perceived content in an abstract and technical way - Inference and inference from spoken and audio content
Skills of moral values	- Faithfulness to the covenant - Paying attention to others - Stand for the right - Accept responsibility for your decisions
communication skill	- Understanding and recognizing oneself and mental abilities - The role of attitude in self-confidence - Collecting information through taking notes and summarizing - Ask yourself -self appraisal

Based on the obtained results, the KMO index is greater than 0.6 and shows values close to one, which indicates the adequacy of the sample size based on the identified indicators for factor analysis. A significance level of 0.000 for Bartlett test also indicates the suitability of the research variable for factor analysis because the assumption that the correlation matrix is unique is rejected. Exploratory factor analysis was performed on 26 identified indicators in identifying the components of teaching philosophy in a narrative method based on the results obtained from the qualitative and content validity sections. In order to investigate the confirmatory factor analysis of the 6-factor structure of the Philosophy Education Questionnaire by narrative method, Amos software was used.

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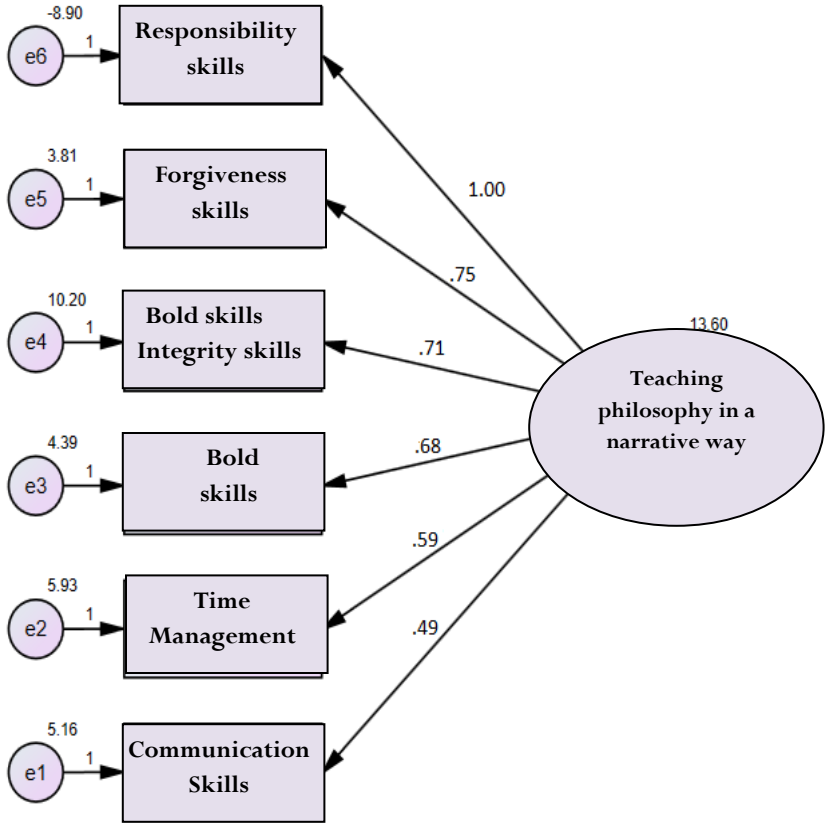

Figure1. Confirmatory factor analysis model in the case of non-standardized coefficients

Table3. Indicators of confirmatory factor analysis

Index name	Fit indicators	
	the amount of	Limit
$\frac{\chi 2}{df}$	1/19	Less than 3
(Root of average estimation error) RMSEA	0/05	Less than 0.1
CFI (Modified Fit)	0/96	Above 0.9
NFI (Softened Fit)	0/94	Above 0.9
FFI (goodness of fit)	0/96	Above 0.9
AFFI (Adjusted Fit Goodness)	0/92	Above 0.9

Based on the results obtained from Table 4, it can be stated that in general, the model is in a good position to explain and fit, and it can be said that the researcher's hypothesis that the 6-factor questionnaire of philosophy education is narrative is confirmed. In order to investigate the effect of narrative philosophy teaching methods on moral intelligence scores in pre-test, post-test and follow-up stages, mixed analysis of variance (one factor within subjects and one factor between subjects) was used.

Table4. Mixed analysis of variance test of moral intelligence scores with Greenhouse Geyser criterion

Statistical index of factors	SS	df	MS	F	Sig	Effect size
Test (repeat measurement)	1794.49	1.86	965.61	17.35	0.00	0.38
Test Interaction * Group	1143.82	1.86	615.49	11.06	0.00	0.28
Error	2896.36	52.04	55.66			
Intergroup	2035.38	1.00	2035.38	6.75	0.01	0.19
Error	8444.44	28.00	301.59			

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The results of Table 5 show that in relation to the intragroup factor, the value of F calculated for the effect of stages (pre-test, post-test and follow-up) is significant at the level of 0.05 (F = 0.35, P = 0.05). As a result, there is a significant difference between the mean scores of pre-test, post-test and follow-up of moral intelligence scores in the three stages of pre-test, post-test and follow-up. The results of Bonferoni post hoc test were calculated to investigate the differences between the means in the educational stages. The results showed that there is a significant difference between the scores of moral intelligence in the pre-test and post-test stages, pre-test and follow-up. Comparison of adjusted means shows that the scores of moral intelligence in the post-test and follow-up stages have increased significantly compared to the pre-test stage. Also, there is no significant difference between the scores of moral intelligence in the post-test stage compared to the follow-up stage, so that the scores of moral intelligence in the follow-up stage compared to the post-test stage did not change significantly.

Table5. Mixed analysis of variance test of epistemological beliefs scores with Greenhouse Geiser criterion

Statistical index of factors	SS	df	MS	F	Sig	Effect size
Test (repeat measurement)	1430.56	1.48	967.77	9.65	1.00	0.26
Test Interaction * Group	1033.89	1.48	699.43	6.97	0.01	0.20
Error	4152.22	41.39	100.32			
Intergroup	3180.28	1.00	3180.28	8.42	0.01	0.23
Error	10571.11	28.00	377.54			

The results of Table 6 show that in relation to the intragroup factor, the value of F calculated for the effect of stages (pre-test, post-test and follow-up) is significant at the level of 0.05 (F = 9.65, P <0.05). As a result, there is a significant difference between the mean scores of pre-test, post-test and follow-up scores of epistemological beliefs in the three stages of pre-test, post-test and follow-up. The results of Bonferoni post hoc test were calculated to investigate the differences between the means in the educational stages. The results showed that there was a significant difference between the scores of epistemological beliefs in the pre-test and post-test stages, pre-test and follow-up. Comparison of adjusted means shows that the scores of epistemological beliefs in the post-test and follow-up stages have increased significantly compared to the pre-test stage. Also, there is no significant difference between the scores of epistemological beliefs in the post-test stage compared to the follow-up stage, so that the scores of epistemological beliefs in the follow-up stage compared to the post-test stage did not change significantly. According to the results of Table 6, in relation to the interaction of stage and group factors, the value of F calculated for the effect of stages (pre-test, post-test and follow-up) between the experimental and control groups is significant at the level of 0.05 (P <0.05, P F =), therefore, there is a significant difference between the mean scores of pre-test, post-test and follow-up of epistemological beliefs in the two groups.

Table6. Mixed analysis of variance test of emotional self-awareness scores with Greenhouse Geezer criterion

Statistical index of factors	SS	df	MS	F	Sig	Effect size
Test (repeat measurement)	500.00	1.50	334.00	3.66	0.05	0.12
Test Interaction * Group	895.56	1.50	598.23	6.56	0.01	0.19
Error	3821.11	41.92	91.16			
Intergroup	2200.28	1.00	2200.28	6.38	0.02	0.19
Error	9655.56	28.00	344.84			

The results of Table 7 show that in relation to the intragroup factor, the value of F calculated for the effect of stages (pre-test, post-test and follow-up) is significant at the level of 0.05 (F = 3.66, P <0.05). As a result, there is a significant difference between the mean scores of pre-test, post-test and follow-up of emotional self-awareness scores in the three stages of pre-test, post-test and follow-up. The results of Bonferoni post hoc test were calculated to investigate the differences between the means in the educational stages. The results showed that there was a significant difference between the scores of emotional self-

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awareness in the pre-test and post-test stages, pre-test and follow-up. Comparison of the adjusted means shows that the scores of emotional self-awareness in the post-test and follow-up stages have significantly increased compared to the pre-test stage. Also, there is no significant difference between the scores of emotional self-awareness in the post-test stage compared to the follow-up stage, so that the scores of emotional self-awareness in the follow-up stage compared to the post-test stage did not change significantly. The results of Bonferoni post hoc test in three stages of pre-test, post-test and follow-up in the subscales of moral intelligence, epistemological beliefs and emotional self-awareness are reported in Table 7.

Table7. Results of Bonferoni post hoc test Comparison of moral intelligence subscales in three stages of pre-test, post-test and follow-up

Statistical indicators	Pre-test - post-test		Pre-test - follow-up		Post-test - follow-up	
	difference in averages	Standard deviation	difference in averages	Standard deviation	difference in averages	Standard deviation
Integrity	4/78**	0/57	3/86**	0/57	0/91	0/57
responsibility	4/08**	0/25	4/16**	0/25	0/08	0/09
Forgiveness	3/68**	0/27	3/95**	0/28	0/26	0/08
Compassion	4/33**	0/15	4/46**	0/16	0/13	0/05
Epistemological beliefs						
	difference in averages	Standard deviation	difference in averages	Standard deviation	difference in averages	Standard deviation
Acquisition of learning	3/38**	0/47	3/44**	0/43	0/88	0/53
Gradual or fast learning process	3/38**	0/45	4/11**	0/32	0/05	0/04
Complexity or simplicity of knowledge	4/41**	0/27	3/42**	0/64	0/11	0/05
Absolute or relative knowledge	3/32**	0/35	3/46**	0/32	0/12	0/06
Emotional self-awareness						
	difference in averages	Standard deviation	difference in averages	Standard deviation	difference in averages	Standard deviation
Recognition	3/28**	0/54	2/81**	0/53	0/45	0/53
Identification	3/28**	0/55	4/11**	0/22	0/06	0/03
Conversion	4/18**	0/23	3/15**	0/43	0/55	0/07
Environmentalism	3/31**	0/45	3/46**	0/23	0/43	0/04

*P<** 05/0P<01/0

The results of Table 8 of Bonferoni test showed that the difference between the mean subscales of moral intelligence, epistemological beliefs and emotional self-awareness between pre-test and post-test and follow-up stages was significant (P = 0.001) but the mean difference between post-test and follow-up was not significant. The results in the follow-up phase did not return and the effect of the intervention was stable.

4. Discussion

The aim of this study was to evaluate the effectiveness of narrative philosophy education on moral intelligence, epistemological beliefs and emotional self-awareness in adolescents in order to provide a model. According to the literature review and research background, using heuristic factor analysis after rotation, 6 factors were identified. Based on a study conducted in the field of literature in this field, the first factor was called responsibility skills, the second factor was forgiveness skills, the third factor was honesty skills, the fourth factor was bold behavior skills, the fifth factor was time management skills and the sixth factor was communication skills. Lipman (2015) states that in teaching philosophy in a narrative way in adolescents, one of the ways to achieve curiosity, improve reason, strengthen moral values and in other words, critical thinking, is to teach philosophy to them. He believes that the purpose of teaching philosophy

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[DOI: 10.52547/ijes.3.2.96]

to students is to strengthen their thinking and reasoning skills, and one should not think that its purpose is to teach the complex ideas of great philosophers such as Plato, Aristotle and Kant. Philosophy programs for children have four different approaches, including a process approach or philosophy as method, a content approach or philosophy as content, an approach based on the connection between philosophy and literature, and an approach based on the cultural context of texts that depend on the culture of philosophical story content and plot. Selects, and rewrites stories from indigenous culture (Carl & Gomez, 2010). According to research by Cummings (2015), adolescents who are exposed to narrative philosophy curriculum classes perform better than other adolescents in comprehension, reading, and critical thinking. It was concluded that a philosophical approach could be useful in improving logical and critical reasoning skills.

In order to determine the appropriate model for the dimensions of philosophy teaching by narrative method, the confirmatory factor analysis model was used. The results showed that the model of teaching philosophy by narrative method was valid. In explaining the obtained results, it can be said that the curriculum of philosophy in a narrative method is a program that emphasizes positive conversations with peers and conscious discussion, which has positive consequences for children and adolescents. This program encourages adolescents to think and learn - that is, to be aware of what they are thinking and learning, in other words metacognition. In addition, this process requires social and communication skills and the development of emotional empathy and sensitivity to the feelings of others. As a result, engagement, as well as cognitive effects, increased self-esteem and self-efficacy, increased social intelligence and emotional intelligence, and perhaps other transferable skills, can have many socio-emotional effects; It is also effective in reducing anxiety and increasing positive behaviors in the classroom and fostering emotional adjustment and reducing irrational thinking (Johnson, 2016).

Also, by reviewing and analyzing the data, it became clear that the designed model has a good fit according to the research components. The final proposed model in this research, which on the one hand is scientific and has a strong theoretical basis and on the other hand has a strong fit and has appropriate criteria for model fit. In fact, the calculated GIF values greater than 0.36 obtained indicate a good fit of the research model. Also, all path coefficients are significant and the explained variance is acceptable and the internal consistency of the structures is above 0.05.

The results also showed that teaching philosophy by a narrative method designed has a significant effect on adolescents' moral intelligence. Azimpour et al (2016) in their research on the effect of teaching philosophy on children on moral change showed that this educational program has been able to increase moral change in children. Iranian education needs more intensive interventions and more considerations. Jalilian et al (2016) in their research showed that the implementation of philosophy education program for children has a positive effect on the development of students' moral judgment.

Lippmann (1969), who presented this research based on the Philosophy for Children program, believes that his self-cultivation program is the best way to strengthen thinking and intelligence in children. He believes that the purpose of this program is to teach children to think and help them to make informed choices. According to him, this program seeks to cultivate questioning children and adolescents with critical thinking and high moral intelligence who learn the ability to recognize themselves, self-correction from the same child. In explaining the above results, it can be claimed to have moral intelligence based on philosophy education , Maintains and promotes self-awareness, which is a kind of equipping people with positive traits such as emotional intelligence, self-openness, cognition of attitudes, personality and behavioral characteristics, and emotional self-awareness. Consequently, when students have high moral intelligence and consider themselves more efficient in achieving tasks, activities and goals, due to this high sense of self-efficacy, they evaluate their lives more positively psychologically and are more satisfied with their lives. They will feel more self-aware. In this regard, Cummings (2015), in his research on these findings, found that children who are exposed to philosophy education classes perform better than other children in terms of comprehension, reading, moral intelligence and critical thinking. In his research, he concluded that a

[DOR: 20.1001.1.26453460.2020.3.2.10.6]
[DOI: 10.52547/ijes.3.2.96]

philosophical approach can be useful in improving logical reasoning and self-awareness skills. Zaman & Memoun (2016) concluded that if teaching philosophy to children in a specific sense and as it leads to critical thinking, creativity, strengthening intellectual skills and moral intelligence in children, certainly a long history and a twin with Islamic culture and literature of countries has it. In the philosophy education program for adolescents, based on this research, accepting the assumption that adolescents should be encouraged and given the opportunity to participate in society from an early age, and they should be in areas that are meaningful to them, such as family And the school to participate, therefore believes in the participation and interaction of students with each other through a research community in the classroom during which students answer their questions through discussion and exchange. Also, stories and narratives are a means for students to participate more than Use thinking and intelligence skills by them. The ideas and characters of stories and narratives are designed to stimulate pure research in the classroom. In general, it can be said that in intellectual stories and narratives, teachers and parents generally have a guiding and supporting role in the discussion. They facilitate the flow of stories and narratives and help children explore issues themselves in a collaborative research movement and, if there is an answer, find it themselves.

Another finding of the study showed that teaching philosophy through a narrative method has been able to have a positive and significant effect on adolescents' epistemological beliefs. In line with the results obtained by Falah Mehneh et al (2018), they conducted a study entitled The effect of the content approach of teaching philosophy for children on metacognitive beliefs and critical thinking of elementary students. The results showed that the use of P4C content approach with a 95% probability has a significant effect on metacognitive beliefs and critical thinking of students. . If no significant changes occurred in the control group, then the research hypotheses were confirmed. Wegerif & Kerslake (2019) conducted a study entitled The Impact of Philosophical Discussions on the Social Research Method on the Development of Epistemological Beliefs and Ethical Attitudes on Students. In their research, they concluded that the effect of philosophical discussions in a social research method is effective in cultivating epistemological beliefs and moral attitudes. The results also showed that conversational actions and philosophical discussions on the group participating in the philosophical exploration class had a significant effect on increasing students' epistemological beliefs and moral attitudes. Thus, teaching philosophy to children is one of the ways of teaching life skills that helps to establish a sincere relationship between students by emphasizing conversation with peers and conscious discussion and helps them to improve self-esteem. In addition, teaching philosophy to children is a process that helps improve students' social and communication skills and the development of emotional empathy and sensitivity to the feelings of others. Improving these skills will increase the student's self-confidence because they will learn effective communication and empathy skills. To explain these findings, we can refer to the results of Lippmann's research in teaching philosophy to children and adolescents. Lippmann (1969) believed that teaching philosophy to children is teaching a philosophical way of thinking that takes place through participation and dialogue and leads to the strengthening of epistemological beliefs. Teaching philosophy promotes moral thinking and internalizes moral concepts in children and adolescents. Adolescents become acquainted with epistemological beliefs and moral norms through stories and narratives, discussion and dialogue. In the exploratory circle, the adolescent interacts with peers with respect for their opinions and rights (Falah Mehneh, et al, 2018).

The results also showed that teaching philosophy in a narrative manner has increased adolescents' emotional self-awareness. In general, it can be said that emotional self-awareness based on the approach of teaching philosophy in a narrative way, are psychological variables that affect students' personal and academic behavior and improve interpersonal relationships and their academic performance. Emotional self-awareness enhances students' moral capacity by having ethical factors such as responsibility, forgiveness, compassion, emotional intelligence, fairness, justice, and the like, and instills in students the feeling that they have the ability to take responsibility for choices. And undertake activities from a moral point of view, thus institutionalizing moral competencies in students and influencing moral principles in the students'

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intellectual framework. Certainly, paying attention to ethics and self-awareness in school will bring countless benefits, both to the individual students, to higher education systems, and ultimately to society. In explaining the findings of this study, it can be said that the application of the philosophy education program in a narrative method, in addition to strengthening thinking, cognitive and metacognitive skills, self-awareness, mental imagery and hearing in adolescents, will have other benefits. Training should be done with the help of experienced instructors, so that the learning environment is law-abiding, a happy environment with freedom of action and the adolescent is challenged, strengthens emotional self-awareness, positive self-concept, reasoning, respect for others' opinions, criticism, improvement Social communication and compromise (Cummings, 2015).

Therefore, if we want to prepare children for the challenges of this age and the future, we must improve our oral and memory-based education system and teach students special skills so that they can master their life and learning. They need knowledge that they themselves have produced-reproduced. The main mission and goal of education is to educate and produce people who can think and are not satisfied with the thinking of others; It means cultivating people with high moral intelligence and self-awareness that if these goals are given enough attention, children will be well prepared to live in the current world and solve possible problems that they will face in the future. Therefore, the philosophy education program for children and adolescents, as it has spread in different countries, its branches and versions have also diversified. The philosophers and educators of each country have tried to adapt the original methods, texts, and curricula to their own traditions and culture, or to rewrite them according to their own cultural components.

In the process of conducting any research, there are obstacles and limitations for the researcher. This research is no exception to this rule. The main limitations of the present study include: The present study is limited to high school students in Tehran, Limitation of variables measurement tool that only questionnaire was used and interview, observation and other measurement methods were not used. Therefore, the relationship between philosophy and factors such as individual, psychological and social factors of students in schools should be measured. A comprehensive model and standard should be drawn in this field that examines all aspects of the philosophy program for children and adolescents and its impact on students' mental health. According to the research findings, it is suggested to promote moral intelligence and emotional self-awareness and students' epistemological beliefs based on teaching philosophy in a narrative way, by providing grounds for students to become more familiar with the concept of self-awareness and moral intelligence and all its various dimensions. , Such as taking responsibility for accepting the consequences of a wrong decision, creating a culture of open-mindedness and an atmosphere of forgiveness and cooperation, mutual trust and teamwork to empathize with other people's points of view by creating a supportive environment for students' progress towards moral competence. Take action.

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[DOI: 10.52547/ijes.3.2.96]