The Effects of Philosophical Stories on Emotional Intelligence and Educational Progress of Students in Science Lessons

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Abstract

The present study aims to study the effects of philosophical stories on emotional intelligence and educational progress in science lessons among students of second grade who are studying in Shahid schools of Birjand City. The present study is of semi-experimental type and its statistical population includes all elementary students of Birjand City. In the present study, the two-stage cluster sampling is used. Among all elementary schools, the Shahid schools were selected out of which the second grader are included in the statistical population. Out of the statistical population 50 students are randomly assigned to test group (25 students) and control group (25 students). The instruments of data collection in the present study are Schutte Self Report Emotional Intelligence Test (SSEIT, 1998) and researcher's questionnaire of educational progress. The results are analyzed through SPSS Software (version.19) and covariance analysis. The results show that philosophical stories significantly contribute to improved emotional intelligence and educational progress in science lessons among students of second grade who are studying in Shahid schools of Birjand City. Therefore, one may state that the usage of philosophical stories make the students interested in education and improves their educational condition. In addition, the teachers could increase the students' emotional intelligence and educational progress.

Keywords: *educational progress, philosophical stories, students, emotional intelligence.*

1. Introduction

The significance of thinking and wisdom of humankind is so high that the mission of prophets is helping humans to know better and to correct and reinforce their ability of thinking. The training and education in their common denotations refer to wisdom. That is why the most common application of training and education could be regarded as nurturing of thinking (Akbari, 2013). One of the significant objectives of most of educational systems is thinking and improvement of ability to think (Safai Moghadam, 2007). The children need to understand the world and they are natural curious about the stimuli around themselves. To attribute significance to the world, they need information about their experiences, process them and to which they respond (Marashi, 2007). Sharp (1993) believes that because children enjoy stories, they could be used to encourage the children to think, ask question, improve their educational progress and emotional intelligence, and create motivation. One of the ways of fostering thinking raised within the past few decades is teaching philosophy to children based on the objective of teaching them the ways of thinking, reasoning and problem solving. Philosophy for children is the most practical philosophical tendency that responds to the essential and global requirement. That is why it is commonly welcomed and public welcome of philosophy for children led to promotion of its educational courses (Ghara Melki, 2006).

2. Literature Review

Lipman (1993) pointed to a distinctive conception of philosophy and a new perception of ability of children, objectives, methods and content for teaching of thinking. He tried to develop certain philosophical constructs so as to solve the problems of children with problems of teaching and memory-reinforcing training (Khodayar Mohebbi,, 1998: 29). In the philosophy course for children, significant objectives are followed and deep values are intended among which one could point to independent thinking, independent judgment, pride in personal conceptions, pride to possess individual perspective, scientific humility, deeper apprehension, order and respect for others (Naji, 2009: 130). On one hand, the

course could be regarded as a new approach to dealing with rationality crisis caused by the dominance of postmodernism. Based on the approach, as Lipman (1983) stated, rational education tempered by right judgment is the objective of the philosophy course for children. On the other hand, it is a reform-seeking course which seeks to concurrently improve the conditions of an individual and the society. From personal perspective, turning children into more thoughtful, more critical, more apprehensive and more logical individuals is intended. From social perspective, turning classroom, school and society into a research community in which the concern is reality and quality is sought. To realize these objectives, democracy and all of its means will be used (Safai Moghadam, 2007). The philosophy course for children is actually a comprehensive and systematic plan developed to improve reasoning skills through philosophical stories. These stories are designed in a manner that they guide the learners toward philosophical concepts and their associated principles (Jahani, 2002).

Emotion is a phenomenon they is observed every day during interaction of body and soul (Farzan Far, 2011: 158). The genetic heritage has assigned us a set of certain emotions that determine our mood. One should note that the emotion-involved brain circuitry is unusually flexible. The emotional lessons we learn during childhood and at school and home shape our emotional currents and make us righteous or unrighteous in regard to principles of emotional intelligence (Farzan Far, 2011: 20). Goleman (1998) defines emotional intelligence as the capacity of understanding the feelings of oneself and others, encouraging oneself, control of one's emotions and appropriate relationship management. Mayer and Salovey (1997) noted that emotional intelligence consists of four abilities. These abilities include the ability to properly understand, evaluation and expression of emotions, ability to stimulate or attain emotions that facilitate thinking procedure, ability to understand emotions and science of feeling, and ability to control feelings so as to promote development of feelings and rationality.

Today, educational progress of students has drawn attentions as a significant indicator for evaluation of educational systems. In addition, educational progress is always significant for teachers, students, theorists and educational researchers. For instance, the educational progress of learners is one of the criteria for evaluation of teachers' performance. For students, the average educational score represents their scientific abilities to enter the world of profession and attain higher educations. This might be due to the fact that the educational theories conduct many studies on identification of factors affecting educational progress. Of the factors affecting educational progress, one may point to attitudinal factors (Hedayati et al, 2010: 134).

In educational activities, the higher curiosity of students is correlated with their interest in learning and educational progress. The necessity of teaching thinking skills for solving the problems, dealing with life problems and maintaining one's health is felt. Numerous studies have been done concerning the effectiveness of teaching one or multiple skills on behavior, health and success of adolescents in dealing with different situations. In the present study, the authors intend to study the effects of philosophical stories on emotional intelligence and educational progress in science lessons among students of second grade who are studying in Shahid schools of Birjand City.

3. Method and Materials

The present study was done through semi-experimental design with pretest-posttest and control group. The present study intended to determine the effects of philosophical stories on emotional intelligence and educational progress in science lessons among students of second grade who are studying in Shahid schools of Birjand City. To collect data obtained from intervention sessions and in order to use the selected philosophical story on the ontological, epistemological and axiological chapter, this study was carried out for students according to the P4C Program. Teacher training was conducted in two briefings to provide and to state localized philosophical stories and it was noted that the ultimate goal of performing philosophical stories is not information transfer; however, it is to stimulate the enhancement of thinking in students as well as to reflect on the stories. The teaching of philosophy course to children assigned to test group was done by an expert teacher for 12 sessions each of which lasted for 30 minutes (i.e. 1 session per week). The students assigned to control group had normal school courses and didn't receive any philosophical teaching. The statistical population of present study included all male students of second grade who are studying in Shahid schools of Birjand City. In the present study, two-stage cluster sampling was used. In this regard, among all elementary schools Shahid schools were selected out of which the second grader were included in the statistical population. Out of the statistical population 50 students were randomly assigned to test group (25 students) and control group (25 students). The method of data collection included intervention sessions and distribution of questionnaire forms among male second graders to fill in. The instruments of data collection included Self Report Emotional Intelligence Test (SSEIT) developed by Schutte et al (1998) which is based on model of emotional intelligence (Mayer and Salovey, 1997). The reliability coefficient of present study was 0.66 which is in acceptable level. The test of educational progress of science lesson was studied from aspects

of validity and reliability. To verify the validity, the questions were reviewed by 20 in-service teachers of second grade along with 30 official teachers of this grade. To verify the reliability of the variable, a set of test forms was distributed among a group of second graders which lead to suitable Cronbach's alpha coefficient (i.e. *a*=0.75).

4. Results

In this section, the study of emotional intelligence and educational progress of students is done in a descriptive manner and the collected data of pretest and posttest was analyzed though mean, standard deviation. Based on the results of this research, the mean scores of emotional intelligence for the test group as determined by pretest and posttest were 86.32 and 107.68 respectively. Therefore, one could state that the variable has increased in posttest. the mean scores of educational progress in science lesson for the test group as determined by pretest and posttest were 86.32 and 107.68 respectively. Therefore, one could state that the variable has increased in posttest.

To determine the effect of philosophical stories on students' emotional intelligence, covariance analysis test was used.

H.1-The philosophical stories influence the emotional intelligence of male second graders of Shahid schools of Birjand City. The results of covariance analysis are represented in the following table.

Table 1. Summary of Covariance Analysis Test of Increase of Emotional Intelligence

Source of Variations	Degree of Freedom	Mean Square	F	Level of Significance
Concomitant Variable (Pretest Scores)	28	558.13	26.20	0.0001
Collective Effect (Test-Control)	1	3385.78	158.98	0.0001
Error	20	21.29		
Modified Sum	49			

As the results of the above table show, the effect of concomitant variable is significant (i.e. F=26.20, p=0.0001) which signifies significant difference of pretest and posttest scores. In addition, the collective effect is significant (F=158.98, p=0.0001) which signifies significant difference between the test and control group regarding the influence of philosophical stories on increased emotional intelligence.

The modified mean of test group was significantly more than control one. This signifies the influence of philosophical stories on increased emotional intelligence.

H.2-The philosophical stories influence the educational progress of male second graders in science lesson who are studying in Shahid schools of Birjand City. The results of covariance analysis are represented in the following table.

Table 2. Summary of Covariance Analysis Test of Increase of Increased Educational Progress

Source of Variations	Degree of Freedom	Mean Square	F	Level of Significance
Concomitant Variable (Pretest Scores)	7	14.07	42.40	0.0001
Collective effect (Test-Control)	1	19.18	57.79	0.0001
Error	41	0.33		
Modified Sum	49			

As the results of the above table show, the effect of concomitant variable is significant (i.e. F=42.20, p=0.0001) which signifies significant difference of pretest and posttest scores. In addition, the collective effect is significant (F=57.79, p=0.0001) which signifies significant difference between the test and control group regarding the influence of philosophical stories on educational progress of science lesson.

The modified mean of test group was significantly more than control one. This signifies the influence of philosophical stories on increased educational progress in science lesson.

5. Discussion and Conclusion

The objective of present study was to examine the effects of philosophical stories on emotional intelligence and educational progress of second grades of Shahid schools of Birjand City in science lesson. The results of present study concerning the first hypothesis, influence of philosophical stories on emotional intelligence of male second graders of

Shahid schools of Birjand City, show that the effect of concomitant variable is significant (i.e. F=26.20, p=0.0001). This signifies that the significant difference in scores of pretest and posttest. In addition, the collective effect was also significant (i.e. F=158.98, p=0.0001) which represented significant difference of the test and control group regarding the usage of philosophical stories on increased emotional intelligence. In addition, the modified mean of test group was significantly higher than that of control group. The results of present study matches the findings of previously conducted ones.

Hovaida and Homai (2011) suggested that there is a significant difference between mean scores of children of test and control group regarding the influence of Quran stories on four aspects of emotional intelligence (i.e. understanding one's and other people's emotions and feelings, control of feelings and emotions, social skills, positivism and positive viewpoint). Hatami et al (2011) suggested that offering philosophy course to children significantly influenced emotional intelligence, interpersonal skills and adjustment skills but no significant difference was observed in regard to intrapersonal skills, stress management skills and general skills.

The results of present study concerning the second hypothesis, influence of philosophical stories on educational progress of male second graders of Shahid schools of Birjand City, show that the effect of concomitant variable is significant (i.e. F=42.20, p=0.0001). This signifies that the significant difference in scores of pretest and posttest. In addition, the collective effect was also significant (i.e. F=57.79, p=0.0001) which represented significant difference of the test and control group regarding the usage of philosophical stories on increased educational progress in science lesson. In addition, the modified mean of test group was significantly higher than that of control group. The results of present study matches the findings of previously conducted ones. Rashtchi (2011) studied the role of children's fiction in development of thinking. P4C is one of the educational courses drawing the attention of those involved in education of children. In this course, the stories are used as the main training instrument because it is believed that the stories could enhance the cognitive skills and inquiry ability of children. Gharibi (2012) found out that teaching the way of thinking significantly increases the inquiry tendency. Inquiry could be enhanced through direct teaching of the way of thinking such as participation of subjects in classroom discussions and activities along with their exposure to surprising and challenging situations. Narimani et al (2008) suggested that the association of psychological hardiness, thinking styles and social skills with educational progress of students is positive. Of the three predictor variables, the variables of psychological hardiness and thinking styles can predict the educational progress of students.

The requirement of intellectual development is existence of certain characteristics such as openness of intellectual windows, expansion of horizons of thought, the idea of openness and flexibility; based on these characteristics, the individual has the ability to study different thoughts. Some thoughts are not only different from each other but in opposition to one another. Therefore, the capacity to tolerate hearing and familiarizing with them is essential. Smith believed that the individuals with philosophical thinking and mentality have three characteristics, namely comprehensiveness, depth and flexibility. Lipman (2003) considered the characteristics of philosophical thinking and determined the main criteria of teaching philosophy to children. One should finally emphasize that considering the significant difference between test and control groups of present study and associated works, the usage of philosophical stories to collectively address the audience plays a significant role in emotional intelligence and educational progress of students in science lesson. This signifies that the usage of philosophical stories in the process of education and entertainment could offer the students with a better future.

According to the research findings, it is suggested for teachers to use story-reading in order to promote thinking skills during the extra class time and to teach better. Moreover, teachers and school principals use philosophical stories in class leisure time (summer) so that it increases students' emotional intelligence and thinking skills .It is recommended that teachers use intellectual and philosophical stories in teaching lesson concepts to reinforce students' thinking skills, emotional intelligence, and academic achievement.

References

Akbari, A. (2013). Philosophy for children (P4C): Philosophical concepts in classic fictions of Persian literature. PhD Dissertation. Ferdowsi University of Mashhad.

Farzan Far, J. (2011). The study of philosophy for childhood and role of story in nurturing philosophical spirit in children. PhD Dissertation on Philosophy of Education. Tehran Tarbiat Moallem University.

Ghara Melki, A, F. (2006). Philosophy for Children: From rational thinking to philosophical experiences. Sadra Foundation. 1.

Gharibi, H. (2012). Effectiveness of teaching strategic thinking on critical thinking, behavioral change and inquiry among fifth graders of elementary school. PhD Dissertation. Tabriz University.

Goleman, D. (1998). Working with emotional intelligence. New York: Bantam.

Hatami, H, R., Karimi, Y & Noori, Z. (2011). The study of effect of execution of "Philosophy for Chilren" course on increased emotional

intelligence of first graders of elementary school of Shohadaye-Azadi of Tehran during 2010-2011. Thinking and Children, 1 (2), 3-22.

Hedayati, M., Ghaedi, Y & Shafii Abadi, A. (2010). The study of influence of philosophy for children as research community on improvement of relationships among elementary-school students from teachers' viewpoint, Quarterly of New Thoughts in Educational Sciences, Islamic Azad University of Rodehen, 10.

Hovaida, R & Homai, R. (2011). The effects of Quran stories on emotional intelligence of children, Journal of Educational Studies and Psychology, 11, 61-76.

Jahani, J. (2002). Analysis and study of philosophical principles of teaching Lipman's critical thinking. PhD Thesis. Tehran University.

Khodayar Mohebbi, Sh. (1998). Three discourses on philosophical literature for children. Research Journal of Literature for Children and Adolescents, 10: 27-39.

Lipman, M. (1983) Lisa: A child at school, In Bahrini, H (Trans.), Publication of Research Center of Humanities and Cultural Studies.

Lipman, M. (1993). Thinking children and education. USA Kendal hunt publishing company.

Lipman, M. (2003). Thinking in education. Cambridge: Cambridge University.

Marashi, S, M. (2007). The study of effects of sociological methodology in course of philosophy for children on nurturing of reasoning skills of third graders of intermediate level. PhD Dissertation on Educational Sciences and Psychology. Shahid Chamran University.

Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In: Salovey, & P. Sluyter, D. (Eds). Emotional development and emotional intelligence: educational implications. New York: Basic Books.

Naji, S. (2009). Philosophical inquiry for children and adolescents. Tehran: Publication of Research Center on Humanities and Cultural Studies.

Narimani, M., Abol-Ghasemi, A., Barahmand, A & Mohammad Amini, Z. (2008). The study of association of psychological hardiness, thinking styles and social skills with educational progress of students, Scientific-Scholarly Journal of Psychology, 4 (2), 10-23.

Rashtchi, M. (2011). Fiction literature for children and its role in intellectual development. Journal of Children and Thinking, Research Center of Humanities and Cultural Studies, 1 (2), 23-37.

Safai Moghadam, M., Marasgi, S, M., Pak Seresht, M, J., Bagheri, K & Sepasi, H. (2007). The effect of philosophy for children (P4C) on reasoning skills of third graders of intermediate governmental school of Ahvaz. Quarterly of Educational Sciences and Psychology, 13 (2), 31-54.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. Personality and individual differences, 25(2), 167-177.

Sharp, A, M. (1993). The ethics of translation, critical and creative thinking. Australasian Journal of P4C, 1 (1).