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Investigation of the Influence of Teaching via Story-Telling on Verbal Intelligence and Vocabulary of Preschoolers (Case Study: Sar-Pol-Zahab City, 2013-2014)

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ABSTRACT

The present research investigates the impact of education by story-telling on verbal intelligence and vocabulary of preschoolers. Research methodology was quasi-experimental with pretest and posttest and two experiment groups and a control group. Statistical population of the research included preschool children in Sar-Pol-Zahab city who studied in 2013-2014 academic years. 30 students were picked by means of accessible sampling method (15 people in experiment group and 15 people in the control group). Research instrument was Weksler's verbal intelligence scale which was implemented in two stages before and after intervention on both groups. Experiment group received 8 45-minute sessions of story-telling education. Data were analyzed by means of SPSS software. Descriptive statistics and inferential statistics were conducted by means of methods like covariance, Wilk's Lambda and M-Box methods. Results showed that there is significant relationship between education via story-telling and verbal intelligence and vocabulary of preschoolers.

KEYWORDS: story-telling, intelligence, verbal intelligence, vocabulary

INTRODUCTION

Story and story-telling has a long history and human has depicted his life within the framework of stories and stories have formed and changed human life. Stories are illustrations of our experiences. Life is a continuous process of organizing experiences. When there is no complete recognition of life, it seems necessary to assign meaning to experiences. Therefore, experiences and events of individuals turn into stories. Individuals discover meaningful relationships when telling stories and acquire deeper insights about them (Devayoudi, 1997). The present research tries to answer this question: "whether education through story-telling can improve verbal intelligence and vocabulary?"

LITERATURE REVIEW

Story and story-telling

Literally, story means narration and it refers to works in which emphasis is on extraordinary events rather than evolution of individuals. The main pillar of a story is spontaneous events without any impact on depiction of story heroes (Dad, 2003). Story-telling has a very long history in Iran but development of mass media and modern lifestyle have changed story-telling role in educational system. Story-telling is not yet considered as an educational technique and it has no specific place in educational system. Story-telling is a kind of ز literature. Familiarity with oral literature gives children a new understanding of language. Legends, narrations and fables which are told in the form of stories to children can enrich linguistic abilities of children (Nazemi, 2006, p 64). Moreover, stories familiarize children with new words. Telling stories has many advantages because it improves memory and improves verbal capabilities of children. Re-telling stories is the main practice for improvement of children speech-making capabilities and helps children experience active listening. Children naturally enjoy listening to stories because they follow and discover the flow of an unknown and strange story (Mohajeri, 2009, p 52). Story-telling is an active method for improvement of creativity and thinking because knowledge and memory are not enough for completing an incomplete story and students need to combine dreams and creativity. Further, they try to link their thoughts and dreams to the story and find new ways for improving it (Peter, 2010). Story-telling is a wonderful way of improvement of oral and practical behaviors (Mohammad Esmaeel, 2004). Delivery of story to children is conducted in written form and aurally. Telling stories is the main way of delivering stories to preschoolers because they cannot read. However, listening to stories to the higher ages which can read is also pleasing. As story-teller's specch-making power is higher, the story will be more effective in listeners. Change in tone, voice, use of silence and pause, use of hands and body language helps make stories more exciting (Feiz Sheikh-Aleslam, 2008). It is important to establish a link between story-teller and addressees. In this mutual relationship, the story-teller manages to entrap his or her audience's imagination and

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stimulate it and provide rich imaginary pictures for the listeners and make them to create new things and a world which is based on words and imagination (lali, 2005). Sitting position of listeners is important in providing an appropriate environment for story-telling and two points must be considered in this case: the story-teller's voice must be heard easily and the second is that he or she can be seen easily. Therefore, listeners must sit on a semi-circle in front of the story-teller and in a short distance. Sitting in such a position allows the audience to take part in pleasure of story-telling experience. Story narration time depends on the age of the listeners and story type but this time can about 8 to 15 minutes for little children and it can be increased for older ages (Mohajeri, 2009, pp 149-150). A story must be told naturally. Greece Hallorth, an easternIndian story-teller used this method. Densan Williamson, a Scottish story-teller, told stories full of laughter and satire. If a story-teller wants his or her audience enjoy a story, he or she must be natural and use the method he or she is capable in that method and thereby accompany his or her audience (right, 1958, pp 39-40). A good story-teller must have a flexible face in order to be able to express smile and frown, fear and hope and other emotions. Face states must be compatible with story states and caricature state must be avoided unless necessary. Movements must be natural and not pre-planned. Movements must be self-stimulated to increase effectiveness of the story (Hemmati, 2009, p 101). Education based upon a non-threatening and lovely story can increase children's knowledge and insight because they observe them in others' narrations and find solutions for their problems and substitutes (Sahebi, 2010). Jonson (2007) believes that story-telling is a powerful instrument which helps children understand their feelings and behaviors and helps them feel their abstract emotions objectively. A training which is based on stories is more attractive than that of direct training (Hefner, 2003). Telling stories at home is easier than telling stories in larger environments. The most important factor in story-telling is that the story-teller narrates naturally so that listeners think the story-teller is narrating his or her own experiences and imaginations and not what he or she has read or heard. Of course, this is not easy. A story-teller must be sensitive to audience's responses. Telling personal experiences and memories is one of the best ways for practicing story-telling. The first stories one tells may not be that effective in audiences and this should not make you disappointed. Re-tell the stories for others and you will see that you reach better results. Re-telling stories helps you find new points which help you in telling stories in better manners (Polviski, 2006). Education is the most necessary need of people and helps individuals with learning life skills and getting prepared for future life (Shafaee, Rahnama&Alaei, 2012). Today's Iranian children are different from previous ages' children. Today, children are aware of their surrounding issues and are immersed in the global village along with their parents. Development of IT and other technologies and access to devices and technologies like computer and internet has familiarized children with many stories from different societies. Of course, this may be positive and constructive. Familiarization of children with different nations cultures and customs via stories is useful and it is a worry for educational experts. However, this may be also harmful to children. Children compare foreign stories with internal ones and find novelties in theforeign stories and become attracted to them. So we need fundamental changes in educational system. Iranian story-tellers must try to add novelty to their present stories (Mohammadi and Qaeeni, 2009). When a story is told, a subject forms and different subjects become clear and personalities and objects are formed. When a child listens to stories, he or she may replicate with a personality or an event. Therefore, his or her interest in thoughts, feelings and behaviors of story personalities allows him or her to participate in experiences of personalities and transfer their personalities and experiences to him or her (Geldard and Geldard, 2003). For short, story-telling is an instrument for freedom because when a child is able to state his or her feelings fluently and clearly are an autonomous child. Using stories, we can show different methods of language use like educational directions, methods, secrets, warnings, questions and explanations. Creative imagination turns story-telling into an art. Creativity in language brings knowledge, culture and cognition (AqaAbbasi, 2009, p 186). Educational impacts of story-telling on children are as follows: 1. Relationship between childrenand story concepts, establishment of emotional relationship with its personalities being influenced by behaviors and states which result in deep understanding. 2. Progress in establishment of relationship with others and influencing on others which can be achieved after telling story at others' presence. 3. Improvement of collaboration and cooperation morale in children which results in mutual expression of affection. 4. Improvement of speech-making power in children (Mirzabeigi, 1994, p 128). Furthermore, story-telling can be a means for development of language via mutual contact with story-teller. However, story-telling is not yet used for improvement of curricular understanding. The only listening skill improvement which is achieved by story-telling is enough to embed story-telling in educational programs) Chambers, 2006, p 49). Using story-telling, great changes can be made in children's learning, creativity and literacy (Reimond, 2008).

Verbal intelligence

The other variable which is under study in the present research is verbal intelligence. Intelligence is a word which is very common in every day talking but its definition is difficult. Definition of intelligence is difficult because it refers to a very complex reality and has many aspects. Old researchers considered intelligence and general factor or characteristic which is expressed within a wide range of behaviors. However, subsequent psychologists defined intelligence as a collection of relatively independent abilities. In the first viewpoint,

intelligent people were superior to other people from many aspects while in the second viewpoint, individuals might have high levels of logical intelligence but low levels of artistic intelligence. The second difference between the first and the second viewpoints is the difference between being hereditary and adaptability of intelligence (Judit and Arthur, 2000, p 110). Concerning intelligence, psychologists are divided into two groups: the first group believes that intelligence is a unit overall talent but the second group believes that there are different types of intelligence. The fact that intelligence is an abstract concept makes its definition difficult and it does not have any tangible, objective and physical bases. Intelligence is a general label for a group of processes which are inferred from individuals' clear responses and behaviors (Ganji, 2007, p 24). Intelligence is a notional construct and not a human neurologic characteristic. In other words, intelligence is a forged concept which has been designed by psychologists for ease of communication. However, different psychologists have commented on intelligence. These theories have been classified into three categories: psychometric viewpoint, Piaget's viewpoint and information processing viewpoint. Psychometric viewpoint: it is the oldest viewpoint concerning psychometric. This viewpoint deals with measurement of psychological functions. Intelligence has been defined in different ways in theories related to this viewpoint. Weksler (1958) defined intelligence as a general ability which enables individuals to think logically, act purposefully and interact with surroundings effectively (Seif, 2003). Verbal intelligence is related to application of language and involves sensitivity to written and speech language and ability to use words and language. Individuals who have high levels of this aspect of intelligence have high abilities in understandings concepts and words (Poursharifi, 2008). In general, as information environment is richer, children are more probable to have higher verbal abilities. Many children have rich educational background before they go to school because their parents read many books for them took them to observe the nature and surroundings and visit their friends. Such parents establish good verbal relationships with their children and answer children's questions well and transferred their experiences to them. It is natural such children be more prepared for reading (Hoseini, Qiasi, 2011). Interaction with skilled speech-makers is very important in childhood. Conversation with parents contributes to preliminary linguistic skills. Parents should not criticize children for grammar mistakes because this might dishearten children. Talking about album pictures is a very effective method for talking to children (LouriBerk, 2001). Semantics includes three aspects: image words, relational words and oral words. visual words deal with listening system (received skills). Relational words are concerned with organizational system (mediating integration skills). Finally, oral words concern talking system (speech skills). These three aspects of verbal skills measure children's vocabulary. However, grammar aspect concerns with grammatical understanding, sentence completion and knowledge about application of words in different sentence states. In general, verbal intelligence is made up of six main skills (Newcomer, Hamil, p 13).

RESEARCH METHODOLOGY

The present research is a quasi-experimental study with a pretest and a posttest and aims to investigate teaching by story-telling method on verbal intelligence and vocabulary of children in comparison with traditional method. Children in the experiment group received 8 sessions of training and the control group were trained without telling stories. The statistical population of the research included all preschoolers aged 5-6 in Sar-Pol-Zahab city in 2013-2014 academic years. 30 preschoolers were selected as sample members. They were selected by means of accessible sampling and 15 students were put into the control group and 15 students were put into experiment group. Weksler's intelligence scale which was published in 1967 and revised in 1989 was used for collecting data. it is used for children aged 4-6 and has 11 subscales which measure verbal and non-verbal intelligence and overall intelligence. Verbal intelligence is intended in this research. Verbal scale has 5 main subscales including information, words, numerical calculation, similarities and reading comprehension and a complementary subscale (sentence-making) and these scales have been aligned according to difficulty (Azkhosh, 2008, p 66). Reliability of verbal intelligence scale was reported to be equal to 0.086. retest method was used for determination of validity and reliability of the scale. In a study conducted by SHahim and Razavi (1990) on preschoolers, the reliability coefficient was 0.083. Weksler considered correlations between subscales as guaranteeing validity of the questionnaire. Investigations showed that all subscales have positive correlations with each other and verbal subscales have also more correlations. Questions which are going to be studied in this research are as follows:

Does teaching by story-telling method influence preschoolers' comprehension?

Does teaching by story-telling method influence preschoolers' vocabulary?

Does teaching by story-telling method influence preschoolers' calculation abilities?

Does teaching by story-telling method influence preschoolers' verbal intelligence?

Research findings

Descriptive indices like percentage, standard deviation, mean and frequency table were used in descriptive statistical analysis. Covariance method was used to analyze data. it is an appropriate technique for controlling differences between groups. Data analyses were conducted by means of SPSS22 software.
Covariance test for investigation of the main hypothesis:
Main hypothesis: "teaching by story-telling method influences preschoolers' verbal intelligence."

Descriptive statistics table one

SD	mean	number	Groups	tests
4.20	79.12	15	Control group	**pretest**
3.93	81.23	15	Experiment group	
2.88	80.14	15	Control group	**posttest**
3.89	107.21	15	Experiment group	

Box's M table two

Statistic value	6.63
F value	4.25
First df	5
Second df	26
Sig.	0.19

Considering the fact that significance level in Box's M test is greater than 0.05 (0.19), test precondition, i.e. equality of covariances holds.
Mean scores of verbal intelligence variable test in control group and experiment group was equal to 79.12 and 81.23, respectively. These mean values are equal to 80.14 and 107.21 in the posttest for control and experiment groups, respectively. This shows that mean values reduced considerably in experiment group's posttest.

Wilks Lambda test table Three

Sig.	F value	Statistic value
0.0001	256.60	0.03

As Wilk's Lambda test value is closer to zero, mean values have more differences and as it approaches to 1, there is no difference between mean values. In this test, Lambda test value is equal to 0.03 which is close to zero and significance level is equal to 0.0001 which is smaller than 0.05. this shows that mean values have significant differences in the posttest and pretest.

Respondents' internal impacts test Four

Sig.	F value	df	Acceptance test Covariate
0.0001	284.40	2	563.12

Acceptance test show that whether the test variable (teaching by story-telling) was effective or not? Considering the above table, because significance level was equal to 0.0001, and is smaller than 0.05. Therefore, it can be said that the test variable (teaching by story-telling method) was effective and increased students' verbal intelligence. In general, considering post hoc tests (Wilk's Lambda and acceptance test), it can be said that teaching by means of story-telling influenced on verbal intelligence of preschoolers and the above hypothesis is supported.

CONCLUSION AND DISCUSSION

Results showed that teaching via story-telling influences verbal intelligence and its components (vocabulary, similarities, information, calculations and comprehension) significantly and positively. This result conforms to the results of studies conducted by Salari (2003) which was titled "influence of story-telling on vocabulary of children aged 3-6". Rafeei (2010) conducted a research titled "investigation of the impact of story-telling on students' reading skill" and found that story-telling influenced on speech tone and rhythm and comprehension (Rahmani 2009). Arshi (2000) conducted a research titled "a comparison of vocabulary of children aged 3, 4, and 5." His results showed that speeches lengths means increase by vocabulary, age, story-telling and free playing and this increase is statistically significant. Foreign studies: Setoulet et al (2007) conducted a research titled "increase in vocabulary by story-telling in children aged 4 and 5". They found that story-telling is a powerful predictor of linguistic performances in grammar and limitations in vocabulary result in limitations in other linguistic areas. Green (2011) found that "story-telling is a kind of expression of thoughts and ideas". In his research, students told keywords for completion of some stories. Ann Lock and John

Gisenberg (2002) conducted a research on 240 children aged 3 to 7 in kindergartens located in socially and economically deprived areas in England. They found that limited participation of children in linguistic conversations, story-telling and singing poems delay children' linguistic and verbal growth. Many psychologists believe that language helps to children's mental growth and we find that story-telling plays an important role in children's comprehension and children can obtain more words in daily conversations and comprehend meanings of many words.

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