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**THE EFFECT OF TEXT LESS STORY-TELLING CARDS TO REDUCE
MATHEMATICS LEARNING DISORDERS WITH PROBLEM-SOLVING
APPROACH IN GRADE-V, ELEMENTARY PUPILS IN LAR, SCHOOL YEAR 2014-
2015**

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ABSTRACT

This study aimed to analyze the effect of text-less story-telling to reduce mathematics learning disorders with problem-solving approach in grade-V elementary pupils in Lar, school year 2014-2015. The correspondents of the study included thirty two (32) grade five pupils from four different elementary schools in Lar. The correspondents of the study were divided into two groups of control and experimental of sixteen (16) pupils each. The research instruments included Wechsler's intelligence test and the text-less story cards. Wechsler's intelligence test was used to distinguish pupils with mathematics learning disabilities. The story-telling cards were used to improve pupils' mathematics learning. The experimental group undertook the story hearing for two months and then were post-tested. The mean scores before and after the instruction were compared, and the findings of the study were obtained, by t-test statistical measurement. The findings of the study showed that: the text-less story-telling cards increases both components of reasoning and judgment in children's problem solving skills. Thus, the children's problem solving skills can be increased by these text-less story-telling cards.

Keywords: Learning Disorder, Text-Less Story-Telling Cards, Problem Solving

INTRODUCTION

Learning is a process by which the children can attain full growth and developments. In spite of various teaching and learning methods some children face difficulties in their mathematics problem-solving learning, Karimi (2012).

Story-telling is one of the most attractive teaching art. Stories have covered most of the children's literature, Mirzabigi (1995). Through repetition of good and sweet stories, children's mind, and imaginations will be developed. Their memories will become active and their speaking ability will improve, Haddadian (2005).

Story-telling and the use of pictured story books helps the children to relate the pictures and to talk about them, Mobini (2009). Story-telling has a manipulative effect on children's creativity. On the other hand it is a mean to improve their understanding and imagination ability, Attaran (2011). When children attend preschool education they get familiar with a lot of words and terms by listening to different children's stories. Later, in elementary education these words will turn into writing, so sufficient writing skills will develop, Taj-Abadi and et. al (2006). Story-telling is expected to increase the children's problem-solving components. These components include reasoning and judgment abilities, Mokri (2006). Based on

the above mentioned the researcher attempted to investigate the effect of story-telling on children's problem-solving with text-less story cards in Lar.

METHODOLOGY

This study was a semi-experimental type of study. The correspondents of the study included thirty two (32) girl grade-V pupils from four different elementary schools. They were divided into two groups of control and experimental group. The problem-solving of both groups were both pretested by Wechsler's intelligence test. The experimental group attended the story-telling classes for two months. Then the two group were post tested.

Research Instruments:

The research instruments included: 1. Wechsler's intelligence test. The test was used to pre-test and post-test the pupils problem solving ability. This test included some questions to evaluate both children's verbal and practical intelligence. These two intelligence components are related to problem solving ability, 2: text-less story-telling cards. These cards were all pictured without any content (text). The stories were told to the experimental group and the pictured cards were shown to them.

DISCUSSION AND FINDINGS

In-order to find the effect of text-less story-telling cards on girl grade-V pupils'

problem solving abilities, the researcher hypothesized that:

The pictured text-less story-telling cards can increase reasoning, judgment, analysis, organizing and attention abilities in pupils. To verify the hypothesis the pupils were divided into two group of control and experimental group. The two group's problem-solving abilities were pre-tested

by Wechsler's intelligence test. Later the two groups attended the story telling classes for two months. Then, the two groups control without card and experimental with card were post-tested again. The gathered data was analyzed by t-test statistical method. The descriptive information of the correspondents is presented in **Table 1**.

Table-I, Descriptive information of the correspondents

Correspondents	F	%	Cumulative, F%
Control Group	16	50	50
Experimental G	16	50	100
Total	32	100	-

The statistical information of correspondents pre-test is presented in table –II.

Table-II Statistical Information of Correspondents Pre-test

Problem Solving Components	Control-Group			Experimental Group		
	$\sum x$	$\sum x^2$	\bar{X}	$\sum x$	$\sum x^2$	\bar{X}
Reasoning	91	546	5.7	94	564	5.9
Judgment	122	946	7.6	125	995	7.8
analyses	122	944	7.6	120	920	7.5
Organizing	106	716	6.6	104	692	6.5
Attention	108	681	6.75	106	730	6.6

The statistical information of correspondents' post-test is presented in table –III.

Table-III Statistical Information of Correspondents' Post-test

Problem-Solving Components	Control-Group			Experimental Group		
	$\sum x$	$\sum x^2$	\bar{X}	$\sum x$	$\sum x^2$	\bar{X}
Reasoning	103	681	6.4	128	1042	8
Judgment	127	1035	7.9	153	1057	9.6
Analysis	129	1069	8	152	1476	9.5
Organizing	117	687	7.3	149	1417	9.3
Attention	118	908	7.37	140	1266	8.75

Table-IV, Computed t-Values of Problem-Solving Components

Components	Control	Experimental	t-value 2.042
	\bar{X}	\bar{X}	
Reasoning	6.4	8	4.32
Judgment	7.9	9.6	3.2
analyses	8	9.5	3.12
Organizing	7.3	9.3	2.22
Attention	7.37	8.75	2.46

As it is shown in table II and III story-telling increases reasoning, ($\bar{X} = 6.4 > 5.7$) and ($\bar{X} = 8 > 5.9$), judgment ($\bar{X} = 7.9 > 7.6$) and

($\bar{X} = 9.6 > 7.8$), analysis ($\bar{X} = 8 > 7.6$) and ($\bar{X} = 9.5 > 7.5$), Organizing ($\bar{X} = 7.3 > 6.6$) and ($\bar{X} = 9.3 > 6.5$) and attention ($\bar{X} = 7.37 > 6.75$) and

($\bar{X} = 8.75 > 6.6$) abilities in both control and experimental groups. Furthermore, the effects of the text-less story-telling cards are more on experimental group comparing their mean score respectively:

The computed T-values of the components for both groups are presented in table-IV.

As it is shown in table-IV, all the computed t-values are greater than the standard $t=2.042$ at significant level of 0.05. Reasoning ($t=4.32 > 2.042$), Judgment ($t=3.2 > 2.042$), analyses ($t=3.12 > 2.042$), Organizing ($t=2.22 > 2.042$) and Attention ($t=2.46 > 2.042$).

Conclusion:

The researcher concluded that story-telling has significant effect on children's problem solving and the text-less story-telling cards have more effects because they help children think further. The pictured stories without text increases the judgment ability and this is cited by Nazemi's (2012) research finding. The sufficient numerical problem analysis of this study is also cited by Zakariae's (2007) findings. Finally, a mean to improve other children's aspects of development.

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REFERENCES

- [1] Attaran, Maryam (2011). Shahrzad the story teller, Iranian family center, Tiban site.
- [2] Haddadian, Reza (2005). The Effect of Story-telling on Children Creativity. Vol. 5. Second edition. P. 125.
- [3] Karimi, Yusef (2012). Learning Disorders, Savalan Publication, Vol. 5, P. 140.
- [4] Mirzabeigi, Ali (1995). Children's Short Stories. Samt Publication. P. 250.
- [5] Mobini, Mohammad-Taghi (2009). Children's Language Development Method. Samt Publication P. 325.
- [6] Mokri, Shohreh (2006). The Necessary Skills Literature Festival.
- [7] Nazemi, Yahya (2006). Children's Literature. Chapar Publication. Tehran.
- [8] Taj-Abadi, Rezad (2006). The Investigation of Children's Language Art and Story-telling Methods. P. 200.

- [9] Zakariae, Ali (2007). The Relationship of Story-telling and Children's Problem Solving Ability. P. 150.