



Research Article

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The Effect of Group Learning (Discussion) and Individual Learning Progress in Reading Performance of Dyslexic Students in Second Grade in 2016-17, Qazvin City

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ABSTRACT

Objective: This study aims to review group learning method effect compared to individual learning method on dyslexic students of second grade in elementary school and it evaluates whether their problem will be solved in group and by other's help? Thus, two methods of learning- Jigsaw I and Jigsaw II methods -were used to review their effects on improving learning and reading of children. **Methods:** Pretest-posttest design was selected due to semi-experimental method topic. Kessler and mental scale was used to gather data and a test for recognizing reading called Shirazie test was used to determine disorder amount of students reading, also data resulted from pretest, posttest, follow up and delayed tests were used to gather information. Validity coefficient was estimated .87 and reliability coefficient was .96 for total scale, .94 for class scale, and .91 for practical scale during one month that reliability coefficients' median was reported .75. 30 students were delivered learning services in learning disorders center by one mentor, and in two shifts, preferentially 60 students were under learning services, in this study, 30 students of first shift was selected randomly as experimental group and 30 students of second shift was selected as control group. Gathered information was used for statistical tasks with the use of independent groups' t-test and SPSS software in order to compare performance of two independent groups of experimental and control. **Results:** Study findings indicate that group learning method effect compared to individual learning method on reducing the problems of dyslexic students of second grade in elementary students of Qazvin city. It is deduced from hypotheses that group learning compared with individual learning is effective in no addition and/or removing words in text, group learning compared with individual learning method is effective in no addition and removing letter or syllable, group learning compared with individual learning method is effective in no substitution of words in text, thus it can be concluded that students that are learned by group method are enjoyed better performance in reading skill.

Introduction

Training and learning is a strategic task and this question was always raised for teaching and training experts that what we want to learn and how we want to learn it.

Learning is a behavior change that is created in human through experience and it consists of physical, mental skills and ideology (Seif, 1997). One of teaching-learning methods is group learning method. Group learning

enhance knowledge, remembering and memorizing and it expose people with live and explicit experience through correlation. Since 1950, mentors, psychologists and physicians paid attention to children and their learning that has no obvious complication in terms of physical and mental aspects, but they suffer from special disorders in learning and sometimes behavioral problem. The most common terms are: brain lesions, brain mild lesions, and nerve damages (Kamali Sarvestani, 1998). In psychology literature, dyslexic is referred to any disability in reading through which children will stay disable in terms of reading in their class and no objective evidence is excited that indicate disorders like mental retardation, major brain lesion or thrilled and cultural problems and also spoken language (Naemie, 2004). Dyslexia is a term that is used for children with disability in reading although they have natural consciousness and this group of children may know many words and use them easily in conversation but they cannot understand and identify written or printed signs. Research results show that natural children in elementary first grade and second grade face with problems like adding or removing letters, repeating words, reading words with extending their sounds (slow reading), adding a word that is in the text or substituting a word by another word, decomposing words into letters, combining remove and addition of words, replacing letter or word letters and sometimes they correct their reading by retelling (Seif Naraghie, 2002). Group learning is one of approaches and modern and active methods of teaching that can be responsive in many problems and difficulties, this approach has research backup (Ghaltash, 2003). Mac Shin (1982) states about reading and expression: reading consists of a set of skills that include re-identification of written word, determining meaning of words and phrases and coordinating this meaning with total situation of a text; this task requires processes that are applied in many different levels of representations such as letters, words, phrases, larger sentences of the text (Narimani, 2001). Problems of reading is typically includes disability in re-identification or understanding papers and among them re-identification process is considered more fundamental, because before we understand a word, we should identify it. Comprehension problems usually are in level of phrases and combining information of a sentence. According to Kaloger and Calson (1987), 85 to 90 percent of learning disorders are related to reading disorders. Children with reading disorders have almost similar characteristics including that they do not tend to read; their attention range is short; they have problem in concentration; they have

academic underachievement; they feel despair, incapability and timid; they are hesitate in oral and verbal reading and sometimes stammer; instead of moving their eyes while reading they move their body; when they read slowly, they move their lips or read another thing in their mind; they have weak auditory and visual memory and they do not have distinction and determination in their auditory memory (Polano and Adrian, 2005). Jalal Kalantari in academic year of 1993-94 conducted a research under guidance of Maryam Seif Naraghi under title of reviewing and comparing auditory perception of dyslexic students and natural students in elementary third grade in Mashhad city. Results of this study showed that dyslexic students hearing perception is significantly lower than hearing perception of students of elementary third grade in terms of statistics (Seif Naraghi Naderi, 2002). Bilateral learning is effective on comprehension and social growth of dyslexic students, in this regard: Biabangard and Shakiba (2002) conducted a research under title of "bilateral training method effect on reading comprehension and social growth of dyslexic students of elementary fifth grade in Jovein area in Sabzevar city in order to determine effectiveness of bilateral training method on reading comprehension and social growth of dyslexic students of elementary fifth grade and they concluded that those dyslexic students that were taught by bilateral training method had higher comprehension and social growth than dyslexic students who used science traditional method (Ghaltash, 2004). Geshoynd (1962) showed that dyslexia has correlation with left-handed, problems in visual perception, movement disharmonious, stuttering, delay in speech growth and inheritance and (problem method in family) (Karimi, 2004). Weakness in utilizing reading strategies causes problems in reading: Hook and Janson (1978) conducted a experiential research about reading strategies and they found that children with reading disability have problem in creating and evolution of cost-effective methods in processing reading materials and also they cannot use language structure categories as well as skilled children (Naemi, 2004). Based on findings of this study, this study aims to response to this question that: Can group method have positive effect on solving problems of dyslexic students with learning disability?

-Is group learning compared with individual learning method effective in lack of addition or removing words.

-Is group learning compared with individual learning method effective in making no mistake in pronunciation.

Research method in present study is pretest-posttest design, half-experimental method with control group. Statistical population in this study is all students of

elementary second grade that are enrolled in Education learning disorders center in Qazvin city and they were 60 people. Reading recognition test was used. Doing this test takes 8 to 10 minutes that includes three texts (cooperation, chicken and bird). Materials required for doing this test are answer sheet reading texts and stopwatch, the test is started with cooperation text and it is ended with bird text and time of reading each text is recorded. Scoring method is such that there is a table at the end of each text that children errors can be registered on them based on error type. Types of errors that are determined in this table are substitution errors, refusal,

mistake in pronunciation, addition and removing a word, addition and removing letters, corrective restate and movement.

Main hypothesis

Group learning is more effective than Individual learning method in reducing dyslexic students' problems of elementary second grade. Gathered data related to this hypothesis was reviewed through t-test, independent groups and its results were offered in following table:

Table 1: Describing data related to scores of reading recognition pretest

Variable	Number	Average	Standard deviation	Degree of freedom	T	Sig.
Control	30	30.6	9.96	40	0.009	0.01
Experimental	30	30.5	9.93			

Table 1 shows that there is no significant different between score average of reading recognition pretest in

both groups of control and experiment and both groups were almost similar in the beginning of education or learning.

Table 2: Describing data related to scores of reading recognition posttest

Variable	Number	Average	Standard deviation	Degree of freedom	T	Sig.
Control	30	28.77	8.5 0	40	2.99	0.006
Experimental	30	22.03	6.82			

Table 2 shows that calculated t is 2.99 and degree of freedom of 40 and significant level is 0.006 that because it is less than 0.05, thus main hypothesis is confirmed, that is group learning is more effective than Individual learning method in reducing problems of dyslexic students of elementary second grade.

According to the table, average of control group is 28.77 and experimental group is 22.03 ($22.03 < 28.77$), as average of experimental group is less, indicating error levels are reduced. Therefore, group learning is effective. In questionnaire of reading recognition, average level

shows reducing or increasing error, here it can be said that experimental variable was effective in experimental group. group learning reduces students' errors level in reading and it leads to enhance performance and to improve reading in students of experimental group.

Findings

Analysis of sub hypothesis 1

Group learning is more effective than Individual method in not adding or removing words in the text.

Table 3: Comparing non-addition and/or removing words in text in control and experimental group

Variable	Number	Average	Standard deviation	Degree of freedom	t	Sig.
Control	30	3	2.66	40	2.32	0.04
Experimental	30	1.8	2.78			

Table 3 shows that calculated t is 2.32 with degree of freedom of 40 and significant level is 0.04 that is less than 0.05, thus hypothesis 1 is confirmed and it shows that there is a significant different between two groups and as average in errors of experimental group is less than control group ($1.8 < 3$), it can be said that cooperative learning is more effective than Individual learning method in not adding and/or removing words in the text.

Analysis of sub hypothesis 2

Group learning is more effective than Individual learning method in not making mistake in pronunciation.

Table 4: Comparing non-making mistake in letters pronunciation in control and experimental group

Variable	Number	Average	Standard deviation	Degree of freedom	t	Sig.
Control	30	3.3		40	1.57	0.19
Experimental	30	1.4				

Table 4 shows that calculated t is 1.57 with freedom degree of 40 and signification level is 0.19 that is more than 0.05, thus sub hypothesis 2 is not confirmed and it shows that there is no significant different between these two groups. It can be said that group learning is not more effective than Individual learning method in not making mistake in letters pronunciation. That is experimental variable was not effective in experimental group. Although no significant difference was seen but averages indicate that experimental group had lower error but this was not considerable.

Conclusion

Dyslexic students who were taught with group method have better performance in gaining reading skill compared with those students who were taught with individual method. Dyslexic students who were taught with group method have better performance in non-addition and/or removing words in the text compared with those students who were taught with individual method. Dyslexic students who were taught with group method do not have better performance in not making mistake in letters pronunciation compared with those

students who were taught with individual method. In this study, better performance of students with group method was confirmed due to findings and stated

materials. It was determined that group method is effective in improving dyslexic students, perhaps the reason of this performance can be found in statements of Amin Zadeh (2002), Flecher and Fooman (1994), Ernsin (1993) and Brouner et. al, (1995) and Henz (1990) and Ronald (1997). They said that when students with learning disability with shared problems gather together, they read texts for each other and they solve their problems, in this way students learn from each other, for this reason, they gain cooperation morale and this causes more self-esteem among them and they will be free from frustration and disappointment that were faced in the school. Interaction spirit and eagerness to learn other people and strengthening responsibility feeling of students will increase against self learning and other classmates. They will learn new techniques and strategies from classmates and self-leadership and positive attitude skills will be strengthen in them. Due to these findings, it can be said that reducing reading errors can be originated from these factors. Although students reading errors level are not removed completely, their amount is considerably reduced. group method of "Jigsaw I" is effective for reading short texts and group method of "Jigsaw II" is effective for reading long texts. The most basic errors of students are addition and removing letters and words and replacing words whose

related hypotheses (hypothesis no. 1 and 2) were confirmed and group learning method lead to reduce level of these errors, but number of movement errors were low in both control and experimental groups and group learning method has no special effect in reducing it, this indicates that movement error level is lower among this sample of students with learning disability.

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