

Use of Reflective Teaching in Reading Comprehension Achievement among Students with Emotional Behavioral Disorder

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Abstract

In this study, reflective teaching was used to improve the reading comprehension achievement of students with emotional behavioral disorder in Nsukka Local Government Area of Enugu State, Nigeria. Particular attention was paid to the location of the schools as moderating factor. Three research questions and two null hypotheses guided the study. The population of the study was 152 Junior Secondary School III students with emotional behavioral disorder. A sample of 35 of the students from four co-educational schools was used for the study. Reading Comprehension Achievement test was used to collect data. The instrument was face validated by three experts, from University of Nigeria Nsukka. Content validation of the instrument was ensured through the use of a test blueprint. A reliability index of 0.86 was obtained using Pearson's product moment correlation. Data collected were analyzed using mean, standard deviation and analysis of covariance. Results show that students exposed to reflective teaching achieved higher mean reading comprehension than their counterparts in the control group. There was no significant interaction effect of method and location on reading comprehension achievement of students with emotional behavioral disorder.

Keywords: Emotional behavior disorder, Reading comprehension, Reflective teaching

I. INTRODUCTION

The education of students with emotional behavioral disorder has been a subject of controversy (Gargiulo, 2003). Many individuals still question whether they should attend public schools due to their behavior (Heflin, Boreson, Grossman, Huette & Iigen, 1994). For instance, in about 55% statistics of the general school population, Gargiulo observed that they leave school without graduation, amounting to the highest dropout rate of all categories of students with special needs. Also, their behaviors constantly put them at great loggerheads with other family members, thereby putting the family's tranquillity and equilibrium at risk.

In the views of Tresco, Lefler and Power (2010), emotional behavioral disorder is among the most prevalent behavioral concerns among children and youth, occurring in an estimated 3-10% of children. Thus, it

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is recognized as a significant public health concern (Barkley, 2006). The IDEA (2010) requires that a student must exhibit one or more of the following characteristics over a long duration: difficulty to learn that cannot be explained by intellectual, sensory, or health factors; difficulty in building or maintaining good interpersonal relationships with peers and teachers; inappropriate types of behavior (acting out against self or others) or feelings (expresses the need to harm self or others, low self-worth, etc.) under normal circumstances; a general pervasive mood of unhappiness or depression and a tendency to develop physical symptoms or fears associated with personal or school problems.

Students with emotional behavioral disorder often have significant challenges learning to read, resulting in delays that can exacerbate other academic, emotional, and behavioral difficulties (Wehby, Falk, Barton-Arwood, Lane & Cooley, 2003). Thus, the need for support and guidance of trusted adults, school psychologists, speech -language therapists, special education teachers, and other staff members trained in working with students with behavioral and social challenges becomes imperative (Rochwell, 2017). More importantly, is the need for enhancement through reflective teaching and personal counselling by the school social workers. For instance, these students need individualized behavior supports from social workers in the school, such as a Behavior Intervention Plan, to receive a free and appropriate public education. They equally need explicit instruction on social skills and problem-solving skills as well as opportunities to practice these skills to increase their abilities to communicate their wants, needs and feelings effectively.

In a study by Mangal (2010), students with emotional behavioral disorder tend to experience enormous frustration, intra-psycho conflicts, poor self-esteem, emotional disturbance, feelings of failure and high anxiety levels. Zwozdiak-Myers (2008) found that adolescents with emotional behavioral disorder are more afraid, over vigilant, hesitant in nature, constantly shy, have difficulty adapting to social situations, and equally react strongly to new knowledge. All these affect their memory and ability to understand new concepts. The students find it challenging to acquire, sort and recall information. They find it difficult to pay attention to a major aspect of a situation for long. These imply that students with emotional behavior disorder need a unique teaching approach to acquire knowledge and skill. One of such approaches is clinical teaching approach which is exhibited in reflective teaching.

Reflective teaching looks at what one does in the classroom, thinks about why one does it, and thinks about if it works. By collecting information about what goes on in one's classroom and analyzing and evaluating this information, one identifies and explores one's own practices and underlying beliefs. This may lead to changes and an improvement in one's teaching. Research has found reflective teaching to be effective (Durkin, 1993; Hammond & Ingalls, 2003). It includes: reviewing and checking the previous day's work and re-teaching if necessary; promoting initial student practice of new content and skills and checking for understanding; providing corrective feedback; giving students an opportunity for independent practice; and conducting weekly and monthly reviews of progress. Reflective teaching involves identifying a problem, asking question about the problem to induce the learner to clearly reflect on his/her past personal experiences based on the subject matter. It is considered a continuous process of self-observation and self-evaluation. Giving emotional behavioral disorder students extra time to complete their assignment in their area of weakness, be it reading, writing, spelling or arithmetic, and offering extra help and guidance can promote reflection. The teacher could also help students with reading problems by teaching them perceptual skills. A teacher who is aware of listening and

speaking problems among students would encourage such students to listen to good audiotapes, and videotapes, recorded speeches, stories and asks them to recall the stories, draw lessons from the story, or to imitate the speaker or storyteller and guide to being any assignment at the simplest level, and move from easy to more complex level. Teachers handling these students with emotional behavioral disorder are also expected to teach them beyond their tolerance level, either in terms of the time/period or content material which can stress them by making the lessons short, interactive and exciting (Obani, 2006).

Comprehension is reading and the active process of constructing meaning from text. Reading comprehension is a complex interaction among automatic and strategic cognitive processes that enables the reader to create a mental representation of the text (Van Den Broek & Espin, 2012). Based on the information the researchers collected from English teachers, out of the three students with emotional behavioral disorder in class two of a Junior Secondary School in Enugu State Nigeria, they did not pass reading comprehension in the 2014/2015 academic section. Equally, at another Community Secondary School in Enugu State, out of four students with emotional behavioral disorder in class two, only one had a pass in reading comprehension. These students perform better in other subjects outside reading comprehension. What could be the reason? Could location be a factor?

According to Umo (2004), irrespective of location of schools, the students taught Igbo grammar using games as instructional strategy achieved higher than those taught without games. Owoeye (2010) in another study showed that the part of the community in which the schools were located had effect on the academic achievement of students with emotional behavioral disorder in subject areas, especially in mathematics, reading comprehension and others ($t=2.73$, significant at 0.05). Okoro (2011) found that school location had a moderating influence on students' achievement in cognitive and non-cognitive instruments in favor of the urban students. Finally, Ozioko (2015) found that school location significantly influences the students' achievement in Food and Nutrition when taught using the guided discovery method.

Theoretically, this study is anchored on Gagne's theory of learning (Gagne, 1962). This theory stipulates that there are several types or levels of learning. These are verbal information, intellectual skills, cognitive strategies, motor skills and attitudes. This theory is related to this work since it is built on the fact that different types of learning require a different type of instruction, which is the mainstay of reflective teaching strategy. The study generally seeks to investigate the effect of reflective teaching on the reading comprehension achievement of students with emotional behavioral disorder. Specifically, the study seeks to: ascertain the effect of reflective teaching on reading comprehension achievement of students with emotional behavioral disorder; determine the influence of location on the reading comprehension achievement of students with emotional behavioral disorder and ascertain the interaction effect of reflective teaching and gender on the reading comprehension achievement of students with emotional behavioral disorder.

Research Questions

This study was guided by 3 research questions. They are-

1. What is the difference in the mean reading comprehension achievement of students with emotional behavioral disorder exposed to reflective teaching and those exposed to the conventional method?

2. What is the effect of location of the schools on reading comprehension achievement of students with emotional behavioral disorder?

3. What is the interaction effect of method and location on reading comprehension achievement of students with emotional behavioral disorder?

Hypotheses

The following 2 null hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

H₀₁: There is no significant difference between the mean reading comprehension achievement of students with emotional behavioural disorder in urban and rural schools exposed to reflective teaching.

H₀₂: There is no significant interaction effect of method and location on reading comprehension achievement of students with emotional behavioral disorder.

II. METHODS

Study design and sampling

The study adopted a quasi-experimental research design. This involves experimental and control groups. The two groups were non-equivalent (Nworgu, 2006). The study was carried out in Nsukka Local Government Area of Enugu state. The area was chosen due to the growing number of students with emotional behavioral disorder found in the regular classrooms in the area. The study population was 152 JSS III students identified with emotional behavioral disorder in all the public junior secondary schools in Nsukka Local Government Area (PPSMB Nsukka L.G.A 2015/2016 Academic Section. There are 23 co-educational schools and 7 single-sex schools in Nsukka LGA. However, a sample of 35 JSS III students were drawn from the 152 students identified with emotional behavioral disorder from four public secondary schools after the researchers assessed all the JSS III students.

Also, with the permission of the principals of the schools, the form teachers of JSS III students in the four schools were approached to supply the researchers with information regarding the number of students with emotional behavioral disorder in their classes. This was based on students who had long-standing behavior problems in the school and with the school authorities. Through the teachers, 35 students were identified. This comprises 15 male and 20 female students.

A multi-stage sampling technique was used in this study. First, the purposive sampling technique was used to draw the 23 co-educational schools from the 30 junior public secondary schools in Nsukka LGA. Then four co-educational schools were drawn from the 23 co-educational schools through a simple random sampling technique. An intact class was used for the study such that all the students could benefit from the lessons.

Two separate schools each were randomly chosen in which one served as the control group while the other served as the experimental group. A sample of 8 males and 12 females was for the experimental groups, while the control group was made up of 7 male and 8 female students. The identified students with emotional behavioral disorder were administered with a test (Reading Comprehension Achievement Test) before

separating them into experimental and control groups. Then reflective teaching was applied for the experimental group. After the reflective teaching, a post-test was administered to both groups to determine possible change in performance. The effect of the treatment was determined by the post-test mean differences between the experimental (reflective teaching strategy) and the control groups (conventional method).

Data collection and analysis

The instrument for data collection was an adapted version of the standardized test of the Basic Education Certificate Examination (JSS Upper Basic 3). It was called the “Reading Comprehension Achievement Test” (RCAT). It was made up of two sections, A and B. Section A was on students’ personal data, while section B consisted of ten items on reading comprehension. It served as pre-test and post-test to the control and experimental groups. Validation of the instrument was made to ensure that the Reading Comprehension Achievement Test (RCAT) items were clearly and unambiguously stated, relevant to the study and enough to measure the effect of the treatment based on the location of the schools. Ten items on reading comprehension were used. The instrument was sent to experts in Special Education and Measurement and Evaluation units, all in the Faculty of Education, University of Nigeria, Nsukka for vetting. The comments and corrections were used to produce the final copy. Content validation of the instrument was ensured through the use of a test blueprint.

A test re-test for determining the internal consistency estimate of the Reading Comprehension Achievement Test (RCAT) was carried out using 10 male and 10 female JSS II students with emotional behavioral disorder in Igbo-Eze South Local Government Area. The answer scripts were marked by the researchers, and scores were kept. After two weeks, the RCAT was re-administered to the same sample. The scores of the test and re-test were correlated. The index of temporary stability of RCAT was found to be 0.86 using Pearson’s Product Moment Correlation. This indicated that the instrument was reliable.

The researchers trained four research assistants from the four sampled schools. Two research assistants each were chosen from two separate schools. The research assistants were the form masters of the classes used. The pre-test was given to them to test their performance before giving them a post-test after lessons to determine if there was change in their performances. There were also lessons on reading comprehension for four weeks, on four topics selected in line with the first term scheme of work for JSS III upon which lesson notes were written. The lessons were for both the experimental and control groups with the use of reflective and conventional teaching respectively. In addition, the research assistants helped in teaching the identified students with emotional behavioral disorder based on the experience of training given to them on how to use reflective teaching on such students by the researchers.

The control group was taught by two form masters who acted as the research assistants in both school locations using the conventional method of teaching. Similarly, the experimental group was taught by another two research assistants using the reflective teaching strategy. The pre-test items were reshuffled and used as the post-test. This reduced the likely effect of the pre-test on the post-test. In order to avoid researchers’ bias, the researchers were not directly involved in administering the instrument both in the pre-test and post-test. Rather, the research assistants did this instead. The researchers monitored the exercise and then collected the entire answer scripts, score and generate data that was subjected to statistical analysis. Mean and standard deviation was used to answer the research questions, while analysis of covariance (ANCOVA) was used to analyze the null hypotheses at 0.05 level of significance.

III. RESULTS

Research Question One

The students with emotional behavioral disorder who were taught reading comprehension using reflective teaching method as shown in Table 1 had mean reading comprehension achievement score of 59.95 with a standard deviation of 17.23 at the post-test and mean reading comprehension achievement score of 28.20 with standard deviation of 6.00 at the pre-test while those who were taught using conventional method had mean reading comprehension achievement score of 40.46 with a standard deviation of 7.78 and mean reading comprehension achievement score of 26.80 with standard deviation of 8.64.

Table 1: Mean and standard deviation of reading comprehension achievement of students with emotional behavioral disorder exposed to reflective teaching and those exposed to conventional method

Group	Pre-test			Post-test		
	N	Mean	SD	Mean	SD	Mean Gain
Reflective Teaching	20	28.20	06.00	59.95	17.23	31.75
Conventional Method	15	26.80	08.64	40.46	07.78	13.66

Research Question Two

As shown on Table 2, the reading comprehension achievement mean scores of urban and rural students with emotional behavioral disorder. It shows that students in urban schools had post-test mean reading comprehension achievement score of 55.38 with a standard deviation of 20.45 and reading comprehension achievement score of 28.55 with standard deviation of 7.08 at the pre-test while their rural school counterparts had post-test mean reading comprehension achievement score of 41.58 with a standard deviation of 11.55 and reading comprehension achievement score of 26.58 with standard deviation of 7.33 at the pre-test.

Table 2: Reading comprehension achievement scores of urban and rural students with emotional behavioral disorder

Location	Pre-test			Post-test		
	N	Mean	SD	Mean	SD	Mean Gain
Urban	18	28.55	07.08	55.38	20.45	26.83
Rural	17	26.58	07.33	41.58	11.55	15.00

Research Question Three

Students with emotional behavioral disorder in urban schools who were exposed to reflective teaching had a post-test mean reading comprehension achievement score of 67.00 with a standard deviation of 20.28 against their pre-test reading comprehension mean achievement score of 29.20 with standard deviation of 06.98 while the students in urban schools who were exposed to conventional method had a post-test mean reading comprehension achievement score of 40.81 with a standard deviation of 07.35 against their pre-test reading comprehension mean achievement score of 27.75 with standard deviation of 7.61. Similarly, students in rural schools who were exposed to reflective teaching had a post-test mean reading comprehension achievement score of 52.90 with a standard deviation of 10.23 against their pre-test reading comprehension mean achievement score of 27.20 with standard deviation of 5.00 while students in rural schools who were exposed to conventional method had a post-test mean reading comprehension achievement score of 40.00 with a standard deviation of 8.81 against their pre-test reading comprehension mean achievement score of 25.71 with standard deviation of 10.28.

Table 3: Interaction effect of method and location

Group	Location	Pre-test			Post-test	
		N	Mean	SD	Mean	Std. Deviation
Reflective	Urban	10	29.20	06.98	67.00	20.28
	Rural	10	27.20	05.00	52.90	10.23
Conventional	Urban	8	27.75	07.61	40.81	07.35
	Rural	7	25.71	10.28	40.00	08.81

Analysis of Covariance of the Influence of Location

Hypothesis One: The calculated value of F (2.833) of location on reading comprehension achievement of students with emotional behavioral disorder had an associated probability value of 0.103 as revealed in Table 4. The probability value is greater than the 0.05 level of significance ($p > .05$), the null hypothesis was accepted.

Hypothesis Two: Table 4 reveals that the associated probability for the calculated value of F (2.059) for the interaction effect of method and location on reading comprehension achievement is 0.162. Since the probability value of 0.162 is greater than the 0.05 level of significance ($p > 0.05$), the null hypothesis was accepted.

Table 4: Analysis of Covariance of the influence of location on the reading comprehension achievement scores of students with emotional behavioural disorder

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4300.226 ^a	4	1075.056	5.926	.001
Intercept	6356.371	1	6356.371	35.040	.000
Pre-test	49.601	1	49.601	.273	.605
Group	3303.572	1	3303.572	18.211	.000
Location	513.963	1	513.963	2.833	.103
Group * Location	373.488	1	373.488	2.059	.162
Error	5442.174	30	181.406		
Total	102932.000	35			
Corrected Total	9742.400	34			

a. R Squared = .441 (Adjusted R Squared = .367)

IV. DISCUSSION

The findings of the study showed that students with emotional behavioral disorder exposed to reflective teaching achieved higher than their counterparts who were taught using the conventional method. In other words, there is a significant difference between the mean reading comprehension achievement scores of students exposed to reflective teaching and those who were exposed to the conventional method in favour of those exposed to reflective teaching. This result is in line with the findings of Durkin (1993), Hammond and Ingals (2003) and Umo (2004). In addition, Umo (2004) found that irrespective of the location of schools, the students taught Igbo grammar using games as an instructional strategy achieved higher than those taught without the use of games. Also, Durkin (1993) and Hammond and Ingals (2003) showed that students exposed to the reflective teaching method achieved better than those exposed to the lecture method.

The study results showed that students with emotional behavioral disorder in urban schools achieved higher than their rural school counterparts. In other words, there is no significant difference between the mean reading comprehension achievement scores of students with emotional behavioural disorder in urban and rural schools. This finding disagrees with the findings of Owoeye (2010) and Okoro (2011). Owoeye (2010) found that the part of the community in which the schools were located affected the academic achievement of students with emotional behavioral disorder in subject areas, especially mathematics, reading compression, and others.

Okoro (2011) concluded that school location had a moderating influence on students' achievement in cognitive and non-cognitive instruments in favor of the urban students.

V. CONCLUSIONS

The researchers concluded that reflective teaching significantly proved more effective than the lecture method in enhancing the academic achievement of students with emotional behavioral disorder. However, school location was found not to be a significant factor. Therefore, the study recommended that both federal and state governments should encourage reflective teaching for reading comprehension in schools. Also, equal attention should be given to students in urban and rural schools during the teaching and learning of reading comprehension. Finally, the family should synergize with the school for effective implementation.

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