Self-Concept and Attitude Towards Reading as Correlates of Achievement in Reading Comprehension Among Students with Learning Disabilities in Ibadan, Nigeria

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Abstract

*This study investigated self-concept and attitude towards reading as correlates of reading comprehension (using expository texts) among students with learning disabilities in Ibadan, Oyo State. It adopted a correlational research design. One hundred and fifty (150) secondary school students were selected through random sampling technique. Four instruments were used to collect data for the study namely: an adapted version of the Screening Inventory Learning Disabilities Association of Ontario (r=0.63); Expository Comprehension Test for Senior Schools (ECTSS, r=0.74); Self-Concept Scale (SCS, r=0.78) and Attitude towards Reading Scale (ARS, r=0.65). Data collected were analysed using Pearson Product Moment Correlation (PPMC) and multiple regression analysis at 0.05 level of significance. Results showed that there was a significant relationship between students with learning disabilities' self-concept and their reading comprehension achievement (using expository texts) (*R = *.317). There was a significant relationship between attitude towards reading and comprehension of expository texts among students with learning disabilities (*R = *.273). The result further revealed a significant joint contribution of self-concept and attitude towards reading to comprehension of expository texts among students with learning disabilities (*$F_{(2,147)}$ *=10.12) This means that 10% of the variance on comprehension of expository texts was accounted for by the two predictor variables when taken together. Based on the findings, it was recommended that students with learning disabilities should be encouraged to become actively involved in debates, quiz competitions, clubs and workshops, in order to boost their self-concept and attitude towards reading comprehension. Teachers and parents should show more love, care and support to students with learning disabilities, thereby help in actually building a foundation for a high self-concept and positive attitude towards reading among the students.*

Introduction

Secondary school students with learning disabilities (LD) have deficits with cognition that manifest as visual and auditory processing difficulties as well as memory problems. Consequently, these students experience persistent problems in their ability to read and comprehend information presented to them in both written and oral forms despite having a normal intelligence quotient (Lazarus, 2009). Nevertheless, researchers such as Block and Pressley (2002) maintained that learners should be able to efficiently engage in the interactive process of reading comprehension involving the reader, the text and the context in order to succeed at school. In other words, students ought to be actively involved with text information in a way that conveys meaning that is specific to the reader.

Studies (for example, Kintsch and Kintsch, 2005; Hart, 2010; and Tompkins, 2014) have shown that reading comprehension could be influenced by several factors such as the reader's background knowledge, vocabulary and fluency, active reading

skills, critical thinking, decoding skills, knowledge of language structures, knowledge of text structures and genres, knowledge of cognitive and metacognitive strategies, students' reasoning abilities, motivation, interest, level of engagement, enjoyment of the material and overall reading ability. Unfortunately, secondary school students with learning and reading disabilities view reading as labouring and unsatisfying so they have little reading experience; as a result, they are not familiar with the vocabulary, sentence structure, text organization and concepts of academic 'book' language (Moats, 2002). Moreover, Moats, (2002) affirmed that because they do not read much their comprehension skills decline over time and they become poor spellers and poor writers. Conceptually, what usually begins as a core phonological and word recognition deficit, often associated with other language weaknesses, becomes a diffuse, debilitating problem with both spoken and written language.

Similarly, Gersten, Fuchs, Williams and Baker (2001) averred that students with learning disabilities face great difficulties in comprehending texts due to a number of deficits that affect their reading skills and competence. They also noted that these students fail to recall strategies needed for comprehension, they do not control their progress, nor do they adjust or regulate specific behaviours associated with successful comprehension. In addition, students with learning disabilities often develop negative thoughts and cognitions, which in turn, are associated with low levels of self-efficacy, reading interest (Schiefele, 1996), and motivation to read (Guthrie, Wigfield, Metsala and Cox, 1999; Sideridis, 2006).

Significantly, research has shown that how well a student comprehends a reading text could be determined by the text structure and features (Tompkins, 2014). Some texts are narrative in nature, while others are expository. In the present study, the primary area of interest is expository text structure. Daniels and Bizar (2005) noted that an expository text is typically organized using structures such as descriptions, analyses like comparison and contrast, syntheses of information such as generalization, presentation of problems and solutions, and cause and effect. This type of text is found in every subject from Mathematics and Literature to Social Studies and Science. Virtually every subject in school as well as every area in life utilizes exposition as a form of written communication. From this insight, one can readily conclude that the understanding and usage of this type of text is critically important to the academic achievement and advancement of all students including those with learning disabilities.

Generally, students demonstrate their understanding of expository texts in many ways. They locate and recall information, draw on the knowledge of the text structures and text organizers, write short reflective responses, complete multiple choice questions, think deeply and express ideas verbally, complete descriptions, recognize casual relationships, make local connections, interpret graphics and images and identify multiple points of view and specific details. However, Gajria, Jitendra, Sood and Sacks (2007) asserted that although all secondary school students are required to read a number of expository texts, many students with learning disabilities find it difficult to understand expository texts, be it in Mathematics, Science, History, Geography or Social Studies because they fail to link their prior knowledge to texts and contents.

Furthermore, the present study delved into the investigation of the relationship existing between the comprehension of many difficult expository texts by students with LD and the self-concept of these students. Schunk, Pintrich and Meece (2008) defined self-concept as an individual's belief about himself in terms of his academic, social, athletic and personal capabilities and characteristics. This could be negative or positive. Positive self-concept leads students to set challenging, yet attainable academic goals for themselves, feel less anxious in achievement settings, enjoy their academic work more, persist longer on difficult tasks and overall, feel better about themselves as individuals (Schunk, Pintrich and Meece, 2008).

In other words, high self-efficacy and self-concept are associated with good academic outcomes. Students who have higher self-concept are likely to attend to instruction, participate in tasks, and rehearse information to be remembered, expand effort, persist challenging tasks and have proximal, specific and moderately difficult goals (and have mastery goal orientation). They also feel competent in skills and have high confidence in their ability to learn and perform on task (Schunk, Pintrich and Meece, 2008).In addition, Dekrefflin (2003) found that students who have higher self-concept aim more at success in academics than those with low self-concept. He also found that students with low self-concept maintain a low level of confidence and negative self-perception and low level of performance. Likewise, self-concept has been associated with many serious outcomes, such as inattentiveness (Singer, 2005) and poor school performance (Elbaum and Vaughan, 2003; Singer, 2005).

More so, research has consistently demonstrated that students with learning disabilities have a lower global self-concept than other students (Bryan, Burstein & Ergul, 2004, Gans, Kenny & Ghany, 2003). Besides, self-concept has been found to correlate positively with reading achievement in the first language (McQuillan, 2000) and readers with positive self-concept are known to not only perform better but also more likely to persist through difficult reading tasks (Wigfield, Guthrie, Tonks and Perencevich, 2004).

Another important variable in this study is student with learning disabilities' attitude towards reading. According to Logan and Johnston (2009) attitude towards reading is an important factor that affects students' reading achievement and in-class reading activities, and determines whether they will become independent readers or not. Moreover, Senemoglu (2004) cited in Bastug (2014) observed that attitude is an internal situation that is acquired and has an effect on the selection of behaviour. Similarly, Inyang-Abia (2003) posited that attitude is a desire or tendency to approach or avoid something. He stated further that the attitude of an individual can be either positive or negative. When it is positive, the individual approaches the object. Otherwise, the object is avoided when attitude is negative.

Further, attitudes are relatively stable evaluations of persons, objects, situations or issues, along a continuum ranging from positive to negative (Wood, Wood and Boyd, 2007). Attitude has three components. They are: a cognitive component, consisting of thoughts and beliefs about the attitudinal object; an emotional component, made up of feeling toward the attitudinal object; and a behavioural component composed of predispositions concerning actions toward the object (Wood, Wood and Boyd, 2007).

In both theory and practice, a strong relationship between attitude towards reading and achievement in reading has long been assumed. For instance, Lawal

(1993) carried out an investigation on the attitude of secondary school students to programme learning tasks and found positive correlation between attitude and achievement of students. Besides, the result of the study by Lazarus and Callahan (2000) as well as that of Polychroni, Koukoura and Anagnostou (2006) showed that students diagnosed with learning disabilities in reading have negative attitudes toward reading. In another vein, Villaume and Brabham (2002) revealed that negative reading attitude can disrupt the possibility of every reading experience. In a recent study by Mihandoost (2013), the attitude and self-concept of eighty dyslexic pupils in primary four and five as against one hundred and twenty pupils without dyslexia were compared. The findings of the study showed a significant difference between pupils with dyslexia and those without dyslexia in measures of reading attitude and self-concept.

Statement of the Problem

Reading comprehension is an important goal of the reading process, yet having learning disabilities is believed to directly impact the acquisition of reading skills especially comprehension ability. Many students with learning disabilities lack the requisite comprehension skills needed to meet senior secondary school academic expectations and demands. Such skills include the ability to identify the main ideas and supporting details from the passage, draw inferences or make interpretations about key points, make judgments and evaluate the author's ideas, and critically analyse the author's opinions. That is, students with learning disabilities often fail to infer and read between the lines and at best, they mainly grasp literal information (who, what, why, when and where) stated in expository texts. During the primary school years, students with learning disabilities have difficulty with decoding, word identification and word study. These problems usually result in fluency (that is, accuracy, speed and prosody) and comprehension difficulties. However, comprehension difficulties may not be evident until when students reach the higher classes (secondary school) when comprehension challenges increase. Thus, students with learning disabilities in senior secondary classes may not be able to answer multiple choice, open-ended, close questions and true/false questions posed on different texts.

Consequently, the academic achievements of these students become greatly impaired. For instance, Omilani (2014) reported the submission of the Head of the West African Examination Council (WAEC) National Office, Nigeria. According to this report 529,425 candidates representing 31.28% obtained credits in five subjects and above including English language and Mathematics indicating that about 70% of the students failed. This implies that previous research efforts on reading comprehension have not yielded desirable results especially among secondary students with LD majority of who are among the number of students with poor WAEC result presented above. Therefore, more studies are needed to bring about improvement in performance of students in school subjects. Thus, this study investigated self-concept and attitude to reading as correlates of reading comprehension (expository texts) among students with learning disabilities.

Hypotheses

In this study, three hypotheses were tested at 0.05 level of significance.

1. There is no significant relationship between self-concept and achievement in reading

comprehension (using expository texts) by students with learning disabilities.

2. There is no significant relationship between attitude towards reading and achievement in reading comprehension (using expository texts) by students with learning disabilities.
3. There is no significant joint contribution of self-concept and attitude towards reading to achievement in reading comprehension (using expository texts) by students with learning disabilities.

Methodology

The study adopted a correlational design. The population for the study was made up of all students with learning disabilities in Senior Secondary School One (SSI) in Ibadan North Local Government Area of Oyo State. Random sampling technique was adopted to choose one Local Government Area (L.G.A) out of the five (5) L.G.As in Ibadan zone of Oyo State and four secondary schools from the chosen L.G.A. Next, the respondents were selected using purposive sampling technique. The inclusion criterion was the presence of learning disabilities among the respondents. After the selection of study sample, the research instruments were administered.

The researchers examined the past academic records of all Senior Secondary 1 students in the selected schools. This enabled them to select two hundred and eighty (280) students with low academic achievement. Then, screening for learning disabilities was conducted by administering an adapted version of the 34-item screening inventory by the Learning Disabilities Association of Ontario (LDAO)tagged "Screening Inventory Learning Disabilities Association of Ontario"(r = 0.63) to all the two hundred and eighty (280) SSI students with low academic achievement. Students were asked to rate each item in each of the 15 questions on a 4-point scale from 4 to 1; using the words, Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). This screening showed that one hundred and fifty (150) students from the four selected schools have learning disabilities. This gave a sample size of one hundred and fifty (150) respondents.

Three other instruments were also administered in this study: 1. Expository Comprehension Test for Senior Schools (ECTSS), 2. Self-Concept (SCS) and 3. Attitude towards Reading Scale (ARS).

The Expository Comprehension Test for Senior Schools (ECTSS), is a 20-item achievement test used to measure the dependent variable in the study, that is reading comprehension (using expository text). Four short expository passages titled: "Titanic", "Jet Streams", "The earth is a globe", and "Sea creatures" were presented to the students, with five literal and inferential questions posed on each passage. The researchers obtained the reliability of the instrument using Kuder Richardson (KR) 0.68 after conducting a pilot study.

The Self-Concept Scale was adapted from Self-Concept Clarity Scale, a 12-item scale, designed to measure self-concept of individuals and developed by Campbell, Trapnell, Heine, Katz, Lavallee and Lehman (1996). The Self-Concept Scale has ten items answered on four points ranging from: Strongly Agree (SA), Agree (A), Disagree (D), to Strongly Disagree (SD). The researchers obtained the reliability coefficient of (r = 0.78) using Guttmann split-half method, after conducting a pilot study with thirty students who were not part of the study respondents. Examples of items in the SCS are: "My beliefs about myself often conflict with one another" and "I feel that I am very good at my school work".

In addition, the Attitude towards Reading Scale (ARS) was adapted from Biology Attitude Scale, a 22-item instrument, designed to measure students' attitude towards Biology which was developed by Russell and Hollander (1975). The ARS is a ten-item measure and was answered on a four point scale ranging from: Strongly Agree (SA), Agree (A), Disagree (D), to Strongly Disagree (SD). Reliability coefficient of (r = 0.74) was obtained using Guttmann split-half method after conducting a pilot study. Examples of items in the ARS are: "Reading expository text is very interesting to me" and "I feel that I am very good at my school work".

Data collected in the study were analyzed using Pearson Product Moment Correlation (PPMC) and Multiple Regression Analysis.

Results

Hypothesis 1

There is no significant relationship between self-concept and achievement in reading comprehension (using expository texts) by students with learning disabilities.

Table 1: Pearson Product Moment Correlation of Self-Concept and Comprehension of Expository Texts by Students with Learning Disabilities

Variable	Mean	Std. Dev.	N	R	P	Remark
Comprehension of Expository texts	40.11	17.44	150	.317	.000	Sig.
Self-Concept	25.60	04.48				

Table 1 shows that there is a significant relationship between students with learning disabilities' self-concept and their comprehension of expository texts (r = .317, P < 0.05). The null hypothesis was rejected. This depicts that high self-concept would definitely improve the comprehension of expository texts of students with learning disabilities and vice versa**.**

Hypothesis 2

There is no significant relationship between attitude towards reading and achievement in reading comprehension (using expository texts) by students with learning disabilities.

Table 2: Pearson Product Moment Correlation of Attitude towards Reading andComprehension of Expository Texts by Students with Learning Disabilities

Variable	Mean	Std. Dev.	N	R	P	Remark
Comprehension of Expository texts	40.11	17.44	150	.273	.001	Sig.
Attitude	26.14	3.66				

Table 2 shows that there is a significant relationship between students with learning disabilities' attitude towards reading and their comprehension of expository texts (r = .273, P < 0.05). The null hypothesis was rejected. This implies that positive attitude towards reading would definitely improve the comprehension of expository texts of students with learning disabilities and vice versa**.**

Hypothesis 3

There is no significant joint contribution of self-concept and attitude towards reading to achievement in reading

comprehension (using expository texts) by students with learning disabilities.

Table 3: Joint Contribution of Self-Concept and Attitudetowards Reading to Comprehension of Expository Texts by Students with Learning Disabilities

Model	Sum of Squares	DF	Mean	F	Sig.
Regression	5486.096	2	2743.05	10.122	.000
Residual	39838.198	147	271.01		
Total	45324.293	149			

R= .348
R^2= .121
Adj R^2=.109

Table 3 shows a significant joint effect of self-concept and attitude towards reading to comprehension of expository texts among students with learning disabilities at R^2 = 0.121. In addition, 10% of the variance on reading comprehension (using expository texts) was accounted for by the 2 predictor variables when taken together. Hence, the joint contribution was significant at ($F_{(2,147)}$ =10.122; P<.05). This implies that self-concept and attitude towards reading of students with learning disabilities influence their comprehension of expository texts.

Discussion

The study revealed that there is significant relationship between students with learning disabilities self-concept and their comprehension of expository texts. This means that while the possession of high self-concept by students with learning disabilities would definitely improve their comprehension of expository texts, lack of high self-concept would equally affect the comprehension of expository texts of students with learning disabilities. To give credence to this assertion, self-concept has been found to correlate positively with reading achievement in the first language (McQuillan, 2000), and readers with positive self-concepts will perform better and more likely to persist more on difficult reading tasks (Wigfield, Guthrie, Tonks and Perncevich, 2004).

Further, in their study Schunk, Pintrich and Mecee (2008) explained that positive self-concept lead students to set challenging yet attainable academic goals for themselves, feel less anxious in achievement settings, enjoy their academic work more, persist longer on difficult tasks, and feel better about themselves as persons and as students. In other words, high/positiveself-concept is associated with good academic outcomes becausestudents with high/positive self-concept are likely to attend to instruction, participate in task, rehearse information to be remembered, expand effort, persist on challenging tasks and have proximal, specific and moderately difficult goals. They also feel competent in skills and have high confidence in their ability to learn and perform on tasks (Schunk, Pintrich and Mecee, 2008).

Moreover, this finding is in consonance with that of Mihandoost (2013) who found a significant difference between pupils with dyslexia and those without dyslexia in measures of reading attitude and self-concept. According to Mihandoost (2013), a positive self-concept by students without dyslexia enabled them to obtain higher achievement gains in reading than their counterparts with dyslexia. The implication is that since many students with learning disabilities have negative self-concept resulting from their poor reading skills, low academic achievement

and school failure and increased potential for school dropout, teachers of students with learning disabilities should endeavour to boost their students' self-concept for improved reading performance.

The study also revealed that there is significant relationship between attitude towards reading and comprehension of expository texts among students with learning disabilities. This implies that lack of positive attitude affects comprehension of expository texts among students with learning disabilities and vice versa. This finding supports the result of Lazarus and Callahan (2000) as well as that of Polychroni, Koukoura and Anagnostou, (2006) which show that students diagnosed with learning disabilities in reading have negative attitudes towards reading. Similarly, Lawal (1993) carried out an investigation on the attitude of secondary school students to programme learning tasks and found positive correlation between attitude and achievement of students. In addition, this finding is consistent with that of Villaume and Brabtham (2002) which demonstrated that indeed negative reading attitude can disrupt the possibility of students' reading experience.

The study further revealed a joint contribution of independent variables (self-concept and attitude towards reading) to comprehension of expository texts, indicating that self-concept and attitude influence the comprehension of expository texts among students with learning disabilities. To corroborate this finding, Dekrefflin (2003) found out that an individual learner who has high self-concept aims more at success in academics than those with low self-concept. He also found that students with low self-concept maintain a low level of confidence, negative self-perception and low level of performance.

With reference to the above findings, it would be right to adduce that high self-concept and positive attitude towards reading lead to better reading achievement and vice versa. Therefore, teachers should not relent on their efforts until they have wiped out factors responsible for low self-concept as well as negative attitude in students with learning disabilities. To address this, students with learning disabilities should be exposed to self-advocacy programmnes, and effective instruction that is appropriate to the student's needs.

Conclusion

The major findings of the study revealed that self-concept and attitude towards reading have significant relationship with comprehension of expository texts of students with learning disabilities. The study specifically revealed that low self-concept and negative attitude undermine students with learning disabilities' ability to comprehend expository texts.

Recommendations

On the basis of these findings, this study recommends that students with learning disabilities who have low self-concept and negative attitude towards reading should brace up to the challenges of poor achievement in comprehension of expository texts by not making themselves objects of pity. Rather, they should believe in themselves as to be able to bring out the best in them in order to compete with their counterparts. Teachers should teach students with learning disabilities skills and strategies that would enable them to build positive attitude towards reading in general and in particular, reading expository texts.

The school alone cannot bring about the needed effect of fostering self-concept and building positive attitude of students with learning disabilities.

Therefore, the home and society should not be left out in this. Parents and siblings should show more love, care and support to students with learning disabilities, thereby help in actually building a foundation for a high self-concept and positive attitude among the students. Parents and teachers should encourage students with learning disabilities to become actively involved in self-advocacy programmes like participation in: debates, quiz competitions, sport activities, clubs programmes and workshops. This is because through active participation, students with learning disabilities will develop a sense of belonging, gain more confidence, boost their self-independence, self-concept and attitude towards reading comprehension and academics.

Ministries of Education should regularly organize workshops and seminars on how to foster self-concept and attitude for the students with learning disabilities. Government should sponsor awareness programmes via television and radio stations to sensitize the public on how they can relate well with students with learning disabilities and provide them with the necessary support to build high self-concept and positive attitude towards reading.

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