
**EMOTIONAL INTELLIGENCE AND CRITICAL THINKING
SKILLS OF HEARING-IMPAIRED STUDENTS IN A NIGERIA
TEACHER TRAINING INSTITUTE**

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Abstract

Emotional intelligence and critical thinking skills of hearing-impaired students in a Nigeria teacher training institute in Nigeria was investigated. A descriptive survey design of correlational type was adopted and multistage sampling procedure was used to select 250 participants for the study. Two instruments were adopted and used for data collection. Emotional Intelligence Scale (EIS) designed by Nirmalo and Panboli (2018) which consisted of 27 items with four-point Likert scale; Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) was used to measure participants emotional intelligence. EIS reliability coefficient is 0.75. Owolabi Critical Thinking Test (OCTT) developed by Owolabi (2011) with a reliability index of 0.71 was also adopted to measure the critical thinking skills of the respondents. Descriptive and inferential statistics were used to analysed the obtained data. Two research questions were answered and one null hypothesis was tested. Results revealed that the emotional intelligence of hearing-impaired students is high, however, their critical thinking skills are poor. Hence, no significant relationship was found in the emotional intelligence and critical thinking skills of hearing-

impaired students. It was therefore recommended that the discovered high level of emotional intelligence should be sustained while the teaching of Critical thinking skills should be advanced.

Keywords: Emotional intelligence, Critical thinking, Skills, Hearing-impaired.

Introduction

Emotional intelligence can be referred to as holistic wisdom. Rapid rise in the current social ills in the society could be traced to inadequate attention to emotional intelligence in homes and schools. Also, emotionally imbalance tends to affects individual (students inclusive) thinking and behavior. Mayer and Salovey (1997) described Emotional intelligence as ability to perceive, evaluate and express emotions, ability to gain and produce emotions to facilitate cognitive acts of a person and others in order to catch effective social communication and growth. To Goleman (1995), emotional intelligence is a skill use in perceiving accessing and managing the emotions of one's self, and of others. Emotional Intelligence is an array of non-cognitive capabilities, competencies and skills that influences one's ability to succeed in coping with environmental demands and pressures. Knowing and managing personal emotions, sympathizing with others and manipulation of communications in order to be satisfied with them are included in the theory.

Goleman (1998) believed that persons who benefit from high emotional intelligence have more talent to obtain information and have a more enjoyable life. He believed emotional intelligence as a general construct which can be the cause of persons' success in different aspects of life. People with a high level of emotional intelligence are found to be happier, more successful, and more socially responsible, experience more job satisfaction, have more harmony in their relationship and are better adjusted than people with low emotional intelligence. Daramola, Owolabi and Olutola (2013) submitted that hearing impaired students in Kwara State School for special Needs, Ilorin have low emotional intelligence.

On the contrary Ayoku (2017) found out that hearing impaired secondary school students in South West, Nigeria has high emotional intelligence.

One of the serious anomalies next to visual impairment is hearing impairment. Scathe to the hearing mechanism could lead to hearing impairment or loss of hearing which could range from mild to moderate and moderate to severe. Mba (1991) described hearing impairment as disability that has to do with total or partial inability to receive and interpret sound or speech as meaningful message. Hearing impairment can be classified as congenitally deaf and adventitiously deaf. The effects of hearing loss are not easy to identify. Hearing impairment leads to generalized learning difficulties and difficulties in specific areas. It affects both the language development and other aspects such as social, emotional, educational development and thought of the victim.

It has been observed that students with hearing impairment are emotionally disturbed. Controlling and managing their emotions seems difficult. This tends to have negative effect in their level of critical thinking and down turn their academic achievement. Luckner (2005) submitted that research has shown that deaf or hard of hearing students unsatisfactory prepared for the world of work. Learning to think critically therefore becomes imperative for hearing impaired students like any other individual. According to Arehart and Yoshinaga-Itanom (1999) deaf or hard of hearing children are at a high risk of delays in communication and language development, poor academic achievement, delays in critical thinking skills and problem with social and emotional development because of the central role that language plays in these essential areas. This was buttressed by Olanrewaju (2014)'s submission that 60.5% of hearing-impaired students in tertiary institutions in two states in Nigeria were poor in critical thinking. This finding corroborates that of Ajagbe (2012) that 63.2% of undergraduates though hearing in South-West Nigeria were poor in critical thinking. Also, McKinnon and Renner (1991) submitted that students' critical thinking level is low and that it should be taught for better improvement.

The quality of human life is a function of quality of their thought, as creativity is a function of critical thinking. The demands of employment in a global economy, the survival of a democratic way of life, and personal decision-making in a complex and rapidly changing society require people who can reason well and make good judgments. Our pluralistic society needs citizens who can fairly-mindedly evaluate the relevance of different perspectives on complex problems. For students, workers, and citizens, critical thinking is an essential tool for performing successfully in a complex and rapidly changing world.

The basic definition of critical thinking is the ability to take information and make informed decisions without being influenced by your own opinions (Kumskov, 2009). Fleming (2012) opined that critical thinking involves suspending one's belief to explore and question topics from a "blank page" point of view. In the simplest form, critical thinking may be regarded as that mode of thinking about any subject, content or problem in which the thinker improves the quality of his thinking by proficiently taking charge of the structures inherent in thinking (Adeyemi, 2011). To Dowden (2010) critically thinking means interpreting things correctly and accepting or rejecting it for good reasons and drawing reasonable conclusions from it. Dowden description of critical thinking is tandem to Owolabi (2010) three components of critical thinking-Evaluation of Argument, Recognizing Assumption and Test of Inference. Olanrewaju (2014) findings revealed that 76.5% of hearing-impaired tertiary institution students in two states in Nigeria were good in Evaluation of Argument, 63% were good in Recognizing Assumption while 48% were good in Test of Inference. This implies that the hearing-impaired students are relatively doing well in the first two components (Evaluation of Argument, Recognizing Assumption) but they were poor in the Test of Inference. Generally, Olanrewaju (2014) submitted that 60.5% of hearing-impaired students in tertiary institutions in two states in Nigeria were poor in critical thinking.

Studies have shown that the hearing impaired do not perform so well as their hearing counterparts in tasks that are highly reasoning oriented. To buttress this, Ademokoya (1995) found out

that most hearing-impaired students shy away from science mathematical oriented subject. Likewise, Diafrancesca (1978) observed that individuals with hearing impairment lack skills such as reasoning, long range goal setting, decision making and step-by-step thinking methods that will enable them remain successful in a competitive market. Meadow (1980) observed that, apart from language deprivation, impaired reasoning ability is the next devastating effect of hearing disability on an individual. Ademokoya (1995) attributed widespread poor reasoning among students with hearing impairment to the loss of their hearing and depriving environment in which they often grow up. On the contrary, Osakwe (2010), insisted that regardless of the way disabled students are being defamed, their innovativeness capacity still remains undoubted. Also, Daramola, Bello, Yusuf, and Amali (2019) submitted that creativity level of hearing-impaired students in Federal College of Education Oyo is good. It is evident from research that studies are inconclusive since there are divergence findings and submission on Emotional Intelligence and Critical Thinking of students with hearing impairment. This necessitates an investigation on relationship between emotional intelligence and critical thinking skills of students with hearing impairment in a Nigerian teacher training institute.

Purpose of the Study

The study specifically looked into:

- i. emotional intelligence level of hearing-impaired learners in a Nigeria teacher training institute;
- ii. critical thinking skills level of hearing-impaired learners in a Nigeria teacher training institute; and
- iii. relationship in the emotional intelligence and critical thinking of hearing-impaired learners in a Nigeria teacher training institute.

Research Questions

- i. What is the emotional intelligence level of hearing-impaired

- learners in a Nigeria teacher training institute?
- ii. What is the critical thinking skill level of hearing-impaired learners in a Nigeria teacher training institute?

Hypotheses

There is no significant relationship in the emotional intelligence and critical thinking of hearing-impaired learners in a Nigeria teacher training institute.

Methods

A descriptive survey design of correlational type was adopted for the study. The study population comprises of hearing-impaired learners in a Nigeria teacher training institute. The target population consisted of all hearing-impaired students in the institute School of Special Education. Purposive and simple random sampling techniques were used to select 250 respondents. The instruments used for data collection were 27 items adopted questionnaire on Emotional Intelligence Scale designed by Nirmalo and Panboli (2018) with reliability index of 0.75. Also, Owolabi Critical Thinking Test (OCTT) developed and validated in (2011) with Cronbach Alpha reliability coefficient of 0.71 was adopted. The OCTT consisted of 54 items that was divided into 3 segments: Evaluation of Arguments, Recognizing of Assumptions and Test of Inference respectively. Information collected from the participants to items on (OCTT) was scored such that a right answer attracted one mark while a wrong response attracted zero mark. The maximum obtainable score is 54marks which was divided by two (good and poor). When the maximum obtainable score (54) was divided by two, it gives 27. Thus, score of 27-54 and 1-26 indicated good/strong and poor/weak critical thinking skill respectively. The data obtained were analyzed using descriptive and inferential statistics.

Results

Research Question One: What is the emotional intelligence level of hearing-impaired learners in a Nigeria teacher training institute? Information collected on students' emotional intelligence was

subjected to percentage analysis. The minimum, maximum and range scores of respondents were 40, 90 and 50. The range was divided by the two levels (high and low) and the cut off was 25. Thus, 40-65 and 66-90 scores indicated a low and high level of EI respectively.

Table 1: Frequency and Percentage of Respondents' level of Emotional Intelligence

Level of EI	Frequency	Percentage (%)
High	167	66.8
Low	83	33.2
Total	250	100

It is revealed in Table 1 that 167 (66.8%) of the respondents have high emotional intelligence while 83 (33.2%) have low emotional intelligence. Thus, the emotional intelligence level of hearing-impaired learners in a Nigeria teacher training institute is high.

Research Question Two: What is the critical thinking skill level of hearing-impaired learners in a Nigeria teacher training institute?

Information collected from the participants to items on OCTT was subjected to percentage analysis as shown in Table 2.

Table 2: Level of critical thinking skills of hearing-impaired students in a Nigeria Teacher Training Institute

Critical Thinking Skills	Level	Frequency	Percentage (%)
Evaluation of Argument	Poor	69	27.6
	Good	181	72.4
	Total	250	100
Recognizing Assumption	Poor	100	40
	Good	150	60
	Total	250	100
Test of Inference	Poor	112	44.8
	Good	138	55.2
	Total	250	100
Grand Total	Poor	183	73.2
	Good	67	26.8
	Total	250	100

Table 2 revealed the participants' scores on the component and the total of critical thinking in the OCCT. One hundred and eighty-one (181) and 69 representing 72.4% and 27.6% of the participants were good and poor respectively in the Evaluation of Argument. In Recognizing Assumption 150 (60%) participants were good while 100 (40%) were poor. Also, 138 (55.2) respondents were good in the Test of Inference while the remaining 112 (44.8) respondents were poor in the same.

A total of the critical thinking skills of the participants showed that 183 participants representing 73.2% were poor in critical thinking while 67 respondents representing 26.8% were good in critical thinking. Thus, the critical thinking skills level of hearing-impaired learners in a in a Nigeria teacher training institute is poor.

Hypothesis One: There is no significant relationship in the emotional intelligence and critical thinking of hearing-impaired learners in a Nigeria teacher training institute.

Table 3: Pearson Correlation of Relationship between Emotional Intelligence and Critical Thinking of Hearing-Impaired Learners in a Nigeria Teacher Training Institute

Variables	N	r-value	p-value	Decision
Critical Thinking	250	0.01	0.87	Accepted
Emotional Intelligence	250			

As shown in Table 3 the correlation coefficient calculated value is 0.01 and its p-value is 0.87 at an alpha level of 0.05. The null hypothesis is not rejected since the p-value of 0.87 is greater than 0.05. Therefore, there is no statistically significant relationship in the emotional intelligence and critical thinking of hearing-impaired learners in a Nigeria teacher training institute.

Discussions

Finding of this study revealed that emotional intelligence level of hearing-impaired students in a Nigeria teacher training institute is high. This finding amplifies that of Ayoku (2017) that hearing impaired secondary school students in South West, Nigeria have high emotional intelligence. On the contrary the finding is not in tandem with the submission of Daramola, Owolabi and Olutola (2013) that hearing impaired students in Kwara State School for special Needs, Ilorin have low emotional intelligence. The difference in the finding of the present study and that of Daramola, Owolabi and Olutola (2013) could be as a result of level of education of the respondents which could be attributed to maturity.

On the level of critical thinking skills, it was revealed that above average of the sampled hearing-impaired students were good in Evaluation of Argument (72.4%), Recognizing Assumption (60%) and Test of Inference (55.2%) components of critical thinking. This finding except for Test of Inference concurs with the submission of Olanrewaju (2014) that 76.5% of hearing-impaired tertiary institution students in two states in Nigeria were good in Evaluation of Argument, 63% were good in Recognizing Assumption while 48% were good in Test of Inference. It could be deduced that the hearing-impaired students are doing well in the first two components (Evaluation of Argument, Recognizing Assumption). This finding confirms Ademokoya (1995) submission that most hearing-impaired students shy away from science mathematical oriented subject.

Generally, it was revealed that critical thinking skills level of students with hearing impairment in a Nigeria teacher training institute is poor because 73.2% of the hearing-impaired students were poor in critical thinking. This finding corroborates Olanrewaju (2014) submission that 60.5% of hearing-impaired students in tertiary institutions in two states in Nigeria were poor in critical thinking. The finding also supports Ajagbe (2012) submission that 63.2% of undergraduates (hearing) in South-West Nigeria were poor in critical thinking. However, the finding contrasts Osakwe (2010) opinion that innovative capacity of disabled students

regardless of their inability still remains undoubted. It also negates Daramola, Bello, Yusuf, and Amali (2019) submission that creativity level of hearing-impaired students is good. No significant relationship in the emotional intelligence and critical thinking of students with hearing impairment in a Nigeria teacher training institute was additionally uncovered. This finding contradicts that of Nicole and Anthony (2007) that established a positive relationship between students' emotional intelligence and critical thinking dispositions. However, the finding is in line with that of Hasanpour, Bagheri and Ghaedi Heidari (2018) whose study revealed no significant correlation between the scores of critical thinking skills and the scores of emotional intelligence skills among nursing students. Arehart and Yoshinaga-Itanom (1999) submitted that deaf or hard of hearing children are at a high risk of delays in communication and language development, poor academic achievement, delays in critical thinking skills and problem with social and emotional development because of the central role that language plays in these essential areas.

Conclusion

Sequel to the findings of this study it is concluded that the emotional intelligence level of learners with hearing impairment in a Nigeria teacher training institute is high. Also, their critical thinking skills level is poor, hence no significant relationship is found in the respondents' emotional intelligence and critical thinking.

Recommendations

In line with the results of this study, it is recommended that the discovered high level of emotional intelligence should be maintained. Since hearing-impaired students' critical thinking level is low it could be taught for improvement. Critical thinking skills could be taught through the stand-alone program or through an indirect method that integrates thinking skills development into the regular curriculum.

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