

*Full Length Research Paper*

# Captions resources and library patronage by hearing impaired students in university libraries of South-south Nigeria

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This study investigated the availability of Captions Resources and Library Patronage by Hearing Impaired Students in University Libraries of South-South Nigeria. One research question and one hypothesis were formulated to guide the study and were tested at .05 level of significance. Survey research design was employed. The population for the study was 57 hearing impaired students from 10 universities in South-south Nigeria. Purposive sampling technique was used in the study. A structured questionnaire was developed and used to elicit information from the respondents. Frequency distribution and percentages were used to determine the level of availability and use while Pearson Products Moment Correlation (PPMC) was used to test the hypothesis. The findings revealed that significant relationship exists between availability of captions resources and library patronage by hearing impaired students. The findings also revealed the non-availability and patronage of captions resources by hearing impaired students. The study concludes that the provision of captions resources for the hearing impaired students in university libraries in South-south Nigeria will increase patronage. Based on the findings, it was recommended among others that universities in South-south Nigeria should provide captions resources for the hearing impaired students in their respective libraries.

**Key words:** Captions resources, interactive searching, relay services, functionality.

## INTRODUCTION

There is a growing awareness in Nigeria of the need to remove every barrier to information access irrespective of handicaps and disabilities. This is so for library patrons with disabilities as reflected in the National Policy on Education (2004) which stipulates a definite provision of captions resources for the hearing impaired students in

Nigeria. Captioning is the process of converting audio information into text and displaying the text on the screen or monitor. They are words shown on a movie, television or computer monitor showing what is being said in the captions are synchronized with video image so that the viewer has equivalent access to the content that is

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originally presented in sound, regardless whether they receive that content via audio or text. The benefit of closed caption to the hearing impaired students in institutions of higher learning had been identified by The University of Washington Library (2012) as allowing hearing impaired students benefit from the rich collection of the library by displaying audio and other digital information into text.

Captions resources have been of tremendous assistance to the hearing impaired students the world over. Data obtained from the National Institute on the Deafness (2012) indicate that there are 87 million deaf and hard of hearing people studying in different institutions in United Kingdom which equate to 14% of the population. Mitchell (2012) while commenting on a survey conducted by the Survey of Income and Programme Participation (SIPP) indicated that 1 in 20 US are currently deaf or hard of hearing. In a round number, nearly 10,000,000 are hard of hearing and close to 1,000,000 are functionally deaf. Although in Nigeria there are no data on the number of hearing impaired persons, it is estimated that several thousands are studying in different institutions of learning across Nigeria including academic institutions.

### **Objective of the study**

The objective of this study was to investigate the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South Nigeria.

### **REVIEW OF RELATED LITERATURE**

Captions resources are generally regarded as bridge linking deaf individuals to the digital world so that they have access to library materials, news, entertainment, and other information. Studies have shown the usefulness of caption to students with hearing impairment. Koskinen (1988) in two studies employed captioned television in reading instruction for secondary school deaf students. Withrow (1994) reported on projects implementing captioned media resources in libraries for persons with hearing impairment. He reported that students were comfortable, and read with concentration. Evmenova (2008) investigated the effectiveness of alternative narration, various alternative captioning (highlighted text and picture word-based), and interactive searching the video for answers on content comprehension of non-fiction general education videos by students with intellectual disabilities. The study programme. The National Centre on Accessible Information Technology in Education (2013) noted that showed that students enjoyed learning with captioning devices. It was further concluded that captioning offers effective adapted curriculum and interventions supporting inclusion of

students with disabilities into content based education. In a comparative study of captioned video and face-to-face instruction for secondary school students with hearing impairment conducted by Atinmo and Egunjobi (2010), the result indicates that there was a significant difference in the learning outcomes of participant exposed to captioned video instruction and the group control. This suggests that caption video is very effective in library use instruction of students with hearing impairment. Austin (1981) and Messelheiser (1996) (as cited in Atinmo and Egunjobi, 2010) carried out a study on usefulness of captioning video in teaching library use skills. The study discovered that captioned video is useful in teaching library use skills. The study concludes that libraries should provide captions resources in libraries for persons who are deaf or hard of hearing. Atinmo and Egunjobi (2010) observed that the provision of captions resources is necessary in the library because it is one manner of accommodating hearing impaired persons in institutions. Similarly, Withrow maintained that libraries should provide captioning for media such as videos, DVDs, and streamed media technologies for deaf and hard of hearing students in universities of higher learning. Omoniyi and Oluniyi (2012) conducted a study on the impact of captioned video instruction on Nigerian hearing-impaired pupils' performance in English Language. The result indicated that captions video was effective in giving English language instruction to hearing impaired pupils. Fakomogbon (1998) examined the coordinated team approach in developing captioned video tape instructional package for special learners. The study had deaf students in an introductory technology class as the subjects. The result indicated that hearing impaired students learned and used the library better using captions video. Hutchinson (2005) investigated the effects of using Americans with Disabilities Act (ACA) compliant captioned instructional digital video on learning outcomes of participants drawn from Mississippi State University TCK 1273 class. The result indicated no significant effect of ADA-compliant captioned video on the students learning outcome. Captioned video allows hard of hearing or deaf students to access audio programmes and resources in the library. The caption feature allows the designer to give library user a deeper understanding of the video and enable users benefit from the rich collections in the library. Adding captions and sub titles makes videos more accessible to hearing impaired library users who cannot follow along with the audio.

### **Research question**

The following research question was raised to guide the study:

What is the relationship between the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South

**Table 1.** Distribution of population of the study.

<b>Universities</b>	<b>Hearing impaired</b>
University of Uyo	5
Akwa Ibom State University	2
University of Calabar	7
Cross River State University of Science and Technology	4
University of Port Harcourt	11
Rivers State University of Science and Technology	5
Delta State University	5
Niger Delta University	3
Edo State University	6
University of Benin	9
<b>Total</b>	<b>57</b>

Universities Admissions Units and Association for the Hearing Impaired Students, between 2007/2008-2012/2013 academic sessions.

Nigeria?

## Hypothesis

The following null hypothesis was analyzed and tested at 0.5 level of significance.

Ho<sub>1</sub> There is no significant relationship between the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South Nigeria.

## METHODOLOGY

### Research area

The area of this study is the South- south geo-political zone of Nigeria. The zone is popularly known as the Niger Delta oil zone of Nigeria. It is a tropical region, known for heavy rainfall. Major occupations are agriculture, fishing and extraction of raw materials, such as limestone, gold, oil etc; approximately 31 million people of more than 40 ethnic groups including the Bini, Efik, Ibibio, Annang, Oron, Ijaw, Itsekiri, Isoko, Urhobo, Ukwani, and Kalabari are among the inhabitants in the zone speaking about 250 different dialects. The South-south is made up of six states in the Federal Republic of Nigeria namely, Edo, Delta, Bayelsa, Akwa- Ibom, Rivers and Cross-River.

There are several academic institutions in the zone. They include the University of Uyo, Akwa Ibom State University, Obong University, Akwa Ibom State Polytechnic, Uyo City Polytechnic, Heritage Polytechnic, University of Calabar, Cross River State University of Science and Technology, Rivers State University of Science and Technology, University of Port Harcourt, Rivers State Polytechnic, Delta State University, Niger Delta University, Edo State University, Igbinedion University, Idahosa University, University of Benin. Etc.

### Research design

Survey design was adopted for this study.

### Population of the study

The population of the study was 57 consisting of all the hearing impaired students in universities in South-south Nigeria. The universities are University of Uyo, Akwa Ibom State University, University of Calabar, Cross River State University of Science and Technology, Rivers State University of Science and Technology, University of Port Harcourt, Delta State University, Niger Delta University, Edo State University and University of Benin (Table 1).

### Sample and sampling technique

All the hearing impaired students were sampled (57). Purposive Sampling Technique was used in the study.

### Instrumentation

A researcher-developed instrument was used in collecting data tagged "Captions Resources and Library Patronage by Hearing Impaired Questionnaire (CLPHIQ). The questionnaire was divided into two sections. Section A contained personal data of the respondent such as gender, age, name of institutions, faculty, department and course of study. Section B contained the questionnaire items generated in line with the research question and hypothesis. The questionnaire was developed on a four point rating scale; Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) to determine the availability of resources and Daily (D), Weekly (W), Monthly (M), and Never (N) to determine the frequency of use with grading range of 4,3,2 and 1 respectively.

### Administration of the instrument

The researchers collaborated with research assistants, who were students in the institutions under study to administer and collect the questionnaires.

### Method of data analysis

Frequency distribution and percentages were used to determine the availability and frequency of use of the resources. Pearson Product Moment Correlation (PPMC) was used for testing the null hypothesis at 0.05 level of significance.

**Table 2.** Availability of captions for the hearing impaired students.

	SA	A	Total	%	D	SD	Total	%
The library provides closed captions that support my learning and research programme	-	-	-	-	19	38	57	100
The library provides open captions that support my learning and research programme	-	2	2	4.4	18	37	55	95.6
The library provides other captions resources that support my learning and research programme	-	-	-	-	22	35	57	100

**Table 3.** Patronage of captions resources by the hearing impaired students.

	Daily	%	Week I	%	Month	%	Never	%
How often do you utilize closed captions in the library?	-	-	-	-	-	-	57	100
How often do you utilize open captions in the library?	-	-	-	-	-	-	57	100
How often do you utilize other captioning resources in the library?	-	-	-	-	-	-	57	100

**Table 4.** Pearson product moment correlation analysis of the relationship between availability of captions resources and library patronage by the hearing impaired students in universities of South- South Nigeria.

Variable	$\frac{\sum X}{\sum Y}$	$\frac{\sum X^2}{\sum Y^2}$	$\sum XY$	r-ratio	Decision
Availability of Captions(x)	139	449		0.892	Significant
Patronage of Captions (y)	132	396	417		

Level of significance 0.05, df= 57-2, critical r-value 0.288.

## FINDINGS

### Frequency distribution and percentages of availability of captions resources and library patronage by impaired students

Table 2 indicates unavailability of captions resources in the library for the hearing impaired students. Only 2 students agreed that open captions are provided in the library, being 4.4% of the total response. The other 55 hearing impaired students disagreed as regards the availability of the resources in the library

In Table 3, all the hearing impaired students in universities of South-south Nigeria indicates none patronage of captions resources in the library.

### Null hypothesis 1

There is no significant relationship between availability of captions resources and library patronage by the hearing impaired students in universities in South-south Nigeria. Data for testing the null hypothesis were obtained from

the questionnaire for the hearing impaired students.

The data in Table 4 indicate that the calculated r-value is 0.892, while the critical r-value is 0.288. Since the calculated r-value is greater than the critical value, the null hypothesis is rejected. This implies that there is a significant relationship between availability of captions resources and library patronage by the hearing impaired students in universities in South-south Nigeria.

## DISCUSSION

Findings of this study revealed a significant relationship between availability of captions resources and library patronage by hearing impaired students in university libraries of South-south Nigeria. This denotes that library patronage of captions depends on its availability. A library that provides adequate captioning resources for the hearing impaired students will experience increased patronage, but in a situation where the resources are not available students will not use the library except for other purposes. Analysis of the data obtained in the study indicates that hearing impaired students in universities of

South-south Nigeria have not been using captioning resources because they are not stocked in the library. This result is supported by the University of Washington Library (2012), that this legacy hardware is expensive, making the caption a costly endeavour in several institutions of learning.

The National Association of Special Education (2012) points out that just as other normal students have information needs, which should be properly disseminated to them, libraries should stock print resources along with translated audio-visual materials and other assistive technology resources such as captioning. Consequently, Golub (2010) asserted that audio-materials such as audio tapes, video tapes, etc. should be translated into print formats to make information accessible to the deaf and persons who are hard of hearing. When transcribing video materials, all sounds and actions must be mentioned.

## Conclusion

Indeed, this study has proven that patronage of captions resources in university libraries depends on its availability. The availability of captions in the library will increase patronage, but in a situation whereby these resources are not provided in the library, there will be no patronage by hearing impaired students. It was discovered in the study that universities of South-South Nigeria do not provide captions resources for the hearing impaired students, thereby resulting in none library patronage of the resources by these students.

## Recommendations

Based on the findings of the study, the following recommendations were posited:

1. Universities should provide adequate captions resources for the hearing impaired students in the library to facilitate learning and research.
2. All academic institutions in Nigeria should provide these resources for the hearing impaired students as stipulated by the National Policy of Education.
3. The National Universities Commission (NUC) should not accredit any university in Nigeria that failed to provide resources for the hearing impaired students.
4. Federal and state governments should release funds stipulated for equipping of university libraries nationwide.
5. Library staff should be trained on the use of captions resources in order to offer effective services to the hearing impaired students.

## Conflict of Interests

The authors have not declared any conflict of interests.

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