Perceived Influence of Information Sources Availability and Use on the Academic Performance of Secondary School Students in a Nigerian Metropolitan City

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Abstract   This study investigated the influence of information sources availability and use on academic performance of secondary school students using a descriptive survey design. Two hundred and eight senior secondary school students were randomly selected from six secondary schools in Ibadan. Data was collected using a self-structured questionnaire that covers all the variables under study. Percentage was used to answer the research questions while Pearson product moment correlation coefficient was used to test the hypotheses postulated. The findings indicated that information sources that are mostly available in secondary schools are the teachers and lesson notes while library and internet facilities are the least available. The result of the hypotheses showed significant relationship between the independent variables (information sources availability and use) and dependent variable (academic performance). r (206) = .21, $p < .01$. And r (206) = .42, $p < .01$ respectively. Implication for counselling and recommendations were made based of the results of the findings.

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1. Introduction

In educational institutions, success is measured by academic performance or how well student performs. The level and quality of a student's academic performance depends on a number of factors like grades, attendance, standardized test and extracurricular activities [11]. Academic competence is a multidimensional construct composed of the skills, attitudes, and behaviours of a learner which contribute to academic success in the classroom [7].

Crosne and Elder (2004) cited in Ali, Haider, Munir, Khanand Ahmed [2] observed that provision of facilities and availability of resources in schools are important structural components of the school and that access to information resources such as computers can enhance students' academic performance and educational attainment.

Academic performance is the demonstration of a student's level of competence and mastery of a subject [3]. For a student to perform well and be competent in the field of study, it is important that the student make use of relevant and pertinent information that will enhance the performance.

Meadow and Yuan [10] noted that information is a message that changes the recipient's knowledge base, that is, information significantly enhances the existing knowledge of the users. Information as a concept has no unified definition as there are many authors and writers with different perception and opinion on what information is. Information can also be seen as all that contributes to increasing one's general awareness, understanding or consciousness of a given topic. Similarly, Boakye [5] also defines it as some knowledge received or acquired by individual, a group, a society or a nation about an event, incidence or occurrence that contributes to the general awareness, understanding and level of consciousness of the activity in question.

Ajewole [1] categorized definitions given for information by different authors into three: the scientific and technical information (STI) which includes information found within the scientific and technological fields or domain that is mostly generated from research activities. Nwagwu [12] sees STI as all information developed from research undertakings in all science and technology fields. The second category is the socio-cultural which perceived information as knowledge which when transferred or disseminated, aids diverse human activities. Lastly, information was perceived as a resource. It is believed to serve as an important link between a variety of activities, piece or material and servicing individuals, institutions and the society at large.

A number of authors such as Kamba [8] & Ugnagha and Samuel, agreed that information plays a vital role in any development process especially by improving the general wellbeing of those that utilize it, thus implying

that lack of information can jeopardize any developmental efforts or process. On the other hand, scholars such as Boon [4] argued that information is power but remains worthless in any problem solving and decision making capacity except when used or applied effectively. Therefore utilization of information can improve the academic performance of students. Also the research work of Osunade, Ojo and Ahisu (2009) cited in Ogedengbe [13] showed a significant difference in academic performance between those who made use of a source of information (internet) and those who did not.

This study has adopted the last category that sees information as resources needed to enhance academic performance. In educational setting, aside from the human resources, books and other reading materials are considered to be another major sources being utilized for advancing and enhancing academic performance. Use of the library has also been found to positively affected the student performance (Young, 1999 cited in Mushtaq & Khan [11]).

Kimeu, Tanui & Ronoh [9] concluded from the study on the influence of instructional resources on students' academic performance that students' academic performance depended on teachers' reference books and guides, students' and teachers textbooks, charts, chalk boards and chalk, classrooms, and laboratory apparatus and chemicals as teaching and learning materials. This study has looked into kind of information sources available to secondary school students in Oyo state and how often are these sources are been used to influence the academic performance of students.

Information use is implicitly included in several information behaviour either based on cognitive or constructionist approaches. Information use is part of information seeking behaviour determined as physical and cognitive activities working on the inclusion of the fund information into the existing knowledge base of human [18].

Based on analysis of peer-reviewed papers in library and information science, Keri conceptualizes information use in terms of the outcomes of information. This is utilization of these outcomes to settle and satisfy the user's need. Two categories of outcome represent the use; the active outcomes which are internalization of information and canvasses use and the effects passive outcomes which are the effects of information in the activity.

Information use in organization is explained by Choo [6] as a dynamic, interactive social process of inquiry that may result in construction of meaning or making decisions. This study asked the following question: how available are information sources in secondary schools? how accessible are the information sources and how much of the information sources are being used by secondary school students?

While acknowledging the fact that several studies have been carried out on the various variable that can affect students' academic performance little or no work has been done on the perceived effect of information sources availability and use on academic performance of secondary school students, therefore, this study has assessed the perception of secondary school students on how information sources availability and use influence their academic performance.

2. Research Questions

1. How available are the sources of information in secondary schools in Ibadan?
2. How much do secondary school students use information available?
3. Will the use of information sources affect their academic performance?

3. Hypotheses

1. Information sources availability will not significantly influence the academic performance of secondary school students.
2. Information use has no significant influence on the academic performance of secondary school students.

4. Method

4.1. Design

A descriptive survey design was used to examine the influence of information sources and use one academic performance of secondary school students.

4.2. Participants

Participants for the study include two hundred and eight (208) secondary school students randomly selected from six secondary schools in the South-west Local Government, Oyo State.

4.3. Instruments

A self-structured questionnaire was used to collect data for this study. The questionnaire consists of four main sections **A B C D.** They include questions on demographic data, types of information sources available to students, use of information, and the perceived influence of the usage of information on their academic performance. The participants responded to the set of items in the questionnaire by expressing their level of agreement or disagreement based on a 4-point Likert Scale. A test-retest reliability of two weeks interval was conducted and cronbach alpha revealed a reliability score of .87.

4.4. Method of Data Analysis

The data collected from the questionnaire was analyzed and processed using percentage to ascertain the availability of the sources and how much of the information sources is used while Pearson product moment correlation co-efficient and multiple regressions were used to assess the relationship between the independent variables (information sources and use) and dependent variable (academic performance).

5. Result

The findings of this work are presented based on the research questions and hypotheses.

Research Question 1: how available are the sources of information in secondary schools in Ibadan?

Table 1. Information Sources Availability

Sources of Information Availability	Percentage of Availability			
	Very Available	Available	Rarely Available	Not Available
Library	15.4%	14.9%	6.7%	63.0%
Teachers	64.4%	29.8%	3.4%	2.4%
Television	16.8%	12.5%	19.7%	51%
Textbook	53.4%	36.1%	6.3%	4.3%
Lesson Note	55.8%	32.2%	7.2%	4.8%
Internet	20.2%	27.9%	22.1%	29.8%
Friends	64.4%	29.3%	3.8%	2.5%

The above table revealed the sources of information available to secondary school students. Friends (64.4%) and teachers (64.4%) are considered to be sources of information that are very available in the secondary school. Followed by lesson notes(55.8%) Textbook (53.4%), Internet (20.2%) almost not available are the Library (15.4%) and Television (16.8%).

Research Question 2: How much do secondary school students use information available?

Table 2. Usage of Information

Sources of Information Used	Percentage of Usage			
	Very Much	Much	Rarely	Never
Library	14.4%	15.4%	13.5%	56.7%
Teachers	58.2%	26.0%	8.2%	7.7%
Television	16.8%	18.3%	25.5%	39.4%
Textbook	53.4%	35.1%	7.7%	3.9%
Lesson Note	45.7%	29.3%	14.4%	10.6%
Internet	29.3%	24.0%	27.4%	19.3%
Friends	51.0%	24.0%	10.6%	14.4%

The above table revealed the usage of information sources by secondary school students. Out of the seven (7) sources of information available to secondary school student that were highlighted, the seven (7) were also rated for the level of their usage. Information from the teachers (58.2%) seems to be the most available source for secondary school students. Next to this are the Textbooks with 53.4%, Friends with 51.0%, Lesson Notes with 45.7%, and Internet with 29.3% while the least source of information used by secondary school student is the Television with 16.8%, closely followed by Library with 14.4%. The result from the table above indicates that information given by teachers are more useful to the students than any other information sources while the least information sources used by students is the library.

Research Question 3: Will the use of information sources affect their academic performance?

Table 3. Perceived Influence of Use of Information Sources on academic performance

Influence of Information sources used on academic performance	Percentage of Usage			
	Very Much	Much	Rarely	Never
Library	29.8%	23.6%	12.0%	34.6%
Teachers	52.9%	22.6%	10.1%	14.4%
Television	17.8%	21.6%	26.4%	34.2%
Textbook	50.5%	22.1%	11.5%	15.9%
Lesson Note	54.8%	19.7%	12.0	13.5%
Internet	21.6%	26.4%	26.4%	25.5%
Friends	40.4%	37.0%	13.9%	8.7%

The table above shows the result of the perceived influence of use of information sources against academic performance of secondary school students. The students perceived the **Lesson Notes, Teachers and Textbooks** with the percentage of **54.8%, 52.9% and 50.5%** respectively as the sources that can affect academic performances. The scores of other sources are below average such as information from friends (40.4%), Library (29.8%) and Internet (21.6%) this result indicates that friends, library and internet do not really have any influence on the academic performance as perceived by the secondary school students.

H01. Information sources will not significantly influence the academic performance of secondary school students.

Table 4. Correlation between Information Sources and Academic Performance

		Information sources	Academic performance
Information Source availability	Pearson Correlation	1	.210(**)
	Sig. (2-tailed)		.002
	N	208	208
Academic performance	Pearson Correlation	.210(**)	1
	Sig. (2-tailed)	.002	
	N	208	208

** Correlation is significant at the 0.01 level (2-tailed).

The correlation table above shows a significant relationship between information sources and

Academic performance with $r(206) = .21$, $p < .01$. Therefore the null hypothesis that stated:

Information sources availability will not significantly influence the academic performance of secondary school student is rejected. This implies that the sources of information can influence the academic performance secondary school students.

H02. Use of information sources has no significant influence on the academic performance of secondary school students.

Table 5. Correlations between Information Use and Academic Performance

		information use	Academic performance
Information Use	Pearson Correlation	1	.418(**)
	Sig. (2-tailed)		.000
	N	208	208
Academic performance	Pearson Correlation	.418(**)	1
	Sig. (2-tailed)	.000	
	N	208	208

** Correlation is significant at the 0.01 level (2-tailed).

The findings in the table above shows a significant relationship between information use and academic performance of secondary school students [$r(206) = .42$, $p < .01$] which means academic performance depends on the use of information available. Based on this result therefore, the null hypothesis that stated "Information use has no significant influence on the academic performance of secondary school students" is rejected.

6. Discussion

This finding in Table 1 shows that libraries are almost not available in most secondary schools and this in turn is

affecting the scope widening of students' horizon when it comes to learning. Likewise, Television seems to be irrelevant when it comes to being and information source for secondary school students to learn.

The findings indicated that Lesson Notes, Teachers and Textbooks as sources of information are more influential on the academic performance of secondary school students which is then followed by the influence of their friends on their academic performance.

Library has been discovered through the research findings to be least available and not always been used by students due to unavailability. Yet the library is considered by the students as the most influential on while television was considered to be the list influential. This could be as a consequence of Television stations not showing enough educative programs to assist students with their academic performance.

The result of hypothesis one that shows a significant relationship between information sources and academic performance is being supported by Kimeu, Tanui & Ronoh [9] who noted that academic performance of students depend largely on availability of sources of teaching and learning materials. Kamba [8] also stressed the important role information plays in the development process. Therefore, for students to be informed and equipped for academic endeavors, necessary instructional materials (information sources) need to be made available to them.

The findings in Table 5 above rejected the hypothesis two that says information use will not influence the academic performance of secondary school students. This is an indication that the usage of information is germane to the academic success of students as supported by Demaray and Elliott [7] who posit that behaviours, skills, and attitudes of a learner contribute to academic success in the classroom. This implies that the information seeking behavior, and attitude of the students are contributive factors of academic performance.

7. Conclusion and Recommendations

This study confirms the unavailability of information sources in most secondary schools in South-west Local Government, Oyo State, Nigeria, based on the perception of the students which automatically affect the use since usage of facilities depends on availability. Inadequate information sources especially library and internet facilities were also observed in this study and therefore affect the academic performance of the students understudy. The result of this study has implication for the government, school administration, teachers and counselors. Therefore the following are recommended:

- The government should make adequate provision of sources of information especially the ones that are germane to the improvement of students' academic performance such as the library with current and useful books, internet access, etc. and also employ school counselors and post them to secondary school.
- The school administration should maintain the existing information sources they have and make request to the government for the provisions of this sources.
- The teachers counsel and encourage the students to make use of the available sources.
- The school counselors should provide educational information services to students through orientation, group and individual counseling. Counseling them on the need to make good use of the existing facilities.

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