

Reading Interest and Alternative Format Utilisation by Persons with Visual Impairment in Nigeria

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Abstract

The transcription of information in conventional materials into alternative formats for the use of persons with visual impairment (PVI) in Nigerian libraries is often premised upon the belief that the reading interests of such persons are as varied as or similar to those of sighted persons. Such belief might be in error, thereby unwittingly forcing such persons to read whatever materials had been transcribed and provided for reading by the libraries instead of what they really want. This study was undertaken to obtain evidence to confirm or debunk the belief. Fourteen libraries, including public libraries and those serving users in non-governmental organisations, tertiary institutions and secondary schools, were purposively selected based on the population of their visually impaired users who used the alternative format materials. The sample of users was selected proportionately to population of PVI in the libraries, and data from 71.3% of the 563 administered copies of a questionnaire that were retrieved were analysed. The results show that adult PVI had high reading interests in religious,

business/enterprise and entertainment materials, and in manuals and reference materials, while secondary school respondents were interested in arts related subjects, reference materials, manuals, and animal stories. Braille is the most frequently utilised format (79.8%), although it was preferred by a lower percentage of the users (58.3%). The study recommends that the reading interests and format preferences of PVI, as had been found out in this and other studies, should be carefully considered when libraries are considering the nature of alternative format materials that should be provided for such users.

Keywords

Reading interest, Alternative Formats, Utilisation, Persons with Visual Impairment, Libraries, Nigeria

Introduction

Sighted persons can naturally read and communicate using conventional information materials such as print books, reference sources, serials, databases, etc. But for persons with visual impairment (PVI), reading and communication usually must be in alternative formats such as Braille, talking books and large prints because of their visual impairment. According to Royal National Institute for the Blind (RNIB) (2006), PVI refers to people with irretrievable sight loss, and this simple definition covers a wide spectrum of different impairments. Abosi and Ozoji (1985) clarifies that the visually impaired includes those who are totally blind, low visioned, partially sighted and those who have short sight, long sight or astigmatism. The visually impaired does not include those whose sight problems can be corrected by spectacles or contact lenses, or those whose sight might be improved by medical intervention (RNIB, 2006).

Persons with visual impairment, like their fully sighted counterparts, are expected to show interests

in gaining information from various disciplines and topics for academic and leisure purposes. The reading for information and knowledge interests of PVI may be as varied as those of sighted persons. This was confirmed by the studies of Horten and Horten (1995) and of Byrne, Cylke, Hagle, Herdon and Perry (1990). These authors also posit that the reading interest and the information materials required by PVI vary as do the users themselves, in terms of background and specific needs. They contend that the reading interest of PVI just like the sighted ranges from adventure to history, mystery, politics, biography, natural science, humour, romance, sports, religion, etc. In addition, people with visual impairment may also need information connected with their disability that sighted people would not bother about. So it becomes essential for libraries and other providers of information materials in alternative format for PVI to investigate periodically the reading interest needs and preferences in the rapidly changing information environments of digital societies.

Reading will be more rewarding to PVI if information materials are provided in their areas of need and interests and also in the appropriate format of readability. Knowledge of the reading interest of PVI will be useful for the planning of adequate library and information services in terms of types of information needed or desired, and the types of materials that should be acquired and made available in different formats. This will also help in the selection of the materials to be converted to alternative format.

In many countries, the demand for alternative format utilisation by PVI appears to be high, but the extent of utilisation of materials is limited by lack of inadequate availability of such materials. PVI in many parts of the world have been exposed to alternative formats use through the efforts of specialised libraries, non-governmental organisations (NGOs) and other affiliated institutions through constant production and distribution of reading materials in alternative formats. Some of these institutions sell materials, while many lend them to their visually impaired users (American Council for the Blind, 2005).

The demand for the utilisation of audio recordings appears to be higher than other formats among PVI in many developed countries (Anne,

2000; Davis, Wisdom and Greaser, 2001). Audio recordings are popular among children and adults, even though there has always been a small but important demand for Braille by borrowers or buyers (National Library of Canada, 1996). In Nigeria, Basharu (2000) and Atinmo (2002) have highlighted the fact that PVI have visited libraries asking for materials in alternative formats to borrow to read or listen to. They also sometimes bring printed matter to libraries to be transcribed to Braille.

This is part of a larger study entitled "Relationship among Reading Interests, Information Materials Availability and Alternative Format Utilization by Persons with Visual Impairment in selected Libraries in South western Nigeria" earlier submitted for doctoral thesis at the University of Ibadan, Nigeria.

Statement of the Problem

Most libraries providing information services to the public and various groups in Nigeria have not been providing materials geared towards meeting the potential or latent needs of PVI for materials in alternative formats. The focus of government, libraries and institutions offering information services have not adequately recognised the reading interests of PVI in Nigeria, possibly because they are not aware of the population of PVI and their needs, or the need for special programmes for minority and disadvantaged groups such as PVI. Invariably, libraries providing information services to PVI have not met the reading interest of their visually impaired users. In many of the libraries providing information services to PVI, information materials in terms of Braille, talking books and large prints are generally inadequate. Utilisation of alternative format in libraries is low even though PVI have always demanded for increased use of alternative format in Braille, large prints and recorded tapes. There is constant need for research evidence to be updated and provided to policy makers in government and libraries on the conditions and needs of such special and disadvantaged groups in Nigeria that they are expected to serve. As emphasised by the Chartered Institute of Library and Information Professionals (CILIP) (2005), those developing services for PVI in libraries should ensure that visually impaired users are asked questions about their reading interests and

information needs at least every two years, in order to ensure that the services and facilities remain adequate and appropriate.

This study therefore investigated the nature and relationship between reading interests and use of alternative formats by PVI in selected libraries in Nigeria. The study focused on visually impaired students in secondary schools, adult persons with visual impairment in tertiary institutions of learning, and others who are gainfully employed in society who patronise the services provided by public libraries and the libraries of non-governmental organisations.

Literature Review

Reading interest is an important variable to investigate because high interest materials are more easily comprehended than low interest materials (Disibio and Savitz, 1992). Also, increased comprehension could lead to increased knowledge. It is generally acknowledged that because PVI have the same human composition as sighted people (aside from being visually impaired), their reading interests and information needs may be similar. A study of the homebound elderly with visual disabilities in Denmark (Nielson, 2005) found that the range of reading interest of the elderly visually impaired is as broad as those visiting the library in person. He reported that many of them have a high concentration on reading and their reading interest centres on natural science, and ancient history, and that many of the titles are required in foreign languages from special libraries. Atinmo (1999) also found that the reading interests of persons with visual disabilities in Nigeria are as varied as those of sighted individuals.

Byrne, Cylke, Hagle, Herdon and Perry (1990) however declared that the reading materials required by PVI vary in line with their backgrounds and specific needs. PVI need factual and recreational reading, educational materials, encyclopaedias, directories and all other kinds of publications, which are used by sighted people. Unlike sighted people however, they also need appropriate formats or auxiliary aids to help them access their required interests (Chartered Institute of Library and Information Professionals (CILIP), 2005). The Canadian National Institute for the Blind (CNIB 2005) reported that blind and visually impaired children often choose to read, if they are provided

with books that are at an appropriate reading level and are about their personal areas of interests. The study further identified poems and short stories as the most preferred areas of interest to the children.

In a survey of visually impaired children, Thomason (1993) found that visually impaired students in high schools generally show slightly more interest in reading as a hobby, and that they read for pleasure but find active pastimes more enjoyable. It was also discovered that students find reading more appealing if they can choose their own materials themselves. The study also found that boys like to read science fiction, adventure, mystery, sports and short stories while girls were interested in adventure, mystery and romance. A similar survey (Kimmins, 1996) submitted that the reading interests of visually impaired boys are not the same with sighted boys, but that some similarities do exist. Sports materials which was highly rated by all, was the number one interest of visually impaired boys. Science materials were also popular amongst all boys, while poetry was rated as being of low interest for visually impaired boys. Reading will be more appealing to visually impaired students if they are offered reading materials in subjects that excite interest and attract them.

Bruce, Mckennell and Walker (1991) reported that 48% of blind and partially sighted adults in the United Kingdom (UK) read or used ordinary print materials (with aid though), 24% used large prints, 1% used personal reader, 13% used tape recording, and 1% used Braille, but that the actual use of alternative format was likely to be limited by availability. Another UK survey (Davis, Wisdom and Greaser, 2001) found that 83% of adults who are blind and partially sighted use tape recordings. The Royal National Institute for the Blind also reported that 25% of blind and 4% of partially sighted people have its talking book player, although awareness of the service is fairly low; that 47% of blind and 51% of partially sighted people are not aware of talking book service; and that only 13% are aware that libraries can inform them about talking books (RNIB, 1997).

Ogba (2000) reported that visually impaired users of the Imo State library board visit the library section for the visually handicapped to use and borrow Braille books, moon type, talking books on cassette, large prints books and periodicals. Ogba

(2000) further clarified that apart from the moon type with few volumes existing in the library, there are numerous volumes of Braille and periodicals on various subjects which provide satisfaction for the visually impaired users. Large print books are in fewer subject areas while there are many recorded cassettes. Aldrich and Parkin (1994), in a survey of producers and users of tape recorded textbooks for the blind, reported that tape has one major disadvantage when compared with Braille and large prints because it does not allow, beyond serial presentation, the direct, random or parallel access to information. Half of the students surveyed read large prints; nearly all others used Braille. The users showed remarkable resolve and flexibility, and were enthusiastic about the possibility of Braille and large print supplements to taped books.

In another study, Aldrich and Parkin (1987), the users of tape recorded books complained of the time it takes for a book to be recorded; they felt that every opportunity should be taken to record only the relevant parts of the required books. The study suggested that providers should explore the possibility of dividing a book between several readers or volunteer recorders. Majority of users of talking books, according to Getz (2003), are visually impaired people who generally have no other way to read unless they read Braille; even though not many people do read Braille. For instance, in the UK, just 3% of the RNIB users read Braille, while in the USA, only 4% of the National Library for the Blind (NLB) users read Braille (NLB, 2002). In Israel, 3.9% read Braille, according to a study at the Central Library for the Blind (Getz, 2003).

Other researches confirm that tape is now a popular reading format (Crofts, Cleary, Keil, Franklin and Cole-Hamilton, 2001; Grundy, Alburg, Ali, Breeze and Sloggett, 1999; and Kennell, Yu and Greaser, 2000). The use of recorded materials on tape by PVI is widespread. This, Hatlen (1996) reasoned, is because individuals who lost their vision through the ageing process may never master Braille and they will, in all probability, enjoy their remaining years listening to talking books. Children with complex disability are confined to learning by listening. Their physical disabilities may also preclude their ability to write.

In an assessment of the use of large prints in the Netherlands, Schols (1995) viewed that the

partially sighted people who prefer reading their information in large prints are considerable in number. He argued that this can be attributed to the ageing population which has resulted in a rise in the number of elderly people and, concomitantly, in the frailties associated with old age, such as poor vision. A study (Porter, 1997) declared that 75% of people with partial sight are able to read clear, large print materials effectively.

In summary, according to Tuttle (1996), it is important to be flexible and not take rigid stand in arriving at the best format for different categories of the blind and visually impaired. Tuttle submits that many persons, who learned Braille as adults, use audio formats for some reading tasks, and Braille for others. Moreover, no one library can hope to meet all the needs of such varied interests and formal preferences at different levels. Thus, Byrne et al (1990) suggested a national and international resource sharing initiative if the reading interests and information needs of all readers are to be met.

Theoretical Framework

Emery (1992) explained that users of a library have behavioural characteristics that are similar to those of consumers of material goods. As this study was concerned with reading interest and other factors that are associated with the extent of utilisation of information materials in alternative formats, the information utility theory (Jhingan, 1997; Schiller, 2000) was adopted to guide the study. The theory relates information utilisation with value of use and user satisfaction concepts, including the marginal utility of information. The application of information utility theory to explain user studies in library and information science stresses the dynamics of information consumer behaviour in the use of library and information systems. These theories have their roots in microeconomics.

Information utility theory assumes that users of information goods and services are rational beings. Each user assumes that the value of expected or anticipated information is always non-negative, though the value or utility of imperfect information may be negative. The user has full knowledge of the availability and the range of information products and services, as well as the choices open to him. He is also able to compare the satisfaction or utility he

derives from information materials in terms of maximising his or her needs. He is able to choose rationally based on utility considerations, and that his choices are expected to be certain and positive.

In the context of this study and the information utility theory, PVI users of libraries are assumed to be rational beings. They know that the value of information they need should be non-negative and they are able to compare the satisfaction or utility derived from using the alternative formats materials available in the libraries, all in the quest to meet their reading interests and information needs. PVI also have full or at least adequate knowledge of information materials in alternative formats which they want to read and the choices available to them. The marginal utility of information theory is significant in this context because it argues that services or products (alternative formats) that bring about higher marginal utility (additional satisfaction) than is possible from other services or products will be demanded and used in greater quantity. In other words, PVI who are aware of and use alternative formats in libraries will, at any point in their use of the alternative formats, expend more efforts and other resources on the additional (marginal) use of those formats that give them additional greater satisfaction or utility than they would on other available formats. But before a PVI chooses to use or not use any alternative format, he is expected to have full or adequate knowledge of the nature and potential utility value of each of the available formats. The assumption of full or adequate knowledge by PVI is the only one that is often difficult to meet, although such level of knowledge can be promoted through adequate information dissemination on and trial provision of various alternative formats by libraries to PVI in their communities.

Research Questions and Hypotheses

The following research questions were investigated in the study:

- (i) What are the reading interests of PVI in the selected libraries?
- (ii) What is the frequency of use of alternative formats by PVI in the selected libraries?

The following research hypotheses were

validated at the 0.05 level of significance:

1. Ho₁: Reading interest of adult PVI will not have significant relationship with their utilisation of alternative formats materials in the selected libraries.
2. Ho₂: Reading interest of secondary school PVI will not have significant relationship with their utilisation of alternative formats materials in the selected libraries.

Methodology

The descriptive survey research design was used in the study. Fourteen libraries were purposively selected based on the population of PVI to which they were providing information materials in alternative formats. The South-West geo-political zone of Nigeria was purposively chosen for the study. This is because it is the only zone that has those libraries that have PVI users and materials in numbers useful for the study (Atinmo, 2002). The total population of PVI using the alternative formats in the selected libraries was 563, and a complete enumeration approach was used to collect data because of the small size of the total population.

Using the proportionate random sampling technique, the 14 libraries were stratified into two NGO libraries, four public libraries, two tertiary institution libraries and six secondary school libraries. A questionnaire, named the "Visually Impaired Adult Questionnaire (VIAQ)" ($\alpha = 0.73$), was administered on the adult PVI in the first three categories of libraries. A second questionnaire, named "Visually Impaired Students Questionnaire (VISQ)" ($\alpha = 0.78$), was administered on the student PVI of the secondary school libraries. The librarians in charge of the libraries assisted in the administration of the questionnaires by the researchers and their assistants who read out the questions to the respondents and recorded their responses on the questionnaires. A total of 410 out the 563 administered copies of the questionnaires (71.3%) were successfully completed and used for the study.

Results

Respondents' Characteristics

The collected sample data showed that male respondents were 256 (67.1%) while the female respondents were 136 (32.9%). There were 104 (26%) student PVI while 297 (74%) were adult PVI. Most of the respondents were single 303 (75.5%) while 98 (24.4%) were married. The data also

showed that 224 (54.3%) of the respondents were totally blind while 177 (45.7%) were partially sighted.

Reading Interests of PVI

The respondents were asked to indicate their interests for reading for leisure and academic purposes. The reading interests of the respondents were analysed separately for the adults and the students.

Table 1: Reading Interest of Adult PVI (N = 297)

	<i>Reading Interest</i>	<i>Mean</i>	<i>Standard Deviation</i>
1	Religious materials on general and specific aspect of faith	3.62	0.72
2	Stories or text books about business and how to succeed in business	3.40	0.89
3	General entertainment materials such as magazines and periodicals	3.40	0.84
4	Manuals that teach how to do things	3.39	0.86
5	General and specific reference materials	3.30	0.94
6	Biographical accounts of individuals of achievements	3.23	1.02
7	Works of poetry that stimulate reasoning.	3.05	0.90
8	Drama books/plays with good plot	2.98	0.91
9	Works on security and safety and about security of lives and property	2.95	0.74
10	Works that stimulate entertainment and amusement /humour stories	2.88	1.06
11	Works/ text books related to the arts such history, literary studies and languages	2.86	0.92
12	Books/stories about romance and love life of people	2.82	1.10
13	Tales/stories describing how to get to places, how to make journeys to important places of interest	2.78	1.07
14	Accounts of events, things and happenings which have no cause or origin, works of mystery which cannot be explained	2.77	1.01
15	History text for leisure and academic purposes	2.71	1.19
16	Unusual and exciting tales of dangerous experiences, events or occurrence/adventure stories	2.65	0.97
17	Works or textbook on social sciences such as sociology, economics, political science etc.	2.54	0.87
18	General sporting events and sports personalities or a particular sports report	2.54	1.06
19	Detective stories that help unravel difficult crime	2.52	1.02
20	Works/textbook on technology, technological feats and happenings	2.51	1.10
21	News or stories about your local or immediate community events/happenings	2.49	1.15
22	Political stories, political events and writings about politics locally or globally	2.18	1.22
23	Natural science works or textbooks such as physics, chemistry and biology, scientific happenings and discoveries	1.86	1.00

Top on the reading interests of the adult respondents (Table 1) were religious books and materials on general and specific aspects of faith (Mean = 3.62; S.D. = 0.82), business and entrepreneurial books and materials on how to succeed in business (Mean = 3.40; S.D. = 0.89), entertainment materials such as magazines and periodicals (Mean = 3.40; S.D. = 0.84), manuals that teach how to do things (Mean = 3.39; S.D. = 0.86), general and specific reference sources (Mean = 3.30; S.D. = 0.94), biographical events or individuals (Mean = 3.23; S.D. = 1.02), and stimulating works of poetry (Mean = 3.05; S.D. = 0.90). At the bottom of the reading interest were books on natural science related subjects such as physics, chemistry and biology (Mean = 1.86; S.D. = 1.00), followed by political stories, political events and political related writings (Mean = 2.18; S.D. = 1.22), local community events or stories (Mean = 2.49; S.D. = 1.15), technology related subject areas, feats and happenings (Mean = 2.51; S.D. = 1.10), detective stories (Mean = 2.52; S.D. = 1.02), general sporting events, sports personalities and sports reports (Mean = 2.54; S.D. = 1.06), and social science related books and materials (Mean = 2.54; S.D. = 0.87).

For the secondary school respondents, their reading interests were strong in arts related subjects such as history, literature, languages, etc (Mean = 3.27; Standard Deviation (S.D.) = 0.84); reference sources (Mean = 3.04; S.D. = 1.06); manuals that described how to do things (Mean = 3.04; S.D. = 0.95); followed by animal stories or stories on specific kinds of animals; stories about family life and about families and school related challenges with the following mean and standard deviation scores, respectively. The areas of least interest to the students included books on natural science subjects such as physics, chemistry and biology (Mean = 1.52; S.D. = 0.91); stories about unreal scientific events/science fiction (Mean = 1.80; S.D. = 0.98); and tales of a war or about wars (Mean = 2.10; S.D. = 1.04). The other areas are historical fiction describing unreal

events, mysterious stories with no cause or origin and poems for leisure and class work.

The results showed that the respondents in this study are generally not interested in reading science related books and materials, as well as science fiction materials. This may be explained by the fact that information bearing materials for visually impaired persons are very weak in capturing details in these areas. The finding that student PVI least liked such materials, just as the adult PVI, should be of concern to educationists, for which a solution should be sought, possibly by investing in the acquisition or production of materials in alternative formats that provide lively and interesting details for student PVI learners.

Use of Alternative Formats Materials

The data showed that Braille materials recorded high frequency of use among the respondents. Three hundred and twenty PVI (79.8%) used Braille materials daily while 44 respondents (10.9%) used Braille two or three days in a week. The survey revealed that the frequency of utilisation of talking books or recorded materials among PVI in the libraries was less, compared to Braille materials. Ninety-five respondents (23.6%) used talking books daily, while 142 (35.4%) used talking books two or three days in a week. However, as many as 105 respondents (26.1%) used talking books only once in a month. Large prints were used daily by only 19 PVI (4.7%), and two or three days per week by 9 (2.2%). As many as 125 (31.1%) of the respondents used large prints on monthly basis, while 220 (54.8%) had never used large prints. This low level of utilisation for large prints could be attributed to the fact that large print publication and availability is very low in Nigeria, and also that majority of the respondents are totally blind and cannot use even large prints. By contrast, Braille is the most utilised format because it is the most available in all the libraries.

Table 2: Reading Interest of Secondary School Adult PVI (N = 104)

	<i>Reading Interest</i>	<i>Mean</i>	<i>Standard Deviation</i>
1	Materials or textbooks on Arts subjects such as History, Government and Literature	3.27	0.84
2	Reference materials such as dictionaries, encyclopaedia, directories, etc	3.04	1.06
3	Manuals/stories that describe how to do things	3.04	0.95
4	Stories about animals or specific kinds of animals	2.91	1.06
5	Stories on family life and about families	2.91	1.01
6	Stories on school activities and about the challenges students face at school.	2.86	1.00
7	Funny or amusing and entertaining stories/humour stories	2.82	0.99
8	General or specific sporting events, achievement or stories	2.77	1.29
9	Stories about the life of people who have achieved/biographies	2.70	1.02
10	General unreal stories and fantasies	2.67	1.13
11	Books/textbooks on subjects such Economics, Commerce and Business Management	2.65	1.10
12	An account of usual and exciting or dangerous experience or events, feat or occurrence/adventures stories	2.56	1.12
13	Poems for relaxation and for classroom work	2.51	1.16
14	Tales of events, things or happiness which have no cause or origin, mystery stories	2.47	1.01
15	Historical literature or stories describing unreal or imaginary events or people/ historical fiction	2.33	1.10
16	Tales on a particular war or about wars/war stories	2.10	1.04
17	Stories describing unreal scientific event(s) or people / science fiction	1.80	0.98
18	Books or textbooks on natural science subject such Physics, Chemistry and Biology	1.52	0.91

According to direct observations made in the libraries, the frequency of utilisation of Braille materials in the secondary schools and NGO libraries was encouraging. But the same cannot be said of the public libraries and the tertiary institutions. The

public, school and tertiary institution libraries had little to show in terms of talking books, hence utilisation was rather low. Utilisation of talking books in the NGO libraries was noteworthy, but large prints were rarely used in all the libraries.

Table 3: Frequency of Utilisation of Alternative Format Materials

<i>Period of utilization</i>	<i>Braille</i>		<i>Talking Books</i>		<i>Large Prints</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Daily	320	79.8	95	23.6	19	4.7
Two/three days weekly	44	10.9	142	35.4	9	2.2
Weekly	17	4.2	28	6.9	11	2.7
Fortnightly	4	0.9	31	7.7	17	4.2
Monthly	16	3.9	105	26.1	125	31.1
Never	-	-	-	-	220	54.8
Total	401	100	401	100	401	100

Relationship between Reading Interest and Use of Alternative Formats

The two hypotheses of the study are concerned with the possible significant relationship between the reading interests of and the use alternative format materials by the PVI.

Hypothesis 1: Reading interest of adult PVI will not have significant relationship with alternative format utilisation in the selected libraries.

In this hypothesis, the reading interest of adult PVI in the selected libraries was correlated with alternative formats utilization. The result showed Pearson correlation coefficient of 0.143, with a calculated probability of 0.014, which is less than the 0.05 significance level. Consequently, the null hypothesis was rejected. Accepted was the alternative hypothesis that the reading interest of adult PVI has no relationship with their utilisation of alternative formats in the libraries.

Table 4: Correlation between Reading Interest of Adult PVI and their use of Alternative Format Materials in the Selected Libraries

	<i>Mean</i>	<i>Standard deviation</i>
Reading interest	124.3535	12.4637
Alternative format utilisation	18.5556	2.3375

Pearson correlation results: $r = -.143^*$; $p = 0.014$; $N = 297$.

* Correlation is significant at the 0.05 level (2-tailed). *Hypothesis 2: Reading interest of secondary school PVI will not have significant relationship with alternative format utilisation in the selected libraries.*

The reading interest of secondary school PVI in the selected libraries was correlated with their use of alternative format materials. The results showed Pearson Correlation Coefficient of 0.029, with a probability of 0.770, which is more than the 0.05 significance level. Consequently, the null hypothesis was accepted, i.e. that the reading interest of secondary school PVI has no relationship with their utilisation of alternative formats in the libraries.

Table 5: Correlation between Reading Interest of Secondary School PVI and their use of Alternative Format Materials in the Selected Libraries

	<i>Mean</i>	<i>Standard deviation</i>
Reading interest	46.9231	6.6430
Alternative format utilisation	9.3846	1.5157

Pearson correlation results: $r = -0.029^*$; $p = 0.770$; $N = 104$.
* Correlation is NOT significant at the 0.05 level (2-tailed).

Discussion

There is a consensus among authors that the reading interests of PVI are varied, and the results of this study confirm this, although also found out were areas of high and low reading interest. Adult PVI in this study showed that they are mainly interested in religious, business/entrepreneurial materials, entertainment, reference sources, manuals, biography and poetry. This is in contrast with the findings of Horten and Horten (1995), Kimmins (1996) and Nielson (2005). This may be due to difference in educational level, environmental factors, economic and social status of respondents in these studies. Interest in religious materials could be attributed to the high religiosity of people in Nigeria and the worsening socio-economic realities in Nigeria, which have brought adult PVI (as much as other people) closer to God as a source of hope. Also, the adult PVI were much less interested in natural science, politics and community events, which again are not in consonance with the findings of Thomason (1993) and Nielson (2005). These respondents may be less interested in natural science materials possibly because they do not like science, or because scientific subjects are not very popular in the Nigerian society, or because scientific objects, symbols and diagram have not been well captured by the alternative formats provided by the libraries. Materials/stories on community events or happenings may not interest PVI because of their emotional reaction to the general negative or inadequate positive attitudes towards the blind and other visually impaired persons in the Nigerian society.

The secondary school PVI showed high interest in arts related subject areas, reference sources, short stories (animal, school and family) and sports. This is in conformity with the findings of Bachmutskaya and Yankova (1996) in a study of Russian children. However, it conflicts with that of Thomason (1993), who reported that high school students in an American city desire science fiction, adventure and mysteries. They were not much interested in natural science and science fiction. The findings of secondary school PVI in this study could be attributed to the unavailability of science and technology-based materials in alternative format which, in turn, could be due to the difficulty of effective transcription of such materials into alternative formats. Science

materials are replete with illustrations, symbols and other technical drawings, which are not easily transcribed.

As observed from the results, the most frequently used alternative format among PVI in the libraries was Braille, followed by talking books or tape recordings, and large prints. This contrasted with the findings of Anne (2000) who reported that only 19% of Canadian college students who are visually impaired used Braille frequently, and also that of Davis, Wisdom and Greaser (2001) who reported that 83% of blind adults and partially sighted persons used tape recording in the UK. The preference for talking books in these countries may be due to ease of use and availability of technology to produce and use talking books (even in digital format), and the prevalence of innovative audio-based media services such as the Talking Newspaper services in the UK (Craddock, 1996).

Studies emanating from the developed countries such as the National Library of Canada (1996) and Bruce, McKennel and Walker (1991), revealed that there is only a small demand for Braille by borrowers and buyers, and that talking books are more frequently used than materials in Braille and large print. The reason for Braille being the most utilised format in this study is likely because the use of other alternative formats is limited by their low availability.

On the relationship between reading interest of adult PVI and alternative formats utilization in the libraries surveyed, the study found that the reading interest of adult PVI had a significant relationship with their rate of utilisation of alternative format. By contrast, the reading interest of secondary school PVI did not bear a significant relationship with their rate of utilisation of alternative format. The reason for the different results could be that for secondary school students who are likely to need to read for mandatory schooling-related work, their use of alternative format is dictated less by choice of optional reading interests and more by the demands of the school work and subjects. However, adults have choice in what they may want to read, so their self-chosen reading interests would correlate with and influence or be influenced by their optional use of alternative format materials. In other words, for adult PVI the utilisation of alternative format will be driven by their reading self-chosen interests and vice versa,

whereas for young schooling PVI, their utilisation of alternative material would be influenced more by the availability of the materials and less by their school-prescribed reading interests.

The finding of CNIB (2005) showed that visually impaired children in Canada often want to read alternative materials if these are provided in their areas of interest. The import of the findings of this study and those of CNIB is that both adult and young PVI would want to use alternative format materials in their areas of reading interests if they can find libraries or institutions that provide such materials. However, where the materials are not available or are inadequate, some PVI, particularly the young, may not be aware or able to ask for them. The inadequate availability challenge may also not be recognised by libraries, particularly in developing countries such as Nigeria, if young schooling PVI are unable to voice their frustrations with the challenge. The implication of this, and that of the information utility theory that underpinned conceptualisation of this study, is that Nigerian libraries have to strategise to acquire or produce adequate materials in alternative formats relevant to the preferences of PVI, and disseminate adequate information on the availability of the materials in the libraries, selectively educate the PVI on their rights as citizens to demand for such services.

Conclusion and Recommendations

The reading interests of PVI in the libraries surveyed were varied, while their use of alternative materials was dominated by Braille materials with much to be desired for large print and talking books. The low use of large print and talking books could be due to their low availability in the libraries which prevents PVI from using them. The satisfaction of the reading interests of PVI in the libraries studied is clearly crucial to utilisation of the alternative materials, as well as the attainment of the objective alternative materials provision in the libraries. In conclusion, the findings of this and other studies have shown clearly that the following variables (emphasised in italics) can and should be managed properly by Nigerian libraries in order to ensure adequate utilisation of the materials by PVI: provision of reading materials in the *subject interest areas* of the PVI; availability of the materials in the *alternate formats preferred*

by the PVI; *availability of the materials* in libraries, and *awareness and knowledge* by PVI of the availability and their rights and choices. These variables are particularly important because of the current situation in Nigeria where alternate materials for PVI in Nigeria are inadequate, dispersed and uncoordinated across various institutions with diverse agenda for the selection and production of alternative format materials. The situation in Nigeria is however not peculiar, as the same conclusion was reached by Kinnell and Creaser (2001) in their assessment of public library services in the UK.

The study recommends that information materials in alternative formats for PVI in libraries should be provided first and foremost to meet their reading interests. Libraries providing information services to PVI should collaborate and share resources in order to increase the utilisation of alternative formats. The reading interests and information needs of PVI should be investigated periodically and adequately considered by libraries before information materials are acquired or converted into alternative formats for use.

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