Information Seeking Behavior of School Students in Delhi: A Comparative Study

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Abstract

Purpose: The study attempts to understand information seeking behaviour of school students of Delhi. It includes sources for initiation resources, preferences of printed and electronic resources, preferred language, method used to search information resources, purpose of using internet, time spent on e- search and electronic devices used for reading.

Method: The data for the study was collected from nine schools consisting of three government schools and six private schools. Stratified random sampling method was used to select the sample. The SPSS (Statistical Package for Social Science-version24) was used to transform and analyze the data with applied statistical techniques such as Mann-Whitney U Test and Chi-Square test for proportions and content analysis.

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Findings: Result of the analysis revealed that printed information material is more preferred than electronic information material for both government and private school students. The students use electronic information resources more for recreational purposes than for academic ones, however significant difference in use of E resources was observed between government and private school students. Government school students as well as private school students were found to prefer and use mobile phones for searching information over other electronic gadgets such as laptops, tablets, etc. however use of Laptops, Kindle and Tablets was found to be significantly higher among private school students than government school students.

Conclusion: Government school students preferred Hindi as language for information resources whereas Private school students preferred English information sources. It was found from the study that the information seeking behavior of Government and Private school students varied significantly.

Keywords: Information Seeking Behavior, Information Seeking, Electronic resources, Government schools, Private schools, School students.

Introduction

The search for information forms a vital part of numerous human exercises, ranging from decision making and critical thinking to the allocation of resources and system administration. Although a wide range of information search models have been proposed, it is widely assumed that the information search engine is a person[1]. The process of information seeking is instinctive for Humans, they undergo the process of information seeking in order to be able to change their state of knowledge.[2] There are different categories of schools in India and these can be arranged in general on the basis of administrative bodies, i.e., government (state and central), quasi government (for example military schools), model schools (Jawahar Navodaya Vidyalaya's (JNVs)), and private schools. Under different commissions, they develop their curriculum and conduct state and central level exams. For example, "CBSE, ICSE" and "State education/examination boards". In Delhi, Secondary (9th and 10th) and higher secondary (11th and 12th) education are administered primarily by the Directorate of

Education, Government of the National Capital Territory (NCT) of Delhi. The broad category of schools can be divided based on the type of management namely Government schools (fully funded by Central/ State Government), Government Aided Private School (partially funded by Government), and Private Schools including Public, Private and Convent Schools. In today's era of information technology, electronic information resources and web-based information form an integral part of education and method of acquiring knowledge from very beginning of school level education.

It is therefore very important to understand the Information Seeking Behaviour of the school students in the changing modern times. Thus, through this an attempt has been made to analyse and interpret the information seeking behaviour of school students studying in Government and Private Schools of Delhi in Class 09th to 12th Standard.

Literature Review

The Literature Review is done to learn about what literature is available or what work has been done on the particular area of concern. The idea of the literature review is to develop a good working knowledge of the research in a particular area of study. Valentine and Bernhisel[3] in their article found that today's teens grow up using digital media during their whole lives, and probably developing different ways of learning. Studies do suggest that teens are much more interactive, absorb information from many sources simultaneously (Instant Messaging, games, blogs, etc.), and are more involved in content creation than older generations. Shenton and Dixon[4] in their study explored for young people's information-seeking behaviour and how it develops during childhood. Young children learn much through practical experience and conversation with adults but, in the later stages of this school phase, books and internet are of increasing importance. In the middle school, the internet is used more frequently, books from departmental libraries and textbooks provided by teachers play key roles in satisfying the academic information needs of high schoolers. It is in this phase that use of the internet is the greatest, although many teenagers are highly critical of it. Kakai etal.[5] observed that, often students' information seeking behaviour involves active or purposeful information as a result of the need to complete

course assignment, prepare for class discussions seminars, workshops, conferences, or write final year research papers.

According to Wilson[6] Information-Seeking Behavior includes "those activities a person may engage in when identifying their own needs for information, searching for such information in any way, and using or transferring that information." Snowball[7] discussed the problems children face at public libraries as there is nobody to guide them and the parents have to struggle with situations of the presence of unattended children in the library and need to provide adequate childcare arrangements. This article presents some typical library responses to the presence of unattended children and identifies elements that are shared by the most successful programs. Many libraries have found that offering programs for children is an excellent way to strengthen the relationship between the library and its community.

The scope of study is limited to information seeking behavior of school students studying in class 9th to 12th of selected Government and Private schools of Delhi. The stratified random sampling technique was used for selection of user for collecting data from nine schools categorized as Government and Private schools in Delhi. The study addressed the following specific research objectives:

- ❖ To compare the information seeking behaviour of Government and Private School students.
- ❖ To compare the impact of electronic resources on information seeking behaviour of Government and Private School Students.

Methodology

A list of all Secondary and Senior Secondary schools in Delhi was compiled from the data available on website of Directorate of Education (Government of Delhi). Out of these schools a further list was compiled based on school management type, namely Government schools, Private schools (including Convent schools and other minority institutions) and Government aided Private schools. The data for which was collected from the following nine (9) schools including three (3) Government schools and six (6) Private schools. The sampling method in the sample selection were closed with the help of the stratified random sampling method. The IBM 24.0 Statistical Package for Social Sciences (SPSS) was used to transform and

analyse the data with applied statistical techniques such as Mann-Whitney U Test and Chi-Square test for proportions and content analysis. In the present study, the user population was divided into two separate layers, i.e., Government school students and Private school students. Each layer was then sampled as an independent sub-population, in which individual users were randomly selected and were made substantially available in schools during the survey period. The survey questionnaires were distributed among 920 students, out of which 405 (135 from Government Schools and 270 from Private Schools) fully answered questionnaires were received and thus analyzed for the study. For citing the test and rendering the references in the current study 'American Psychological Association; (APA) 6th edition style for bibliographical references has been used.

Research Findings

In the present study comparison of information seeking behaviour of Government and Private school students of Delhi in the era of information technology and, availability and use of the electronic resources have been analysed with help of SPSS (Statistical Package for Social Sciences). It can be inferred from the study that Information seeking behaviour of students varies between private and Government school students, however the printed information resources are still the most preferred mode of seeking information.

Table 1- Sources of Initiation for Seeking Information Search

Sources Used for Information Search	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
Teachers	45	33.3	215	79.6	260	64.2
Librarians	38	28.1	204	75.5	242	59.8
Family	30	22.2	187	69.3	217	53.6
Friends/Classmates	58	43	209	77.4	267	65.9
Library Tools	10	7.4	198	73.3	208	51.4
Others	5	3.7	48	17.8	53	13.1

It can be seen in the table 1 that government school students seek help from friends/classmates 58 (43%) followed by teachers 45 (33.3%), librarian 38 (28.1%) and family 30 (22.2%) for information search. The scenario is different with private school students, 215 (79.6%) seek help from teacher followed by friends/classmates 209 (77.4%) and librarian 204 (75.5%) for information search. Table 2 depicts the information preference of students through Printed and Electronic mode.

Table 2- Preference for Printed V/s Electronic Resources for Information Search

Information Sources	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
Exclusively Printed	71	52.59	140	51.9	211	52
Electronic and printed but mainly Printed	33	24.44	60	22.2	93	23
Both Electronic and printed in equal proportion	12	8.88	45	16.7	57	14
Exclusively Electronic	8	5.92	25	9.3	33	8.14
Others	0	0	0	0	0	0

It can be seen from the Table 2 that printed information source is the most preferred information resource of both Government and Private school students. 71 (52.59%) of the government school students are using only printed sources of information followed by 33 (24.44%) of students using both printed and electronic but mainly printed sources 12 (8.88%) of them are using both electronic and printed and 8 (5.92%) are using only electronic resources. 140 (51.9%) of private school students are using the only printed sources of information followed by exclusively electronic sources 25 (9.3%), 45 (16.7%) private school students using both electronic and printed resources in equal proportion. Out of total number of students mostly 211(52%) use exclusively printed resources and least 33 (8.14%) use both electronic and printed resources in equal proportion**.**

Table 3 an attempt has been made to understand the preference of language while seeking the needed information.

Table 3- Preferred Language for Seeking Information

Type of School	English		Hindi		Any other	
	f	%	f	%	f	%
Government School Students (n=135)	65	48.1	70	51.85	0	0
Private School Students(n=270)	223	82.5	47	17.40	0	0
Total (n=405)	288	71.1	117	28.88	0	0

In the present study an attempt has been made to understand the preference of language while seeking the needed information. Table.3 reveals that 288 (71.1%) of the school students prefer to search information in English language and 117 (28.88%) of the students prefer Hindi language. 65 (48.1%) of the government school students prefer to search in English language and rest 70 (51.85%) of the students prefer Hindi language. 223 (82.55%) of the private school students prefer English language whereas 47 (17.4%) of the students prefer Hindi language. Thus, the language preference varies significantly based on type of school.

Table 4 analyses the various methods of searching information resources used by the Government and Private school students for their academic purposes.

Table 4- Methods Used to Search Information Resources

Methods used to Search Information Resources	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
Card Catalogue	15	11	34	12.6	49	12.1
OPAC	25	18.5	58	21.5	83	25.1
Searching Books on Shelves	108	80	267	98.9	375	92.6

Through Specific URL	34	25.2	117	43.3	151	37.3
Through Search Engines like Google, Yahoo	105	77.8	257	95.2	362	89.4
Through subject gateways/portal	13	9.6	76	28.1	89	22
Others	0	0	4	1.4	14	3.5

Table 4 analyses the various methods adopted by the students while searching for the information, from table 4 below we can observe that most of the Government school students 108 (80%) search the books on the shelves for information resource followed by search engines like google 105 (77.8%) only 13 (9.6%) of students search information resources through subject gateways /portal. Private School students usually search books on shelves 267 (98.9%) and only 34(12.6%) search information resource through card catalogues.375 (92.6%) student out of all school students search books on the shelves for students and only 49 (12.1%) use card catalogue for the search.

Table 5 analyses the purpose of using Internet for information search to update knowledge, to do project work/assignment, to supplement class notes, recreation, current affairs.

Table 5- Purpose of Using Internet for Information Search

Purpose of using Internet	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
To update knowledge	72	53.3	167	61.9	239	88.5
To do project work/ Assignments	86	63.7	205	75.9	291	7.9
To supplement class notes	47	34.8	108	40	152	37.5
To Prepare for the talent Examination (Like: NTSE, INO etc)	83	61.5	186	68.9	269	66.4

To answer specific questions from question bank.	74	54.8	173	64	247	61
Recreation	108	80	262	97	370	91.4
News/Current Affairs	76	56.3	223	82.6	299	73.8
Others	23	17	43	15.9	66	16.3

The various purposes of using internet for information search can be observed from Table 5. It has been observed that government school student is using internet mostly for recreation 108 (80%) followed by project work 86 (63.7%) and talent examination83 (61.5%). Similar distribution can be observed for the private school students wherein 262 (97%) students are using internet for recreation purpose followed by project work 205 (75.9%) and talent exams 186 (68.9%).

Table 6 shows how much time the government and public-school students spend on E-search for Information on daily basis.

Table 6- Time Spent on E- Search of Information on Daily Basis

Time spent on E- Search of Information	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
Half an hour	20	14.81	12	4.44	32	7.9
One hour	33	24.44	45	16.66	78	19.25
Two Hours	29	21.48	104	38.51	133	32.83
More than two hours	53	39.25	109	40.37	163	40.24

It can be observed from table 6 that 53 (39.25%) of the Government school students spends more than two hours on internet/E-search followed by 33 (24.44%) of students spending one hour on internet/ E search 29(21.48%) students spend two hours and 20 (14.81%) of the students spend half an hour on internet/ e-search of information. 109 (40.37%) of the private school students spends more than 2 hours followed by104 (38.51%) of students spending two hours

45(16.66%) of students spend one hour and 12 (4.44%) of students spend only half an hour on internet/ E search of Information.163 (40.24%) students of both school types spend more than two hours on internet/E-search and only 32 (7.9%) spends half an hour.

From the study we observe that students are using internet and carrying out E-searches for their information needs, therefore it would be interesting to understand the type of electronic devices used by the students for E-search. Table 7 analyses the various electronic devices used for reading by Government and Public-school students that include desktops, tablets, mobiles and laptops.

Table 7- Electronic Devices used for Reading by School Students

Electronic Device Used for Reading	Government School Students (n=135)		Private School Students (n=270)		Total (n=405)	
	f	%	f	%	f	%
Desktop	44	32.5	130	48.1	174	43
Tablet	12	8.9	148	54.8	160	39.5
Mobile	95	70.4	258	95.6	353	87.2
Laptop	56	41.5	253	93.7	309	76.3
Kindle	10	7.4	158	56.3	168	41.5
Others	0	0	0	0	0	0

Table 7 depicts the various devices used by the students to carry out electronic search. It can be seen that 95 (70.4%) of the government school students use mobiles followed by laptop 56 (41.5%), desktop 44 (32.5%), tablet 12 (8.9%) and kindle 10 (7.4%). Whereas 258 (95.6%) of the private school students prefer mobiles followed by laptop 253 (93.7%), kindle 158 (56.3%), tablet 148 (54.8%) and desktop 130 (48.1%).

There are some more major findings in this research as following:

❖ It was found that Government schools and Private schools mostly preferred exclusively printed resources, however

Government school students were found to be using fewer electronic resources than Private school students.

❖ It was found that Government school students preferred information available in Hindi language, whereas the Private school students preferred information in English language.

❖ t was found that most of the Government school students search the books on the shelves for information followed by search engines like google and only 13 (9.6%) student searches information resourcees through subject gateways /portal. Private School students usually search books on shelves followed by internet search engines and only 34 (12.6%) search information resources through card catalogues.

❖ It was found that Government school students were using internet mostly for recreation followed by project work and talent examination. Similar use of Internet was found for the Private school students, wherein most of the students are using internet for recreation purpose, followed by project work and talent exams.

❖ Today Internet is both bane and boon, it depends on how it is being used, it was found in the study that considerable time is spent by school students on E-Search of information on daily basis .A Significant difference was found in duration of using internet between government school and private school students.

❖ The study also indicates that there is a significant difference between Government and Private school students with regard to use of devices for electronic search of information, Government school students mostly relied on mobiles for information search, whereas Private school students were found using laptops, tablets and kindles to a large extent.

Tenability of Hypothesis.

The tenability of the hypothesis postulated for the study was tested based on the findings of the study.

Table 2 can be used to test and compare the preference of government school and private school students for printed resources vis a vis electronic resource

As shown in table 8, Pearson Chi-sq test of association was used to test the association between the type of information source preferred by the Government and Private school students. The table given below shows the results of the Pearosn's Chi-sq test and gives the test statistic value as 25.32 with 3 degrees of freedom and p-value of less than 0.001. This means that there is a significance between the type of information source preferred by the Government and Private school students.

Table 8- Chi-sq test of association between the type of information source preferred by the Government and Private school students

χ^2	25.3246
Df	3
Pr	<0.001

Table 3 can be used to check the association between the language preference of Government and Private school students for seeking information.

As shown in table 9, Pearson Chi-sq test of association can be used to test the association between the language preferred by the government and private school students for information search. The table below shows the results of the Pearson's Chi-sq test and gives the test statistic value as 51.942 with 1 degree of freedom and p-value of less than 0.001. Thus, it means that the null hypothesis is rejected, and it can be concluded that there is a significant difference between the language preferences of Government and Private school students.

Table 9- Chi-sq test of association between the language preferred by the government and private school students for information search

χ^2	**51.942**
Df	**1**
Pr	**<0.001**

Table 4 can be used to test the difference in information seeking behaviour of government and private school students in today's era of E-resources.

As shown in table 10, Proportion test was used to test the above stated hypothesis of the difference in the use of e-resources by

government and private school students The results of the proportion test can be seen in the table below which gives the z score of -5.45 and p-value of less than 0. 001.This means that there is a significant difference in the use of e-resources between the Government school students and Private school students.

Table 10- Proportion test

Z	-5.45
Pr(|Z| > |z|)	<0.001

Conclusion

In the present study a comparison of information seeking behaviour of Government and Private school students of Delhi in the era of information technology was made. It was found in the study that printed information material is more preferred than electronic information material for both Government and Private school students. The students use electronic information resources more for recreational purposes than for academic ones, however significant difference in use of E resources was observed between Government and Private school students. Government school students as well as Private school students were found to prefer and use cell phone for searching information over other electronic gadgets such as laptops, tablets, etc. however use of Laptops, Kindle and Tablets was found to be significantly higher among Private school students than Government school students. Government school students preferred Hindi as language for information resources whereas Private school students preferred English information sources. Thus, it can be concluded from the study that that there is a remarkable difference in information seeking behavior of Government and Private school students.

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