

Printed and Electronic Resource Preferences among Ophthalmologists: A Study in India

R. Govindarajan¹ and S. Dhanavandan²

¹Librarian, Aravind Eye Hospital & Postgraduate Institute of Ophthalmology, Madurai, Tamil Nadu, India

²Deputy Librarian & Head, Central Library, Central University of Tamil Nadu, Thiruvavur, Tamil Nadu, India

E-Mail: govindarajanthamba@gmail.com, dhanavandan@gmail.com

(Received 23 August 2018; Revised 13 September 2018; Accepted 28 September 2018; Available online 6 October 2018)

Abstract - The Ophthalmologists - Eye Doctors continuously seek and use information for their evidence-based practice, career advancements and quality patient care. The study aims to examine and explore the ophthalmologists' preference towards print vs. electronic information resources. The study design is cross-sectional and convenience sampling method is adopted. A structured questionnaire was used to collect data. SPSS 18 PASW Statistical package was used for statistical analysis. Frequencies, percentages, Chi-square and Fishers' exact test were used in the study. Around 633 ophthalmologists, working in 47 academic eye hospitals from 16 states of India were included in the study. The ophthalmologists prefer electronic resources more than the printed resources as a venue for access and publish. They consider both printed & electronic resources as more authenticated resources than electronic resources. They recognize electronic resources as easy to manage, use, economical, time savvy. They prefer electronic resources more than printed resources to improve their professional competency. The Ophthalmologists' preference on resource choice doesn't have any association with gender, age group, designation, experience, institution type. The study results revealed the ophthalmologists' preferences on print and electronic resources. This will help the ophthalmic librarians to understand the resource choices of the ophthalmologists and manage information resources in libraries effectively. The study results will help the ophthalmic institutions and information providers for future planning.

Keywords: Print Resources, Electronic Resources, Ophthalmologists, Information Seeking, Information Use

I. INTRODUCTION

Information Age opened up new opportunities and challenges to the knowledge society. The advancements in digital technologies shifted the information resources from shelves to disks, preserved the resources unwary and made the resources easy to use at anytime, anywhere. The digital shift also results in the proliferation of information and a range of information types. To meet the challenges efficiently and effectively, it requires specific skills, effort, and attitude to handle it effectively.

The Ophthalmologists - Eye Doctors continuously seek and use information for their evidence-based practice, career advancements and quality patient care. The study aims to examine and explore the ophthalmologists' preference towards the printed and digital electronic information

resources. The resource choice preferences were examined with the following seven attributes of information use.

1. Venue of Access
2. Venue of Publish
3. Authentication Quality
4. Management
5. Ease of Use
6. Cost of time and money
7. Perceived Usefulness

The expected outcome of the study will be helpful to the librarians, institutions and information providers. Survey method is used to collect the preferences of ophthalmologists. 633 ophthalmologists working in 47 academic eye hospitals from 16 states of India were included in the study. This particular study is a part of the main study "Information Needs and Seeking Behaviour of Ophthalmologists in Academic Eye Hospitals in India".

II. REVIEW OF LITERATURE

Niu, X., (2012) conducted a study to examine the user preferences on print vs. electronic resources. The survey includes 2063 academic researchers. The results revealed that most of the participants preferred to search electronically and most of the participants preferred a combination of electronic and print formats for reading. Only a small percentage of participants read only electronically or only using print.

Mizrachi, D., (2016) studied about the academic reading format preferences and behaviours among university students. He enrolled around 10293 tertiary students worldwide. Majority of the students report better focus and retention of information presented in print formats, and more frequently prefers print for longer texts.

Tsai, C. C. (2016) examined the students' choice of reading a printed text or an electronic text. The study enrolled 105 students from English reading classes at a English department. The results revealed that the students at a high proficiency level preferred to use the printed text and the students at a low proficiency level preferred to use the electronic text.

Wellings, S., (2017) studied the information seeking behaviour of engineers and scientists in UK. The survey included 58 engineers and 57 scientists. The results revealed that electronic sources were preferred for publishing and print resources were preferred for reading.

III. OBJECTIVES OF THE STUDY

1. To identify ophthalmologists preferences on print vs. electronic resources
2. To examine ophthalmologists preferences on print vs. electronic resources and their individual characteristics and institutional characteristics.

IV. HYPOTHESES OF THE STUDY

There is no association between ophthalmologists' preferences on print vs. electronic resources and their individual characteristics and institutional characteristics.

V. METHODOLOGY

The research design adopted in this study was cross-sectional. Convenience sampling method was found appropriate to enrol the wide-spread ophthalmologist population and the same followed in the study. A structured questionnaire was used as a data collection tool to record the ophthalmologists' preferences on print vs. electronic resources. This particular study was a part of the main study "Information Needs and Seeking Behaviour of Ophthalmologists in Academic Eye Hospitals in India". Around 633 ophthalmologists working in 47 academic eye

hospitals from 16 states of India were included in the study. The collected data were entered into the data-entry software, purposefully developed for the study. The software was developed in Microsoft Visual Basic 6.0 with backend SQL Server 2000. For further analysis, the data stored in SQL Server 2000 was extracted into Ms-Excel 2007 spread sheets. MS-Excel 2017 was used to organize and tabulate the data. SPSS 18 PASW Statistical package was used for statistical analysis. Frequencies, percentages were used to find the most preferred resource choice. Chi-square test of independence is used to check whether the gender, age group, designation, experience, institution type had an association with print and electronic resource choice. Fishers' exact test was applied for small sample sizes.

VI. ANALYSIS AND INTERPRETATION

Ophthalmologists' preferences on print vs. electronic resources for their information use is analysed by finding out popular preference through a frequency table.

A. Identifying Ophthalmologists' Popular Preference on Print vs. Electronic Resources

The ophthalmologists' choices of print vs. electronic resources were examined with the following seven attributes of information use. They are Venue of Access, Venue of Publish, AuthenticationQuality, Management, Ease of Use, Cost of time and money, Perceived Usefulness. The table I shows up the frequencies and percentages of ophthalmologist preferences on print vs. electronic resources.

TABLE I OPHTHALMOLOGISTS' PREFERENCES ON PRINT VS. ELECTRONIC RESOURCES

S. No.	Description	Printed	Electronic	Both	No Opinion	Preference
1	My first preference to access information	78 (12.32%)	355 (56.08%)	195 (30.81%)	5 (0.79%)	E>B>P>N
2	My first preference to publish information	122 (19.27%)	283 (44.71%)	199 (31.44%)	29 (4.58%)	E>B>P>N
3	I feel it is authenticated source of information	175 (27.65%)	154 (24.33%)	290 (45.81%)	14 (2.21%)	B>P>E>N
4	I feel it is easy to store, organize and manage	52 (8.21%)	436 (68.88%)	138 (21.8%)	7 (1.11%)	E>B>P>N
5	I feel it is convenient to access, use, share	27 (4.27%)	469 (74.09%)	132 (20.85%)	5 (0.79%)	E>B>P>N
6	I feel it saves my time and it is economical	21 (3.32%)	508 (80.25%)	98 (15.48%)	6 (0.95%)	E>B>P>N
7	It improves my professional competency	44 (6.95%)	297 (46.92%)	280 (44.23%)	12 (1.9%)	E>B>P>N
	Total	519 (11.71%)	2502 (56.47%)	1332 (30.06%)	78 (1.76%)	E>B>P>N

N=633, P=C*100/N

The frequency counts and percentages reveal that majority of the ophthalmologists prefer electronic resources for their information use. Majority of the ophthalmologists prefer electronic resource as their first preference to access information and they are of 56.08%. Around 44.71% of the ophthalmologists prefer electronic resources as their first preference to publish. Around 45.81% of the ophthalmologists recognized that both print and electronic

resources as an authenticated source of information. The ophthalmologists consider both printed & electronic resources as more authenticated resources than electronic resources. Around 68.88% of ophthalmologists perceived electronic resource is easy to manage information. Around 74.09% of ophthalmologists agreed that electronic resources are convenient to use. Around 80.25% of ophthalmologists realized that electronic resources are economical and saves

time. Around 46.92% of ophthalmologists recognized that electronic resource improves their professional competency.

B. Examining Ophthalmologists' Preferences with their Individual and Institution Characteristics

The chi-square test of independence is used to verify the significance level of ophthalmologists' preferences with

their individual and institution characteristics. Fishers' exact test is applied for small sample sizes.

Ophthalmologists' resource choice as the first preference to access and resource choice is assessed with their individual and institution characteristics and presented in table II. The table II shows up the group frequency counts and group preferences along with the chi-square test / fishers' exact test results of the group.

TABLE II FIRST PREFERENCE TO ACCESS INFORMATION - CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.102
Male	36	194	104	5	E>B>P>N	Electronic	
Female	42	161	91	0	E>B>P>N	Electronic	
Age Group							0.74
Less than or equal to 30	33	124	59	1	E>B>P>N	Electronic	
Between 31 and 40	28	180	86	4	E>B>P>N	Electronic	
Between 40 and 50	14	35	40	0	B>E>P>N	Both	
Between 50 and 60	2	12	7	0	E>B>P>N	Electronic	
Greater than 60	1	4	3	0	E>B>P>N	Electronic	
Designation							0.46#
Medical Officer	42	190	128	5	E>B>P>N	Electronic	
Fellows	35	156	63	0	E>B>P>N	Electronic	
Senior Resident	1	9	4	0	E>B>P>N	Electronic	
Experience							0.067
Less than or equal to 5	50	239	119	3	E>B>P>N	Electronic	
6 to 10	4	25	11	0	E>B>P>N	Electronic	
10 to 15	4	9	17	0	B>E>P>N	Both	
15 to 20	5	11	15	0	B>E>P>N	Both	
Greater than 20	15	71	33	2	E>B>P>N	Electronic	
Institution Type							0.543#
Government	8	20	13	0	E>B>P>N	Electronic	
Not for profit organization	64	292	154	5	E>B>P>N	Electronic	
Corporate	6	43	28	0	E>B>P>N	Electronic	

** Significant at the 0.05 level

The gender group frequencies show that both the male and female ophthalmologists consider electronic resources as their first preference to access. The ophthalmologists in the age group "Between 40 and 50" prefer both resources more than electronic resources. The ophthalmologists working in different positions prefer electronic resources as their first preference to access. The ophthalmologists with experience "10 to 15 years" and "15 to 20 years" prefer both resources more than electronic resources. The ophthalmologists working in different types of institutions also prefer electronic resources as their first preference to access. The chi-square result of gender group was 0.102. The chi-square result of age group was 0.74. The fisher exact test result of

designation is 0.46. The chi-square result of experience group was 0.067. The fisher exact test result of institution type was 0.543. Ophthalmologists' preferences on the venue of access don't have any association with their individual and institution characteristics.

Ophthalmologists' resource choice as the first preference to publish was assessed with their individual and institution characteristics and presented in table III. The table III shows up the group frequency counts and group preferences along with the chi square test /fishers' exact test results of the group.

TABLE III FIRST PREFERENCE TO PUBLISH INFORMATION - CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No opinion	Preference	Max	P Value
Gender							0.714
Male	62	150	109	18	E>B>P>N	Electronic	
Female	60	133	90	11	E>B>P>N	Electronic	
Age Group							0.32
Less than or equal to 30	46	93	71	7	E>B>P>N	Electronic	
Between 31 and 40	51	148	83	16	E>B>P>N	Electronic	
Between 40 and 50	20	31	34	4	B>E>P>N	Both	
Between 50 and 60	4	6	9	2	B>E>P>N	Both	
Greater than 60	1	5	2	0	E>B>P>N	Electronic	
Designation							0.112#
Medical Officer	71	148	128	18	E>B>P>N	Electronic	
Fellows	46	128	69	11	E>B>P>N	Electronic	
Senior Resident	5	7	2	0	E>P>B>N	Electronic	
Experience							0.174
Less than or equal to 6	74	185	129	23	E>B>P>N	Electronic	
6 to 10	6	18	14	2	E>B>P>N	Electronic	
10 to 15	9	8	13	0	B>P>B>N	Electronic	
15 to 20	5	11	13	2	B>E>P>N	Electronic	
Greater than 20	28	61	30	2	E>B>P>N	Electronic	
Institution Type							0.164#
Government	15	13	11	2	P>E>B>N	Electronic	
Not for profit	90	236	165	24	E>B>P>N	Electronic	
Corporate	17	34	23	3	E>B>P>N	Electronic	

The gender group frequencies show that both the male and female ophthalmologists consider electronic resources as their first preference to publish. The ophthalmologists in the age groups, "Between 40 and 50" and "Between 50 and 60" prefer both resources more than electronic resources. The ophthalmologists working in different positions prefer electronic resources as their first preference to publish. The ophthalmologists with different working experience prefer electronic resources as their first preference to publish. The ophthalmologists working in different types of institutions also prefer electronic resources as their first preference to publish. The chi-square result of gender group was 0.714. The chi-square result of age group was 0.32. The fisher exact test result of designation is 0.112. The chi-square result of experience group was 0.174. The fisher exact test result of institution type was 0.164. Ophthalmologists' preferences on the venue of publishing don't have any association with their individual and institution characteristics.

Ophthalmologists' resource choice as authenticated source of information was assessed with their individual and institution characteristics and presented in table IV. The table IV shows up the group frequency counts and group preferences along with the chi-square test /fishers' exact test results of the group.

The gender group frequencies show that both the male and female ophthalmologists consider both resources as an authenticated source of information. The ophthalmologists in the age groups except "Greater than 60" prefer both resources. The ophthalmologists working in different positions except "Senior Residents" prefer both resources as an authenticated source of information. The ophthalmologists with different working experience prefer both resources. The ophthalmologists working in different types of institutions also prefer both resources. The chi-square result of gender group was 0.102. The chi-square result of age group was 0.963. The fisher exact test result of designation is 0.737. The chi-square result of experience group was 0.797. The fisher exact test result of institution type was 0.099. Ophthalmologists' resource choice for authentication doesn't have any association with their individual and institution characteristics.

Ophthalmologists' resource choice as easy to store, organize, manage was assessed with their individual and institution characteristics and presented in table V. The table V shows up the group frequency counts and group preferences along with the chi square test /fishers' exact test results of the group.

TABLE IV AUTHENTICATED SOURCE OF INFORMATION- CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.102
Male	94	83	150	12	B>P>E>N	Both	
Female	81	71	140	2	B>P>E>N	Both	
Age Group							0.963
Less than or equal to 30	63	52	98	4	B>P>E>N	Both	
Between 31 and 40	79	74	137	8	B>P>E>N	Both	
Between 40 and 50	26	19	42	2	B>P>E>N	Both	
Between 50 and 60	6	5	10	0	B>P>E>N	Both	
Greater than 60	1	4	3	0	E>B>P>N	Electronic	
Designation							0.737#
Medical Officer	98	87	170	10	B>P>E>N	Both	
Fellows	71	63	116	4	B>P>E>N	Both	
Senior Resident	6	4	4	0	P>B & E>N	Print	
Experience							0.797
Less than or equal to 5	113	97	192	9	B>P>E>N	Both	
6 to 10	12	7	21	0	B>P>E>N	Both	
10 to 15	10	7	13	0	B>P>E>N	Both	
15 to 20	8	10	13	0	B>E>P>N	Both	
Greater than 20	32	33	51	5	B>E>P>N	Both	
Institution Type							0.099#
Government	18	8	14	1	P>B>E>N	Both	
Not for profit organization	134	134	235	12	B>E&P>N	Both	
Corporate	23	12	41	1	B>P>E>N	Both	

TABLE V EASY TO STORE, ORGANIZE AND MANAGE- CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.673
Male	32	231	72	4	E>B>P>N	Electronic	
Female	20	205	66	3	E>B>P>N	Electronic	
Age Group							0.988#
Less than or equal to 30	18	155	42	2	E>B>P>N	Electronic	
Between 31 and 40	25	200	69	4	E>B>P>N	Electronic	
Between 40 and 50	7	61	20	1	E>B>P>N	Electronic	
Between 50 and 60	2	15	4	0	E>B>P>N	Electronic	
Greater than 60	0	5	3	0	E>B>P&N	Electronic	
Designation							0.48#
Medical Officer	24	251	85	5	E>B>P>N	Electronic	
Fellows	26	176	50	2	E>B>P>N	Electronic	
Senior Resident	2	9	3	0	E>B>P>N	Electronic	
Experience							0.882#
Less than or equal to 5	37	283	86	5	E>B>P>N	Electronic	
6 to 10	5	28	7	0	E>B>P>N	Electronic	
10 to 15	2	23	5	0	E>B>P>N	Electronic	
15 to 20	2	21	8	0	E>B>P>N	Electronic	
Greater than 20	6	81	32	2	E>B>P>N	Electronic	
Institution Type							0.397#
Government	4	26	11	0	E>B>P>N	Electronic	
Not for profit organization	45	349	115	6	E>B>P>N	Electronic	
Corporate	3	61	12	1	E>B>P>N	Electronic	

The gender group frequencies show that both the male and female ophthalmologists consider Electronic resources as easy to store, organize and manage. The ophthalmologists in all the age groups prefer electronic resources. The ophthalmologists working in different positions prefer electronic resources. The ophthalmologists with different working experience prefer electronic resources. The ophthalmologists working in different types of institutions also prefer electronic resources. The chi-square result of gender group was 0.673. The fishers exact test result of age group was 0.988. The fisher exact test result of designation is 0.48. The fisher exact test result of experience group was

0.882. The fisher exact test result of institution type was 0.397. Ophthalmologists' resource choice as easy to store, organize and manage doesn't have any association with their individual and institution characteristics.

Ophthalmologists' resource choice as convenient to access, use, share was assessed with their individual and institution characteristics and presented in table VI. The table VI shows up the group frequency counts and group preferences along with the chi square test /fishers' exact test results of the group.

TABLE VI CONVENIENT TO ACCESS, USE, SHARE- CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.727
Male	15	251	69	4	E>B>P>N	Electronic	
Female	12	218	63	1	E>B>P>N	Electronic	
Age Group							0.555#
Less than or equal to 30	11	168	37	1	E>B>P>N	Electronic	
Between 31 and 40	11	222	62	3	E>B>P>N	Electronic	
Between 40 and 50	5	58	25	1	E>B>P>N	Electronic	
Between 50 and 60	0	16	5	0	E>B>P&N	Electronic	
Greater than 60	0	5	3	0	E>B>P&N	Electronic	
Designation							0.108#
Medical Officer	14	260	87	4	E>B>P>N	Electronic	
Fellows	11	200	42	1	E>B>P>N	Electronic	
Senior Resident	2	9	3	0	E>B>P>N	Electronic	
Experience							0.289#
Less than or equal to 5	19	315	73	4	E>B>P>N	Electronic	
6 to 10	3	30	7	0	E>B>P>N	Electronic	
10 to 15	1	23	6	0	E>B>P>N	Electronic	
15 to 20	0	21	10	0	E>B>P&N	Electronic	
Greater than 20	4	80	36	1	E>B>P>N	Electronic	
Institution Type							0.486#
Government	1	26	14	0	E>B>P>N	Electronic	
Not for profit organization	24	384	102	5	E>B>P>N	Electronic	
Corporate	2	59	16	0	E>B>P>N	Electronic	

The gender group frequencies show that both the male and female ophthalmologists consider Electronic resources as convenient to access, use, and share. The ophthalmologists in all the age groups prefer electronic resources. The ophthalmologists working in different positions prefer electronic resources. The ophthalmologists with different working experience prefer electronic resources. The ophthalmologists working in different types of institutions also prefer electronic resources. The chi-square result of gender group was 0.727. The fishers exact test result of age group was 0.555. The fisher exact test result of designation is 0.108. The fishers exact test result of experience group was 0.289. The fisher exact test result of institution type was 0.486. Ophthalmologists' resource choice as convenient

to access, use and share doesn't have any association with their individual and institution characteristics.

Ophthalmologists' resource choice as it saves time and economical was assessed with their individual and institution characteristics and presented in table VII. The table VII shows up the group frequency counts and group preferences along with the chi square test/fishers' exact test results of the group.

The gender group frequencies show that both the male and female ophthalmologists consider Electronic resources as it saves time and economical. The ophthalmologists in all the age groups prefer electronic resources.

TABLE VII SAVES TIME AND ECONOMICAL - CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.805
Male	11	268	56	4	E>B>P>N	Electronic	
Female	10	240	42	2	E>B>P>N	Electronic	
Age Group							0.804#
Less than or equal to 30	9	177	30	1	E>B>P>N	Electronic	
Between 31 and 40	9	238	48	3	E>B>P>N	Electronic	
Between 40 and 50	3	70	14	2	E>B>P>N	Electronic	
Between 50 and 60	0	18	3	0	E>B>P&N	Electronic	
Greater than 60	0	5	3	0	E>B>P&N	Electronic	
Designation							0.149
Medical Officer	10	286	64	5	E>B>P>N	Electronic	
Fellows	9	211	33	1	E>B>P>N	Electronic	
Senior Resident	2	11	1	0	E>B>P>N	Electronic	
Experience							0.653#
Less than or equal to 5	16	335	56	4	E>B>P>N	Electronic	
6 to 10	1	33	5	1	E>B>P>N	Electronic	
10 to 15	1	25	4	0	E>B>P>N	Electronic	
15 to 20	0	25	6	0	E>B>P&N	Electronic	
Greater than 20	3	90	27	1	E>B>P>N	Electronic	
Institution Type							0.256#
Government	2	29	10	0	E>B>P>N	Electronic	
Not for profit organization	19	412	78	6	E>B>P>N	Electronic	
Corporate	0	67	10	0	E>B>P&N	Electronic	

TABLE VIII IMPROVES PROFESSIONAL COMPETENCY- CHI-SQUARE TEST RESULTS

Characteristic	Printed	Electronic	Both	No Opinion	Preference	Max	P Value
Gender							0.323
Male	26	152	152	9	E & B>P>N	Electronic & Both	
Female	18	145	128	3	E>B>P>N	Electronic	
Age Group							0.481
Less than or equal to 30	17	98	99	3	B>E>P>N	Both	
Between 31 and 40	19	142	132	5	E>B>P>N	Electronic	
Between 40 and 50	8	38	39	4	B>E>P>N	Both	
Between 50 and 60	0	15	6	0	E>B>P&N	Electronic	
Greater than 60	0	4	4	0	E=B	Electronic & Both	
Designation							0.168#
Medical Officer	21	168	166	10	E>B>P>N	Electronic	
Fellows	20	124	108	2	E>B>P>N	Electronic	
Senior Resident	3	5	6	0	B>E>P>N	Both	
Experience							0.787
Less than or equal to 5	30	189	185	7	E>B>P>N	Electronic	
6 to 10	2	23	14	1	E>B>P>N	Electronic	
10 to 15	4	13	12	1	E>B>P>N	Electronic	
15 to 20	0	15	16	0	B>E>P&N	Both	
Greater than 20	8	57	53	3	E>B>P>N	Electronic	
Institution Type							0.632#
Government	4	14	22	1	B>E>P>N	Both	
Not for profit organization	36	247	222	10	E>B>P>N	Electronic	
Corporate	4	36	36	1	E&B>P>N	Electronic & Both	

The ophthalmologists working in different positions prefer electronic resources. The ophthalmologists with different working experience prefer electronic resources. The ophthalmologists working in different types of institutions also prefer electronic resources. The chi-square result of gender group was 0.805. The fishers exact test result of age group was 0.804. The chi-square test result of designation is 0.149. The fishers exact test result of experience group was 0.653. The fisher exact test result of institution type was 0.256. Ophthalmologists' resource choice as it saves time and economical doesn't have any association with their individual and institution characteristics. Ophthalmologists' resource choice as it improves professional competency was assessed with their individual and institution characteristics and presented in table VIII. The table VIII shows up the group frequency counts and group preferences along with the chi-square test /fishers' exact test results of the group.

The male ophthalmologists consider both electronic and print resources to improve their professional competency. The female ophthalmologists consider electronic resources to improve their professional competency. The ophthalmologists in the age group "Less than or equal to 30", "Between 40 and 50" and "Greater than 60" prefer both resources. The ophthalmologists in the age group "Between 31 and 40" and "Between 50 and 60" prefer electronic resources. The ophthalmologists working in different positions except "Senior Residents" prefer electronic resources. The ophthalmologists with different working experience except "15 to 20" prefer Electronic resources. The ophthalmologists working in NGOs prefer electronic resources while the others prefer both resources. The chi-square result of gender group was 0.323. The chi-square result of age group was 0.481. The fisher exact test result of designation is 0.168. The chi-square result of experience group was 0.797. The fisher exact test result of institution type was 0.632. Ophthalmologists' resource choice as it improves professional competency doesn't have any association with their individual and institution characteristics.

VII. CONCLUSION

Around 633 ophthalmologists working in 47 academic eye hospitals from 16 states of India were included in the study. The study aims to examine and explore the ophthalmologists' preference towards the print vs. electronic information resources. The preferences were examined with the seven attributes of information use. The frequency counts and percentages on resource choices reveal that majority of the ophthalmologists consider electronic resources as their first choice to access and publish. The ophthalmologists consider both printed & electronic resources and printed resource as more authenticated resources than electronic resources. Majority of the ophthalmologists consider electronic resources are easy to store, manage. Majority of the ophthalmologists consider electronic resources are economical and time savvy. Majority of the ophthalmologists accept electronic resources improve their professional competency. There is

no association between ophthalmologists' preferences on print vs. electronic resources and their individual characteristics and institutional characteristics. The study results revealed the ophthalmologists' preferences on print vs. electronic resources for their information use. This will help the ophthalmic librarians to understand the resource choices of the ophthalmologists more specifically. The results also provide guidelines for the efficient and effective management of information resources in ophthalmic libraries. This will help the ophthalmic institutions to provide appropriate infrastructure and facilities. The study results will provide insights to the information providers to plan their future service options.

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