Summary, Findings and Conclusion

In the present study, an attempt has been made to know the information seeking behaviour of the sports persons and sports scientists of Delhi and Punjab especially in the light of the use of information technology. Other aspects related with information seeking behaviour have also been considered. Data were collected through two structured questionnaires. Literature survey, interviews-informal meetings with library staff and research respondents; and observation method were also used for supplementing the collecting data. The summary, findings and recommendations are the outcome of the analysis of the foregoing data collected on the information seeking behaviour of the sports persons and sports scientists.

TESTING OF HYPOTHESES

Hypothesis 1: Electronic Sources of Information are used very less by the Sports Persons and Sports Scientists.

In case of awareness about Internet facility provided by the concerned libraries, 47.5% of the respondents state that their institutional libraries provide internet facility, 38.5% respondents are not aware about it, and 14% did not respond (Table 6.3.4a). The study reveals that 38.9% of the respondents rely upon library staff for searching on the Internet. It is due to several reasons like lack of training in information technology use that they are unable to operate it of their own (Table 6.3.4b).

In using the library collection and information technology facilities, study finds that 25% of the respondents use audio-video cassettes, 19.5% use the Internet, 11.5% use CD-ROMS, and only 10.5% of the respondents’ use Physical Education and Sports Sciences websites. It has been found that most of the sports persons and sports scientists rely upon printed sources as compared to electronic form (Table 6.4.1). Further, regarding adequacy of library collection in concerned libraries, research respondents give 5th rank to Physical Education and Sports websites, 9th rank to E-books and 12th rank to E-journals from a list, comprising 13 information sources, rest of the sources are
printed. All the information sources have been marked ‘inadequate’ by majority of the respondents (Table 6.4.2). Regarding frequency of using electronic information sources, only 6.5% of the respondents use www most frequently, whereas 61% never use it. Online databases are used most frequently by only 4% of respondents whereas 68% never use this. CD-ROM databases are used most frequently only by 3.5% respondents and 79% of the research respondents never use this electronic information source.

Hence, the hypothesis stands vindicated.


Library Services

The results reveal that newspaper service is used most frequently by 18.5% respondents whereas 13.5% never make use of it. Library space/ reading room is used most frequently by 16% respondents whereas 21.5% never make use of it; 13% respondents use loan/circulation of books most frequently, but 29% never make use of it. Photocopying service is used most frequently by Sports persons and Sports Scientists whereas 38% never make use of it. Current awareness service is used most frequently by 11% respondents whereas 46.5% never make use of it. Internet service is used most frequently by 16% of the research respondents whereas 54.5% never make use of it. Reference service is availed of most frequently by 9.5% of the respondents but 55.5% never make use of it. Indexing/abstracting service is used most frequently by 3% respondents whereas 70% give negative response about it. E-mail facility is used most frequently by 7% respondents whereas 73.5% never make use of it. Bibliographic service is used most frequently by only 1 % respondents whereas 88.5% never make use of it. Microfilming service is used most frequently by 2% of the respondents whereas 93% never make use of it. Database service is used most frequently by 1.5% respondents whereas 92% never make use of it. Selective dissemination of information is used most frequently by 2.5% respondents whereas 93% never make use of it. Referral service is used most frequently by 1% respondents whereas 92.5% never make use of it. Discussion group is used most frequently by 1% Sports persons and Sports Scientists whereas 93% never make use of it. Inter-library loan is used most frequently
by 1% of the respondents whereas 95% never make use of it. Unfortunately, majority of the respondents do not make use of such services (Table 6.5.1).

Hence, the hypothesis is vindicated.

FINDINGS OF THE STUDY

By academic qualifications majority of the respondents, i.e., 35% have M.P.Ed. followed by 26.50% of the respondents have B.P.Ed., 15.50% have M.Phil., whereas 13% of the respondents have Ph.D. degrees.

Majority of the respondents have marked their specialisation in ‘Athletics’ followed by the ‘Sports sciences’.

Majority of the respondents, i.e., 77.50% of the respondents are male and rest 22.50% respondents are female.

Majority of the respondents are young as 80% of the respondents are below the age of forty.

Majority of the respondents will stay long in the profession as 70% have less than ten years of experience. They have a long way to go.

It is found that 96% of the respondents know English. The second largest group of respondents, i.e., 64% knows other Indian languages; it includes Hindi, Kashmiri, Gujarati, Urdu, Haryanvi, Manipuri, Telugu, Marathi, Kannada, Konkani, Assamese, Tamil, Pahari and Sindhi, etc. The small number of respondents, i.e., 3% also know foreign languages like French, Nepali and Bengali, etc. in addition to their mother language. So it is clear that majority of the respondents have knowledge of English language, which serves as a bridge across India and with the international community.

Purpose of Seeking Information

It is found that majority of the respondents seek information for ‘teaching/coaching’ as the top most reason.

Majority of the respondents most frequently seek information for ‘teaching/coaching’ and they give lowest rank to ‘writing articles’.

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Information Channels

Majority of the sports persons and sports scientists use their departmental libraries for seeking their required information followed by consulting ‘subject experts.’

As far as visits of the sports libraries by the sports persons and sports scientists are concerned, maximum respondents i.e. 26.5% use the library of Sports Authority of India at Netaji Subhash National Institute of Sports, Patiala.

The institutes located at distant locations are less visited by the sports persons and sports scientists who belong to the institutes situated in North India. Library of the parent institution is used mostly by them.

Regarding the extent of use of library, results show that daily users of the library services are 13% while 23% of the respondents use library services ‘twice in a week’, 12% of the respondents use these services once in a week. Only 6.5% and 14% of the respondents use library services ‘once in a fortnight’ and ‘once in a month’ respectively. Whereas 19% physical education and sports respondents use such services rarely, and 12.5% of the respondents never use these services.

So far awareness about Internet facility in libraries among sports persons and sports scientists is concerned, 95(47.5%) of the respondents state that their institutional libraries provide internet facility.

The study reveals that 38.9% of the respondents rely upon library staff for searching on the Internet.

Majority of the respondents, i.e.44.21% are dissatisfied with information technology facilities provided by the libraries.

Library Collection and Use of Information Technology Facilities

In case of using library collection, top priority of the 80% respondents goes to reading newspapers.

Most of the sports persons and sports scientists rely upon printed sources than the electronic ones. Lack of infrastructure or personal training of information technology may be the major reasons for the less use of electronic sources by the respondents. Sports persons still rely upon traditional printed sources.
Regarding adequacy of library collection in concerned libraries, majority of the respondents give 1st rank to Newspapers and 2nd rank to Books.

All the information sources have been marked ‘inadequate’ by most of the respondents. Such highly inadequate information sources include Physical Education and Sports websites, Conference seminar/proceedings, Research reports, Indexing/abstracting journals, E-Books, Bibliographies, and Trade/Publishers Catalogues etc.

Sports persons are mostly books oriented whereas researchers in other fields such as sciences and social sciences mostly have started depending on journals and web resources.

The study reveals that 43.5% of the sports persons and sports scientists feel that information technology is helpful for better access to information and 43.5% respondents feel that it is also helpful to make contact with other professionals living far and wide.

About 41.5% respondents reveal that information technology has decreased the use of postal mail and 40.5% feel that Information Technology (IT) is time saving. It is stated by 32.5% respondents that due to the advent of information technological devices use of landline telephone has decreased, and 26% respondents feel that use of print version of documents has also decreased. Forty six that is 23% respondents state that information technology based services have brought improvement in the quality of their professional work, whereas 21.5% respondents feel that IT services provide quick and abundant information.

Library Services

Sports persons and sports scientists make use of variety of library services. The results reveal that Newspaper Service has been given 1st rank by the respondents by making maximum use of this service for getting current information.

Unfortunately, majority of the respondents do not use library services to a great extent. Some reasons may be there such as they may not be aware of such services, or their libraries may not be providing such services to them due to lack of proper infrastructure or publicity, or they may not have interest in using these library services due to their busy time schedule in classrooms and in the play grounds as well.
Modes of Seeking Information

Majority of the respondents, i.e., 38.5% consult experts for discussion and 32% of the respondents discuss their problems with their colleagues.

Majority of the respondents, i.e., 46% consult collection on the shelves and the lowest number of respondents, i.e., 9% consult Indexing/Abstracting journals for seeking their required information.

Purpose of Using Information Sources

Use of information sources for seeking different types of information by the sports persons and sports scientists has been given below:

Printed Sources

Library Catalogues: Majority of the respondents i.e. 71.5% use library catalogues for locating their books in libraries.

Bibliographies: The study reveals that majority of the respondents use bibliographies for specific information.

Indexing/Abstracting Journals: Results show that 46.5% respondents use indexing/abstracting journals for current information.

Subject Dictionaries: In case of subject dictionaries majority of the respondents use them for background information.

Newspapers: As sports have become a passion and profession for masses, so most of the newspapers available in different languages try to widely cover sports related events at national and international level. This study also indicates that majority of the respondents use newspapers for current information.

Books/Monographs: In case of books/monographs, the study reveals that majority of the respondents use books/monographs for exhaustive information.

Research Journals: Majority of the physical education and sports respondents use research journals for specific information.

Research Reports: The study indicates that majority of the respondents use research reports for specific information.
Conference/Seminar Proceedings: Majority of the research respondents use conference/seminar proceedings for getting current information.

Theses/Dissertations: In case of using theses/dissertations, majority of the sports persons and sports scientists use these sources for background information.

Unpublished Conference Papers: The study reveals that maximum respondents use unpublished conference papers for current information.

Patents/Standards: Major group of respondents use patents/standards for specific information.

Handbooks/Manuals: Most of the respondents use Handbooks/manuals for obtaining current information.

Statistical Publications: Majority of the respondents use statistical publications for getting current information.

Subject Encyclopaedias: Most of the respondents frequently use subject encyclopaedias for getting background information.

Electronic Sources

WWW: Maximum number of the research respondents use WWW for current information.

CD-ROM Databases: It is found that sports persons and sports scientists have used CD-ROM databases for current information.

Online Databases: The results show that respondents use online databases for background reading.

Regarding using information sources by the respondents, the study reveals that 1st preferred source of information by the respondents is newspapers and in case of electronic sources 1st rank goes to WWW.

It is found that use of electronic sources by the sports respondents is very less as compared to the printed sources.

It is found that most preferred online database of Indexing/Abstracting periodical by the sports persons and sports scientists is *SPORT Discuss* (http://www.ebscohost.com/public/sportdiscus-with-full-text).
Use of Journals

In case of mostly preferred foreign journals, 1st preferred journal by the respondents is *Journal of Applied Sport Psychology* (Association for Applied Sports Psychology, UK. Pub.).

In case of highly preferred Indian journals, 1st preference goes to *Indian Journal of Physical Education, Sports Medicine and Exercise Science* (LNIPE Pub.).

Conferences/Seminars

Majority of the sports respondents, i.e., 78.5% state that conferences/seminars are good sources of information for them.

The study shows that 12% respondents have attended international conferences, 30.5% respondents have attended national level conferences and seminars, and 22.5% of sports persons and sports scientists have attended local level conferences and seminars.

Majority of sports scientists and sports persons (65.5%) feel that library orientation programmes may be helpful in retrieval of their desired information.

Information Barriers

Majority of the respondents admit that they want to keep themselves up to date in the field of research. But they also state that there are some problems in seeking their desired information.

The Study reveals that respondents give first rank (mean=2.32) to ‘Poor connectivity’ as the biggest problem while using information technology for getting their desired information.

Results indicate that majority of the respondents (63.5%) feel that complete library automation will help to solve their information seeking problems.

Suggestions Received from the Respondents:

- It is suggested by some respondents that the library should be automated and campus-wide Internet facility should be provided to the library users.
• Information technology services are essential in the library and a library assistant should be there for assisting information seekers while using such e-services.
• It is suggested that computer networking between library and their departments is required.
• The campus should be made Wi-Fi enabled.
• Library should be made air conditioned.
• It is suggested that more variety of information sources should be provided to the users.
• Only a small number of reference books are available in the library. More reference books and latest books written by foreign authors should be regularly procured.
• Books should be kept in a systematic order; it can save the time of the library users.
• More printed and electronic journals should be subscribed.
• More research material should be provided.
• Library timings should be extended to suit the users.
• Library staff should be tech-savvy and more co-operative with library users.
• The library should be made user friendly and its services be upgraded from time to time.

Recommendations

Information seeking behaviour is ever changing with the changing information needs of the users, and changing forms of documents as well as advancements in information technology. In the present study all the possible efforts have been made to understand the information seeking behaviour of the sports persons and sports scientists, their information needs, information channels, search strategies, adequacy of the
information sources in both the forms - printed and electronic form, purpose and frequency of their use. Sports community and sports libraries, both the parties should be ready for some necessary changes. The following changes may be helpful for achieving the set goals:

The sports persons and sports scientists should enhance their reading habits to exploit the library resources to the optimum level.

They should become more techno-savvy, so that they can use latest technology for getting latest information regarding their subject field. They should be made aware enough about library sources and services, so that they can avail them. Lack of awareness and passive acceptance about library services are the major bottlenecks to the effective information seeking process.

Sports persons and sports scientists should enhance their participation in research activities and conferences.

Latest information sources in both the forms, printed and electronic, should be regularly procured.

Due to financial constraints, it is not possible for a single library to procure all the printed and electronic documents for its users, so inter-library loan can be helpful among sports libraries. For the fulfillment of information needs of the users, libraries can join library information networks suitable to their requirements.

In electronic era, procurement of electronic information sources from private publishers proves expensive. Therefore, it is the need of the hour to set up a INDPESS Consortium (Indian National Digital Library in Physical Education and Sports Sciences). With the availability of such consortium sports community can be served better for their information and library needs.

Areas for Further Research

At the end of this present study, some areas for further research have been identified. Information seeking behaviour of the sports persons and sports scientists can be further carried out in the following areas:
To investigate the information seeking behaviour of the sports persons and sports scientists of developed and developing nations.

To study the feasibility and design of Indian National Digital Library in Physical Education and Sports Sciences (INDPESS).

A comparative study of information seeking behaviour of male and female sports practitioners can be done.

A comparative study of information seeking behaviour of sports academicians and sports students can be done.

To study the information seeking behaviour of medalist and highly decorated sports persons.

CONCLUSION

In the concluding phase of this piece of research, it is relevant to mention here that information gathering habits among the sports persons and sports scientists should be encouraged by themselves. On the other hand libraries also can play a very active role to serve sports community by developing their latest collections in printed and electronic form. Latest research material should be provided to sports community. Libraries should propagate their sources and services among sports persons and sports scientists and while acting as a ‘Centre of attraction’ state of the art facilities should be provided to their users. Therefore, library staff should be welcoming, co-operative and trained so that they can serve the user community timely, effectively and efficiently. Today sports are not mere a display of muscle power but a great competition of brain power also. So, for harvesting satisfactory results in sports competitions at national and international turfs, a sportsperson has to be abreast with the latest techniques for increasing sports performance.

Hence, major responsibility to innovate new techniques and methods for enhancing sports performance rests on the shoulders of sports persons and sports scientists of the country. Research in sports sciences should be encouraged. Now, libraries and playgrounds are equally important to sports community. For scaling new heights in national and international sports, they will have to work on this Mantra; Win by Reading More and Playing More.