Chapter 4

Review of Related Literature

INTRODUCTION

The vast expansion of library and information services in all the fields of knowledge has raised a number of issues and problems which are reviewed, criticized and discussed by concerned professionals in various journals, reports, conferences and seminars during the past few decades. Several studies have been conducted on different aspects of information seeking behaviour. But the researcher has not found any study on information seeking behaviour and information needs of the Sports Community in the light of the use of Information Technology. However some important studies reviewed are as follow:

THEORETICAL STUDIES ON INFORMATION SEEKING BEHAVIOUR

Jackson (1983)\(^1\) mentioned about information explosion and the information needs of the Post Industrial Society in the United States. He explained the emergence of Information science and its implication in library and information services, as well as in educational and training programme in the profession.

In a study Khulthau (1993)\(^2\) found that information seeking begins with an initiation stage. During this stage the Information seeker first becomes aware of the need to gather information. The task during this stage was, to recognize the initial need for information.

Ashraf and Singh (1994)\(^3\) discussed the importance of intelligence information, social information and health care information for government officials for decision making. They pointed that a public policy is based on information, available at the time of decision making. They concluded that it is the responsibility of government and citizens to decide the right use of information and the right balance between access, privacy and ownership.

Kuruppu (1999)\(^4\) in his study discussed about information needs and information seeking behaviour of workers in organisations especially in research
organisations. The use of the findings of the studies in making decisions relating to the design of information systems and services is also touched upon. He also discussed the impact of emerging information technology on information users and their information seeking behaviour. He talked about various models designed for Information seeking behaviour of researchers with the evidence of related studies, he justified the great impact of information technology on information seeking behaviour of users.

Ocholla (1999)\(^5\) in his study conducted at the University of Zululand, South Africa, found that Journals, dissertations and theses, conference literature, text books and research reports are high in demand overall. The faculties of education and commerce have rated conference literature (92% and 88% respectively) second to journals (93% for education and 100% for commerce). It is strange that academics use the library but make less use of the catalogue and the staff to obtain information. Academics seek information for career development, to enlighten others, professional need and occupation, Personal ego and prestige and justify the existence etc. Academics use other libraries at large scale than their own university library and this use may be possible through Inter library loan, but it is interesting and worth further investigation in order to determine the suitability of the services offered.

Hjorland (2000)\(^6\) attempted to delineate a general theory of information seeking behaviour. He defines essential characteristics in human information seeking, including a description of its cultural and social determinants. He feels such a theory should explain information neglecting and avoidance, the utilisation of different kinds of information resources, the strategies used, and its efficiency.

Chandel and Saraf (2002)\(^7\) in their study reviewed the characteristics, concept, types and scope of information needs and information seeking behaviour in the light of findings of the earlier studies. They considered the previous studies were unable to achieve the objectives, because information seeking behaviour is ever changing. Authors considered every study is a model in itself. So it is difficult to conceive a single model applicable in different environment. It has been realised that methodological model can be more workable than the cognitive one. In present study authors discussed about information needs, objectives of ascertaining of information needs, types of
information, scope of information needs, characteristics factors of information needs and use, behavioural aspects, retrospection methodologies, models of information seeking behaviour by Kuhalthan, Dervin, Ellis and Wilson etc. and their comparison. The study concludes that the ultimate objective of these models is to assist to user in accessing the desired information. If proper orientation is given to any of the models, and information searching skill is reinforced, then better results could be expected. It is the right time to bridge the gap between information users and information system and overcome the intervening variables and barriers obstructing their way in meeting each other.

**Laloo (2002)** described the information needs and Information seeking behaviour of users and characteristics of all the involved factors in the field of research and development. He talked about the information seeking behaviour of scientists, social scientists, businessmen, managers, doctors, teachers and citizens. He also discussed about technology transfer process, its need and constraints in transfer. The researcher advocates the impact of information on the quality of life. The researcher throws the light on each and every aspect of information and seeking behavior of users. All the aspects have been touched minutely.

**Murthy, Guha and Tejmen (2004)** found that an exercise in the status of information need studies can loosely be divided into four phases like, phase of generalisation, early systematic studies, cost benefit analysis, recall and precision and the last one, user-centered studies. The phenomenon of web is now ever dominating influence over all the traditional means of publication and circulation of information. They also identified the hurdles involved in dissemination of information i.e. economic hurdles, attitudinal hurdles, information-overload hurdles and technology hurdles, etc.

**Wilson (2006)** in his attempt talked about key elements of activity theory like, Motivation, Goal, Activity, Tools, Object, Outcome, Rules, Community and Division of labour. These all are directly applicable to the conduct of information behaviour research. An activity-theoretical approach to information behaviour research would provide a sound basis for the elaboration of contextual issues, for the discovering of organisational and other contradictions that affect information behaviour. It may be
used to aid the design and analysis of investigations. The basic ideas of activity theory are outlined and an attempt is made to harmonise different perspectives. A contrast is made between an activity system perspective and an activity process perspective and a diagrammatic representation of the process perspective is offered. According to Wilson, Activity theory is not a predictive theory, but a conceptual framework within which different theoretical perspectives may be employed. Typically, it is suggested that several methods of data collection should be employed and that the time frame for investigation should be long enough for the full range of contextual issues to emerge. Activity theory offers not only a useful conceptual framework, but also a coherent terminology to be shared by researchers, and a rapidly developing body of literature in associated disciplines.

USE OF INFORMATION TECHNOLOGY

Sreekumar (2001) in his study examined the major issues relating to the usage of electronic information. He found issues in three groups namely (a) Advances and achievement (b) common problems (c) promise of the future. The problems discussed in the paper are: (1) learning curve (2) diagnosing problems (3) Understanding error messages (4) adjusting the new features (5) Understanding manuals (6) navigating system (7) short cuts and up grading systems (8) Printing. After a deep analysis we have looked at the wealth of information available electronically, the technical problems one encounters and also the potential and promising future. In the way of acquiring, storing, retrieving and disseminating Information Technology, it is our duty to make this accessible to the unreached.

INFORMATION SEEKING AND USE OF INFORMATION TECHNOLOGY STUDIES IN SPORTS SCIENCES

Seema Kaushik (2000) elaborated computer applications in Physical Education and Sports because modern civilisation has become so complicated and sophisticated that to survive one has to be competitive. In fact, there are innumerable applications of computer and new ones are being developed everyday due to fast changes in information technology. In Physical Education and Sports, computers have their uses in every aspect, be it personal, staff work, class organisation and conduct,
health services, assignments, budgeting, financial aid, accounting, publishing, up
gradation of knowledge, management of grants, conference, library, or a gymnasium; it
is used everywhere. She concluded that the only limit is the limit of our creativity to
imagine uses for the computers.

Sharma (2005)\textsuperscript{13} indicated that the Physical Education has always been a
neglected area for research. But with the emergence of Sports Sciences like Sports
Medicine, Sports Psychology, Sports Sociology, Exercise Physiology, Kinesiology and
Biomechanics, the face of subject is gradually changing and it is shifting in a new era,
where spirit of competition in sports gave a push to the whole world to innovate new
techniques and methods to improve sports performance.

Bhagiarathi (2005)\textsuperscript{14} described that the Information Communication
Technology is also playing a vital role in practice for Physical Education and Sports. He
felt that ICT is helpful in coaching, professional development of teachers, research,
management and sharing of resources in physical education and sports.

INFORMATION SEEKING AND RESEARCH IN PHYSICAL EDUCATION
AND SPORTS SCIENCES

Clarke and Clarke (1970)\textsuperscript{15} presented various research methods in sufficient
detail so that they can be applied by the scientists. The book is divided into five parts
namely

(I) Initial considerations in research, (II) Non Laboratory studies, (III) Statistical
applications, (IV) Laboratory research, and (V) The research Report. Further these five
parts have been divided into eighteen Chapters. Authors expressed full intention to
provide all the information to the physical education and sports community, so that they
can add more golden chapters in their field of research.

Bucher (1979)\textsuperscript{16} in his very informative work, provided insights on very basic
and important aspects of physical education. He talked about the nature of the subject,
its meaning and philosophy and its future. He also touched historical foundations of the
subject. End of sex discrimination and physical education for handicapped and
exceptional persons are also important issues of his work. Relation of physical
education to health education, recreation, leisure services, camping and outdoor
education has been discussed minutely. Duties and services performed by Physical educators also mentioned. At the last, challenges are discussed which are being faced by the professionals.

**Das (1982)** in his book made an effort to draw a picture of games, sports and physical activities of India right from the medieval period to date. He described the role of Hindus, the Mughal and the Mohammadan, The Rajput and the Maratha and the Peshwa Rulers in the development of Physical education, Games and recreations in India. He also discussed the later British period (1900-1946) during which the cause of physical Education has been rightly ushered by the Britishers and Americans. In the last, an account of international Charter of physical Education and India’s national sports policy has been given.

**Singh and Gangopadhyay (1991)** in their nicely prepared work provide information on various aspects of Physical education and Sports. There are nineteen articles available in this book by distinguished scholars. These articles are mainly related to recent trends and practices in Indian Physical Education. Some authors discussed research trends in the subject. Most of the scholars extend their deep intension for uplifting the physical education and sports. Role of Physical education teacher and status of the subject in educational institutions has been discussed in this work. No doubt, while talking about modern trends, this well knitted work contains information on historical background and development of physical education and sports in India during right from ‘stone age’ to ‘twentieth century’.

**Tempelhoff (1992)** described about Southern African Sports Documentation and Information centre which was established in 1986. Its philosophy, location, activities, publications, and marketing have also been discussed.

**Sandhu, Singh and Bedi (1993)** in a study, highly relevant to this work, presented the problems and perspectives of information self sufficiency in sports with particular reference to India. They discussed the need for Information system in sports and physical education to meet the scientific enquiry and total awareness and global approach to enhance the health standard through physical fitness and sports performance.
Noack (1994)\textsuperscript{21} described the potential of the Internet for obtaining information about sports and sports enthusiasts to share and exchange scores, schedules, stories, and other information about their favorite teams.

Bedi (1995)\textsuperscript{22} discussed the position of the Sports Authority of India (SAI) library at Jawaharlal Nehru Stadium, Delhi as prevailed in 1990s. He proposed that new services be introduced to meet the information needs of sports community.

Bedi and Gautam (1996)\textsuperscript{23} drafted a plan to propose a model for National Information System for Physical Education and Sports Sciences in India. This sport information system is an imperative and operative necessity for promotion of sports in general and policy formulation in particular. In organisational structure the overall utility of versatile, integrated and state, regional, national and international level needs of various users have been discussed.

Bedi (1997)\textsuperscript{24} investigated that an effort has been made to provide an overall picture about the growth and development of physical and sports science libraries in the country. The fast pace of information has challenged the library staff. He feels that problems are everywhere, but these should be eliminated at the right time to build quality based collection and ensure better use of library resources through various services on the needs of users. He emphasises on networking of libraries. He believes that information system in physical education and sports science proposed in the study will be helpful in enhancing the sports standards and strengthening the physical education programme in the country.

Sharma (1997)\textsuperscript{25} provided sufficient details about meaning of research, steps of research, various research methods, qualities of a good researcher, need and area of research in physical education. He talks about selection of research problem and its related aspects. He gives minute information related to hypothesis, sampling method, analysis and interpretation of data.

Sharma (1997)\textsuperscript{26} in his study discussed about research, educational research, methods of research and selection of the research problem. He also talks about survey of related studies. He feels the concepts and methods of educational research have been mainly borrowed from western countries and in India these concepts and methods have
been applied in Physical education and sports also. Data collection, content analysis and tools of analysis are very important factors in physical education and sports sciences research. In the last of his work he applies the research in evaluation in gymnastics even in other games and sports too.

Dhananjoy and Ashu (2001) described a scholarly work entitled “Research methodologies in Physical education, sports and exercise science”. They concentrate on research methodologies and statistical procedures used in physical education research in different areas. They touch all the subjects involved in physical education and sports sciences, except sports information.

Gupta (2003) in his study mentioned the importance of research tools in collection of data in Physical education. He also discusses about research methodology, its goals, statistics in Physical education and Sports sciences. He talks about research programmes in Physical education and Sports sciences. While achieving the task in hand, researcher admits that the literature as regards in physical education and sports is very few, especially in case of writing of books by Indian authors in the field, the number is very less. In the last, researcher discusses about problems and issues in research methods very minutely and gives appropriate suggestions to avoid such hurdles.

Pargaonkar (2005) in his study stated that there are many shortcomings in research on Physical Education and Sports. It is difficult to solve it totally, but we can develop awareness among students and research scholars through seminars, workshops, refresher courses etc., that these may be minimised. Sooner an urge to excel is developed in the Scholars, better it will be for the quality of research in physical education and sports.

Yadav, Pagare and Singh (2007) in their research, wrote about research process like characteristics of good research and qualities of a good researcher, nature and need of research and especially scope of research in physical education and sports and its purpose. They focused on formulation and selection of research problems. They discussed about hypothesis and methods of research. They mentioned experimental research and sampling method in detail. After discussing tools and techniques of data collection, they sum up with writing of report.
Yobu (2008)\textsuperscript{11} in his study tried to cover almost all the aspects of research in physical education and sports sciences though it may be types of research and its scope, hypothesis formulation, statement of problem, thesis and dissertation format, presentation of a paper in a conference or seminar etc.

Gratton and Jones (2010)\textsuperscript{32} in their comprehensive accessible and practical work provided a complete grounding in both qualitative and quantitative research methods for the sports studies researchers. This book offers a step by step guide to the research process from designing a research project to collecting and analysing data, to reporting the research, and richly illustrated throughout with sport related care studies and examples from around the world. This book is divided into fifteen chapters and these chapters cover research process, research traditions, research questions, aims and objectives, reviewing the literature, theories, concepts and variables, research design and sports studies data collection, analysis of data, writing the research report and practical issues. Finally, it is a very good and useful source of information for sports community and researchers can make best use of it.

CRITICAL EVALUATION OF REFERENCE SOURCES IN PHYSICAL EDUCATION AND SPORTS SCIENCES

Reference books differ from other books in general, due to the fact that, they are looked up only for specific information and are not meant for continuous reading. Whether for recreation or study or research, a book on any subject or topic is gone through thoroughly, but no one would be expected to read a dictionary, an encyclopedia, a directory or a yearbook from cover to cover. A reference book is not designed for consecutive reading, but for short consultation only. In such books, the facts and information are usually brought together from a vast number and variety of sources and arranged conveniently for rapid and expeditious use. Their main purpose is to supply information.

In the light of above mentioned views, the reference sources in the field of physical education and sports sciences have been critically evaluated, and these are given below:

This book contains some best photographs appeared in Sports Illustrated in its first 13 years. Entire plan of the book is divided into sixteen chapters. All the chapters touch different aspects of sports and are nicely decorated with coloured and Black and white photographs. These photographs contain moments of Joy and show of strength. The last chapter covers about 30 articles by sport reporters. The superstars of various games have been included with their photographs representing their historic wins.


Michael (1968) in this work, divided this reference source in five parts like Angling, Falconry, Game shooting, Horsemanship and Hounds and Hunting. This dictionary starts from ‘Adipose fin’ and ends with ‘Young Entry’. Drawings have been given for justification and making understandable difficult things to the readers. The sporting terms related to above mentioned fields have been placed minutely.


Today’s athletes are far superior to those of a generation ago, as has been demonstrated by the continuing advancement of records and more sophisticated performance in every field of sports. So this source is very helpful for physicians and sports persons. All the entries have been arranged alphabetically which start from ‘Abrasion’ and end with ‘Whiplash’. Synonyms, Etiology, symptoms, signs, complications, laboratory data and pathology of each injury have been mentioned. At the last glossary and cross index entries have been provided. Indeed, it is a very valuable source for sports community.


In this work, an account of information on sports sciences and medicine has been given. In the beginning, history of sports sciences and medicine is given. The
entire plan of this reference source has been divided into ten chapters like, physical activity; General, Physical activity; sports, Games and Exercises, Environment, Emotions and Intellect, growth, development and aging, Drugs, Prevention of Disease and injury, special application of Physical activity to the Handicapped individual, Rehabilitation and the last one Safety and protection. Required diagrams and photographs have been given. At the end of each topic ‘references’ have been given which provide authenticity to the work. In the last of reference source ‘Subject Index’ and “Author Index” have been provided.


The primary aim of this book is the introduction of public games, now little known or confined to a particularly locality, and it has been necessary to sacrifice a few of the better known games to make room for them. This book fulfills need of everyone, whether he is sportsperson or a layman.

The total text of this book falls into these groups named Outdoor games, Covered court games, Gymnasium games, and Indoor games. The games and their rules have been described very well and these are made very easy to understand. Somewhere simple diagrams of courts have been provided for better understanding. At the last, an Index has been prepared which helps a reader to find particular information on particular page and it saves a lot of time of an information seeker.


John (1975)38 in his edited work, he tried to explain about games and sports and made an attempt to make readers understand a sport when he watches it for the first time. Board and table games were excluded from this book. Cross-references have been provided. Biographies of Eminent sports performers added in the reference source. This book starts from (AALTONEN), Ravno to ‘ZUCCHI, R”. Photographs and diagrams have been given at some places.

This work is well decorated with Black and White photographs, which fills curiosity and enthusiasm in readers. All the games from ‘Archery’ to ‘Yachting’ have been given in dictionary order and their history, playing rules, equipments, types have also been elaborated well. Adventure sports have also been included in this valuable piece of information. The rules regarding men and women sports have been differentiated as well. The glory of old sports about three decades before has been preserved in this encyclopaedia. Diagrams of courts and fields provide exact idea to a sports person.


This reference source (1980) has been entitled with word ‘Dictionary’ but in a real sense, it is not less than an Encyclopedia. It starts with abbreviations, some important dates and important events. The plan of this source is simple. The flow of information is in alphabetical order from ABA to Zwischenzug. Each term is given a brief description. In case of a particular game or sport, it follows historical summary, some detail of its notable performers and their achievements, a synopsis of the rules and some account of how the sport or game is practiced or played has been given. In many instances, some detail on technical terms, has been given and selective glossary as a part of the entry has also been included. Cross references are in capital letters. There is nothing in this book for an expert of particular sport or game but in general, it is for all. Bibliography and new facts have not been included. Finally, we can consider it, in the category of good reference sources available in sports and games.


This well knitted source is a landmark in the literature of Indian sports. It covers almost all about Asian games and provides each and every detail about Asian games hold in India in 1982 at New Delhi. Different games with full description of their related teams and their records have been provided. Both Black and White and coloured

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photographs of different events add more taste and enthusiasm to a reader while reading. All that involved in Indian Asiad’s have been mentioned, even contribution given by other departments, like Transport directorate, Communication directorate, Accommodation directorate, Medical and health directorate, Media and especially Doordarshan has also been acknowledged. So it is having a very detailed account of information on IX Asian games and it is very helpful for the researchers, who are engaged in sports and games because they can get readymade statistical information about IX Asiad for their research purpose.


This is a very helpful reference source for all sports persons but especially for coaches. It is a very technical nature document, which contains rules and definitions approved by concerned associations and highly recognized bodies in the field of sports. It runs in dictionary order from ‘Archery’ to ‘Water Polo’. All the rules for different games have been specified minutely and are helpful to remove confusions among coaches and administrators of sports. Because almost every major game played today, has been included and entries have been brought up to date.


The Encyclopaedia serves all those who are engaged in the promotion of games and sports. This source throws light on rules and regulations of different games and all these have been explained minutely. The arrangement of chapters is almost alphabetical but somewhere it is violated. Rest, like other sources diagrams have been drawn. Any index and glossary have not been provided. This source fulfills information desires of referees, sports scientists, and coaches.


Andrew (1990) in his work of preparing a directory of Psychological tests in the sport and exercise sciences has given following format on each test:
Test title, Test author, Source, Purpose, Description, Construction, Reliability, Validity, Norms, Availability and References. The entire plan of work has been divided into twenty chapters namely Achievement orientation, Aggression, Anxiety, Attention, Attitudes toward exercise and physical activity, attitude value toward sport, Attributions, Body image, Confidence, Imagery, Leadership, Motivation and Sex roles etc. The main objectives of the work are: to impel psychological test authors and publishers to promote higher standards for test construction and validation, to make test users more aware of the strengths and limitations of psychological tests, to stimulate comprehensive reviews of psychological tests, to make consumers and the public more aware of appropriate test selection and use. At the last Subject index, Test author index, Test title index and Test Acronym index have been given.


This well knitted work fulfills the need of sport lovers. It runs alphabetically. Each title contains three elements, the rules for the sports, a description of the concerned governing body, and names and addresses of selected magazines that cover the sport. The length of the entries varies greatly according to the nature and complexity of the subject. Diagrams and figures have been used for the clarity of idea. At the last, a list of organisations concerned with sports for the handicapped has been given. Although any sport enthusiast will find the book interesting for reading in leisure but, the directors, managers and coaches will find it invaluable in performing their professional responsibilities.


Anshel and et al. (1991) given a scholarly work in the form of a dictionary and they compiled some 3000 defined terms derived from professional refereed research Journals and text books. They completed this job with objectives like to promote the understanding and correct use of terminology among students, educators and scientist to identify areas of common ground among the sport and exercise sciences in light of overlapping research interests and shared use of scientific literature among
investigators of human performance. To improve scholarly writing and familiarise students with the meanings of sophisticated terms to clarify and minimise scientific jargon. They have adopted alphabetical arrangement of entries letter by letter from AAHPERD to Zero order control system. Surnames and company names are not included in term unless they are scientifically associated in the professional literature. Cross-references have been used. Figures have been included for some terms to illustrate or clarify their definitions.


Kent (1994) described in his work that sports sciences include any discipline which uses scientific methods to study sports phenomena. Sports medicine first emerged out of the growth of the modern Olympic movement and the search for methods of improving athletic performance. It was originally concerned with the prevention and treatment of sports injuries especially in the elite athlete. But modern sports medicine has grown in response to the demands of the large number of people who take part in sport for pleasure and health. The dictionary contains over 7500 entries covering all the main areas of sports science and medicine. The entries are extensively cross-referenced so that the dictionary is as self-contained as possible. The bibliography has been listed at the starting of the reference source. The dictionary starts from ‘A’ to ‘zygomatic Bone’ in alphabetical way. Figures have been added, wherever felt necessary.


Ghosh (1997) in his encyclopedic work included 51 games of national and international popularity. It has been designed as much as a personal guide for a better understanding of these games for the general reader. This is a valuable reference source for not only players and coaches but journalists and commentators too. This book contains fascinating facts and figures called painstakingly from various sources, interesting information about the personalities who have made a mark in the world of sports, important statistics, world records and a brief history of renowned
championships and tournaments. Apart from detailing the origin of the games and their definitions, each chapter arranged alphabetically, describes the field layout, equipment, essential inputs of the game and India’s standing in relation to the international scene. In the last, list of selected sources and two indexes – game wise and consolidated have been given.


The Encyclopaedia of Sports edited by Hedlen Peek and F.G. Aflalo, fulfills the need of sport lovers. This work ensures that nothing has been left out by the editors in this multi voluminous study. In these volumes, without sacrificing accuracy, a lighter style has been adopted. This technical arrangement makes the subject lively and reading easy and interesting. Beautiful photographs, line drawings, and sketches enhance the value of the work. It is Useful for sports associations, sports authorities’ sports institutions, sports writers, sports editors, and sports enthusiasts. It will be an asset to sport section of each library.

Vol. 1: The material in this volume has been organised in alphabetic order and this deals A-EEL topics. (AARD-VAARK), or Earth Hog-EEL-Anguilla Vulgaris.

Vol. 2: It deals with all topics starting with the alphabet Eland to Leopard Spearing (Eland, Elephant-African-Leopard).

Vol. 3: It covers all topics starting with alphabet licenses- Weapon (Licenses-Dog Licenses, Lion-Sampaur-Weapon).

Vol. 4: It covers all topics starting from Sandpiper to the Quagga. It has general index and appendices to the encyclopaedia.


It is also an important work in the field of physical education and sports sciences available in single volume. For better understanding of an information seeker illustrations have been provided. The arrangement of entries is alphabetical with appropriate description. It starts from ‘Abasia’ and ends with the word ‘Zygote’. It has
been described in simple but meaningful way. The printing of the text is attractive and font of letters is reader friendly which is a unique feature of this work in itself. For better understanding (cross) ‘see also’ references have been provided, which indicate towards intellectual qualities of a good editor. So, on the whole source is really very helpful for the sports community and with a reasonable price, it is not beyond of sports community.


As its name indicating, it is a book for all sports lovers. It covers more than 150 sports and games including every accredited Olympic sport and many national and regional specialties.

Whole scheme of chapters has been divided into 11 parts with headings like Stadium team sports, court games and Athletics etc. Each chapter runs in alphabetical order from A to Z. For better understanding of a user black and white photographs have been provided wherever necessary. An index has been provided at the last by the editor, it calls attention of a reader for selection of particular entries.


Shaw and Shalini (2000) edited this dictionary and explain important terminologies extracted from different sports and exercise sciences of physical education namely Anatomy and physiological sciences, Anthropometry/Kinanthropometry, Biomechanics/Kinesiology, Computer/computer sciences, exercise physiology/Sports medicine, foundation of Physical education, Health education/safety education, Rehabilitation and games, First-aid, Sports management administration and organisation Behavioral sciences, pedagogical sciences, statistics and lastly test measurement and evaluation. This source explains two thousand important terminologies which are commonly and frequently used in physical education, sports and exercise science as well as allied sciences to it. This dictionary has considered sixteen chapters. The dictionary starts from word ‘Acidosis’ and ends with word ‘Variable’ in alphabetical manner. At the last, appendix (figures of Anatomy and Physiology) and references have been given.

Gandhi (2001) in his work tried to cover each and everything of Glorious past of Indian sports and its prestige. He talked in detail about history and origin of sports. He discussed almost all the sports with lots of information and pictorial presentation. The highest sports awards in India, like Bharat Ratna, Padma Vibushan, Padam Bhushan, Padam Shri, Arjuna Award, Rajiv Gandhi Khel Ratan award and Dronacharya award for coaches have been explained well and Biographical detail of winner’s of these awards has given with their family history and their photographs. In other words, it is a very valuable and informative encyclopedic nature of work, which provides readymade and exact information about Indian sports and eminent sports persons, who had add glory and proud among themselves as well as the country too.


This work ensures that nothing has been left out in the multi voluminous study. In these volumes, without sacrificing accuracy, a simple style has been adopted. It provides liveliness to the subject and makes reading easy and interesting. Figures, line drawings, and tables have been given. It covers almost all about physical education and sports. This valuable source has been divided in 9 volumes. Photographs and line drawings provide freshness, and tables, index and references provide ready information to a reader. This work is very useful for all sports lovers or enthusiasts in general and for sports scientists, coaches, players and facility in particular.


This reference source is a great venture of Rajdeep Singh Gill, IPS and his associates, despite having many irons in his fire, he performed a great job. It is one and only reference source of its kind, which provides detailed information regarding performance of the Punjab Police in sports. It covers almost all the sports activities performed by Punjab Police at national and international level. The book has been divided into ten chapters. The detailed information regarding police sports persons,
thousands of coloured photographs, their Bio data, and their individual and team records have been given. In spite of having busy schedule with such responsible designation in Police Administration, the author has done a remarkable job and presented a role model work to the department and sports lovers. After consulting this reference source, no one can live without paying his respect to the sports persons of the Punjab police for their legacy to the Indian sports. Definitely, it ought to be an asset to sports section of each library.


According to Glenn (2004), this dictionary is designed to apprise the reader various terms concerning the health and fitness of body as well as mind and soul. It contains more than 2000 terms regarding Physical Education. Various terms are supplemented by visual representations concerning the terms. Yoga has been dealt extensively in this dictionary, as it has been regarded as the ultimate method to soothe our body and rejuvenate it in the easiest and the simplest way. The dictionary moves smoothly from ‘Abdomen’ to ‘Zygomatic bone’. All the entries have been discussed minutely, which is the unique feature of this dictionary in itself.


The present encyclopaedia of world history in physical education and sports provides information on all the historical aspects of physical education from ancient period to modern time. An effort has been made to identify historical and general purposes of health, physical education and sports with their role in total education. The encyclopaedia is in five volumes. Especially, volume number five contains four chapters- International understanding in physical education, physical education in Pan-America, Physical Education in the East and Far East; and the last one is a panorama of world Physical Education.

A bibliography at the last of each volume has been provided. The work justifies its price and a worth investment for collection building of a sports section in libraries.
Encyclopaedia of Recreational Games, Edited by Dr Sitaram Sharma, Anil Vanaik and Daljinder Singh Kahlon. II Vol., New Delhi, Friends Publications, India, 2005.

Sharma, Vinaik and Kahlon (2005) divided their encyclopedia work in two volumes and further subdivided in 23 chapters and try to cover almost all the aspects related to physical education and sports. They write about foundations of health and physical education, health service and instruction role of school in healthful living, programme organisation in physical education, curriculum, Gym facilities and equipment, sports facilities and administration maintenance of play fields, Budget finance and office management etc. They also discussed in detail regarding handicapped children. The Authors have tried to explain all the basics of the subject. It covers chapters: (1) Introduction (2) To the Teachers of games (3) Counting-out; choosing sides and turns; who’s it? (4) Organised athletes (5) Miscellaneous active games (6) Social and quite games (7) Status and contests; Feats and forfeits and volume two covers like (8) Game for one or two (9) Banbag games (10) Balls and How to play them (11) Ball games (12) Track and Field events.

Encyclopaedic Dictionary of Games and Sports. Edited and compiled by Dr. Sandeep Tiwari. 2 Vol., New Delhi: Friends Publications (India), 2006. The Encyclopedic dictionary of games and sports provides all kind of terms related to the games and sports, which are playing all over the world. It reflects different positive developments in various games and sports. Indeed, it is an encyclopaedia in scope, which contains thousands of terms related to various games and sports. The book has been written in user friendly language and easy to understand for a layman. It has been enriched, highly referred, simplified and in a lucid style for the purpose of making it more understandable. This dictionary consists more than ten thousand terms from different disciplines of sport. The volume No.1 starts from A and ends with K (Kyong go) and volume No.2 starts from Lae Belle (Fencing) and ends with zone ride (Lacrosse). Finally this source is very helpful for sports persons, and sports lovers in general and for researchers in particular.

Douglas and Holly (2007)⁶⁰ with the help of this reference source provided the first international survey of extreme sports. It is a state of the art summary of where extreme sports are today, where they have come from and how they are likely to grow and change in the years ahead. The encyclopedia provides 114 articles written by sixty-nine sports experts and athletes covering more than fifty sports, biographies of more than thirty athletes, essays on nine extreme sports venues, and seventeen social issues. According to editors, it is realised that as the world of sport evolves, examining extreme sports will provide further and new insights into how sports grows and spreads. A detailed account of information on extreme sports has been given. Black and white photographs have also been given. In the starting of source list of entries from 'Adventure Racing to 'X Games' has placed and at the end of each entry references or further readings have been added. In the last, A relative index has been provided covering, "See also references".


Mike, Steve and Paul (2007)⁶¹ in their work laid emphasis on research ethics, their history, research governance, respectful research, scientific misconduct and research and society. They show how moral theory can guide reflection in research ethics. They consider the ethical review of research historically and contextually. They talk about the critical landmarks in research ethics from the Nuremberg code to the many versions of the world. They consider some inherent limit actions of all codes of conduct, the aims of which may be as much punitive as educative. They also discussed in detail issue regarding plagiarism and the misappropriation of authorship, which are the most commonly encountered forms of research fraud.


Ashok (2008)⁶² in his work covers all the dimensions of physical education and sports sciences through nine major branches namely Anthropometry, Biomechanics,
Endurance, flexibility, Hormones, Psychological variables, Rehabilitation, Speed and Yoga. Each branch contains minimum fifty research abstracts. The abstracts contain introduction, methodology, results and conclusions. This work is very useful for researchers in the concerned field, because they can get readymade information regarding previous research in the field.

Other than above mentioned studies, a very important source of information in Physical Education and Sports Sciences has been brought out by Association of Indian Universities which is given below:


In this special issue (2010)63 Twenty nine articles relating to different aspects of Physical Education and Sports have been published. These related issues are like, role of physical activities and sports for wellness, and personality development, yoga, physical education curriculum, development of university sports, role of sports sciences, broad basing of sports and achieving excellence, commonwealth games etc. All these articles are very important sources of information and may prove useful to sports persons in the field of research.

CONCLUSION

A deep evaluation of the above mentioned literature on information seeking behaviour of user’s reveals that the most of the studies have been conducted to know information needs, information seeking and use of Information Technology by users. It is evident that no comprehensive study has so far been conducted in Physical Education and Sports Science in India, especially about impact of information technology on information seeking behavior of sports community. There are a good number of studies available on information seeking behaviour and use of Information Technology in various fields but no such study is available with broad objectives of analysing the impact of IT on information seeking behaviour of sports persons and scientists.
REFERENCES


33. The wonderful world of sport: A phenomenon of the second half of the twentieth century as discovered, explored and interpreted by the editors, writers, reporters, photographers and artists of sports illustrated. (1967). Canada: Time Life Book, p. 324.


