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DISSECTING THE RELATIONSHIP BETWEEN SPORTS AND NATIONALISM

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Abstract

The purpose of this study, which is carried out in the qualitative method in which the information obtained from secondary sources is reported in the historical context, is not to reach a theory, find the truth or make generalizations. The main purpose is to explain the relationship between sports, politics, and nationalism in a more concrete way, based on the existing literature, through historical events. Primitive sport, which appeared in ancient civilizations, has been organized since a certain period and has assumed the identity of modern sport. Although sport has undergone many changes in terms of meaning, tools, and diversity after modernity, it has preserved its continuity and validity in both primitive and modern applications in the context of the relationship of sports with politics. The most prominent of these are nationalism and nation-state building through sports. Existing literature clearly reflects that nations are well aware of the link between sport and nationalism and are trying to use it effectively for many national and international purposes.

Keywords: Sports, Patriotic, International completion, Literature, Historical event

Introduction

The existence of a close relationship between sports and nationalism is widely accepted. This relationship manifests itself in the concept of national sports, in the enduring popularity of international competitions, events, and contests, and in the myriad ways in which politicians and politically motivated groups have sought to harness sport to national causes. On the other hand, questions are increasingly being asked not only about the future of the relationship between nationalism and sport, but also about the fate of the nation itself. The argument is perfectly straightforward, even though it is commonly expressed in far from accessible language. Put simply, it is asserted that economic, political, cultural, and ideological trends, supported by a pervasive and all powerful global media industry, must inevitably destroy the distinctiveness upon which nations, nationalism, and national identities depend for their very existence.

Specifically in relation to sport, it is claimed that the global exchange of sporting bodies makes it increasingly difficult for the nation state to be represented by conventional corporeal symbols. As a consequence of this and other far reaching developments, it is believed by some that we may be at the earliest stages of the development of a transnational or global culture, of which sport is a part. Yet, sport also provides considerable evidence of cultural exchange that is undoubtedly at odds with the vision of a process of homogenization that is often encapsulated in the concept of Americanization. Furthermore, in any debate of this type it is dangerously misleading to equate the nation with the nation state. Indeed, it can be claimed that the forces associated with the idea of globalization have

actually created political and cultural space in which nations and nationalities that have historically been submerged within nation states have been reawakened and infused with new vitality.

One need go no further than the United Kingdom in order to clarify the distinction between nation and nation state. "Britain" is in itself a nationless entity. Nowhere is this demonstrated more publicly than in the world of international sport. With a single Olympics squad, four "national" soccer teams and three "national" rugby teams together with Northern Ireland's part share in the Irish team, the UK's sporting landscape is testimony to the complex relationship between nations and nation states. Thus, when we refer to the prestige that nations can derive from sport, it is important to think in terms not only of internationally recognized states whose politicians seize upon sporting success for ideological and propagandist reasons, but also of submerged nations (Scotland, Wales, Quebec, the Basque nation, Catalonia, and so on) for which sport has commonly been one of the most effective vehicles for cultural resistance by both cultural and political nationalists. For them, sport provides athletes and fans with opportunities to celebrate a national identity that is different from, and in some cases opposed to, their ascribed nationality. The two forms of engagement need not be mutually exclusive. It is possible to support both British teams and Scottish ones or to represent Wales and also the United Kingdom. It can be argued, though, that national identity takes priority in the minds of sports fans. Nationality, however, is likely to be what matters to athletes since this alone guarantees the right to compete on behalf of nation states, which, unlike many nations, may be represented in international sport just as they are at the United Nations itself. It is worth noting, of course, that nationality rules have become increasingly flexible in sport as a response to labor migration.



The desire, particularly on the part of fans, to express their national identity in the realm of sport is clearly linked to nationalism in the broadest sense or, at the very least, to patriotism. Former Member of Parliament Jim Sillars dismissed the attitude of his fellow Scots toward national sporting representatives as "ninety minute patriotism." For example, Irish support for national representatives in global sporting activities such as track and field, rugby union, and soccer is in most cases patriotic and, by implication, relatively politically shallow. The relationship between Gaelic games and Irish nationalism is, on the other hand, much more profound. In general, however, attempts to distinguish the passions aroused by international sport from "real" nationalism miss the point. It is undeniable that expressions of solidarity for players and teams that represent one's nation are closely linked to cultural nationalism. Whether or not they are also bound up with political nationalism is a different question, the answer to which necessarily varies from one individual to the next. For many people, even ones whose national identity is associated with a submerged nation, cultural nationalism is enough. They may well feel that they could not become any more Scottish or Welsh or Catalan than they already are with the formation of a nation state that would correspond to their sense of national identity. For others, though, cultural nationalism is nothing more than the emotional embellishment of a strongly held political ideology that will settle for nothing less than national sovereignty.

For most sportsmen and women, even in an era when money is a major incentive for sporting success, representing the nation remains important. It is not inconceivable that

they might represent more than one nation, with neither ethnic origin nor even well established civic connections being necessary for a move from one to another. However, for the overwhelming majority of athletes engaged in international sport, the matter is still relatively clear cut. For fans, things are arguably even simpler. In the modern era, following one's "proxy warriors" into international competition is one of the easiest and most passionate ways of underlining one's sense of national identity, one's nationality, or both. Needless to say, not everyone wishes to celebrate their national affiliation in this way, in most instances for the simple reason that they are not interested in sport, the nation, or the relationship between the two. But just as for most active participants, for the majority of sports fans the choice is relatively straightforward. This is not to deny that in certain circumstances athletes and fans alike may well understand their nations in different ways. Furthermore, it is not only sporting individuals who demonstrate the contested character of most, if not all, nations. Sports themselves also do so to the extent that they become "national" in the popular imagination for a variety of reasons.

National sports take different forms and, in so doing, they provide us with insights into the character of particular nations. Indeed, the concept of the "national" sport not only provides insights into the relationship between the various terms listed above that are associated with the nation, but also helps us to understand how it is that nations resist globalization even in a global era. Some "national" sports are peculiar to specific nations. Their "national" status is ring fenced by their exclusivity – echoes here of ethnic nationalism. National sports and games of this type are in some sense linked to the essence of the nations in question, even though their actual origins may be prenational or at least prior to the emergence of nation states. They represent "the nation" symbolically despite the fact that they may well have demonstrably failed to capture the interest of most of the people who constitute the civic nation and/or the nation state.



It should be noted that those activities that are most likely to be ring fenced because of their specific cultural resonance do not always find favor with members of particular nations' cosmopolitan elites, who may well believe that the nation is better represented by sports that are both modern and transnational. Certainly, the *corrida de toros*, the classic form of the bullfight, is not universally popular throughout Spain, nor does it even take place at all in some Spanish regions. In terms of popularity, the "national sport" of Spain is almost unarguably association football (soccer). Yet, at least as much as taurine activities, the game helps us to appreciate the extent to which Spain is at best a divided nation and, at worst, not a nation at all – merely a nation state.

In Ireland, whilst hurling may well be the sport of choice in the eyes of Bord Failte or the executives responsible for selling a variety of Irish products, including stout and whiskey, the sport's popularity varies considerably from one county, and even one parish, to another. Gaelic football is more uniform in terms of the support that it receives throughout the 32 counties. Yet there are isolated pockets where it loses out to hurling. Furthermore, the right of any Gaelic game to be assigned "national status" is considerably weakened not only because some Irish nationalists opt for other sports, such as rugby union and soccer, but also because the overwhelming majority of the Protestant community in the north of Ireland have resolutely turned their backs on the whole Gaelic games tradition. It might seem easy to dismiss this difficulty by simply taking these people at their word and accepting that, since they do not consider themselves to be truly Irish, their sporting

preferences need have no impact on what does or does not constitute an Irish national sport. But this would be to ignore the basic precepts of Irish republican ideology that has consistently sought to embrace not only Catholics but Protestants and dissenters as well.

Games such as rugby union and soccer have some claim on the right to be called “national” in the Irish context. Despite their



British origins, they are played throughout the island. Moreover, although rugby tends to be played by Protestants rather than Catholics in Northern Ireland, both football codes enjoy considerable supports from both traditions on the island as a whole. They offer Irish sportsmen the opportunity to represent the nation at the international level. Indeed, rugby, unlike soccer, allows northern unionists the chance to acknowledge their sporting Irishness whilst retaining a political allegiance to the union of the United Kingdom and Northern Ireland. It should be noted, however, that regardless of any claims that either sport may have to be recognized as “national,” neither has escaped the influence of globalization. The two Irish “national” soccer teams have both fielded players whose ethnic “right” to belong has been relatively weak. The same thing has happened in rugby union, which in recent years has witnessed a flood of antipodean coaches and players, some of whom have qualified to play for Ireland despite having accents that conjure up images of Dunedin or Durban, not Dublin or Dungannon.

Gaelic games have been less affected by the movement of people that is commonly linked to globalization, except in the sense that Irish migrants have taken their traditional activities to other parts of the world, most notably North America. This is not to deny that changes taking place beyond the shores of Ireland have had an impact on the Gaelic Athletic Association (GAA). Nevertheless, the factors that have been most influential are best understood in terms of modernization and capitalism as opposed to the more specific category of globalization. Gaelic games have been relatively unscathed by the latter. As a result, the GAA offers rich insights into the processes whereby the nation has been able to resist the global in sport as in much else.

Sports and Nationalism of India

George Orwell, a novelist, defines nationalism as the worst enemy of peace. He says, “The abiding purpose of every nationalist is to secure more power and more prestige, not for himself but for the nation or other unit in which he has chosen to sink his own individuality.” In his essay, “The Sporting Spirit,” Orwell says that sport can be just as violent as war. The idea of fair play is only a myth. The athletes feel the same hateful and violent feelings as do soldiers in combat. He called the sports as “war minus shooting.”

Sports act as the glue that binds people together and offers a collective identity at local, national and supra-national levels. It is one of the most emotional forms through which we experience and express our nationalism. The teams or the individual who plays at a national or international level does not represent religion or caste but the region and nationalities.

E.J. Hobsbawm, a British Marxist historian, in his book, “Inventing Tradition” mentions the inventions of national tradition. According to him, Sporting pastimes, rituals, ceremony, institutions, costumes, anthems, symbols, plays are a great invention of tradition. Along with the participants, spectators of the sports event are also the symbol of being a part of the nation. Even any individual, who is present in the sports event cheering

up, also becomes a symbol of his nation. Sport is important in the emergence of national identity.

On April 2, 2011, when we won the Cricket world cup, the streets of India were flooded. There were strangers embracing and sharing their praising words. It was not a matter of being a Hindu or Muslim, a lower caste or an upper caste. It was an Indian Identity that emerged and transformed a diverse community into united.



Ramchandra Guha, an Indian historian, and writer, in an article in Outlook magazine, said that the institutions that keep us together are those bequests of the British: the civil service, the army, the railways, and cricket. All the linguistic, pluralistic, regional, caste barriers are superseded by the feeling of brotherhood and nationalism.

The feeling of national identity even resides in the heart of Indians residing in other countries of the world. Indian Diaspora across the world rooting for the Indian team is the identity of a nationalist sentiment. It was clearly seen in the cricket match recently held in Florida. It was the first time when America hosted the international cricket match. Half of the stadium was filled with Indian immigrants. The national flags flying all over the stadium, people cheering the Indian players, praising India in a common voice, depicts the Indian Diaspora's feeling of being a part of India. Sport not only has the power to influence community identity but the nationalist sentiments also. Sports manage to maintain the links between the Indian Diaspora and Indian culture.

Sports create a shared experience which inculcates a collective consciousness among the people. There is no powerful medium than sports to inspire and bring people together for a common purpose. Other than cricket, sports event like Olympics is of phenomenal importance to create a feeling of nationalism. Recently when summer Olympics were held in Rio de Janeiro, every Indian living in any part of India, belonging to any religion or caste realised that they are the part of a single identity "Indian". The badminton women's singles final between PV Sindhu and Carolina Marin was being watched by Indians sitting in different corners of the Nation. But they all shared a common thought. Irrespective of different caste, religion or region, they all had a common wish of PV Sindhu winning the finals. It shows how the citizens of our nation who holds different opinions and views for different incidents held the common imagination of winning the Gold medal. This is the strength of sports, which makes our nation united and brings us under a common umbrella.

Benedict Anderson, a historian, political scientist, and polyglot, calls the nation as an imagined community which is limited and sovereign, in his book "Imagined Communities". The imagined community of millions of people in a nation appears to be real when a few individuals or a team represent the whole nation. Despite various disparities, there are factors that bring the citizens of our country together, with common views – sports being the most important of all.



Conclusion

The sport being a part of the universal culture, is an important means of combining different people in the world. It is an activity that contributes to world peace. It can be defined as a totality of activities realised in order to affect positively social and moral benefits as well as physical benefits. It has been a great sanction tool in International relations. It is also a new science determining the nature of the human behavior and mental structure by means of activities, games, competitions as well as training physically the human body. It becomes a social event entered deeply into the social life of people. The sports sociology in this context has been defined as a science branches describing the sport as a major and social phenomenon, studying it as a social institution and a social system. It is observed that the sport become increasingly efficient in international politics. The sport is the most noble of the wars in international platforms because it is a war of peace. The international sports battles aren't like to the political wars. The sporting competitions are manfully, honest, friendly and sportsmanlike. For such a sportsmanship, a person can not be natural athletes, by contrast he should deserve the title.

There are some grounds for believing that the link between nationalism and sport is becoming weaker and that the very existence of international competition is threatened by the twin forces of globalization and consumer capitalism. For the time being, however, the relationship between sports and nations remains strong, although this relationship manifests itself in many ways.

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CHALLENGES OF PUBLIC LIBRARIES IN INFORMATION LITERACY IN AN INFORMATION SOCIETY- AN OVERVIEW

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Abstract

Over the last decade, electronic resources have become one of the most significant and effective components in the library collection. The major factor behind this demand is the continuous development of information technology and the multidimensional as well as multifarious demand of information by the user which needs to be fulfilled pin-pointedly and exhaustively in a short period of time. It is quite evident that the old „book centered“ concept of librarianship has been replaced by the „reader centered“ concept and instead of „Library service“, „Information service“ is emerging which emphasizes on access and use of information in an IT dominated environment.

Keywords: *Information Literacy, User Study, LIS Professionals, Internet, Search Engine, Social Media, Database.*

Introduction

Here information literacy can play a vital role in educating the users of libraries on various information and documentary resources, where to start searching of information, what where and how to access them, how to assess and compare retrieved information, how to communicate their information or findings to the general masses and experts, and so on. Now-a-days, information are available in the finger tips, provided if the users are skilled enough to thrive highways and the byways of accessing diverse source of information (subject gateways, open sources, portals, etc) located in a remote host. To have the full advantage of IT in accessing information, some kind of training and awareness is desirable for the user community. In accordance to that Users“ Education is provided to the users of the library in the Indian context, which is basically consists of four components- users“ awareness, users“ orientation, interest profiling and bibliographic instruction, and seems to be obsolete/ineffective in this IT dominated information society.

In this IT era, user education is not so effective and sufficient as far as empowerment of the users is concerned. Information literacy has the wider perspective than user education, as information literate person can locate, evaluate and effectively use information in the process of lifelong learning. In India, information literacy is broadly accessed in three categories- “access to government information, access to administration records and information facilitation through IT application”.

Importance of information literacy

The general response from participants was that IL:

- In the academic environment, information literacy deserves a special attention since well information literate student has the potential of being the successful, confident and enduring lifelong learner in this digital society.
- Contributes to students’ academic output,
- Equips students and researchers with skills to carry out quality research,

- Helps students use both print and e-resources,
- Supports teaching and learning, and
- Prepares students to be independent learners, as well as for lifelong learning purposes.

Information Literacy and Higher Education.

Many remarkable changes can be seen in the education system of our country. The fundamental driving forces contributing towards the change in the higher education are

(i). Societal Needs: Higher education has undergone many transitions like from student to learner, from faculty centric to learner centric, from teaching to the design and management of learning experiences and eventually from the Synchronous, classroom based instruction to asynchronous computer based learning.

(ii). Technology Driven: Rapid advances in ICT have influenced the every sphere of life, and it has immensely affected the education system also. Now-a-days delivering educational services to anyone, anytime, anyplace is possible with different technologies. Students demands „Plug and Play“ experiences and „Plunge in and learn“ through participation and experimentation. Therefore teachers should act more like a consultant or a coach to motivate, inspire, and manage an active learning process.

(iii). Emerging Research Area: In the present time research is not confine to one discipline only rather its domain is extended to inter disciplinary, multi-disciplinary, cross disciplinary and extra disciplinary research also.

(iv). Focus on Library: In higher learning institutions and research, library has been given due importance as it is one of the intellectual focal point. Preservation and dissemination of knowledge is one of the important 65 functions of the academic libraries which are available in (many forms (text, image, sound etc.) and can be distributed and shared worldwide through networks.

Information Literacy Standards and Indicators

In 1998 American Association of School Librarians and Association for Educational Communications and Technology prepared a document titled ‘Information literacy standards for student learning: standards and indicators’, which is widely accepted worldwide as a set of information literacy standards that can be imparted to produce information literate citizen. The each standard has some indicators that show kinds of competency and parameters to accomplish that standard.

Table 1: Information Literacy Standards and Indicators

(a). Information Literacy Standards

Standards	Indicators
1. The person who is information literate accesses information efficiently and effectively.	1. Recognizes the need for information. 2. Recognizes that accurate and comprehensive information is the basis for intelligent decision-making. 3. Formulates questions based on information needs. 4. Identifies a variety of potential sources of information. 5. Develops and uses successful strategies for locating information
2. The person who is information literate evaluates information critically and competently.	1. Determines accuracy, relevance, and comprehensiveness. 2. Distinguishes among fact, point of view, and opinion. 3. Identifies inaccurate and misleading information. 4. Selects information appropriate to the problem or question at hand.
3. The person who is information literate uses information accurately and creatively.	1. Organizes information for practical application. 2. Integrates new information into one’s own knowledge. 3. Applies information in critical thinking and problem solving. 4. Produces and communicates information and ideas in

	appropriate format
(b). Independent Learning Standards	
Standards	Indicators
1. The person who is an independent learner is information literate and pursues information related to personal interests.	1. Seeks information related to various dimensions of personal well-being, such as career interests, community involvement, health matters, and recreational pursuits. 2. Designs, develops, and evaluates information products and solutions related to personal interests.
2. The person who is an independent learner is information literate and appreciates literature and other creative expressions of information.	1. Is a competent and self-motivated reader. 2. Derives meaning from information presented creatively in a variety of formats. 3. Develops creative products in a variety of formats.
3. The person who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation.	1. Assesses the quality of the process and products of personal information seeking. 2. Devises strategies for revising, improving, and updating self-generated knowledge.

Information Literacy and Reading Habits

Reading habits not only help a person becoming knowledgeable, socially responsible and socially productive person but also help in personality development. Information literacy competency development programmes may be initiated to impart necessary information skills and reading skills to public library users in maximizing utilization of public library resources. Present urbanized society observes a changing face of new generation, where children have access to various modes of entertainment and amusement. Every middle-class household in India equips with at least one electronic gadgetry, like, television, music system, DVD-player, VCD-player, Internet, video games, etc. All these gadgets may be detrimental our new generations as well as older generations, that is one of the reasons for declining number of regular users of public libraries.

Public Libraries in India

Public libraries are mainly supported by state governments and local authorities, and some times by the central government, developmental agencies, nongovernment organizations and private trusts.

- ❖ The Delhi Public Library (DPL), established in 1951 by government of India in collaboration with UNESCO, caters library and information services to the National Capital Territory of Delhi. It has 176 service points spreads over five regions and consists of branch libraries, sub-branches, community libraries resettlement colony libraries, reading rooms, mobile library points, Braille library and deposit stations.
- ❖ The DPL is a recipient of books published in India as per the provision in the Delivery of Books and Newspapers (Public Libraries) Act, 1954. The DPL has collections about 2 million books and other documents.
- ❖ Raja Rammohun Roy Library Foundation (RRRLF) is the nodal agency of the Government of India to support public library services and system and promote public library movement in the country.
- ❖ The RRRLF undertakes different functions in each state and union territory through a State Library Planning Committee (SLPC) or State Library Committee (SLC). Its headquarter is located at Kolkata and it has four zonal offices in Kolkata, Delhi, Mumbai and Chennai.

- ❖ RRRLF provides financial and technical assistance to public libraries and organisations engaged in the promotion of public library development through different.

Table 2: Penetration of Public Libraries in India

Demography of India	Number	Public Libraries	Number	% covered
States and Union Territories	35	State Central Libraries	28	80%
Districts	592	District Libraries	451	76%
Talukas	3,987	Taluka Libraries	501	12.5%
Villages	5,87,226	Rural Libraries	28,820	4.9%

Use of Information and Communication Technology

The modern world is known as Information Technology. Information technology skills enable an individual to use computers, software applications, databases, and apply related technologies to achieve a wide variety of academic, work-related, and personal goals. Among these are information literacy focus on content, communication, analysis, information searching, and evaluation; whereas information technology “fluency” focuses on a deep understanding of technology and graduated, increasingly skilled use of it.

For the effective teaching and learning we use demos, tutorials, course materials in electronic form as interactive and ordinary CDs, animated and multimedia programmes running on cable TV network, FM, All India Radio, local Newspapers that attract the learners.

Role of Information Literacy in India

In the recent decades India has tried to increase the literate population and educated citizens through organizing different programmes like sarva Shiksha Abhiyan (SSA) District Primary Education Programs (DPEP) National Literacy Mission & established the community information centers & village knowledge centers are recent additions to this effort that would transform India into an information society where information & knowledge resources are considered as critical ingredients for development.

(a). Public Library Constraints

Public libraries have myriad strengths to play a role in information literacy development. The literature also reveals of number of factors limiting their efforts

- ❖ Lack of resources to conduct information literacy programs
- ❖ Poor public perception of the library’s function
- ❖ Librarian’s reluctance to assume a non traditional role
- ❖ Attitudes & beliefs of the librarians & library professionals towards information literacy concept.

(b). Marketing and Promotion of IL Programs

Public Libraries may use marketing techniques to enable them to understand the information literacy needs of their users & to plan effectively IL programs to meet those identified needs. They may also promote their IL programs to the target groups to improve their information skills. Marketing & promotion plan may include the following activities:

- Making use of print, electronic & communication media to popularize the IL program
- Public libraries may facilitate formation of ‘ Friends of Library Groups’ to help the libraries in offering IL
- Creation of Library Website to propagate information online about IL programs
- Organizing & making IL programs appropriately with the celebrations of important events & days like Independence Day, Human Rights Day, International Women’s Day, Population Day etc., to attract more number of participants

Conclusion

After Independence, India has experienced growing population of literate and educated citizens due to various efforts in universalisation of elementary education through programmes like, Sarva Shiksha Abhiyan (SSA), District Primary Education Programme

(DPEP), National Literacy Mission and so on. On the other hand, for the facilitating educated citizens with the adequate documentary and knowledge resources, government and other agencies have established public libraries. The community information centres and village knowledge centres are the recent additions to this effort that would transform India into an information society, where information and knowledge resources are considered as critical ingredient for development.

The facilitating educated citizens with the adequate documentary and knowledge resources, government and other agencies have established public libraries. But problem is with the effective and efficient use, consumption and evaluation of information resources, so that informed citizen can take right decisions. In addition to borrow books for entertainment and leisure, public libraries can also disseminate information on community development, best practices, literature, culture, trade, education, etc. which may be further elaborated when needs arise. Information seekers may want consolidated or exhaustive information. To provide right information to the users, public librarians should be trained to develop information literacy competency and should be able to educate the user that will make user information literate.

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3

A STUDY EFFECT OF YOGA ON PERSONALITY DEVELOPMENT IN B.ED STUDENTS

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Abstract

Personality development is mainly concerned with the maintenance of the health of human mind. Along with physical health to maintain a balance state of mind is very important. Today keeping up Personality development is one of the serious problems of the entire world. Due to rapid growth of industrialization and modernization, an individual often fails to maintain a balance himself and his social circumstances. "Personality development is the full and harmonious functioning of the whole Personality development" (Hadfield). Yoga is one of India's most amazing gifts to mankind. It is the science of yoga which helps to develop a person in all the aspects of life such as physical, mental, emotional, moral, spiritual development etc. This chapter summarizes the recent research evidence based on effects of yoga on Personality development of the B.Ed students. Present chapter highlights the meaning of yoga, different yogic practices, importance of yoga to maintain a healthy lifestyle, benefits of yoga. These research reviews give an idea about several areas where yoga may be beneficial for the student as well as for the people of the society. More research article is required urgently on this relevant topic.

Keywords: Yoga, Personality development, B.Ed students

INTRODUCTION

Due to changes in the society such as globalization, modernization, industrialization influence the human being and the present situation has become highly competitive, and B.Ed students and youth have to face this competition at every sphere of their life. So today a student is not free from stress, overload, anxiety, depression in their daily life style. A student more or less lives a tight rope existence where he is trying to cope up with the tremendous pressures from his family, parents or society. As a result, those B.Ed students suffer various psychological problems which create challenges for the physical health and specially for mental well-being of the B.Ed students.

The report of World Health Organization suggests that nearly half of the world's population are affected by Mental illness with an impact on their self-esteem, relationship and ability to function in everyday life.

The role of Personality development in human life is very important because it influence not only in individual's life but also it influences to maintain peace and harmony in societies as well. A healthy person is not only physically fit but also mentally healthy. If a person is physically fit, emotionally sound, well-adjusted in different circumstances of life, balanced mature Personality development, desirable social and moral values then only he is considered as mentally healthy person. In recent few times much, emphasis has been given on the physical and mental wellbeing of the B.Ed students and promote overall development of the society.

Personality development is a basic factor which is responsible for developing good physical health, intellectual development, emotional stability, social development, moral development, developing adjustment capacity, satisfaction, happiness, realization of goals, development of integrated Personality development etc.

Yoga plays a very important role in promoting mental well-being of an individual. Practicing yoga is not only popular in India but it is also popular in western countries as a method for overcoming with the serious problems of life that is stress and improves the quality of life. Yoga is not an exercise only but it is a way to develop all round health-physical, social, mental, emotional and spiritual.

CONCEPT OF YOGA

Thousands of years ago the concept of yoga was originated in India. It is considered as the oldest system of personal development in the world encompassing body, mind and spirit. The word yoga comes from the root YUJ which means to join or unite. It is restraint of the activities of the mind, and is the union of the individual soul with the supreme soul. Yoga is one of the oldest known sciences of self-development, originated in ancient India. Yoga is a science which enables one to learn to unite his jeevatma (individual soul) with the paramatma (universal soul) and the final union is the fulfilment of 'yoga'. Even the techniques which promote one's progress towards realization of the supreme are called "yoga" (Chakrabarti and Sahana's 1984).

Maharishi Patanjali, was known as the father of modern concept of yoga and he was a great physician, in the 300 BC defined yoga as the complete mastery of mind and emotions. Theoretically the yoga system is based on the same tenets of Samkhya philosophy and also incorporates some of the teaching of Vedanta. There are various schools of yoga among which karma yoga (action), bhakti yoga (devotion), jnana yoga (self-study), and raja yoga (will-power) are especially well known. The eight components of the yoga system are as follows: Yamas (restraints), niyamas (observances), asana (posture), pranayama (breath control), pratyahara (sense withdrawal), dharama (concentration), dhyana (meditation) and Samadhi (spiritual absorption). These are so interrelated that without one the other is irrelevant and ineffective.

The yoga and yogic practices are among one of the most popular contributions which has a significant role in the whole world. As we all know that the main aim of yoga itself is an integration of Personality development in its all aspects of life. In order to achieve such development various techniques were employed by the people. These techniques or practices enjoyed in yogic literature and handed down in different traditions also go under the name of yoga (Gharote, 1976). The yoga and yogic practices are very effective today not only to treat physical and mental disorders but also to maintain, preserve and promote a healthy happy and successful life.

Owing to the importance and usefulness of yoga and yogic practices for the people, the United Nations (UNO) has declared June 21 of each year as International Yoga Day.

YOGIC PRACTICES ARE CLASSIFIED UNDER THREE CATEGORIES

A. Asanas: It is one of the most important systems of physical culture ever invented. It is the main yogic tool for balancing the physical body. It refers to special patterns of postures which stabilize the mind and the body through stretching. Its aim is to establish the proper rhythm in the neuromuscular tonic impulses and improve the general muscle tone.

B. Pranayama: It was considered as a science of breath control. It consists of series of exercises especially intended to meet the body's needs and keep it in vibrant health. The main purpose of Pranayama is to gain control over the autonomic nerve system through it influence the mental function. It provides deep relaxation to the body and mind, strengthens the nervous system as well as respiratory system, improves concentration, relieves stress, depression etc.

C. Meditation: It is the practice which involve the control of the mental function which starts from the initial withdrawal of the senses from external objects to the complete oblivion of the external environment. The basic principle of meditation is to develop internal awareness. Meditation improves physical, mental and emotional health of an individual. All these yogic practices are psycho physical in nature. Some practices emphasize on the direct control of mental process and other practices are more physical or psychological.

IMPORTANCE OF YOGA

Yoga is a complete science of life and it is considered the oldest system of personal development in the world encompassing body, mind and soul. The art of practicing yoga helps an individual in a multiple way.

- a. It is rightly said that, "Health is not everything, but without health everything is nothing".
- b. Exercises of yoga have a physical health benefit and it helps to bring a balance between body, mind and soul. Practicing yoga helps an individual to maintain a good physical health.
- c. Along with good physical health to have a good Personality development condition is very much important. Yoga helps to develop a balanced and peaceful condition of the mind and promote and develop Personality development of an individual. Different yogic practices help to deal with various mental disorders, tensions, frustration etc.
- d. It develops social health also. Social health means the ability to be happy within oneself and to be able to make others happy. Simply it is the ability to relax and experience life in all its beauty.
- e. Practicing yoga help to develop positivity among the people's mind so that they can work for the benefit of the society, work to preserve their nature and environment etc.
- f. It also helps in the process of intellectual development of the individual by improving the functions of the brain.
- g. Yoga is very important for spiritual development of an individual. Yoga helps an individual to understand the responsibility of every individual to protect life and respect the individuality and independence of all forms of life. It develops positive thinking, tolerance, concentration,
- h. principle of non-violence which ultimately leads to spiritual health development.
- i. It helps the people in the process of self-realization. Yoga helps the people to realize their real nature and inner self, God. Practicing yoga helps to develop self-control, self-mastery, self-confidence, develop independent judgement, develop pure love and helps the people in realization of the divine within themselves.
- j. Yoga helps an individual to manage stress. According to National Institutes of Health, scientific evidence shows that yoga supports stress management, Personality development, mindfulness, healthy eating, weight loss and quality sleep.
- k. It helps in the attainment of perfect equilibrium and harmony.

EFFECTIVENESS OF YOGA ON PERSONALITY DEVELOPMENT OF B.ED STUDENTS

According to World Health Organization (WHO, 2014), Personality development is not just the absence of mental illness. It is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. There are many benefits of yoga such as physical benefit, mental benefits and spiritual benefits. Various research studies were already done who found that yoga helps an individual in their physical as well as Personality development.

Beddoe A. E and Murphy S. O (2004) studied on meditation and yoga decrease stress and foster empathy among nursing B.Ed students and results of the study shows that favorable trends were observed in a number of stress dimensions including attitude, time pressure and total stress. Findings of the study further suggested that being mindful may also decrease tendencies to take on other's negative emotions.

Singh T and Kaur, P. (2004) conducted a study on effect of meditation on self-confidence of student teachers in relation to gender and religion and found that both male and female and both Hindu and Sikhs (religion) student-teachers have equally benefited from meditation when pre-self-confidence and general intelligence were statistically controlled.

Ray U.S et al., (2007) conducted a study on effect of yogic exercises on physical and Personality development of young fellowship course trainees and found that there was improvement in various psychological parameters like reduction in anxiety and depression and a better mental function after yogic practices.

Sharma et al., (2010) in his study, yoga and cognitive behavior techniques for academic stress and mental wellbeing among school B.Ed students found that certain specific Asanas, Mudras and Pranayams of yoga were combined with some specific techniques of cognitive behavior therapy to reduce the academic stress and to enhance the mental wellbeing of the selected group of school children and the results have shown a significant relief from academic stress and significant improvement in the mental wellbeing of these children.

Woodyard C (2011) exploring the therapeutic effects of yoga and its ability to increase quality of life and found that yoga is superior in its favorable effects for mitigating the effects of anxiety, stress and depression.

Menezes et al., (2015) reviewed the emotion regulation potential of yoga practice and found that

yoga produces improvements in emotional functioning in healthy subjects and people who suffer from some physical illness, particularly in psychological self-reported variables. In the conclusion summarizes that yoga may help foster healthier psychological responses, indicating its potential as an emotion regulation strategy.

Gupta et al., (2016) in his article, does yoga influence happiness and mental balance: a comparison between yoga practitioners and non-yoga practitioners? Shows that yoga practitioners showed higher levels of happiness and mental balance compared to non-yoga practitioners. Participants with yoga experience had high level of happiness and mental balance compared to non-yoga practitioners.

Tiwari, G.K (2016) discussed on yoga and Personality development an underexplored relationship and describe the real meaning of yoga and assess the role of yoga and yogic practices in achieving, preserving and promoting Personality development. Further the study concludes that yoga and yogic practices have sufficient capacity to help maintain, improve, cultivate and nurture health and happiness in the lives of individuals, societies and communities. The future research work on these related issues was emphasized urgently.

Rajkumar, M (2017) in his study find that Personality development, self-concept and achievement motivation level were significantly improved due to the influence of yoga and meditation therapy among school B.Ed students.

Singh A.P (2017) in his review paper entitled, Yoga for Personality development: opportunities and challenges summarize that yoga can empower individual's positivity to take charge of their own psychological wellness and save a large expenditure for treatment and prevention of Personality development problems. It can offer immense help in sustaining wellness, addressing concerns related with increasing suicidal tendencies, anxiety, deal with frustration and conflicts in society and to opt career choices with full awareness of one's own abilities and potentialities.

DISCUSSION AND CONCLUSION

These reviews suggest a number of areas where yoga may be beneficial, but more research work is needed to understand in detail about yoga and different yogic practices. Different research study concludes that yoga enhances happiness, deals with mental issues, helps physical, mental, moral, spiritual wellbeing of an individual, reduces psychological disorders, improves self-awareness, maintain emotional stability, it seems suitable in dealing with the type of issues faced by adolescents.

Yoga is a complete science which harmonies our growth and helps in the development of all the areas such as physical health, Personality development, emotional development, promote peace and harmony etc. thus yoga is a practice of recognizing and re-educating habitual patterns of thinking by cultivating positive thoughts and values. There are different yogic practices which help an individual to maintain balance, flexibility, strengths, focus, relaxation, awareness and self-confidence. These reviews prove that yoga and yogic practices have the ability to help maintain, improve, cultivate and nurture health and happiness in the lives of an individual, society as well as communities. Education system, psychology researchers need to play an important role to increase the level of awareness regarding different forms of yoga and its importance in one's life and bust negative stereotypes related to yoga.

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4

ADVANTAGES AND DISADVANTAGES OF PHYSICAL EDUCATION AND SPORTS IN SCHOOLS AND COLLEGES–A STUDY

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Abstract

Regular physical activity is one of the easiest ways to reduce your risk for chronic disease and to improve your quality of life. However, most Americans do not move enough. No matter your age or ability, you can choose to move more for better health and if pain, a chronic condition, or limited mobility keep you from living a more active lifestyle, a physical therapist can help you overcome barriers to physical activity.

Keywords: *Cost, Commuting, Limited flexibility, Mobility, Physical activity, fitness*

Introduction

It is understood that physical exercise plays a vital role in healthy growth and reinforcement. As such, most of the school systems integrate physical fitness into the official curriculum. Having said that, this policy has stirred a worldwide controversy about whether it's feasible for school to require their students to take physical fitness classes or not. The following essay will take a look at both advantages and disadvantages of this problem.

On the one hand, let us have an overall assessment of the pros. The vast majority support the view that physical training will help students to strike a balance between their study and recreation. There's a rising concern that they're under a huge amount of pressure due to stressful classes, daunting tasks from schoolwork. By taking an exercise class, they can release all the worries, tiredness harbored from an incredible school workload. In addition to that, physical education is of paramount importance regarding students' generic skills. This subject consisted of numerous forms of training, such as taekwondo, boxing, swimming, martial art, which equips them with essential soft skills in line with knowledge acquisition in case of emergencies. Besides, teachers will supervise, keep a record of student's health condition and then give them advice on how to improve their health's problems.

On the other hand, there are some obvious disadvantages that would arise. Firstly, as far as we know, students are under obligation to pick up a fair amount of knowledge of many subjects to get graduated. If we require them to study an extra subject, they will have less time to take good care of themselves as they spend most time investing in their study. Secondly, many students who want to get accepted to prestigious



universities can't make their goals come true because of their bad grades in physical educations. There're some justifications for this but they mostly stem from the fact that some students don't really excel in PE or their health doesn't allow them to involve in physical activities.

There are plus points to requiring students to take PE classes regarding improving their health and body shape, easing the school's pressure, directly tracking their health's condition. However, the downside would emerge consequently in terms of having less time for themselves and acting as a deterrent in their accredited university's goals.

Physical classes, also known as in-person classes or traditional classes, have been the norm for centuries. However, with the rise of technology, online classes have become a popular alternative. Here are some advantages and disadvantages of physical classes:

Advantages:

- ❖ Face-to-face interaction: Physical classes provide students with face-to-face interaction with their teachers and classmates, which can help foster a sense of community and encourage discussion and debate.
- ❖ Access to resources: Physical classes often provide access to resources such as textbooks, libraries, and computer labs, which can be helpful for students who may not have access to these resources at home.
- ❖ Hands-on learning: Physical classes often provide opportunities for hands-on learning, such as lab experiments or field trips, which can help students better understand and remember the material.
- ❖ Discipline and structure: Physical classes require students to adhere to a schedule and attend class regularly, which can help foster discipline and structure in their academic lives.
- ❖ Socialization: Physical classes provide students with opportunities for socialization and networking, which can be important for building relationships and developing social skills.
- ❖ Healthy Student: With physical Education involves in their day-to-day life, the student tends to be healthy. A lot of exercises and sport student plays during the P.E. helps in burning down calories and be free from different lifestyle diseases.
- ❖ Fun to do physical activities: Studying for the whole day makes the life boring of a student. With all the physical activities associated with Physical Education, it is quite a fun experience to do it.
- ❖ Raise the inner talent: Some children may not be interested in academics but more in games and sports. Physical Education can be a platform to bring out the inborn talent which in future can turn out to be a career for the student.
- ❖ Refreshment: Physical Education takes place outside of the classroom which breaks the monotony of the routine that is class work and gives a feeling of refreshment to the students

Disadvantages:

- ❖ Time and location constraints: Physical classes require students to attend class at a specific time and location, which can be inconvenient for students who have other commitments or live far from campus.
- ❖ Cost: Physical classes can be more expensive than online classes, as they often require students to pay for tuition, transportation, and housing.
- ❖ Commuting: Physical classes require students to commute to



and from campus, which can be time-consuming and expensive, particularly for students who live far from campus.

- ❖ **Limited flexibility:** Physical classes often have a set schedule and structure, which may not accommodate students who need more flexibility in their academic schedules.
- ❖ **Class size:** Physical classes may have large class sizes, which can make it difficult for students to receive individualized attention from their teachers.
- ❖ **Uneven Results:** Physical education as a class is either too easy or too difficult for a student depending on how athletic they were as kids. Also, for some it may be PE can be a very scary and intimidating class. Coaches tend to prioritize the athletic child and non-athletic kids are either ignored or even worse, singled out. Also, they are bullied making the children not wanting to attend the PE class or sports.
- ❖ **Interference with Academic Courseload:** The school time is fixed for the students. Thus, the physical education class is taken as an interfering process that takes away the time which can be utilized for academic courses. There are many contents that need to be covered in different subjects and every minute of this time should be earmarked for the academics. Hence, PE is often targeted when extra-classes is needed because it is not considered a core academic subject.
- ❖ **Lack of Choice:** Many kids do not take part P.E. because of their interest. Instead, they are part of it because it is made mandatory in school premises. Especially the introvert students, who don't prefer to perform makes them hate the word exercise. Thus is advised schools should allow students to have some choice in P.E. activities to avoid making exercise seem like a hated necessity, rather than healthy and fun.
- ❖ **Expense:** Everything that is implemented in education comes with a cost. Also, the cost of holding P.E. classes comes with the expenses that need to be paid by the parents of each student. The cost and maintenance of equipment, cost of the teacher, plus the upkeep of a huge gym, should be the money that's better spent on hiring best academic instructors and other technologies.

Benefits of Physical education

1. **Better focus in school.** When the brain activates following exercise, it can better concentrate and helps improve memory and information retention. This helps students to perform better and learn more information during lessons.
2. **Improves school attendance.** Students who participate in regular physical activity are less likely to get sick and be absent. The immune system gets stronger and ready to fight illnesses better.
3. **Better academic performance.** Studies show that students who are physically active get better grades. These students also perform better on standardized tests and have higher graduation rates.
4. **Builds a strong, healthy body.** Students that develop a routine for physical activity when they are younger lower their risk of obesity, heart disease, high blood pressure, and other life-altering diseases and conditions. This helps them build a healthier and stronger body for a longer life.
5. **Improves sleep quality.** Students that participate in physical activity get better sleep and achieve a deeper sleep that helps their body to recover from exercise. Better sleep increases their ability to focus or concentrate their energy levels, and better manage stress.
6. **Reduces risk of anxiety and depression.** Activity helps release endorphins, feel-good hormones, that help reduce stress therefore relieving feelings of anxiety and depression.

7. **Develops better social and problem-solving skills.** Participating in activities that include working with others on a team or a group help students develop positive social and problem-solving skills. Students learn to cooperate with others, encourage teammates, and achieve a goal.
8. **Build self-confidence.** Finding a skill, activity, or sport a student can find success at helps build self-confidence which helps students try new skills, learn new information, and take risks.
9. **More energy.** A body in motion, stays in motion. When a student participates in regular physical activity, they will have more energy and be alert throughout their day. This helps them engage in their learning and enjoy class.
10. **It's fun.** It's important for all students to just have fun! Finding an activity a student enjoys and finds pleasure in will help increase the likelihood of them participating in physical activity for their lifetime



Conclusion

Physical education has both pros and cons that must be taken into consideration when evaluating its role in a student's education. While it can provide valuable benefits such as improving physical fitness and promoting teamwork and sportsmanship, it can also present challenges such as time constraints, inequality of access, and the potential for injury. It is up to schools and educators to strike a balance between the benefits and drawbacks of physical education to provide students with the best possible experience.

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5

RELATIONSHIP BETWEEN LEG ANTHROPOMETRY AND VERTICAL JUMP ABILITY

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Abstract

Success and good performance in any sport are dependent on a number of things, including the athletes' degree of physical fitness, their anaerobic and aerobic capacities, psychological aspects, their training and skill levels, strategies, tactics, and more. And to succeed, every sport needs some specific qualities. The purpose of the study was to find out the relationship between leg anthropometric variables and jumping ability. For the present study the subjects were selected from Department of Studies in Physical Education and Sports Sciences, Karnataka State Akkamahadevi Women University, Vijayapura. Total 45 subjects were randomly selected. The Age of the subjects Range from 21 to 25 years. The Vertical Jump Ability was selected as independent variable, the leg anthropometric variables such as Leg Length, Thigh Girth, Calf Girth were selected as dependent variables. The vertical jump test was conducted to measure the vertical jump ability. The flexible tape was used to measure the leg anthropometric variables. The suitable statistical techniques such Mean, SD and Correlation was applied for analyse the collected data. The result found that there was no significant correlation found between independent and dependent variables.

INTRODUCTION:

Success and good performance in any sport are dependent on a number of things, including the athletes' degree of physical fitness, their anaerobic and aerobic capacities, psychological aspects, their training and skill levels, strategies, tactics, and more. And to succeed, every sport needs some specific qualities.

Vertical Jump is a useful indicator of lower limb joint musculature, particularly that of the ankle, knee, and hip joints, as well as strength, explosive power, and muscle fibre composition. It is one of the most significant assessments of physical prowess and is frequently used to gauge a player's present and future performance level. Leg power, and consequently Vertical Jump performance, is necessary for everyday duties and occupational activities as well as good sporting performance. For improved performance in various sports, such as football, basketball, diving, volleyball, high jumping, hockey, cycling, sprinting, long running, etc., it is consequently regarded as a necessary talent.

Numerous anthropometric, physiological, and biomechanical aspects influence Vertical jump height and performance. Air resistance, force, acceleration, momentum, gravity, joint angle, centre of mass height, and other biomechanical parameters are examples. Other crucial elements are muscle mass, degree of competence, age, height, weight, flexibility, and isometric muscular strength.

OBJECTIVE OF THE STUDY:

The objective of the study was to explore the relationship between leg anthropometry and vertical jump ability.

METHODS:

The purpose of the study was to assess the relationship between leg anthropometry and vertical jump ability. To achieve the purpose 45 female subjects were selected from department of studies in physical education and sports sciences, Karnataka state Akkamahadevi women university, Vijayapura. The age ranged between 21 to 25 years. For the study, Vertical Jump Ability was selected as independent variable, the leg anthropometric variables such as Leg Length, Thigh Girth, Calf Girth were selected as dependent variables. The vertical jump ability was measured with the help of vertical jump test. The Length, Thigh Girth, Calf Girth were measured with the help of flexible tape the measurement was taken in centimetres.

RESULT AND DISCUSSION:

The descriptive statistics of independent and dependent variables presented in table -1

Table-1 : The mean, SD, minimum and maximum of vertical jump, Leg Length, Thigh Girth and Calf Girth

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Vertical Jump	46	14	90	26	12
Leg Length	46	80	107	93.13	7.74
Thigh Girth	46	31	65	49.67	6
Calf Girth	46	22	39	32.52	3.73

The table 1 depicts that the mean value of vertical jump, Leg Length, thigh Girth and calf girth 26, 93.13, 49.67 and 32.52 respectively. The SD of vertical jump, Leg Length, thigh Girth and calf girth 12, 7.74, 6 and 3.73 respectively. The minimum value of vertical jump, Leg Length, thigh Girth and calf girth 14, 80,31 and 22 respectively. The maximum value of vertical jump, Leg Length, thigh Girth and calf girth 90, 107, 65 and 39 respectively. The graphical representation of the mean, SD, minimum and maximum of vertical jump, Leg Length, thigh Girth and calf girth has been presented in figure 1

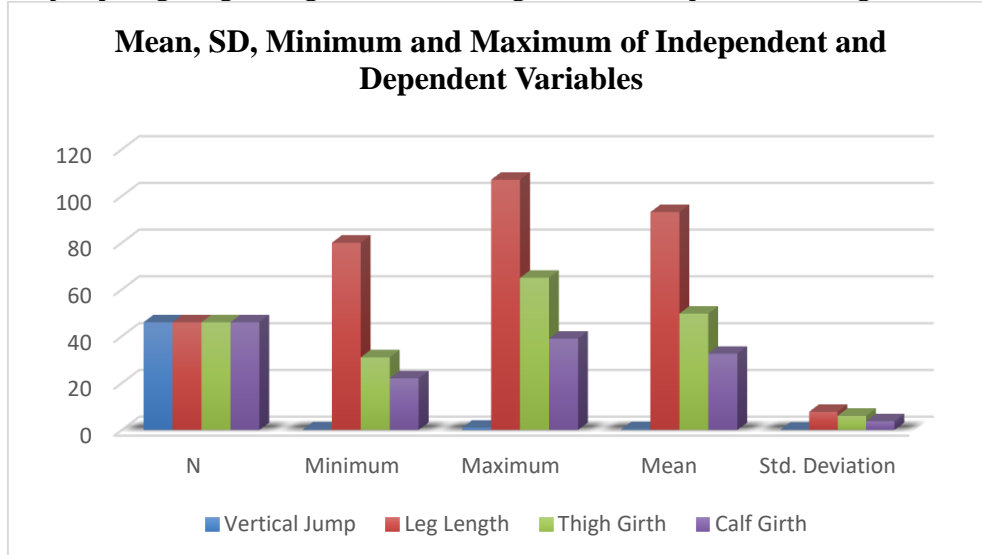


Figure 1 - Graphical representation of the mean, SD, minimum and maximum of vertical jump, Leg Length, thigh Girth and calf girth

The correlation between vertical jump and Leg Length has been presented in table 2

Table – 2 : Correlation between Vertical Jump and Leg Length

		Vertical Jump	Leg Length
Vertical Jump	Pearson Correlation	1	.078
	Sig. (p- value)		.608
	N	46	46

The table 2 described that there was no significant relationship found between vertical jump and leg length as the found $r = .078$ ($p > 0.05$) was not significant at 0.05 level of significance. It is clear from the result that there was a very weak positive correlation exist between vertical jump and Leg length.

The correlation between vertical jump and Thigh Girth has been presented in table-3

Table – 3 : Correlation between Vertical Jump and Thigh Girth

		Vertical Jump	Thigh Girth
Vertical Jump	Pearson Correlation	1	-.014
	Sig. (p- value)		.929
	N	46	46

It was clear from the above table 3 that the found r value between vertical jump and thigh girth was $-.014$ shows that there was a very weak negative correlation between them. But it was clear from the above table that there was no significant relationship found between vertical jump and thigh girth as the found $r = -.014$ ($p > 0.05$) was not significant at 0.05 level of significance.

The correlation between vertical jump and Calf Girth has been presented in table 4

Table – 4 : Correlation between Vertical Jump and Calf Girth

		Vertical Jump	Calf Girth
Vertical Jump	Pearson Correlation	1	-.053
	Sig. (p- value)		.725
	N	46	46

It was clear from the above table 4 that the found r value between vertical jump and calf girth was $-.053$ shows that there was a very weak negative correlation between them. But it was clear from the above table that there was no significant relationship found between vertical jump and thigh girth as the found $r = -.053$ ($p > 0.05$) was not significant at 0.05 level of significance.

CONCLUSIONS:

On the basis of the results of the study the following conclusions were drawn;

1. There was no significant relationship between vertical jump ability and leg length.
2. There was no significant relationship between vertical jump ability and Thigh girth.
3. There was no significant relationship between vertical jump ability and calf girth.

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6

PHYSICAL EDUCATION FOR PERSONS WITH PHYSICAL AND MENTAL DISABILITIES

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Abstract

Recent social policies have focused on reentering persons with mental retardation (MR) into the work force and the mainstream of society. However, as individuals with MR age, their rate of institutionalization greatly outweighs that of the general population as well as children with MR. Health care organizations have expressed serious concern about the impact of an aging population with disabilities, particularly the cost associated with institutionalization. Considering that cardiovascular disorders are more common in population with than without MR, and that physical fitness has been directly related to work productivity among individuals with MR, physical fitness and exercise training have important implications for this population. Yet, available data suggest that individuals with MR have low levels of physical fitness, a higher incidence of obesity, and may respond differently to exercise training than persons without MR. This paper reviews current knowledge of physical fitness status, impact of exercise testing and training, and identifies differences between populations with and without MR, with special emphasis on trends associated with aging. This review is limited to three physical fitness components: obesity, cardiovascular fitness, and muscular strength and endurance, as these components have been shown to impact health and well-being, and are related to work performance of persons with MR. Suggestions for future research are also provided.

Keywords: Physical health and mental health, Physical fitness, Performance

Introduction

Regular physical activity can have many benefits on both mental and physical health. Countless studies have proven, without a doubt, the positive impact of exercise on members of the general population.

Did you know that 15% of the world's population lives with a disability? In Europe, 39 million people are disabled, of which 11 million are in Britain. Accessibility is a major issue, and because of this, disabled people often have a hard time getting an education or finding employment. Accessibility, or lack thereof, also impacts other aspects of their lives, like the practice of physical activity, which is the problem we would like to address.

People with disabilities, whether it'd be physical or learning, are less likely to participate in regular physical activity than



those without disabilities. Lack of accessibility is one of the reasons, but poor social support from family, friends and the community is another one. However, physical activity has the same benefits for disabled people regarding health promotion and disease prevention.

Disabled individuals are often more prone to some chronic conditions. For example, obesity and type 2 diabetes are 66% more likely in members of the disabled community because they are more likely to be sedentary. One of the best tools to prevent these conditions is, you have guessed it, physical activity!

Other physical benefits of exercise include better mobility, improved posture, decreased musculoskeletal pain, better balance, improved blood circulation, and better sleep.

We could discuss the benefits of exercise on physical health for pages and pages because there are so many. But, health has many facets: physical, mental, and even social! In this article, we would like to focus on the psychological and social benefits of physical activity, as these are strongly interlinked.

The Social Benefits of Physical Activity for Disabled People

We'd like to begin the discussion with social health. Humans are social beings, and we constantly look for new ways to connect. The quality of our friendships and our other relationships has a strong impact on our mental health. Social interactions have the power to decrease stress and anxiety, improve self-esteem, and increase happiness.

Unfortunately, disabled people are more likely to be isolated and withdrawn from society. They are also less likely to participate in social events than non-disabled people. Physical activity can be the perfect opportunity to engage in social events. It can also lead to new fun experiences and friendships, decreasing loneliness.

As mentioned earlier, disability can be an obstacle to finding and keeping work. Indeed, 48% of disabled people are employed compared to 80% of people without a disability. That is probably why 25% of families with at least one disabled person live in poverty compared to 16% of households with no disabled person.

These statistics reflect important social issues that we cannot fix in the blink of an eye. However, improving the level of physical activity in the disabled community could potentially help. Studies have shown that disabled individuals who exercised regularly were more likely to be employed and had lower absenteeism rates. They were also more productive in their place of work.

Working and providing for yourself and your family relieves stress and improves mental health. It also boosts self-esteem and improves overall mood.

Benefits of Physical Activity on the Mental Health of Disabled People

Disabled people are more at risk of suffering from mental health problems. As many as one in four disabled people will struggle with a mental health issue at one point or another. Therefore, physical activity is especially important for disabled individuals because of its benefits on mental health.

Studies are clear: exercise and mental health are strongly associated. People who move on a regular basis have less risk of developing depressive or anxiety disorders. They also are calmer in general and feel less stressed. Finally, physical activity helps people sleep better and improves mental clarity.

Those benefits are not specific to the disabled community, and anyone who exercises will experience them. However, studies have shown that physical activity can improve the mental health of individuals who suffer from physical, mental, and functional disabilities.



Physical Disability

The Scandinavian Journal of Medicine and Science in Sports published a large review summarising the mental health benefits of exercise on individuals with physical disabilities. Their overall conclusion was that physical activity led to important psychological gains in disabled people and made them feel empowered. Let's dive into the details of their findings.

The first thing they found is that the practice of sports like mountaineering, scuba diving, snow-skiing, and kayaking resulted in feelings of higher self-efficacy. In other words, recreational activities increased the participants' beliefs in their ability to perform. According to the authors, sports allowed disabled individuals to work on a particular skill at their own pace in a positive environment. They experienced pleasure and excitement from the activity and, as their abilities improved, so did their confidence.

The review also studied the link between physical activity, self-concept, and self-esteem in disabled people. Self-concept measures the capacity a person has to realise their potential. One big part of self-concept is self-esteem, as you have to believe in yourself to accomplish things. The study found that individuals who practised sports had a greater sense of self-concept after the session. Also, disabled people who practised sports regularly had higher values of self-concept than disabled people who were sedentary.

When they looked at self-esteem specifically, they found a positive association between the sense of worthiness and involvement in sports activities. Basically, the practice of sports increased self-esteem, both in younger and older disabled people. The review cites an interesting study where 59 paralyzed boys participated in a sports program for periods of 2 to 20 months. Researchers asked them to draw self-portraits and compared them to those of 152 children who did not practice any sports. They found that the physically-active boys viewed themselves in a more positive light. Their drawings showed fewer body distortions and less body neglect.

Furthermore, the paper looked at the effect of exercise on the locus of control, a psychological concept that describes how much control people believe they have over one situation. Individuals who have an internal locus of control believe they have the power to control their successes and failures. On the other hand, those with an external locus of control think they are a victim of external circumstances. They do not believe they have the power to control what happens to them. Instead, they attribute their successes and failures to things like injustice, luck, or the fault of others.

The review cites a study that analysed the locus of control of 170 disabled children and adolescents who participated in camp activities. It found that, within three weeks only, there was a significant shift towards an internal locus of control from the participants. The practice of physical activity made them feel more in control and like they had the power to change their own circumstances. And this was within three weeks only! Imagine what could happen to someone if they practised sports regularly.



Finally, the paper examined the relationship between physical activity and social acceptance. Authors found that, in general, disabled individuals who exercised viewed themselves as productive members of society. They had fewer acceptance issues and believed they were actively involved within their communities. As mentioned earlier, social involvement has a direct impact on mental health. Individuals who feel like they have a place in society tend to be less anxious or stressed, and happier in general.

Another more recent paper looked at the influence of exercise on the quality of life of disabled individuals. They recruited 26 adult participants and enrolled them in a basketball tournament. At the end of the study, all the participants said that they felt at least one psychological benefit from playing in the tournament. These included feeling good, being more focused, experiencing less stress or aggression, and developing a better work ethic. They were also very satisfied with the opportunities to meet new people and travel that the tournament offered. In summary, they all felt that being involved in a recreational activity like basketball significantly improved the physical, emotional, psychological, behavioural, and social aspects of their life.

Learning Disability

Another review paper this time focused on the influence of physical activity on individuals who had a learning disability. Overall, it concluded that involvement in physical activity resulted in a better quality of life for people with a learning disability. Exercise also improved their self-efficacy, meaning they felt more confident and able to perform various tasks.

The paper also noted that when caregivers were involved in the practice of physical activity, the benefits were even greater. The authors believed that caregivers made sure that participants engaged in activities they actually enjoyed, which increased their positive perception of exercise. The involvement of peer mentors was another factor that potentiated the benefits of physical activity on mental health. Mentors played a role in supporting participants in decision-making and provided regular feedback, which increased the feelings of self-efficacy and their confidence levels.

Functional Disability

Functional disability is the difficulty to perform basic or complex tasks, preventing one person from living independently. It is often seen in elderly people, who lose their abilities over time, whether it is for cognitive and/or physical reasons.



There is a close relationship between functional disability and depression, and one can influence the other. For example, a person who becomes more functionally disabled can feel more depressed as a result. The opposite is also true.

A team of researchers wanted to know if physical activity could alleviate the depressive symptoms caused by functional disability. They assessed 645 elderly individuals with disabilities, and they found that physical activity had the power to change the relationship between functional disability and mental health. Therefore, although participants still had functional disabilities, they were not as depressed if they exercised regularly. The effect was the same, whether participants exercised intensively or moderately.

The Take-Home Message

Physical activity has a positive effect on the mental health of disabled people. It improves self-esteem, self-efficacy, and quality of life. It also reduces depressive and anxious symptoms. Disabled people who exercise regularly are more likely to feel empowered, confident, and like productive members of society.

Be Active to Stay Healthy

Many adults with disabilities and chronic health conditions can participate in regular physical activity; however, it's important to consult with a healthcare professional or

physical activity specialist (for example, physical therapist or personal trainer) to understand how your disability or health condition affects your ability to safely do physical activity.

If you have a disability and want to make physical activity part of your daily routine, here are some options.

Being Active In Your Neighborhood

Engaging in physical activity outdoors can help improve your physical health, as well as your mental health and well-being. Most people can engage in an active lifestyle through walking—including people with disabilities who are able to walk or move with the use of assistive devices, such as wheelchairs or walkers. In fact, walking is the most common form of physical activity reported among active adults with mobility disability.

Unfortunately, adults with disabilities report fewer neighborhood environmental supports (such as sidewalks, public transit, and walkable shops) and more barriers (such as traffic, crime, and animals) for walking than those without disabilities. To improve this, resources were created to help promote the development of supportive environments for walking for individuals with disabilities.

Being Active In Your Home

Being active in your home can also be a good option. Here are some resources that can help you stay physically active while at home.

Conclusion

Disabled people can only benefit from incorporating more physical activity into their lives. You do not have to engage in vigorous activity for long periods to feel the effects. Moderate exercise can achieve the same health benefits. If you are a sedentary person who wants to move more, you can start working out in short intervals and then gradually increase the duration and intensity of your sessions. It will make the transition easier and increase the likelihood of staying on track with your objectives.

At TG Fitness, we help clients redefine their limits with our inclusive personal training services, specialising in working with disabled people and those with chronic illnesses. We believe that everyone deserves access to fitness and wellness services that cater to their unique needs, which is why our network of skilled and experienced trainers will work closely with you to create a bespoke fitness plan that fits your body and lifestyle. Join our inclusive community today and start your fitness journey towards improved mobility, reduced pain, and a healthier, more energised life. Contact us now to schedule your first consultation and experience the benefits of personalised, accessible training.

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7

A STUDY ON TECHNOLOGY REVOLUTION IN PHYSICAL EDUCATION SUPPORTING PHYSICAL EDUCATION THROUGH TECHNOLOGY

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Abstract

Technology has the potential to facilitate more effective instruction in physical education and to provide physical educators with key pieces of information that can be used in advocacy efforts. Educators can efficiently summarize student performance records through tables and graphs to help key stakeholders understand the impact of a quality physical education program. Student performance videos can be shown during school board meetings, parent/teacher conferences, and assemblies to demonstrate the variety of activities offered through physical education. Teachers can also conduct video interviews to document students' impressions of physical education and learning.

Keyword: *heart rate monitors, Pedometers, Video gaming, Physical Activities, Mobile device, teaching Techniques, Digital Technology. Physical education (PE).*

Introduction

Physical education program should be one of the major subjects in schools curriculum since the physical educator has a great role to play in the grass root level to groom a child into making a potential and highly skilled professional. Physical Education (PE) programmer has been creating, implementing, and evaluating in promoting lifelong wellness among the school children. Students learn how to make healthy food choices, reduce time playing video games and watching television .Previously, the PE program has been removed from the school curriculum as schools everywhere strive to improve the academic performance of their students, many have cut physical education and recess periods to leave more time for sedentary classroom instruction .

Over the years, researchers and educators have revised their PE curricula, equipments and training programs to meet the six NASPE (National Association of Sport and Physical Education) guidelines. In India, Central Board of School Education (CBSE) has made PE an elective subject in school curriculum. The idea of including PE class in school is to make the students healthy and teach them healthy life style.

In fact, of all the practical courses in physical education, most of the courses are skill-oriented projects. However, teachers occupies the leading place in the teaching process by limb demonstration and evaluation, ignoring the dominant role of students, thus leading to the situation that more active the teacher be, the more passive the students be. Practice has proved that the teaching goals cannot be achieved and existing problems cannot be solved effectively by traditional skills practice or solely the teacher's explanation, demonstration, evaluation of physical knowledge. The physical education teachers have not completely changed their concept of professional experience teaching, which inveterately limits the scope of research and the practice in educational technology. Over the years, the

sports professional skills course is based on “physical activity”, which is a core course in college physical education.

Benefits of incorporating technology into physical education classes

One of the benefits of incorporating technology into physical education classes is that learning can be enhanced beyond strategies, skills, and rules between individual and team sports. It becomes possible to align physical education with other areas such as math’s or geography, and physical activities can be individualized to create optimal challenges for students.

Technology use in Physical Education

New technology in education is playing a big role in classes. One of the most affordable and effective tools is a simple video recorder. With this, students can see the mistakes they’re making in things such as a throwing motion or swinging form. Studies show that students find this more effective than having someone try to explain what they are doing wrong, and then trying to correct it. Educators may use technologies such as Pedometers and heart rate monitors to make step and heart rate goals for students.

Other technologies that can be used in a Physical Education setting include video projectors, GPS and games and gaming systems such as aFit and Dances Kinect, Wii Fit and Dance Revolution. Projectors can show students proper form or how to play certain games. GPS systems can be used to get students active in an outdoor setting, and active exergames can be used by teachers to show students a good way to stay fit in and out of the classroom setting. Simulators are an efficient way to help promote being active in certain settings. Along with video projectors, GPS and game systems such as Kinect and Wii, simulators where the participant is using goggles to be put in a certain setting are beneficial. One method commonly used in the elderly that could benefit children would be a horse-riding simulator. This simulator allows the participant to be put into a country setting where they are free to roam multiple fields. This simulator is scientifically proven to help balance as well as stability. Relaxing the brain allows for better cognitive function leads to better test results in the classroom as well.

Another type of technology that is commonly used in Physical Education is the pedometer. This does not necessarily track how far a person is going, but lets them know the number of steps they are taking

Applying Technology in Physical Education Class: Lots of Possibilities

From art classes to science projects, the technology tools have been increasingly instrumental to enhancing the learning process. But how can technology be applied in physical education classes? In this article, we’ll take a look at some way in which P.E. classes may be improved by using technology.

Physical Education Tech Tools and apps used in classrooms

(i). Physical Education Apps

Apps involving video and picture analysis can be used to examine athletic movements, and ultimately help to improve physical skills. Physical educators should not shy away from trial and error while thinking of new ways to use apps in and beyond the classroom. Apps like My Fitness Pal, Coach’s Eye, and Team shake show the breadth of offerings available and can get you thinking about many different possibilities.

(ii). Wearable Tech

Wearable technology has changed the way we collect and evaluate personal data. With increasing awareness in physical education departments about the importance of feedback from daily activities, technological tools such as Pedometers, smart watches, and heart rate monitors are increasingly being used. With wearable technology, students will be able to track and analyze their heart rates, activity levels, or the number of steps to take within a time frame.

(iii). Virtual Connections

Effective learning involves two-way communication where students are able to engage in discussion and challenge the teacher's ideas in order to achieve a deeper understanding. Many classrooms have already started taking advantage of the online world by creating classroom blogs or websites. A classroom website is valuable for encouraging discussion after class, or enabling communication for students applying Physical education techniques or working on sport practices or exercise outside of classroom.

(iv). Gaming Systems

Interactive video games such as Dance Revolution, Wii Fit, and Wii Sports, can be invaluable in promoting physical activity of students and are already in use across many physical education centers. They serve as a reasonable alternative to exercising in bad weather and produce results similar to those seen with outdoor physical activity. Physical education teachers can easily tap into students' love of video games to foster interest in physical education. Video games are extremely engaging and immersive, and can be taken beyond the school environment and continued at home.

(v). Video Resources

As a result of advancements in technology and faster internet becoming available today, it is now possible to stream videos on YouTube and Video. Physical education teachers can take advantage of this and recommend workout videos to students, as well as other types of content which provide useful demonstrations for skill development.

Whether they are dance or yoga videos, students may become so entranced with some YouTube channels that follow them, encouraging them to do even more than the teacher asks. No matter the level of the class, teachers will be able to find age-appropriate videos to share.

(vi). Monitors and trackers

Since not all students have the same physical capabilities, it's essential for teachers to be aware of what their students can and can't do. It is important to adapt a program to a particular student's body, thus heart rate monitors have become critical for assessing students' physical stamina and in setting realistic and reasonable goals for them.

Creating goals that are suited for an individual student will make it easier for them to feel motivated, and encouraged to stay active and committed to their fitness routines

Related organizations involved in the development of Educational Technology in physical education

A. Professional Committee of China Association for Technology in College Sports Teaching

It is one of the largest academic communities of China Association for Educational Technology. Referred to as Physical Education Committee, it is founded in November of 1987 in Jinan University in Guangzhou. It now has over 80 governing units and mainly devotes in the research and application of education technology, network courses, CAI courses, multimedia teaching and teaching reforms, which has largely broadened the application of modern educational technology in sports teaching in colleges and universities.

B. Sports Computer

Use Branch of China Sport Science Society It found five study groups:

- Computer-assisted exercise training group,
- Educational technology group (colleges Group),
- Educational technology group (PE group),
- Physical education management group and
- Electronic athletics study group.

The five study groups are of outstanding features and focus on five different research directions, which strive for better academic, application and demonstration of educational technology in physical education of colleges and universities and make a great contribution to all-round and concerted development in China's sports.

C. Unable to Form a Unified Team

The education technology research efforts have not been integrated to be a unified team. Nowadays, the backbone strength of educational technology are mainly majored in computer, education or communication who do not have a great knowledge of sports. The lack of the combination of education technology theory and sports skill practice; and the ignorance of construction of sports specialty but focusing on the theory design, making the unable to achieve the breakthrough in the theoretical disciplines.

D. Inadequate Funding and Uneven Development of Educational Technology

The inadequate funding and uneven development of educational technology in different schools restricts the comprehensive application of educational technology. The investment funds needed in the application of educational technology is very big, especially in the construction of education information teaching environment. Nowadays, the application of educational technology in physical education of colleges and universities are not satisfied, which mainly reflects in the insufficiency of boutique resource sharing courses and boutique resource public video classes and so on.

Supporting Physical Education through Technology

Physical education teachers have traditionally relied on observations as a primary method of assessment in determining student activity levels. However, recent advances in physical activity technology provide more valid and reliable measurements that can help document student performance. Armed with data gathered through technology, physical education teachers become better equipped when trying to convince various stakeholders — including students, parents, colleagues, and administrators — of the merits of a quality physical education program. For example, heart-rate monitors serve as one tool to objectively assess student effort. Companies such as Polar Electro provide services that collect and track physical effort for physical education assessment. Heart-rate technology can be used to help students set fitness goals and show how to create personalized fitness plans that optimize activity time.

Mobile devices, such as iPods, provide another vehicle to implement technology in physical education. Many applications deliver content and assist with teaching. For example, classroom management, lesson plans, student data, and other types of information can be managed with an iPad. Another impressive use of iPads is the capture and replay of video clips. Teachers can videotape student performances and then replay the video to show students the skills elements they are performing correctly and those elements that require improvement. Videos can also be used to highlight students who are successful at a particular task, which can positively reinforce student behavior. The next section highlights how two physical education teachers have made technology a cornerstone of their programs.

Insufficient Development of Physical Education Software and Simplicity of the Design of Teaching Environment

The development of physical education software is insufficient, and the design of teaching environment is too simple. The main shortage level is as follows:

The development of physical education software is basically focused on public fitness project. The scopes of projects are not enough and the professionalism is not strong.

- ❖ The design of teaching environment is too simple, which reflects in the digital cinema presentation, imitation of course design and so on. Though the ornamental stuff are attractive to the students, the interaction between the teachers and students are becoming less and the participation of students are missed. How to improve the students' proficiency level and innovate the teaching methods are becoming imminent problems in physical education.
- ❖ The lack of network interactive teaching and use of multimedia network, the teachers and students cannot get more effective communication after class, which can not show effectively extension of educational technology in physical education.

- ❖ The guidance tool of modern educational technology enables students to have access to excellent software, which benefits the coaching and personalized learning. The teachers can monitor the development of students and give them timely guidance whenever needed.

New Trends of Physical Education

The key points and difficult points of educational technology in colleges and universities are the case studies of the design, development and application of learning environment theory. The learning environment theory emphasizes on the learning initiative, collaboration and situational analysis, which means improving the construction of knowledge and the promoting the transfer of learning.

(i). Changes in the Way Students Learn: The students changed from passively accept and repeatedly skills practice to active learning skills; they use a variety of professional information resources to recreate their own learning skills and thus master their ability of how to learn. In this case, students cultivate their own independent thinking abilities, appearance thinking abilities and problems-solving abilities while training their motor skills.

(ii) . Changes of Teachers' Role: The teachers are no longer solely guide to practical skills, but an instructor who helps the students to be a self learner. At the same time, the teachers can not only use the CAI courseware to guide students to understand the professional skills of movement structure features and application methods, but also deal with the instruction of professional sports skills during the action and correct the error methods. The professional sports skills and abilities of the teachers are basic for the curriculum integration. The PE teachers should have the abilities to make full use of information equipment and information resources, as well as the abilities to process information, create new information and do researches.

(iii). Changes in the Role of the Media: The teaching media changes from the tool for the PE teachers to demonstrate to the tool for the students to learn knowledge and construct their own knowledge system. At the same time, the teaching media is not only the network, but also the learning objects of students.

(iv). Progresses in Education Resources Expansion and Teaching Software Design: **Firstly**, the expansion and innovation of education resources in colleges and universities can improve students' cooperative learning, which benefits the development of students' cognitive abilities and the cultivation of students' explore consciousness, skill practice abilities etc. **Secondly**, the approaches of education software development are becoming more micro, diversified and personalized. The innovation of instructional design platform is the key factor to improve teaching results and the main tool for minimizing the differences between the instructional design theories and the teaching practice. It is also useful means to solve the bottleneck problems in the effectiveness of teaching and learning, which may give a strong impact on traditional teaching and assessment.

(v).Continuous Innovation of Educational Technology: The continuous innovation of educational technology continuously reforms the learning environment, especially in computer image, graphics technology in sports training and teaching, which has taken an irreplaceable role in physical education. The continuous innovation of educational technology can fully solve the difficult problems and the bottleneck problems in sports training and sports teaching, and the auxiliary system of it can greatly teaching effects and athletic performance, which including the following points:

- Establish the comparison system of teaching evaluation and feedback.
- Improve the quality of technical movements,
- Effectively solve the key problems and difficulty problems.
- Analyze the characteristics of technical movements; give scientific guidance in teaching and training.

Conclusion

Physical education is at a crossroads in the 21st century. With government mandates related to the No Child Left behind Act emphasizing core subjects, such as math and literacy, non-core subjects have been deemphasized. The most recent Shape of the Nation Report (National Association for Sport and Physical Education & American Heart Association, 2012) showed that 28 states allow physical education waivers and only 6 require physical education in every grade. Despite continued reductions, evidence indicates that physical activity provides a wealth of benefits to children, including the development of healthy life habits, improved concentration, healthier bone development, improved classroom behavior, increased graduation rates, and higher educational aspirations .Further, more time in physical education does not have a negative effect on learning in other subjects and reduces the likelihood for childhood obesity .Although findings such as these are encouraging, physical education teachers must be able to demonstrate program outcomes in a meaningful way. Advances in educational technology provide several viable approaches to collecting and communicating this evidence.

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PROBLEMS IN IMPLEMENTING TOTAL QUALITY MANAGEMENT (TQM) IN LIBRARIES AND INFORMATION CENTERS- A CRITICAL ANALYSIS

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Abstract

TQM has proved very effective in the manufacturing and business environment and it will be profitable if the library profession also rises to the occasion and ponders over the processes and services where TQM can gainfully applied in research oriented libraries. It has been put forward by the proponents of TQM that their principles also hold good for any educational and governmental agencies and those organizations which intend to achieve excellence in their performance and take pleasure in satisfying their customers will do well in adopting them. In most of the libraries, people are engaged in establishing and restructuring the routines, creating job descriptions, acquiring and organizing materials and doing odd jobs which do not contribute to the information functions. Many libraries have implemented TQM successfully as Harvard college library created a task force which rewrote the library's statement, and considered changes that would have to be made to order to develop a new organization culture one that "highlights the changing nature of staff and responsibilities in an era of pervasive change".

Keywords: *Total Quality Management (TQM), high quality service, Training of Staff, proper infrastructure, ICT, Library Services, Libraries Laws and Law.*

Introduction

Many libraries have implemented TQM successfully as Harvard college library created a task force which rewrote the library's statement, and considered changes that would have to be made to order to develop a new organization culture one that "highlights the changing nature of staff and responsibilities in an era of pervasive change". Library and Information centers exist to support the learning and research needs of their parent institutions. These are dominant agencies for the dissemination of information. Their aim is to provide services acceptable to the users to their fullest satisfaction. For successful functioning, these require professionals who are not only to be professionally qualified, competent and efficient but also to be lively active, contented and well satisfied with their jobs. For sustaining the library services and librarianship, there is need to provide the library professional with adequate training in view of the rapid developments in the fields of science and technology.

In this changing scenario, library and information services have to adapt to the new paradigm. In the process of adaptation, in all services and facilities units, a good quality assurance system plays an essential and important role in gearing up the library to provide users satisfaction. But failure to provide information professionals with adequate training and to deploy them effectively represents one of the constraints on change and development in library and information provisions and can undermine its effectiveness.

Libraries can benefit from TQM in three ways:

- Breaking down interdepartmental barriers;
- Redefining the beneficiaries of library services as internal customers (staff) and external customers (patrons); and
- Reaching a state of continuous improvement.

TQM in libraries

TQM has proved very effective in the manufacturing and business environment and it will be profitable if the library profession also rises to the occasion and ponders over the processes and services where TQM can gainfully applied in research oriented libraries. It has been put forward by the proponents of TQM that their principles also hold good for any educational and governmental agencies and those organizations which intend to achieve excellence in their performance and take pleasure in satisfying their customers will do well in adopting them.

In most of the libraries, people are engaged in establishing and restructuring the routines, creating job descriptions, acquiring and organizing materials and doing odd jobs which do not contribute to the information functions.

Need of TQM

The need of TQM is felt due to the following reasons: -

- User expectation from library is rising constantly which demands for even more sophisticated high quality information product and services.
- Library and information science professionals are facing a stiff challenge from the increasing information industry.
- Library and information Science professionals are now asked to become self sufficient if they are to survive in cost-conscious and competition oriented social environment setup.

Principles of TQM to enhance library and information services.

Sirkin suggests some ways a library might use the principles of TQM to enhance library and information services.

Principle 1: Synergistic Relationships:-

According to this principle, an organization must focus, first and foremost, on its suppliers and customers. In a TQM organization, everyone is both a customer and supplier; this confusing concept emphasizes “the systematic nature of the work in which all are involved”. In other words, teamwork and collaboration are essential. Traditionally, education has been prone to individual and departmental isolation. The very application of the first pillar of TQM to education emphasizes the synergistic relationship between the “suppliers” and “customers”.

The product of the successful work together is the development of the student’s capabilities, interests, and character. In one sense, the user is the customer for the library, as the recipient of educational services provided for the student’s growth and improvement. Viewed in this way, the library is the suppliers of effective learning tools, environments, and systems to the users, who is the customer for library. The library staff must educate the users regarding how to access the resources in the library for the users s by teaching them.

Principle 2: Continuous Improvement and Self Evaluation

The second pillar of TQM applied to education is the total dedication to continuous improvement, personally and collectively. Within a Total Quality library setting, administrators work collaboratively with their users. The foundations for this system were fear, intimidation, and an adversarial approach to problem-solving. Today it is in our best interest to encourage everyone’s potential by dedicating ourselves to the continual improvement of our own abilities and those of the people with whom we work and live. Total Quality is, essentially, a win-win approach which works to everyone’s ultimate advantage. According to Deming, no human being should ever evaluate another human being. Therefore, TQM emphasizes self-evaluation as part of a continuous improvement process.

Principle 3: A System of Ongoing Process

The third pillar of TQM as applied in academics is the recognition of the organization as a system and the work done within the organization is an ongoing process. Quality speaks to working on the system, which will identify and eliminate the flawed processes. Since systems have made up of processes, the improvements made in the quality of those processes largely determine the quality of the resulting product.

Principle 4: Leadership

The fourth TQM principle applied to education is that the success of TQM is the responsibility of top management. The librarians must establish the context in which users can have benefit by providing best services through the continuous efforts and improvement in the services. According to the practical evidences, the TQM principles help the library in following clauses:

- Redefine the role, purpose and responsibilities of library schools.
- Improve library as a best user center for a best “way of life.”
- Plan comprehensive leadership training for users at all levels.
- Create staff development programmes.
- Use research and practice-based information to guide both policy and practice.

Quality Assurance

For extending better and qualitative information services in the libraries, the services should be provided by the libraries with a feeling that information is widely available with equal access to all. This is possible if libraries ensure the implementation of national and international standards while maintaining the currency of information, by updating it and removing unused material. A range of information tools to access information should be available to both the naïve and experienced users. Quality control evolved from inspection. It serves as a measure to check and detect the internal processes and quality failure rate.

Quality assurance involves planning and designing quality into all the processes of libraries. It uses feedback from users and staff. It deals with correction as well as redesigning of system so that failure is not repeated. Like other professions and organizations it was the pursuit of the library profession in India to grow numerically targeting quantity of unorganized and haphazard collections in the initial stages of development. Today, we talk of sustainable development. Sustainable Development is an approach that combines aspects of traditional economic development with elements of the environment where we live and social policy which governs our living. In Librarianship there are four variables viz. stock, staff, services and users.

Quality in services depends on quality of personnel and quality of staff depends on level of quality management which is the hall mark of sustainable management. Library efficiency is the ability to minimize the use of resources, in “doing things right” for the reader. Efficient organization is effective and inefficient organization is ineffective. Professional staff in the libraries needs to be trained in their new role as facilitators, consultant online searchers, gate keepers, interpreters etc. It is the need of the day, because the information hungry users need regular updated information.

Areas of Application of TQM in Library

The library and information centres are basically service organizations. They can effectively apply the TQM concept in each and every field. Some of the possible areas are:

1. **Laws of Library Science:** - Five laws of library science have so many implications similar to what is advocated in TQM that it is often advocated as a refined and modern version of five laws of library science. The first law advocated changing the conservative attitude of the LIS Personnel. The second law and third law indicate the marketing approach underlying in TQM. It advocated for the survey of and feedback from the user and to design and render library services so that it meets their actual need. Fourth law points out that information should be pin- pointed,

exhaustive and expedition. Organization and retrieval of information is what the sum and substance of the TQM Approach is.

2. **Library Services:** -TQM can be effectively used in providing services to user. In rendering CAS, SDI, Interlibrary loan, access to national and international databases through internet or other network, attending reference queries and reference service over phone, fax or personal contact, etc.
3. **Library products:** -Library and information centres produce catalogue card indexing and abstracting periodicals, newsletter, database of their own collection, subject bibliographies etc. all of which can be enriched by TQM.
4. **Marketing of library services and products:** -TQM can be used in creating information awareness and consciousness among the user and reaching out to the potential user. It can be used in identification of the user group, determination of needs, wants and demand of each user group.

Way of the Achieving the TQM: -

TQM can be achieved by way of the following:

- a) **Competence:** - The employees must possess the required skill and knowledge about the library facility and services.
- b) **Credibility:** -The organization and employees must be trustworthy.
- c) **Responsiveness:** - The employee must respond quickly and creatively to user request and problem. The employee should make an effort to understand the user need and provide individual attention.
- d) **Communication:** - library facility and services should be described accurately in user language.
- e) **Courtesy:** - The employees should be friendly, respectful and considerate.
- f) **Tangible:** - The service and facility should correctly project the quality on readers.
- g) **Reliable:** - The Services and facility should be reliable and performance should be consistence.
- h) **Security:** - The service and product should be free from danger risk and doubt.
- i) **Access:** - All library facility should be accessible..

Why Libraries Should Adopt TQM

The introduction of TQM makes great demands on the staff. The following factors in particular need to be taken into account.

- ❖ TQM involves a process of change and therefore requires of staff that they be ready to play a constructive role in that process.
- ❖ TQM requires a basic re-orientation from the media stock towards customer and markets. For TQM a result oriented approach, not the input of resources, is of vital importance.
- ❖ A strongly hierarchical organization with fragmented responsibilities is not well suited to the introduction of TQM since all staff needs to feel a responsibility for influencing quality.
- ❖ The effort necessary for implementing TQM is at the same time rewarding for both staff and the institution

Improvement of the institution in which they work, a strengthening of that institutions position, and more opportunity of staff to influence their own work.

Implementing TQM in Libraries and Information Centers

Quality management is used for a long time in industries but the service institutions like libraries have more recently started applying TQM to provide quality services to the users. As we have discussed in the previous section of this Unit that TQM is focused on the requirements of the customer. Library is a service oriented organization with major goal to serve the customers. A library patron or user as a customer demands a service and expects that library should provide that service. The prime objective of the library is to provide information, services and products to the users. TQM offers an approach for

libraries to design processes, policies and jobs so that they are the best and most effective methods for serving users' needs by eliminating inefficiencies and assuring quality service.

Librarians must find out what readers want and concentrate upon providing it. Total Quality Management Designing an appropriate service means asking:

1. Who are the customers?
2. What do they want?
3. What can the library provide and need to do to meet the user's expectations?
4. How libraries know about their performance?
5. What needs to be changed or continued according to performance of the service or product of the library
6. How do library communicate with the users?
7. To what extent, library knows the current and potential needs of the users?

TQM is seen as a commitment to service with a flexible and future-oriented approach to management. It links the services and products with user demands.

The importance of TQM for libraries is not just limited to know about users needs but also to assess her/his need in anticipation. However while applying TQM one has to remember that it does not provide a quick solution and TQM needs integrated efforts for improving the quality of the services.

Problems in Implementing TQM in Libraries

Some major hindrances in implementing TQM in libraries are:

- Paucity of funds
- Lack of adequate infrastructure
- Lack of support from top management
- Rigid organisational culture and structure
- Employees resistance to change
- Improper and irregular training and education of the library staff
- Lack of coordination among staff and management and also at various level in the library
- Not applying marketing approach in libraries

Quality criteria for library services

(i). Topicality: Since the science of today must perform research in a fast, industrially orientated, innovative but also cost-conscious manner, the topicality of library services and information is of overriding significance. With ever-shorter half-lives, especially for scientific and technical economic information, the topicality of library services and information is highly relevant to an increasing extent.

(ii). Precision: relevance of information Library services for today's science sector must be precise, clear, unambiguous and relevant. Particularly in times with an inundation of information, verifying the relevance of scientific information is of undreamt of significance. It is the libraries' task and a hallmark of quality that the customer should enjoy an information service verified for relevance. If the scientists of today receive irrelevant data from their libraries this puts the success of their research programmes at risk as well as their personal reputations and that of their working groups, and thus their scientific survival. Irrelevant economic information endangers the economic success of a company.

(iii). Reliability: More than ever before, library services in the science and research sector must be characterised by reliability. This factor takes on special significance against the background of electronic media and new technologies. Lucky hits, disappearing URLs, crashing servers and unretrievable WWW addresses must not impair the quality of information services.

(iv). Completeness: Modern users of the library of today expect complete information concerning their query. Only the extensive, complete and comprehensive processing of their information problem is regarded as the fulfilment of their information needs. This includes the complete treatment of their questions and wishes in all available media and all

accessible sources. Particularly against the background of the media mix in a hybrid library, the criterion of completeness is more difficult than ever to fulfil today.

(v). Speed: The information service of a modern library for modern scientific and industrial businesses must not only contain current results but it must also pass these current results on to the customers rapidly and directly. Delayed passage through official channels due to the traditional 'civil service mentality, labyrinthine operations and long rest periods mean the certain kiss of death for any customer satisfaction.

Conclusion

Today technology has changed our social and economic life. In the workplace methodologies change people work at home or on the web with flexible time table, and more and more virtual communities are emerging in different fields. The most important stakeholders in the library are customers, providers of subsidies, staff and other libraries. These stakeholders are interested for various reasons, in the introduction of TQM. The importance of TQM in libraries is a challenging factor now days. Quality has become the buzzword in every walk of life. Modern management techniques are the major instruments for the improvement in information services in the present knowledge society for systemization and the infusion of information technology. Libraries are service organizations dedicated to their users. By formulating a strategic plan, and following it's with a commitment to continuous quality improvement, library managers can transform and improve their organizations. TQM is the preferred method to increase the user satisfaction. It reduces the defect of the organization and increases the productivity. Libraries and librarians are required to demonstrate to top management that they are getting a good return on their investments in the library.

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9

TALENT MANAGEMENT CHALLENGES IN GLOBAL SCENARIO- AN CRITICAL ANALYSIS

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Abstract

To achieve success in business, the most important thing is to recognize the talent that can accompany you in achieving your goal. Attracting them to work for you and strategically fitting them at a right place in your organization is the next step. It must be remembered that placing a candidate at a wrong place could multiply your problems regardless of the qualifications, skills, abilities and competency of that person. The process of talent management is incomplete if you are unable to fit the best talent of the industry at the place .

Keywords: Global talent challenges (GTCs), Recruiting , Workforce Planning, Global talent management (GTM), Job Rotation and Self-motivation.

Introduction

The term was coined by McKinsey & Company following a 1997 study. The following year in 1998 "talent management" was entered in a paper. Written by Elizabeth G. Chambers, Mark Foulon, Helen Handfield-Jones, Steven M. Hankin, and Eduard G. Micheals III. However, the connection between human resource development and organizational effectiveness has been established since the 1970s.

The profession that supports talent management became increasingly formalized in the early 2000s. While some authors defined the field as including nearly everything associated with human resources, the NTMN defined the boundaries of the field through surveys of those in corporate talent management departments in 2009–2011. Those surveys indicated that activities within talent management included succession planning, assessment, development and high potential management. Activities such as performance management and talent acquisition (recruiting) were less frequently included in the remit of corporate talent management practitioners. Compensation was not a function associated with talent management. Lastly, the strategy of using talent management help organizations with workforce during WWII.

Implementation

A talent management system is suggested to be used in business strategy and implemented in daily processes throughout the company as a whole. It cannot be left solely to the human resources department to attract and retain employees, but rather be practiced in all levels of an organization. The business strategy must include responsibilities for line managers to develop the skills of their immediate subordinates. Divisions within the company should be openly sharing information with other departments in order for employees to gain knowledge of the overall organizational objectives. The issue with many companies and the military today is that their organizations put tremendous effort into attracting employees to their company, but spend little time into retaining and developing talent.

The talent management strategy may be supported by technology such as HRIS (HR Information Systems) or HRMS (HR Management Systems).

Talent management

The need for multinational firms to be as competitive in the global marketplace as possible has increased dramatically over the past twenty years. For international human resource management this has meant many strategic opportunities to international human resource management. An excellent example of such an opportunity is that which exists regarding the management of Talent. This opportunity began to develop in the late 1990s with the advent of the challenge of “global talent management.” During the past few years this opportunity has expanded to include challenges dealing with talent shortages, talent surpluses, locating and relocating talent, and compensation levels of talent. Together, these conditions are all “global talent challenges”.

(i). Evaluation

Current employee performance within a specific job has always been a standard evaluation measurement tool of the profitability of an employee. However, talent management also seeks to focus on an employee’s potential, meaning an employee’s future performance, if given the proper development of skills and increased responsibility.

(ii). Competencies

Talent management decisions are often driven by a set of organizational core competencies as well as position-specific competencies. The competency set may include knowledge, skills, experience, and personal traits (demonstrated through defined behaviors). Older competency models might also contain attributes that rarely predict success (e.g. education, tenure, and diversity factors that are illegal to consider in relation to job performances in many countries and unethical within organizations). New techniques involve creating a competency architecture for the organization that includes a competency dictionary to hold the competencies in order to build job descriptions. Companies like Southwest Airlines, Microsoft and General Electric all use talent management.

(iii). Talent marketplace

A talent marketplace is an employee training and development strategy that is set in place within an organization. It is found to be most beneficial for companies where the most productive employees can pick and choose the projects and assignments that are ideal for the specific employee. An ideal setting is where productivity is employee-centric and tasks are described as “judgement-based work,” for example, in a law firm. The point of activating a talent marketplace within a department is to harness and link individuals’ particular skills (project management or extensive knowledge in a particular field) with the task at hand. Examples of companies that implement the talent marketplace strategy are American Express and IBM.

Current applications

In adverse economic conditions, many companies feel the need to cut expenses. This should be the ideal environment to execute a talent management system as a means of optimizing the performance of each employee and the organization. Selection offers a large return on investments. Job analysis and assessment validation help enhance the predictive power of selection tools. Data points such as cost-per-placement or average time to recruit are critical in predictive analytics for talent management. These evaluation methods use historical data to provide insight. However, within many companies the concept of human capital management has just begun to develop.

With more companies in the process of deepening their global footprints, more questions have been asked about new strategies and products, but very few on the kind of leadership structure that will bring them success in their globalization process. “In fact, only 5 percent of organizations say they have a clear talent management strategy and operational programs in place today.

Talent Management Strategies

(a). Attract talent

- Design a Talent Management System
- Unbiased reward & recognition
- Flexible work environment and positive culture
- Proper Training
- Effective and meaning appraisal system
- Design job for talent people
- proactive visionary management and leadership
- provide proper research facility.

(b). Keep Talent

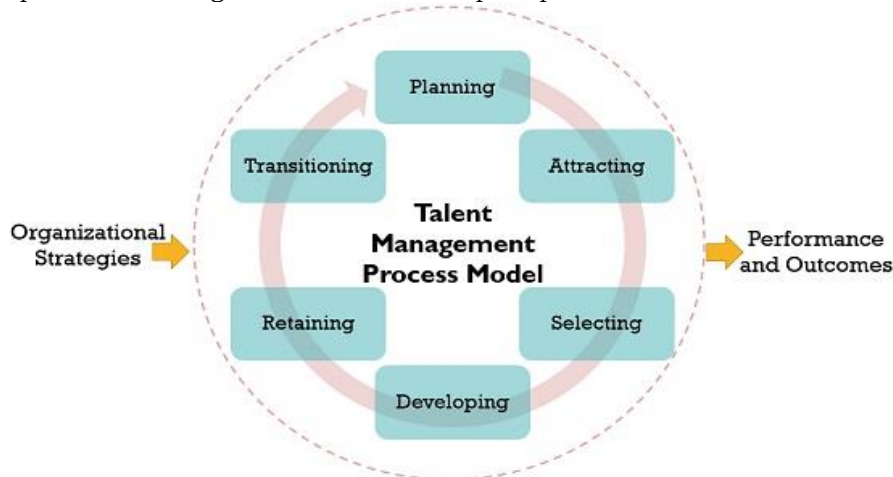
- Assign right job to right talent
- Compensate talent as suppliers
- Career and succession plan
- Right location to attract and retain talents
- Eliminate non-working people .

(c). Manage Talent

- Build trust on Talents
- Monitor Talent as assets
- Take corrective action if necessary
- Allow talent to create and apply knowledge Identify Talent
- Identify own talent before hiring talent
- Test based
- Performance based talent tool.

Talent Management Process

Organizations are made up of people: people creating value through proven business processes, innovation, customer service, sales, and many other important activities. As an organization strives to meet its business goals, it must make sure that it has a continuous and integrated process for recruiting, training, managing, supporting, and compensating these people. The following chart shows the complete process :



1. Workforce Planning: Integrated with the business plan, this process establishes workforce plans, hiring plans, compensation budgets, and hiring targets for the year.

2. Attracting: Deciding whether the source of recruitment should be internal or external and seeking for the suitable individuals to fill in the vacant positions through:

- ❖ Job Portals such as Naukri.com, Timesjob.com, etc.
- ❖ Social Network such as LinkedIn and Twitter.
- ❖ Referrals.

3. Recruiting: Through an integrated process of recruiting, assessment, evaluation, and hiring the business brings people into the organization.

4. Developing: In this stage, the employee is prepared according to and for the organisation and the profile. Following are the steps involved in the process:

- Carrying out an onboarding programme or an orientation programme.
- Enhancing the skills, aptitude and proficiency of the personnel to match the profile.
- Counselling, guiding, coaching, educating, mentoring employees and job rotation.

5. Retaining: Employee retention is essential for any organisational existence and survival. Following are the ways of employee retention:

- ✓ Promotions and increments.
- ✓ Providing opportunities for growth by handing over special projects.
- ✓ Participative decision making.

6. Transitioning: Talent management aims at the overall transformation of the employees to achieve the organizational vision. It can be done through:

- Retirement benefits to employees.
- Conducting Exit interviews.
- Succession Planning or Internal Promotions.

Talent Management Initiative

The managers and the higher authorities need to take the initiative to pave the way for the personal development and long-term association with the organization. Some of the ways in which a manager can motivate and retain employees are as follows:



- a) **Recognition:** Recognizing employees' contribution and their work on individual grounds, boost up self-confidence in them.
- b) **Remuneration and Reward:** Increasing pay and remuneration of the employees as a reward for their better performance.

- c) **Providing Opportunities:** Giving the charge of challenging projects to the employees along with the authority and responsibility of the same, makes them more confident.
- d) **Role Design:** The role of employees in the organisation must be designed to keep them occupied and committed, it must be flexible enough to inculcate and adapt to the employee's talent and knowledge.
- e) **Job Rotation:** Employees lack enthusiasm if they perform the same kind of work daily. Thus, job rotation or temporary shifting of employees from one job to another within the organization is essential to keep them engaged and motivated.
- f) **Training and Development:** On the job training, e-learning programmes, work-related tutorials, educational courses, internship, etc. are essential to enhance the competencies, skills and knowledge of the employees.
- g) **Succession Planning:** Internal promotions helps identify and develop an individual who can be the successor to senior positions in the organization.
- h) **Flexibility:** Providing a flexible work environment to the employees makes them more adaptable to the organization and brings out their creativity.
- i) **Relationship Management:** Maintaining a positive workplace where employees are free to express their ideas, take part in the decision-making process, encourage employees to achieve goals and are rewarded for better performance leads to employee retention.
- j) **Self-motivation:** Nothing can be effective if the employee is not self-determined and motivated to work.

Talent management challenges in Global Scenario

Here is no dearth of professionals but there is an acute shortage of talented professionals globally. Every year b-schools globally churn out management professionals in huge numbers but how many of are actually employable remains questionable! This is true for other professions also. Talent management is an organization's ability to recruit, retain, and produce the most talented employees available in the job market. Talent consistently uncovers benefits in these critical economic areas: revenue, customer satisfaction, quality, productivity, cost, cycle time, and market capitalization.

Having good talent management is when one has good skills, knowledge, cognitive abilities, and the potential to do well. Talent management is also an important and necessary skill for people in the workforce to acquire. Finding good and talented people is not a hard thing to do, but making sure that they want to stay working for the same business is the challenge. If someone has so much talent and they are good at what they do, businesses will want them to stay and work there forever. However, most of those people are either satisfied with the job they have, or they go out and look for better opportunities.

It faces the following opportunities and challenges:

1. Recruiting talent
 2. Training and Developing talent
 3. Retaining talent
 4. Developing Leadership talent
 5. Creating talented ethical culture
1. **Recruiting Talent :** The recent economic downturn saw job cuts globally. Those who were most important to organizations in their understanding were retained, other were sacked. Similarly huge shuffles happened at the top leadership positions. They were seen as crisis managers unlike those who were deemed responsible for throwing organizations into troubled waters. It is the jurisdiction of talent management to get such people on onboard, who are enterprising but ensure that an organization does not suffer for the same.
 2. **Training and Developing Talent :** The downturn also opened the eyes of organizations to newer models of employment - part time or temporary workers. This is a new

challenge to talent management, training and developing people who work on a contractual or project basis. What's more big a challenge is increasing the stake of these people in their work.

3. **Retaining Talent** : While organizations focus on reducing employee overheads and sacking those who are unessential in the shorter run, it also spreads a wave of de motivation among those who are retained. An uncertainty about the firing axe looms in their mind. It is essential to maintain a psychological contract with employees those who have been fired as well as those who have been retained. Investing on people development in crisis is the best thing an organization can do to retain its top talent.
4. **Developing Leadership Talent** : Leadership in action means an ability to take out of crisis situation, extract certainty out of uncertainty, set goals and driving change to ensure that the momentum is not lost. Identifying people from within the organization who should be invested upon is a critical talent management challenge.
5. **5.Creating Talented Ethical Culture** : Setting standards for ethical behavior, increasing transparency, reducing complexities and developing a culture of reward and appreciation are still more challenges and opportunities for talent management.

How recruiters can help solve talent management problems

As a recruiter, you won't be able to solve all of a company's talent management problems. But, you can definitely help the hiring portion of talent management.

(i). Smart hiring strategies

Your sole job as a recruiter is to find the best candidates for your clients. You can afford to spend more time on sourcing candidates who can add to the business. And, you can take the burden of screening candidates off HR. Following best hiring practices means devoting more time to attracting talent and convincing them to work for your client.

(ii). Experience with technology

The majority of recruiters 75% use recruiting or applicant tracking software. If you regularly use technology in your recruiting processes, it could speed up the process. Instead of wasting time on resume screening, typing out individual emails to dozens of people, and organizing candidates, you can automate these processes with software and speed up the recruiting process.

(iii). Work with effective leadership

Though you can't improve the current leadership in a company, you can find talented managers to hire.

If the company has good leaders, work with managers to find out what kind of employee would be a good fit for the company. Managers can help paint a good picture of necessary qualities they would like to see in their department.

(iv). Lower employee turnover

Employee turnover starts with whether the new hire is a good fit at the company or not. You are trained to source the best candidates for a company. Through your thorough screenings, you can ascertain who would mesh with the company culture. Lowering employee turnover starts with putting more time and effort into the hiring process. As a recruiter, you work to make sure your client and candidate are satisfied. By spending more time asking questions about each candidate's goals (i.e., where they see themselves in five years) and qualifications, you can prevent employee turnover.

Talent Management Best Practices in Global Era

Every organization struggles hard to meet the global market competition for its success, and hence the War for Talent. Creating enriching workplace experiences to attract and retain the high caliber is needed. Therefore, it is important for organizations to moot retention as first priority and recruitment second place. There are several key practices to be followed by organizations. They are as follows.

1. **Experience based learning**: Most of the organizations define Job Description to their employees very narrowly and they have no access with others, which makes

them boring and monotony in their work. If the organizations relax them for some time and have exposure to innovative things, they will give rise to the increased output, as well as retention.

2. **The Swift in Workforce:** Today 's greatest challenge lies in aligning the right people with the right skills and identifying the competencies of the workforce. Organizations need to forecast the current workforce and assist in enabling the execution of business plans that manage the supply and demand of talent.
3. **Interaction with management is imperative:** For effective talent management practices, it is essential to involve the top management and practice it at the strategic level.
4. **Mentoring:** Mentoring is required to a new employee, so that, organization can avoid job hopping. A particular form of relationship is designed to provide personal and professional support and guidance to an individual, wherein specific issues and ideas can be discussed and developed. Mentoring is required
5. **True value of HR is Return on Investment (ROI):** ROI allows calculating of a payback period. It can be used to revolutionize and transform the human resource function in order to bring more value throughout the organization. It also helps in comparison of one department returns with the other department.
6. **Developing Business Leaders:** Developing leaders with a shared vision can empower the workforce, whilst instilling organizational values and personal accountability, by understanding the macroeconomic trends and role of emerging technologies.

Conclusion

The scenario is worse even in developing economies of south East Asia. Countries like U.S and many European countries have their own set of problems. The problem is of aging populations resulting in talent gaps at the top. The developing countries of south East Asia are a young population but quality of education system as a whole breeds a lot of talent problems. They possess plenty of laborers - skilled and unskilled and a huge man force of educated unemployable professionals. These are the opportunities and challenges that the talent management in organizations has to face today - dealing with demographic talent problems.

Now if we discuss the problem in the global context, it's the demographics that needs to be taken care of primarily and when we discuss the same in a local context the problem becomes a bit simpler and easier to tackle. Nonetheless global or local at the grass roots level talent management has to address similar concerns more or less.

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10

DIGITAL LIBRARY INITIATIVES: A BOON FOR PRESERVATION OF INFORMATION RESOURCES IN 21ST CENTURY IN INDIA- A CRITICAL STUDY

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Abstract

With the application of ICT and in the modern library system, the information stored digitally and made accessible to user through digital system and network. Digital library is essentially a fully automated information system with all resources in digital form. It not only facilitates the library functions but also saves the precious time, strength and the energy of the users. Libraries adopt the ICT and undertake the process of digitization the networking (LAN, MAN and WAN) would become feasibility which is the need of the day. The electronic media will replace thoroughly the printed media in the form of electronic, digital and virtual respectively. Therefore, it is essential for the librarian and the information professional to adapt to the emerging scenario by improving the skills of using new digital telecommunication technology from its traditional one.

Keywords: *Digital Library, Digital Library Softwares, Information Preservation, Information Storage, Digital Library Initiatives*

Introduction

Although the term digital library is used widely in the literature, a new term, 'hybrid library', appeared in the course of digital library research in the UK. A hybrid library has been defined as a library where digital and printed information resources coexist and are brought together in an integrated information service accessible locally as well as remotely. There are numerous areas of research related to the historic interests of the digital library community that are at the crossroads of technology and social science and which will demand investment and attention in the coming years; many of these are natural extensions and elaborations of the collaborations initiated by the past decade of digital library research programs. Most higher education and research institutions in India are funded by the central and state governments. Those institutions have made a significant contribution to the transmission of knowledge and to research in all fields and disciplines.

Universities and research institutes have played a leading role in transforming the country into a modern industrialized and technologically-advanced state. The green revolution and tremendous progress in dairy development have made India a major food-producing country. Its development of space technology, the production and launching of indigenous satellites, and the development of peaceful nuclear energy have brought it into the forefront of technologically advanced nations to which a large number of developing countries look for training and guidance.

Indian universities and institutes of higher learning support the needs and aspirations of Indian students and scholars. The libraries of those institutions also play a vital role in acquiring and disseminating information for academic and research activities.

Digital libraries are a way of making educational and research data and information available to faculty, researchers, students, and others at the institutions and worldwide.

Objectives of the Digital Library

- To capture, store, manipulate, and distribute information.
- To introduce and produce new services.
- To have large number of databases in CDs/DVDs/external Hard disks etc.
- To avoid routine and redundant activities.
- To provide facility for networking and resource sharing.

Digital Library Initiative in India

With the advancement of information revolution digital libraries are developed all over the world to collect, store and communicate the information through electronic media. But comparing to other developed country India is slow in the development of digital libraries because of many social, political and economic factors. To improve the use of IT, initiatives towards development of digital libraries India are discussed below:

(a). National Digital Library

National Digital Library is initiated by Ministry of Human Resource Development Coordinated By IIT Kharagpur. It has currently 15, 38,083 items hosted including educational materials are available for users ranging from primary to post-graduate levels. There are more than 40 types of learning resources are available, items are available in more than 70 languages. Repository integrates contents from different Indian Institutional Repositories. Repository hosts contents from multiple subject domains like Technology, Science, Humanities, Agriculture and others. MHRD sponsored project hosts 10,000+ video lectures in engineering domain; LibriVox consists of more than 2 Lakhs Audio books.

(b). Andra Pradesh

- APSWAN the network, connecting the state secretariat with 25 centers.
- CARD project, a computerized registration of immovable property transactions.
- Multipurpose household survey project keeps data of all residents and land records.
- Automated services of transport provide insurance of driving licenses, vehicle registration etc.

(c). Karnataka

- Digitization of the Common Entrance Test (CET) seats allotment in professional courses.
- Establishment of LAN in the Revenue Secretariat.
- Computerization of payments and receipts in 20/31 districts and 184 sub-treasuries.
- Computerization of payment of taxes, filing of returns, dealer's registration, and intelligence activities.
- Computerization of insurance department and Municipal Corporation in progress.
- Network center to handle center database at Bangalore and disaster recovery center at Dharwad.

(d). Vidyanidhi Projects

Vidyanidhi (which means "treasure of knowledge" in Sanskrit) is a digital archive of dissertations, as well as a set of resources for doctoral research in India. Vidyanidhi is being developed as a national repository and a consortium for electronic dissertations, through participation and partnership with universities, academic institutions, and other stakeholders. Vidyanidhi began as a pilot project in 2000 with governmental support, well as support from the Ford Foundation and Microsoft India. The Indian Languages. Vidyanidhi is a member of the Networked Digital Library of Theses and Dissertations (NDLTD), and UNESCO and other efforts in this direction. UNESCO supports ETD initiatives worldwide. Ford Foundation support is for focusing on Social and Human Sciences.

(e). Kerala

- ✓ Kerala RD network 152 office blocks and provides regular update of various state activities.
- ✓ CARD automatic, registration system.
- ✓ Treasury computerization of the project involves the computerization of all district treasury offices and a few key sub-treasury offices. ISDN-based messaging system for administration.
- ✓ Computerization of the department of curl supplies, responsible for issue of ration cards.

(f). Indian Parliament Library

This library serves members of Parliament and officers and staff of Lok Sabha Secretariat. Largedatabases were initially developed by the computer centre. The data are stored and available now inPARLIS (Parliament Library Information System).

(g). Khuda Baksh Oriental Public Library

The Khuda Baksh Oriental Public Library has initiated digitization of Arabic and Persianmanuscripts of the medieval India. It is one of the Oriental Libraries having rich collection ofPersian, Arabic, Urdu and other languages manuscripts.

(h). Himachal Pradesh

- Lokmitra, an ambitious programme broadly based on the model of Gyandoot (Madhya Pradesh) to bring e-governance to be extended later to all state districts through intranet.
- Development IT vision 2010 in collaboration with NSSCOM to convert the state an IT destination.

(i). National Institute of Technology, Calicut

"Nalanda" was initiated in 1999 and is one of the largest digital libraries in the country. It serves the campus with research and other academic information in science, engineering, and technology. The software used was developed by the institute itself. Nalanda is accessible from anywhere on campus. The repository contains theses and dissertations, course materials, articles, and annual reports.

(j). National Institute of Technology, Rourkela

Formerly known as Regional Engineering College (REC), this is one of the premier institutions for technical education in the country. NIT is a joint undertaking of Government of India and Government of Orissa. This Institutional Repository uses D-Space. At present around 343 documents are available in the repository

(k). Raman Research Institute

Raman Research Institute (RRI) is located in Bangalore, Karnataka state maintains digital repository for the research community benefits. It enables the research community to submit their preprints, postprints and other publications, using single web interface is being organized and kept in repository for easy retrieval of the information. The repository is developed with D-Space open source software complies with Open Archive Initiatives (OAI) framework, which facilitates to index and search by web search engines and other indexing tools. The contents available through RRI Digital Repository are approximately 5875, which includes Research

- Publication of faculty and students
- Theses
- Annual Reports
- Collected papers of C.V. Raman
- Newspaper clippings

(l). Indira Gandhi Memorial Library, University of Hyderabad

TAs well as being the first fully automated library in India, it was the first to begin a digital library program. Since 2002 the library has digitized around 250,000 pages, primarily

theses and dissertations, as well as 300 books in English and Indian languages. The library has access to about 170,000 electronic journals. The library preserves discs that accompany printed books and journals by uploading them to the CD server, which is linked to the digital library system. The library scans printed journals from Indian publishers and maintains them in the digital library as well. The library uses the open source software D-space for its institutional repository.

Future Trends

Below mentioned are some of the driving force areas for future of digitization

- **Personal information management** : As more and more of the activities in our lives are captured, represented and stored in digital form, the questions of how we organize, manage, share, and preserve these digital representations will become increasingly crucial. Among the trends lending urgency to this research area are the development of digital medical records (in the broadest sense), portfolios in the education environment, the overall shift of communications to email, and the amassing of very large personal collections of digital content (text, images, video, sound recordings, etc.)
- **Long term relationships between humans and information collections and systems** : This is related to personal information management, but also considers evolutionary characteristics of behavior, systems that learn, personalization, system to system migration across generations of technologies, and similar questions. This is connected to human-computer interface studies and also to studies of how individuals and groups seek, discovers, use and share information, but goes beyond the typical concerns of both to take a very long time horizon perspective.
- **Role of digital libraries, digital collections and other information services in supporting teaching, learning, and human development** : The analysis here needs to be done not on a relatively transactional basis (i.e. how can a given system support achievement of a specific curricular goal in seventh grade mathematics) but how information resources and services can be partners over development and learning that spans an entire human lifetime, from early childhood to old age.
- **Active environments for computer supported collaborative work offer the starting point for another research program** : These environments are called for, under the term “co laboratories”, by the various cyber infrastructure and e-science programs, but have much more general applicability for collaboration and social interactions. From one perspective, these environments are natural extensions of digital library environments, but at least some sectors of the digital library community have always found active work environments to be an uncomfortable fit with the rather passive tradition of libraries; perhaps here the baggage of “digital libraries” as the disciplinary frame is less than helpful. But there is a rich research agenda that connects literatures and evidence with authoring, analysis and re-use in a much more comprehensive way than we have done to date; this would consider

Challenges in Digital Educations

In this section we present a few important operational and policy related problems and challenges that we experienced in the project. There are several appreciated research challenges in the area of digital libraries like information retrieval, multi lingual support etc, but these are not the scope of this section

Procurement of Books:

Within the number of books that have so far been enabled for online usage, we discovered from the usage logs that about 80% of the books are not accessed most of the time. Hence, considerable attention needs to be paid towards identifying and procuring books that are useful to broader communities of people. Yet another problem is that many people do not agree to the fact that digitization is the only way of preserving the books. Some are apprehensive about the possible rough use and the resultant damage to the books by the scanning centre staff particularly for the old books and palm leave manuscripts.

Convincing them to loan such rare pieces of information for scanning is important, if the DLI has to contain useful collection of books.

Incomplete and Incorrect Metadata:

Most of the books scanned in the DLI project are procured from sources like libraries and government archives and hence contain metadata entered by knowledgeable personnel which can be relied upon, but is still debatable due to individual biases. However a major portion of the sources of books in the project have metadata only in non-digital formats and so these have to be fed manually. This process though inevitable is understood to be prone to errors. Due to this varied sources of book flow in the DLI project in multiple languages and due to the lack of standard formats, metadata is missing, incorrect or incomplete or sometimes difficult to interpret. Inaccurate metadata hinders fruitful search and retrieval of books, categorization and at the same time brings in scope for duplicate entries of the same book.

Duplication:

Effort put into scanning a book, processing the images and quality assurance cannot be afforded to be spent on duplicates. Communicating metadata across centers and within scanning locations is important. The Duplication of the books can be identified only using metadata of a book like the title, author, publishing year, edition, etc. However, if the metadata is incorrect, missing or incomplete as discussed in the previous section, it makes the duplicate detection all the more difficult.

Data Management:

Each Mega scanning centre is responsible for gathering the metadata and the scanned content from the contractors operating at its scanning locations. This data is to be enabled on the web and also preserved for future. Enabling many tera bytes of data for access to everyone in a highly reliable manner is needed for the success of the efforts put into the digitization process. Also data synchronization and management across centers needs to be done to reduce duplication and ensure reliable high availability and immediate recovery in the event of storage media failures and server failures. Finally, digital preservation of the collections for a long future still remains a very significant problem faced by any digital library.

Problems for Digital Initiatives

The digitization initiatives in India are encountered with several problems such as lack of technical infrastructure, trained manpower, finances and policy initiatives. Some of the important problems are discussed below:

- ❖ Lack of clear cut policy at National level with main focus on sustainability Outdated software and hardware and difficulty in upgrading the same.
- ❖ Non-availability of cost effective new technological advancement.
- ❖ Lack of multiple Indian language OCR facilities.
- ❖ Non-standard technical activities, data description and transmission characteristics.
- ❖ Non-availability of well-trained skilled personnel.
- ❖ Lack of management support
- ❖ Lack of proper preservation policy
- ❖ No Intellectual Property Rights policy for content development of digital information.
- ❖ Rigidity in the publishers' policies and data formats

Conclusion

The digital library is a library where the information is made available in electronic form and access to it which is provided through computer and other media like local area network or internet etc. Digital libraries are emerging electronic entities. Digital libraries are becoming important information resources. The digital library concept is appealing because its inherent design combines end- user's needs with technology that has the ability to handle vast amount of complex data. A digital library is visualized as a server which is

having linkages to various other sources of information in digitized format. Digital library is an integrated set of services for capturing, cataloguing, storing, searching, protecting and retrieving information, which provide coherent organization and convenient access to typically large amount of digital information.

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11

LIBRARY AND INFORMATION SCIENCE (LIS) IN INDIA WITH EMERGING TRENDS ON DIGITAL ENVIRONMENT IN INDIA- AN OVERVIEW

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Abstract

In the networked environment there is a strong need for continuing professional education and training. LIS education and training for LIS students and professionals has become crucial for meeting the challenges of 21st century. Today due to the influence of information technology library profession changed from its traditional librarian concept to many others. He is neither a custodian of books nor handling only information available in written document. This information age creates a heavy demand on librarians to continue traditional library services for some 'patrons', while creating new technology-based services for Digital Native 'customers'. Digital Fugitive and Digital Native customers are at opposite ends of the customer service spectrum, but both deserve excellent library services. v So LIS education provide a capacity to the educed to handle all type of documents which is digital and non digital to satisfy the user with different range.

Keywords: LIS education, ICT, LIS Education Systems, LIS profession, Digital Library, National Knowledge Commission.

Introduction

From the last few years the LIS area and department have radically full-fledged and developed new programs and courses, new teaching and learning approaches and used ICT to support teaching and learning. In India, e-learning is the future of education. At present it merely supplements traditional distance learning methods rather than replaces them. The probable causes for that are lack of finance, infrastructure as well as ICT technologies access, lack of technological skills, nature and level of courses to be considered and designed and offered, instructional delivery modes, necessary faculty, accessibility and affordability of technology, evaluation process etc. But the web based online LIS education in India appears to be very encouraging and supporting. Incredible growth of personal computers, expenses of standard professional courses and increasing network from the residence, workplace and public places will make possible the development of web based learning as a cost effective and convenient educational method.

Thus, the learning system of digital environment will obviously play a crucial role in delivering education in isolated parts of the country in the future. Education is as important as any other resource for economic and industrial development of a nation because it is the key to human resource development. Library supplements a great deal in achieving educational role and serves as a gateway for academic world.

Library and Information Science (LIS) education began in India in 1911, initiated taken by Maharaja Sayaji Rao Gaekwad II of Baroda. LIS education in India offers at various levels such as certificate, diploma, degree, Associate ship in Information Science, M.Phil and Ph.D. Like members of other professionals, librarians have joined together in professional

associations to solve common problems, to advance the profession, to support continuing education for librarians. Library associations are generally formed to look after service conditions of librarians and their professional developments. They also serve the people by promoting the culture of library services and uses in the country. Almost all associations publish journals, monographs, relating to their particular areas of interest. They held conferences, seminars, lectures, training program so that library professionals may come together to develop policies and ideas.

New horizons of Library science education

- a) Add technological related subjects in curricula Like Information management, online services, Database management, database accessioning, digital information preservation, software installation, how to manage, organize, retrieve digital information, search techniques etc..
- b) Provide classes about web application, security aspects in digital information, Web Designing, E-Learning, E-publishing/Web publishing, information architecture, the Digital age/cultures etc. The LIS departments should try to make practical oriented class. Emphasis on hands on practice is required to develop skill especially in Digital information handling.
- c) So practical and theory papers should be integrated across the curriculum and add more specialized papers to enhance the skills and knowledge of LIS professionals up-to-date with Digital growth.
- d) Develop career-long education program which will support ongoing growth of information professionals with graduate certificates in specialized LIS subjects like web management, Knowledge management, Software installation, database management.

LIS Education in India

At present LIS education in India covers a wide spectrum of courses ranging from low level certificate and diploma in library science to bachelor and master degree in library and information science and to high level M.Phil. and Ph.D. programmes. Presently in India, Library and Information Science (LIS) education is imparted in more than 118 universities and institutions. A total of 105 universities provide Bachelor of Library and Information Science (BLIS) courses, 78 universities provide Master of Library and Information Science (MLIS) courses, 21 are offering two-year integrated courses, 16 universities provide M.Phil. In Library and Information Science, 46 universities provide Ph.D. in Library and Information Science and 2 Universities provide D.Litt. Degree. Besides this, the National Institute of Science Communication and Information Resources (NISCAIR) which was earlier known as the Indian National Scientific Documentation Centre (INSDOC), New Delhi, and Documentation Research and Training Centre (DRTC), Bangalore, provide Associate ship courses in Information Science, which are equivalent to the MLIS degree.

LIS Curriculum

With the growth of information technology, LIS Schools have understood the need of periodic examination and analysis leading to necessary changes and improvements in curriculum for the interpolation of new and fast developing areas of information technology and computer science. The objective for training of LIS professionals is to promote library, to educate, to articulate and provide for the need of the clientele to increase productivity and economy.

Curriculum is the core of the reform. Most of the library schools and departments have revised or in the process of re-designing their curricula. In their curricula, courses relating to traditional library science with names such as "History of books" and "Libraries" disappeared. Instead, many computer-related courses were added.

India has a National Policy on Education in general, but there is a dearth of National Policy in LIS. There is also an absence of a national body to make projections for manpower requirement at different levels. The Working Group on Libraries in 2009 raised a

new hope in this regard by recommending the permanent National Commission on Libraries. It also recommended revising and revamping LIS education and training and encouraging research. Since its inception in 1956, the UGC set up the following committees for improvement of LIS education vis-a-vis services:

(a). Ranganatahn Committee (1967):

The recommendations of this committee incorporated the provision that the UGC as well as the state Government should offer financial assistance to the college and the university libraries for purchasing the required books, periodicals, etc.

- The committee proposed the formula that funding be given at the rate of Rs. 15 per enrolled student and Rs. 200 per teacher and research fellow.
- The initial library grant in case of new university or department was also recommended in the report.
- The committee emphasized that open access system should be introduced in every academic library.
- The committee opined that: “reference service is the essential human process of establishing contact between the right reader and the right book by personal service.
- Reference service is vital in promotion of reading habit in student [therefore] each library should provide an adequate number of reference librarians to function as library hosts and human converters”.

Besides these, the committee also suggested the copying facilities for book/reference material, the appointment of regular committee to investigate the standards at various levels of teaching, examination and research work as well as the regular appointment of full-time teaching faculty in place of part-time teacher. The report of the committee incorporated certain standards in its recommendations that the reader receives the book within two weeks after releasing and due library process, the assessment period of periodicals ought to be three years, the management of regular staff, the proper of books, the co-operation between university and college level library located in the same region as well as the allocation of annual recurring grants in consultation with the concerned librarian along with the faculty members.

(b). University Grants Commission (1953):

The role of UGC is noteworthy in enriching the academic libraries in higher education through financing as well as the systematic planning and vital leadership. UGC allocates grants to number of universities for building construction. In addition to this, a liberal financial assistance has been ensured based on a tentative formula of Rs. 15 per student and Rs. 200 per teacher and research fellow for the annual purchase of books. The new university libraries are granted a special initial grant. UGC has helped the professionally qualified academic libraries to get better pay scales equal to the teaching members of the university (Bhatt 130) UGC has been allotting more funds for the development of academic libraries. The provision was made to initiate the work for this function in the 5-year plans of the country.

(c).INFLIBNET:

UGC has established a national information network named INFLIBNET in 1986 at Gandhinagar. It functions the information communication of the libraries of all universities, higher educational and research institutes of our country. The centre INFLIBNET updates the libraries of universities and college at national level. The task of automation of libraries, digitization of resources, software development of libraries and conducting training programme, etc. are well-managed by this centre. The more considerable step towards advancement in this field is the development of software for university libraries (SOUL) which is available free of cost to INFLIBNET members. The centre has developed Shodhganga, a reservoir of Indian theses which has a database of thousands of theses from a number of universities across India.

(d). Kothari Commission: (1964-66)

Another significant change initiated with „The Education Commission“ under the chairmanship of Dr. D. S. Kothari. The commission paid due attention towards the development of university libraries and stressed on positive steps to modernize the framework of library. The committee introduced norms for financial support and suggested required equipment in the library, facilitating the students for the better use of books, proper documentation and inter-disciplinary communication. The report of Kothari Commission ardently mentioned that: “nothing can be more damaging than to ignore its library and to give it a low priority. No new college, university or department should be opened unless adequate numbers of books in the library are provided”.

The challenges and problems

The implications of information communication technologies and the ever-growing information needs of users have transformed the LIS into a profession with a diversity of opportunities and challenges. This requires LIS professionals to make continuous value addition to services and to integrate the emerging technologies to cope with the changing scenario. These changes are making way for a new kind of competitive work environment. The challenges and problems affecting the status of LIS education and profession are discussed below:

(i). Teaching techniques and Internships: The chalk and talk method remains the dominant method of teaching in LIS classrooms. Hands-on experience and teaching in real life situations are rarely practiced. Although apprenticeships enable LIS aspirants to have work experience that makes them aware of current job requirements, Generally, LIS programs in India do not include apprenticeships as a part of their courses. However a two year integrated programme has been initiated that has included this style of teaching. Information literacy is also slowly finding a place in LIS curriculum and is being talked about at seminars and conferences.

(ii). Shortage of Funds: Paucity of funds is the major challenge for improving the quality of LIS education in India, and in South Asia more generally. LIS is a practically oriented course that requires adequate information resources and infrastructure to support teaching and research. This funding is currently not available. LIS research is also lacking financial support. The major funding agencies, including UGC and university authorities, have not paid enough attention to the LIS schools that need special grants to build up basic facilities and infrastructure.

(iii). Lack of LIS Policy: India has a National Policy on Education to promote education throughout the country, but the Government of India has not implemented any policy to support the LIS education as suggested by the National Knowledge Commission. There is a need to have a properly prepared program for the optimum utilization of available academic and technological resources to ensure quality assurance within LIS education.

(iv). Faculty: There is acute shortage of experienced and capable faculty members in majority of developing countries. This is no less the case in India and South Asia. Authorities appoint LIS professionals with little experience on ad-hoc bases and at low salaries. There are departments that are run by a single faculty member with guest faculty from other departments and the university library. The National Knowledge Commission has recommended the establishment of a National Institute of Library and Information Science. This will enhance learning opportunities for LIS faculty.

(v). Gap between Theory and Practice: There is a large gap between theory and practice in LIS in India. As the computer laboratories and libraries are not adequate, students do not get the opportunities to gain hands-on experience. This culture produces LIS professionals who have degrees but a little or no practical knowledge. There is need for short-term courses as we move towards specialization in employment opportunities.

Emerging Trends

With the growth and development of LIS education, various trends are emerging, as listed below:

- ❖ The beginning of PG Diploma courses in some specialized areas, like Archival and Documentation Management, Library Automation, Networking and Information Technology, etc.
- ❖ With the introduction of Information Science curricula, there is greater emphasis on teaching LIS related to information organizations that offer specialized services. As a result, Data Banks, Information Analysis Centres, Translation Centres, Patent Libraries have marked the beginning of a new milestone in the global view of information activities.
- ❖ Like industrial and production management, quality standards are also now being applied to libraries, leading the trend of emergence of ISO certified libraries in India. Therefore, LIS departments are also introducing components of total quality management in curriculum. More LIS departments are getting independent status and privileges like other departments of the university in terms of full-time teachers and full-time head.
- ❖ To face the technological challenges, more existing faculty members are engaging themselves in computer and IT related courses. New faculty positions are created and filled up with the LIS professionals having computer and IT related qualifications.
- ❖ More Continuing Education Programmes (CEP) are being organized in the field of computer and related technologies and LIS departments are playing an active role in organizing such courses.
- ❖ A growing number of LIS departments are developing their own websites to provide information about them. With the growing impact of the Internet on LIS, new areas such as digital libraries, electronic publishing, online resources, and metadata and information architecture are reckoning as nascent fields of LIS research.

Influence of Digital Era in LIS education.

Library professional must be acknowledged with the computer literacy, capable for master the web, creating blog and webpage along with traditional subjects like classification and cataloging of information and needs of the society. They are also capable for communicate through internet facility to users. They must be aware about the use of information technology to serve their users in a right way at right time. The electronic environment demands to the librarian a range of skills which include managerial skill, IT skill and technical skill. The librarian should know about search techniques, database development, quality of online database, choice of database that is available. So the LIS education is also revised their curriculum to efficient the library professional to face these circumstances.

Barriers for revising ICT topics in LIS Education

Respondents also pointed out that there are some barriers to implement or giving a good ICT education in Library Science education some barriers are follows

- Lack of infrastructural facilities
- Lack of trained teachers
- Lack of computers and ICT equipments
- Unwilling to implement ICT structure to the library
- Lack of money to attend the software management training program
- Lack of interest to study new horizons of digital implementation in library and provide better service to user.

Suggestions

- Mobile technology learning should be encouraged using LAN or long -range 'wireless' network services. WAP (Wireless Access Protocol) enabled phones like Reliance Mobile.
- E-learning techniques to be introduced to get better the quality of the products with minimum qualified teachers
- Increasing and developing the competencies and self-assurance among the professionals by giving knowledge of latest technology.
- Study centers should take regular evening classes in selected major cities for the convenience of the working group of students instead of organizing contact classes.
- It is indispensable to set up a few professional bureaus at the national level to carry out the work of accreditation of the courses in LIS to maintain the standard in LIS curricula, nomenclature, course fee and duration.

Conclusion

Since Information is regarded as the driving force for any kind of societal development whether it is economic, intellectual or cultural, however it can be guaranteed only through efficient deliverance of information to all. And to accomplish this noble task qualified and competent library and information workforce is very inevitable for any society. The process of developing competent library and information science (LIS) professionals is directly related to the quality of LIS education imparted to these professionals. As new trend are emerging in librarianship so to cope with the advances technologies the education system in LIS should also teach about dealing with the modern technology.

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12

MAJOR DRIVERS OF KNOWLEDGE MANAGEMENT IN MODERN ACADEMIC LIBRARIES – AN OVERVIEW

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Abstract

In the digital age, academic libraries face challenges from both within (academia) and without (the business sector). Academic departments, or even faculty and students, may purchase or build their own portals to meet their academic and/or research needs. To prove their relevance and value, academic libraries must strive to provide the right amount of information to the right clientele at the right time with a right expense of financial and human resources. Knowledge Management is involved with the entire technique of discovery, advent, dissemination and usage of knowledge. Librarians can use Knowledge Management to expend the library's position in management and assist services. They need to have strategic desires, involve their users, and recognize era as a purposeful device. Knowledge Management can cause a big function for libraries in broader educational community. Shall we us hope that within the coming years knowledge management could prove a great step inside the proper direction of every Indian educational institutions.

Keywords: Information, Knowledge, Knowledge Management, Library, Library & Information Profession.

Introduction

In the present information and knowledge era, knowledge has become a key resource. The conventional function of academic libraries is to collect, process, disseminate, store and utilise information to provide service to the community. However, the environment in which academic libraries operate today is changing. Academic Libraries are pinched on both sides: reduced budget and increased demand from faculty and students. The success of academic libraries depends on their ability to utilize information and knowledge of its staff to better serve the needs of the academic community.

Academic libraries are information centers established in support of the mission of their parent institutions to generate knowledge, and people equipped with knowledge in order to serve the society and advance the well-being of mankind. With a stagnant or dwindling library budget, academic libraries have to increase their operational efficiency in order to meet the challenge. One management tool that can help in this regard is Knowledge Management. Knowledge management is a viable means in which academic libraries could improve their services in the present knowledge era.

Knowledge is information that changes something or somebody –either by becoming grounds for action, or by making an individual (or an institution) capable of different or more effective action.”

There are two types of knowledge; tacit and explicit knowledge.

- Explicit knowledge is documented and articulated into a formal language; it is rule-based, stored in certain media and easily communicable and shared; for example, organizational databases, web-pages, subject-portals, policies and manuals.
- Tacit is personal, hard to document and it is knowledge in action used by people to perform their tasks every day. Tacit knowledge has a personal quality, which makes it hard to formalize and communicate. Tacit knowledge is deeply rooted in action, commitment, and involvement in a specific context . Knowledge management is the management of knowledge that is critical to a person to work more efficiently, inclusive of both tacit and explicit knowledge. Let us now look at some more definitions of KM as explicit and tacit knowledge:

KM as Explicit knowledge refers to	Source
Knowledge that can be expressed in words and numbers and can be easily communicated and shared in the form of hard data, scientific formulae, codified procedures or universal principles.	Nonaka and Takeuchi (1995).
KM as tacit knowledge is:	
A mix of fluid experiences, values, contextual information and intuition that provides a structure to evaluate and incorporate new experiences and information. It originates and is applied in the minds of individuals.	Davenport & Prusak (2000)
KM as explicit and tacit knowledge is:	
A process or practice of creating, acquiring, capturing, sharing, and using knowledge, wherever it resides, to enhance learning and performance in organizations.	Skyrme (2001).

From the above definitions, it is obvious that KM does not consist of only tacit knowledge as indicated in some KM literature. It comprises both tacit and explicit knowledge, which are complementary. KM can be characterized as below:

- KM is a process of several activities; creating, acquiring, capturing, sharing, using and re-using it;
- It includes both explicit and tacit knowledge;
- It is an ongoing activity;
- Information is the building block of KM;
- It is action oriented or application based; and,
- The main drive behind KM is to improve organizational performance.
- Knowledge Management in Academic libraries

Role of information management in libraries have turn out to be an increasing number of vital together with the development of knowledge economic system. As a new technique Knowledge Management in libraries leaves a whole lot to be favored in its theoretical machine. Knowledge Management in libraries must encompass such components as follows.

Knowledge Innovation Management:

Knowledge Innovation Management in libraries refers to the management of the production, diffusion and transfer of knowledge as well as of the network system constructed by related institution and organization. It includes three aspects-

1. Theoretical,
2. Technical and;
3. Organization innovation management.

Theoretical innovation management is to enrich and enlarge the theoretical and practical research fields of library and information science. Technical Innovation Management manages the network systems constructed by institution. It supports the evolution from conventional libraries to electronic or digital libraries. Organizational

innovation management supports to create an effective management system adaptable to the operation procedures of libraries.

(a). Knowledge Dissemination Management: Dissemination or communication of knowledge is an integral part of KM. Technology helps libraries to share knowledge recourses and expertise. Availability of open resources on internet and www and online education has made knowledge multi-sourced in "anywhere, anytime" paradigm.'

(b). Knowledge Application Management: Library should attach importance to provision of services for people to acquire knowledge and achieve maximum function and efficiency of knowledge information based on high speed networks. It may be possible by setting up virtual libraries or Information Centers for enterprises, government and public organizations; scientific research institutions or setting up digitized knowledge services.

(c). Human Resources Management: We should pay full attention to diversity and variation of library staffs requirements, strengthen management of different library staffs by applying contingency management approach.

**Knowledge Management in Modern Academic Libraries
Information Management:**

Information management tries to make the right information available to the right person at the right time though a variety of database driven information applications. Before we discuss about knowledge management it is essential to clear the concept of information management. According to Wikipedia, Information management is the collection and management of information from one or more sources and the distribution of that information to one or more audiences.

Knowledge Management (KM):

Knowledge Management (KM) means management of knowledge. It is the systematic management of an organization's knowledge assets for the purpose of creating value and meeting considered and strategic requirements. KM deals with creating, securing, capturing coordinating, and combining, retrieving and disseminating knowledge.

Difference between Information Management and Knowledge Management:

The significant difference between knowledge management and information management are given below-

Differences between information and knowledge

Information	Knowledge
Information is more easily identified, organized and disseminated	Identification of knowledge is a complex activity
Information is always visible	Knowledge is not always visible
IM success depends on the preservation and retrieval of information	KM success depends on collecting distributing and utilization of knowledge
Information is only organized data in a meaningful milieu	Knowledge is predictive and future-oriented
Information is a flow of messages	Knowledge is created by that very flow of information anchored in the beliefs
IM is working with objects	KM is working with people
No analytical skill is required to gain information	To gain knowledge you need some analytical skills
IM includes only explicit knowledge KM includes both tacit and explicit knowledge	KM includes both tacit and explicit knowledge

Process of Knowledge Creation

(i). Data: Data is distinct pieces of information, usually formatted in a special way. Data as a general concept refers to the fact that some existing information or knowledge is represented or coded in some form suitable for better usage or processing. Data are collected from a study involving observation, experimentations or surveys.

(ii). Information: Information is the process data which can be transmitted between individuals and each individual can use it according to his need. When information is entered into and stored in a computer, it is generally referred to as data. After processing (such as formatting and printing), output data can again be perceived as information.

(iii). Knowledge: Information transforms into knowledge. Knowledge is organised body of information or facts or data or information. Knowledge is the proper collection of information, such that its aim is to be useful. Knowledge is a deterministic method.

(iv): Wisdom: Wisdom is the ability to judge what is true or right. It is an analytical and nondeterministic, non-probabilistic procedure. It is an exclusively human state.

Review of Literature

- Bishop (2001) pointed out that the challenge for the information professional lies in applying competencies used in „managing information“ to the broader picture of managing knowledge. The greeter challenge is managing the knowledge of organizational members, which they require through years of experience.
- Dean (1999), also states that academic libraries should be operated of such levels and relevance that can facilitate research especially when research as an important aspect of teaching is regarded as enquiries, searching for information need and drawing certain conclusion.
- The application of knowledge management as implies to library involves selection, acquisition, organization, storing, sharing and dissemination of information to users. One of the aims of knowledge management in libraries is to promote the knowledge exchange among library staff enthusiasm and abilities for learning, making the knowledge most efficiently applied to business activities of the library, and rebuilding the library into a learning organization. (Shanhong, 2000).
- Gosh and Sambeker (2003) observed that to provide the right amount of information at the right time and to fulfill the mission of academic libraries and their parent institution. In other words inadequate provisions of budgetary allocation, lack of subject specialist, among others are the major obstacles. Thereby hindering provision of efficient information and internet based delivery to both faculty members and students

Objectives of Knowledge Management in Academic Libraries

The main objective of Knowledge management is to ensure that the right information is delivered to the right person just in time, in order to take the most appropriate decision

The objectives are as follows:

- To promote collection, processing, storage and distribution of knowledge
- To promote scientific research
- To promote relationship between library and users
- To protect the intellectual property right, in information technology era

Role of KM in Academic Libraries:

An academic library is a library which provides an institution of higher education, such as a college, university or a school and it also serves two complementary purposes to support the school's curriculum and the research of the university faculty and students. Academic libraries are information centres established in support of the mission of their parent institutions to generate knowledge and people equipped with knowledge in order to serve the society and advance the well being of mankind. In the digital age, academic libraries face challenges from both within (academia) and without (the business sector). Implementation of KM enhances the traditional functions of academic library.

The changing role of academic librarians as knowledge managers emphasises the need to continuously update or gain new skills and knowledge to remain appropriate to the modern library's environment. KM helps academic libraries and information professionals in improving the services being rendered to their users. The academic libraries are the spine of

any organization or institution to information dissemination and the different services offered by the libraries are mainly designed to fulfil the goals of the organization. The main aim of library is to provide right information to the right user at the right time. So in academic libraries the knowledge management cannot be underemphasized, as it helps to enlarging the traditional function in digital age.

Library professionals seek to accomplish following tasks:

- Expert in capturing and transferring of information.
- Sharing knowledge without any geographical limitation.
- Manage knowledge as an asset.
- Representing knowledge in documents and database
- Able to deal with new technology.

Skills required for Knowledge Management in Academic Libraries

The changing role of academic libraries as knowledge managers emphasizes the need to constantly update or acquire new skills and knowledge to remain relevant to today's library environment. Academic libraries may need to restructure their functions, expand their roles and responsibilities to effectively contribute and meet the need of a large and diverse university community.

The successful implementation of knowledge management initiatives in the workplace requires knowledge manager to apply several skills sets (TFPL, 1999). In the perspective of academic libraries, there is a need for academic librarians to extend their expertise. The transformation from librarian to knowledge manager is clearly underway (Chrch, 1998). However, this impending shift of incorporating knowledge management in library activities requires a great deal of preparation.

The sources of academic libraries depend on the capabilities of its staff to serve the needs of the University community more efficiently and effectively. To be successful in this environment, individual needs to acquire new combination of skills (TFPL 1999).

- A sharp and analytical mind;
- Innovation and inquiring;
- Information Technology (IT) literacy, that is knowing how to use the appropriate technology to capture, catalogue, and disseminate information and knowledge
- Enable knowledge creation, flow and communication within the organization and between staff and public

Major impetus of KM in academic libraries

KM literature reveals the following major drivers of KM in academic libraries:

(i). Survival factor with increased user demands and competition:

Due to other information providers as competitors, libraries face survival problems and must strive to find innovative ways to provide customer service. KM is the most recent and most discussed survival factor for libraries.

(ii). Increased visibility of libraries:

Libraries often have a poor image; they are not visible to their parent organization and work in isolation. The ultimate aim of KM is to achieve an organization's mission. Therefore, all parts of an organization (including libraries) must ensure that KM contributes towards the realization of the organizational mission and vision. Adoption of KM could assist library and information professionals in meeting user needs aligned with the organization's strategic goals and objectives.

(iii). Academic libraries as knowledge creating organizations:

Academic libraries are perceived as knowledge creating organizations, as a system of integrated activities and business processes that work together collaboratively to facilitate accomplishing overall organizational goals. Librarians are acknowledged as knowledge creators through content management, organization of knowledge, and evaluating the validity and reliability of information obtained from unfamiliar sources. Librarians bring a set of values that are fundamental to the long-term survival of scholarship.

(iv). Increased value of knowledge in the knowledge economy:

By utilizing their traditional skills university librarians are playing a crucial role in dissemination and exchange of knowledge among students and teaching staff in order to enhance learning, teaching and research activities. All of this contributes towards a knowledgeable and learned society and knowledge economy.

(v). Need of improved library services and customer satisfaction:

Another force for adopting KM in academic libraries is the promotion of existing library practices and better services for clientele (Roknuzzaman & Umemoto, 2009). Due to the rapid advancement in information technology and changing needs of customers, there is an increased need for a more improved approach to library service delivery at the academic libraries. KM enables librarians to capture, store, organize, share and disseminate the right information to the right customer at the right time

Challenges/barriers to knowledge management in academic libraries

The KM literature (Jain, 2007, Raja, Ahmad, Sinha, 2009, Roknuzzaman & Umemoto, 2009, Guru et al, 2009) reveals the following major impediments to incorporate KM into library practice:

- ❖ **Reluctance of library practitioners:** According to the response of LIS practitioners to KM is comparatively slow and they are reluctant to incorporate KM into library practice because of their traditional mind set. Some librarians do not take any initiative for positive changes in their libraries.
- ❖ **Lack of incentives:** Incentives are the biggest motivators. In the absence of proper incentive plans, academic librarians observe reluctance towards KM activities. Inadequate staff training: The success of KM projects are dependent on adequate training plans in all the activities of KM process, e.g. training in knowledge capture, organization, dissemination, and use of new technology skills. Insufficient tools and technologies: This refers to libraries not being well-equipped with KM enabling technologies.
- ❖ **Lack of sufficient budget / funds:** Budget is a two-way issue. On one hand, librarians are adopting KM to solve financial problem by producing more with less. On the other hand, due to budgetary constraints libraries are not well-equipped with essential infrastructure for KM, e.g. new technology, training, incentives.
- ❖ **Digitization of library resources:** Not all academic libraries are well-equipped with the necessary infrastructure, such as, technology, staff expertise in digitization, copyright issues.
- ❖ **Lack of collaboration:** The success of any KM project depends on strong collaboration and partnership within and without the library. On an internal basis collaboration is required between senior and junior staff, teaching faculties and students, human resource and IT staff units.
- ❖ **Misunderstanding of KM concepts:** Many academic library managers do not understand the concept of KM properly; hence, they are not able to appreciate and support KM project fully.
- ❖ **Lack of a centralized policy for KM:** It is the first step in any KM initiative however most academic libraries lack a centralized policy for KM initiatives.

Conclusion

In the knowledge economy era, libraries are very importance to vocational training and lifelong education of librarians. It raises their knowledge level and ability in knowledge acquisition. The main objective of implementing knowledge management in an academic library therefore is to ensure an all-round improvement of library staff's capacity promotion of relationships between libraries and library users; it promotes knowledge innovation, strengthening knowledge internetworking and quickens knowledge flow. Every library ambience attracts the users; the technology and innovation give the institutional libraries a

modern viewpoint. Traditional libraries are focusing on the universal perception. Institutional Repositories are being changed in to digitized forms.

The modern libraries are now focusing to deliver the information in the digital form through web, WEBOPAC via internet. The development of institutional storeroom by innovations of information technology has strengthened the professional libraries. Modern libraries are now called the knowledge library or the knowledge store and the tool to deliver this knowledge is the knowledge management.

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13

ROLES OF SPORTS PSYCHOLOGY IN ENHANCING PLAYER PERFORMANCE

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Abstract

The acceptance of sport psychology, both as an academic discipline as well as an applied process, has grown considerably over the past 2 years. Sports performance is determined by a combination of physiological factors, technical skill, tactical insight and state of mind. Every top sportsperson knows that their best performances come from their mind as much as their body. Not many to the world of competitive athletics would argue with the significance of being psychologically ready just before an athletic competition along with the want to help keep this specific mindset during a competitive competition. As a result, the goal of this report is actually providing the viewer with a basic framework depicting how mental skills education translates into enhanced competition efficiency. This particular framework is meant to help bridge the common "understanding gap" that's presently being described by a lot of coaches and athletes, while simultaneously helping sport psychology practitioners market their valuable services to specific athletes & teams. The paper concluded by stating sport psychology must be used as scientific instruction ways for athletes to be able to improve sports performance.

Keywords: Sports Psychologist article Concentration, Motivation, Mental training. Confidence. Anxiety, Tension, Expectation

Introduction

Sport psychology is an interdisciplinary science that draws on knowledge from the fields of Kinesiology and Psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors. In addition to instruction and training of psychological skills for performance improvement, applied sport psychology may include work with players, coaches, and parents regarding injury, rehabilitation, communication, team building, and career transitions. Sportsman gives outstanding performances not simply due to their hard work and effort of their trainers but also due the active part played by scientists how generally remain in the background. Today, No young talented kid can be groomed in two a star performer without assistance from different branches of science such a Physiology, Bio mechanics, Psychology, Nutrition, Health, Medical sciences etc. From a simple child to play generally called motor - skill acquisition phase to forming at the Olympic games and winning gold is a result of the inter play of innumerable visible and invisible factors and forces that influence training human muscle and mind over time for such endeavours. Experts in sports training systems consider three sports sciences viz. Physiology, Bio mechanics and Psychology to be off critical importance in the preparation of sportsman for top performances. Physiology develops the energy basis, bio mechanics help in improving mechanical skill and Psychology is the ultimate determining factor in winning game. The

sports Psychology utilities various principles concepts, a factor from the field of psychology to study behaviour in sports, sports psychology concern itself with motor learning and performance.



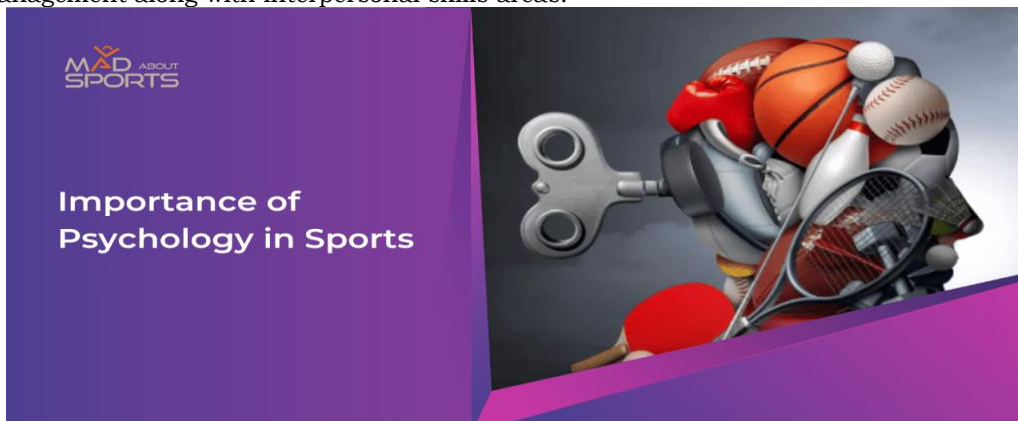
The specialised field of sports psychology has developed rapidly in recent years. The importance of a sports psychologist as an integral member of the coaching and health care teams is widely recognised. Sports psychologists can teach skills to help player's, enhance their leaning process and motor skills, cope with competitive pressures, one-tune he level of awareness needed for optimal performance, and stay focused amid the many distractions of team travel and in the competitive environment psychological training should be an integral part of a player's holistic training process, carried out in conjunction with other training elements. This is best accomplished by a collaborative effort among the coach, the sport psychologist, and the player. The present article aims to provide some of information regarding the role of sports psychologist in games and sports.

Role of sports psychologist

Sports Psychologist studies psychological factor that affect the learning and performance of motor skills. He attempted to explain the phenomenon of learning and to answer such question as how it under which it operates. So some of their important roles are described below in points which are helpful to the sportsman give performance Sports psychologists prescribe several techniques for improving concentration; these include yogic meditation, Zen meditation, concentration training, thought stopping, self-hypnosis, deep breathing exercises etc.

Sport psychology in the grand scheme of items is nevertheless a contemporary and new relative discipline, with academic courses, content specific publications, and expert governing systems just emerging in amounts that are vital as recently as the 1960s. Since this particular time, sport psychology has experienced an immediate development in worldwide recognition, both as an applied exercise and as an academic goal. Significant advances in the understanding of ours of the connection between sports performance and mental skills have been made with this time period, with a strong body of knowledge

supporting the applied usage of it's of the region of performance enhancement. Understanding of sports psychology is vitally important to achieving the best possible performance and has a great deal of benefits like it helps you to evaluate the match among sports and persons as well as positions on a team, helps athletes & coaches appreciate the strengths of theirs and turn into more conscious of those places where growth might be justified, helps athletes and coaches in a strained relationship, examine the cause of the conflict and develop a technique to bring down it. It is able to lead to inspired and dedicated conduct, helpful for the athlete as well as sports expert on the life and career planning, self-management along with interpersonal skills areas.



Practice and sport psychology studies have been around for nearly a century, during which time scholars and workers alike have made initiatives that are ongoing to find out much more about the psychosocial variables related to improved sports performance. From inner variables like character, achievement motivation, and self-efficacy to outside variables such as for instance sports performance as well as team cohesion many variables have been viewed in an attempt to better understands the growth as well as maintenance of performance excellence.

Sport psychologists can also be liable for building techniques to help mentors in the mental management of the organizations of theirs. Psychologists are able to help mentors determine the most suitable techniques to enhance cohesion and commitment to the team, which might include revitalizing the good impact of the team leader building athletes' independence and enhancing decision-making procedures as well as interaction among athletes during competition. With the present, the optimization of sports performance is actually determined by the usage of a multidisciplinary approach. Does this particular wide strategy open a brand new area where coaches, as well as psychologists, work towards the same interests with the development of the best possible work environment, certain competencies together, therefore solving possible conflicts which might develop inside the group.

Motivation

Motivation has a great part to play in performance especially in sports. The sports psychologist play an important role in this motivational process by which a person is inspired, encouraged or provided some sort of incentive to accomplish a goal directed task such as to take part in competitive sports and achieve high success for a successful career in life motivation substance interest in the activity; in psychological language, it is called as reinforces of behaviour because when a player is awarded for his performance, he finds himself energized for a still stronger effort and work harder to improve his performance. We know very well that in athletic pursuit mental training, rather more important because it is rightly said that a game is won or lost in mind before it is done practically. The mental

training is one of the important tools of sports psychologist to prepare sportsman for their competition. The Sports psychologist prepared the player mentally fit through various sets training like cognitive training, perceptual training, coordination training, reaction training, motivation training (goal setting), psycho-regulation training (breath control, self-instruction), imagery, autogenic training, activation. The Sports psychologists are trained the sportsman to become deaf and blind spectators and noise and action so as to remain focused on the game because the spectators of crowd watching an athletic competition exert a powerful influence on the performance of players.



In sports the confidence is built up by the team management (sports psychologist, coach, manager, physiotherapist) by eliminating the causes that makes a player lose heart. This may include paucity of mental strength, to face challenges, poor skill level, lack of required physical fitness, inadequate practice, non-availability of standard equipment and so forth. Anxiety affects man's psychological and physiological functions. For example, anxiety such extent that he finds it hard to concentrate on his game. Player's ability to judge things gets reduced and he cannot process much information; he intends to do something and does something else. The anxious players are generally tense as a result their ability to perform in tasks involving neuromuscular coordination deteriorates steeply. It is experimentally proved that anxiety retards muscular performance, over-anxiety cripples it absolutely. Sports psychologist suggests several strategies for the sportsman to manage anxiety; they include muscular and mental relaxation, behaviour modification, visualization, imagery, skill training, goal setting, positive self-talk and the like.

Practice and competition of sport generates a high level of tension both physical and mental. Physical tension results from hard workouts, over practice, accidents, injury, discomfort and the like. Mental tension arises from too high stress on player's mind. The sports psychologist make use of a variety of relaxation techniques such as yogic relaxation, Jacobson's muscular relaxation, meditation, pep talks, hot baths, desensitization etc. manage their stress and tension arising out of it. Expectation plays an important role in human life, they also play significant role in sports performance when a player prepares for a competition. He honestly and vigorously he nurses great expectations to win. It unfortunately his expectation do not come true because something wrong goes somewhere, it leads to frustration affecting the future performance. Sports psychologist rightly advice level of aspiration and level of achievement must be congruent.



Objective of sports Psychology

- a) To understand the effects of psychological factors on physical performance.
- b) To understand the effects of participating in physical activity on psychological development, health and well-being.

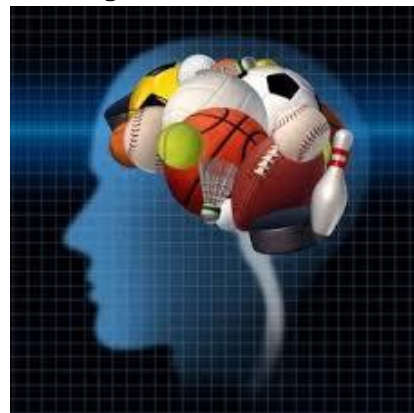
- c) The aim of sports psychology is to address the mental and emotional needs of athletes.
- d) Sports psychology enhances their overall well-being and boosts their sports performance to the highest level possible.
- e) Sports psychology is designed at optimizing sports performance. One mental condition which is strongly connected to the optimum performance of sport is flow.
- f) Sport Psychology interventions are actually created to aid other sports participants and athletes (e.g., coaches, administrators, parents) out of a large array of options, levels of ages and competitors, which range from leisure youth participants to Olympic and professional athletes to master's level performers.

The Role of sport psychology in sports in sports performance enhancement

- ✚ The specific area of sports psychology has created quickly recently. The significance of a sports psychologist as an important fellow member of the coaching as well as health care teams is commonly recognized. Sports psychologists are able to teach skills to assist athletes to improve the learning process of theirs as well as motor skills, handle competitive pressures, fine-tune the amount of understanding required for optimum performance, and be focused amid the countless distractions of staff travelling and in the competitive atmosphere.
- ✚ Sports Psychology has a great deal of roles to play in the realization of the nation's sporting goals, the following are consequently several of the roles which Sports Psychology is able to perform in improving performance.
- ✚ The sports psychologist work on the psychological conflict of every person and requires of the unique athlete, making him take choices which are important to failure or being successful during play.
- ✚ The sports psychologist assists the athlete to block out stress provokingly.
- ✚ The sports psychologist is interested in performance development the athlete, to facilitate the learning procedure, errors which athletes make could be remedied during skill acquisition.
- ✚ Stress management is yet another crucial area in which the sport psychologist helps in improving sports performance. You will find many strategies which could be used in offering with anxiety.
- ✚ The sports psychologist is going to use his/her knowledge of human behaviour in motivating athletes. Inspiration doesn't mean material incentives as cash, home, automobile etc.
- ✚ Sports Psychology is believed in teaching the person to be sensitive, supportive, and positive.

Benefit from sports psychology

- ✚ Improve focus and deal with distractions. Many athletes have the ability to concentrate, but often their focus is displaced on the wrong areas.
- ✚ Develop coping skills to cope with mistakes as well as setbacks. Emotional management is a requirement of entering into the zone. Athletes



with pretty high as well as tight expectations have difficulty coping with small mistakes which are a normal part of sports. It is essential to deal with these expectations as well as aid athletes to stay composed under stress and once they commit mistakes or even get frustrated.

- ✚ Help teams develop cohesion as well as communication skills. A significant component of mental training and sports psychology is helping teams enhance communication and cohesion. The more a staff operates like a product, the greater the outcomes for those involved.
- ✚ Improve and / or balance inspiration for optimum results. It is essential to look at the level of yours of commitment and only the reason why you're driven to enjoy the sport of yours.
- ✚ To put in a proper belief system and determine irrational feelings. Among the areas I pride myself on is actually assisting athlete to determine ineffective values as well as perceptions including bad self-labels and comfort zones which hold them back from executing effectively.
- ✚ Improve and / or balance inspiration for optimum results.
- ✚ Find the right zone of intensity for your sport. I use intensity in a broad sense to identify the level of arousal or mental activation that is necessary for each person to perform his or her best.
- ✚ In order to create game-specific tactics as well as game programs. All great mentors use game plans, race techniques, and program management skills to assist athletes emotionally get ready for competition.

Suggestions

- a) Building confidence in sports.
- b) Focus on yourself, not on others.
- c) Concentrate on the process, not outcomes.
- d) Stay relaxed under pressure.
- e) Develop effective routines.

Failure or success in the area usually depends on mental aspects almost as physical ones. Sports psychologists realize the remarkable effect of the athlete's mindset and concentrate on preparing the brain to conquer obstacles on the field while improving trust for optimum performance Every single one of us has an untapped source of energy which may be drawn upon to take about outstanding outcomes. Sports Psychology does apply to a large number of extreme athletes. Most of the pupils (junior, professional athletes, college, and high school) are highly devoted to excellence and seeing the distance they are able to go to sports. They like tests as well as competition themselves against the very best in the sport of theirs. They realize the value of an optimistic attitude as well as mental toughness. These athletes would like every possible benefit they are able to buy like the mental advantage of the competition.

Conclusion

On the basis of above facts, we can say that the role of sports the games and sports got too much important. Without the training of sports psychologist or their advices performance of sportsman is not possible to achieve top form. In India day by day Sports Psychology is gaining importance but in comparison to advance sporting countries like the U.S.A., the china, the Germany, the U.S.S.R the Psychological preparation of our sportsmen is lagging far behind. Today the 'Quest for excellence' in Olympic or World Cup competition no longer makes allowance for haphazardly constructed coaching or competition plan. In the end, it is beyond any doubt that, if our country wants to win international laurels in the modern world of sports sound psychological preparation of our sportsmen is greatly needed.

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THE ROLE OF LIBRARY NETWORKING SYSTEMS IN HIGHER EDUCATION IN INDIA MODERN ERA- AN OVERVIEW

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Abstract

Library is like a storehouse of knowledge. You will find books in a library in almost all topics, be it history, geography, or even science fiction a library has it all. All schools and colleges have a library. Libraries are as the shrine where all the relics of the ancient saints, full of true virtue, and that without delusion or imposture, are preserved and reposed- Bacon. A library is like the whole world encompassed in one room. Without a library a school will not be complete. It is very essential to the education and school system. The role of a library in the education process at any level, especially at the college level for the overall development of students such as personality, skill communication, career, and creativity is very significant etc. So a well-organized library is essential for the teaching-learning process done in a college, especially when the emphasis is shifted from classroom teaching centered process. The quality of education is greatly linked with libraries. The information collected and disseminated by libraries decides the quality of teaching and learning process in a college.

Keywords: *academic libraries, INFLIBNET, digital technologies, quality education and research, resourceful librarian, SOUL.*

Introduction

The role of library and librarian in recent era has changed as a result of techno-driven world. Library is considered „the heart“ of a university or an institute offering higher education. After independence, the University Education Commission (1948-49) as well as Education Commission (1964) emphasized the need of academic libraries in India and suggested certain measures for betterment and effective management incorporating its organization, the availability of staff, open access system as well as financial support. University Grant Commission played a vital role for betterment of libraries in higher education by establishing Information and Library Network Centre (INFLIBNET).

The SOUL (Software for University Libraries) developed by INFLIBNET centre, made available to its member free of charge, proved valuable in modernizing the entire set-up of academic libraries. The reservoir of Indian theses called Shodhganga, a database of thousands of theses from various universities across India has also become a chief source for researchers and academicians to seek the knowledge generated in various branches. The challenges like effective utilization of digital technologies, supporting access to Open Access Resources, etc. have not been overcome yet in every respect. The laws of library science designed by Dr. Ranganathan should be pursued firmly in a pragmatic manner. A quality education and research is not possible without a modernized library. Library is one of the

major resources for the exchange of ideas. Academic and research work is very much preserved by library.

Importance Of Library In Education

Any problem you have any query unanswered you will find it in one of the books stored in the library. A pivotal role played by the libraries it is one of the factors which helps in the development of a society or an even a civilization. It caters to the knowledge thirsty minds of thousands of people. With the onset and advancement of technologies virtual libraries are created. These types of libraries are present in many colleges. Libraries are an integral part of the education system and one is incomplete without the other.

Library and Information Science in Education

Dr. S. R. Ranganathan (1892-1972), called the father of library and information science in India, gave the five laws of library which need to be acknowledged and pursued every time:

- Books are for use
- Every reader his/her book
- Every book its reader
- Save the time of reader and
- Staff Library is a growing organism

(a). Ranganathan Committee (1967):

The recommendations of this committee incorporated the provision that the UGC as well as the state Government should offer financial assistance to the college and the university libraries for purchasing the required books, periodicals, etc.

- The committee proposed the formula that funding be given at the rate of Rs. 15 per enrolled student and Rs. 200 per teacher and research fellow.
- The initial library grant in case of new university or department was also recommended in the report.
- The committee emphasized that open access system should be introduced in every academic library.
- The committee opined that: "reference service is the essential human process of establishing contact between the right reader and the right book by personal service.
- Reference service is vital in promotion of reading habit in student [therefore] each library should provide an adequate number of reference librarians to function as library hosts and human converters".

Besides these, the committee also suggested the copying facilities for book/reference material, the appointment of regular committee to investigate the standards at various levels of teaching, examination and research work as well as the regular appointment of full-time teaching faculty in place of part-time teacher. The report of the committee incorporated certain standards in its recommendations that the reader receives the book within two weeks after releasing and due library process, the assessment period of periodicals ought to be three years, the management of regular staff, the proper of books, the co-operation between university and college level library located in the same region as well as the allocation of annual recurring grants in consultation with the concerned librarian along with the faculty members.

(b). University Grants Commission (1953):

The role of UGC is noteworthy in enriching the academic libraries in higher education through financing as well as the systematic planning and vital leadership. UGC allocates grants to number of universities for building construction. In addition to this, a liberal financial assistance has been ensured based on a tentative formula of Rs. 15 per student and Rs. 200 per teacher and research fellow for the annual purchase of books. The new university libraries are granted a special initial grant. UGC has helped the professionally qualified academic libraries to get better pay scales equal to the teaching

members of the university (Bhatt 130) UGC has been allotting more funds for the development of academic libraries. The provision was made to initiate the work for this function in the 5-year plans of the country.

(c).INFLIBNET:

UGC has established a national information network named INFLIBNET in 1986 at Gandhinagar. It functions the information communication of the libraries of all universities, higher educational and research institutes of our country. The centre INFLIBNET updates the libraries of universities and college at national level. The task of automation of libraries, digitization of resources, software development of libraries and conducting training programme, etc. are well-managed by this centre. The more considerable step towards advancement in this field is the development of software for university libraries (SOUL) which is available free of cost to INFLIBNET members. The centre has developed Shodhganga, a reservoir of Indian theses which has a database of thousands of theses from a number of universities across India.

(d). Kothari Commission: (1964-66)

Another significant change initiated with „The Education Commission“ under the chairmanship of Dr. D. S. Kothari. The commission paid due attention towards the development of university libraries and stressed on positive steps to modernize the framework of library. The committee introduced norms for financial support and suggested required equipment in the library, facilitating the students for the better use of books, proper documentation and inter-disciplinary communication. The report of Kothari Commission ardently mentioned that: “nothing can be more damaging than to ignore its library and to give it a low priority. No new college, university or department should be opened unless adequate numbers of books in the library are provided”.

Libraries Inspire Education

When individuals of all ages have the opportunity to explore information that matters to them, various forms of education can emerge. Libraries have tools to inspire education of all ages.

- They teach skills and strategies individuals need to learn and achieve
- They are partners in education, developing curricula, and integrating resources into teaching and learning
- They teach the skills individuals need to become effective users of ideas and information
- They seek, select, evaluate, and utilize electronic resources and tools and instruct individuals and educators in how to use them
- Library is the ideal neutral and non threatening environment for learning, formal and informal, to occur Libraries have a record of personal service and impartiality
- They readily partner with other learning providers and with other libraries
- They provide public ICT facilities and support.

Role of Library in Higher Education

The role of the library can be defined within the framework of the university’s mission and a library development programme can be undertaken accordingly.

In the words of Dr. S. R. Ranganathan, “Libraries are not more store houses, they are rich springs from which knowledge flows out to irrigate field of education and culture.”

The fundamental role of the university library is educational. It should not be operated as a mere storehouse of books attached to a reading room, but as a dynamic instrument of education. It is emphasized in different reports brought out by various library and educational commissions in India and abroad. A university library is established with the intention of aiding in successful accomplishment of the objectives such as teaching, research, publication programmes, etc. In modern education system, the university library has important responsibilities.

The report by University Grant Committee (United Kingdom) in 1921 is stressed on the role of a library in university system. Thus, the character and efficiency of a university may be extended by its treatment of its central organ library. We regard the fullest provision for library maintenance as the primary need in the equipment of a university.

In India the University Education Commission (1948-49) headed by Dr. S. Radhakrishnan describes that teachers must have the necessary tools for teaching purpose in the shape of libraries and laboratories as also the right type of students. According to him, "The library is the heart of the University's work; directly so as regards its research work and indirectly as regards its educational work, which derives its life from research work. Scientific research needs a library as well as its laboratories, while for humanistic research. The library is both library and laboratory in one." The training in higher branches of learning and research is mainly a question of learning how to use the tools, and if the library tools are not there, how can the students learn to use them.

Dr. S. R. Ranganathan headed the report of the Library Committee of University Grants Commission in 1957 that dealt with in detail the role of the university library in academic development especially in the field of higher education. The above observations can be summarizing in the words as:

- a. The library is the heart of education;
- b. Methods & fashion in education change from generation to generation, but each generation uses the library as a means of realizing its items; hence the library remains the great conservator of learning;
- c. iii. A quality education is impossible without a quality library;
- d. iv. A library is vital organ for proper exploitation of our intellectual resources;
- e. v. A library is essential for maintenance of free access to ideas, and to the functioning of the untrammelled mind.

Scope of a Library in Higher Education

Library does not mean merely a collection of books. It is a learned institution equipped with treasures of knowledge maintained, organized, and managed by trained personnel to educate the children, men and women continuously and assist in their self-improvement through an effective and prompt dissemination of information embodied in the resources. A research scholar can never successfully conduct his investigations and researches without the help of a library and a librarian. Librarian, as an —information officer! or a —scientific officer! possesses, of necessity, definite subject background and knows best the subject area to be covered by an investigator in his narrow field of the problem in hand that he wants to attack! The scope of a library as an effective aid to study and education is virtually multitudinous. There are different types of libraries, viz.,

1. Special library,
2. Public library and
3. Academic library which contribute to education in various different ways.

1. Academic Library

The primary objective of academic library is to meet the academic needs of the particular institution for which it is created to serve. Academic libraries, comprise of school libraries, college libraries, and university libraries whose prime objective is to meet the academic needs of the particular institution for which it is created to serve. The purpose of a university library differs, in varying degree, from that of a school or college library in that the former adheres extensive and particular emphasis to research projects apart from the curricular needs of the institution. Besides aiding in the studies of children and assisting the teachers in their teaching and periodical research , a school library is primarily concerned to pro-create an urge for reading amongst the children who here get a first-hand-knowledge to use the library resources most effectively in their future career. This institution serves to build up a strong mental base and character of the children.

2. Public Library

A public library which is very often called a –peoples' university, is a democratic institution operated for the people by the people that conserves and organizes human know. The scope or command of a public library that meets not specific but general requirements of the public thus remains quite broader in its vision. It differs from the other types of libraries in that by offering opportunities of informal self-education it inculcates reading habit amongst all types of general readers and, as a consequence, maintains a sizeable collection of light literatures, i.e., fictions, novels, story books, etc., for recreational studies, and a children's corner equipped with juvenile literature. Among its broad based functions to perform in educating the general public as well as the children, the following ones can be quoted :

- Enriches and further develops the subjects on which individuals are undertaking formal education ;
- Meets the informational needs of all ;
- Creates and further develops civic sense and habits of the citizens ;
- Supports educational, civic, and cultural activities of groups and organizations ;
- Encourages wholesome recreation and constructive use of leisure time
- Provides children, young people, men and women opportunity to :

3. Special library

The special library has been historically, and remains today, an integral, functioning unit of the organization in which it is found, dedicated to the proposition that it exists only to offer the information which the organization needs in order to build, prosper, advance, and achieve its ultimate ends. The highly specialized libraries do necessarily contain certain amount of materials on bordering or allied subjects for instance, the library of the Institute of Business Administration should include such subjects as economics, statistics, banks and banking, etc., beside the all embracing term 'business and commerce'. A special library which is specialized in a particular field of knowledge differs in its mandate from other types of libraries on the following grounds :

- Periodical literature is of prime importance and forms the major part of the collection (about 90 p.c.)
- Reports, standards, specifications form a considerable quantity ;
- It files information rather than material' which calls for the introduction of special techniques (mechanical indexing, information retrieval system, etc.) for organization ;
- Information here are most up-to-date more than the textbooks, periodical literatures or published reports ;
- It ensures quickest dissemination of information.

Library Networking Systems

The University Grants Commission (UGC) was established by an act of Parliament in 1956. It is an autonomous advisory organization for the promotion and co-ordination of university education and for the maintenance of standards.

The UGC directs higher education in India. The UGC has played an important role in the improvement of university and college libraries. Realizing the value of the library and its role in higher education, the UGC accepted most of the recommendations of the several committees and commissions.

UGC providing financial assistance for collection development, acquisition of books and periodicals, purchase of furniture and equipment, and construction of new library buildings. Working groups on information and library networks, modernisation of library service and information centres, and the developmental programmes of NISSAT, NIC, DESIMET, ERNET, CALNET, DELNET and CIRNET have covered things like standardization of information handling, networks, and training.

(a). UGC-INFONET

UGC has a consortium for e-journals through UGC-INFONET. It uses the Education and Research Network (ERNET) infrastructure. On behalf of the UGC, INFLIBNET is executing the UGC-INFONET project in collaboration with ERNET. This consortium promotes the use of electronic database and journals by the research and academic community. INFLIBNET Centre is the nodal agency for coordination of UGC-INFONET. It facilitates linkage between UGC, ERNET, and universities and coordinates the programme. UGC-INFONET is a boon to higher education in India. The programme helps mitigate the severe shortage of periodicals faced by university libraries. The consortium gets a discount of 85 to 90 percent of list price. In the year 2008, there was a tremendous growth in overall use of e-resources.

(b). Library Consortia

A consortium is a group of organizations who come together with a combined objective that requires co-operation and resource sharing. A library consortium can be local, regional, state, national, or international. Libraries need consortia because of

- Information explosion
- Diversity of user needs
- Financial crunch
- Impossibility of self-sufficiency

(c). Council of Scientific and Industrial Research (CSIR)

CSIR has also formed a consortium with National Institute of Science, Communication and Information Resources (NISCAIR) (formed with the merger of INSDOC and NISCOM) as the nodal agency. To augment CSIR research and development activities, NISCAIR implemented an agency for access to electronic journals. On behalf of CSIR, it has entered into an agreement with Elsevier to access its 1,500 e-journals and intends to subscribe to more. CSIR consortium has extended its access to other providers of e-journals.

(d). Other Networks

There are a number of other national networks and library networks, including NICNET (National Informatic Center 's network), INDONET, CALIBNET (Calcutta Library Network), DELNET (Developing Library Network), etc. ADINET is associated with INFLIBNET, DELNET with NIC, and MALIBNET with CFTRI. A number of educational institutions are members of such networks. These networks, especially DELNET (which has 752 member libraries including 742 from India and 10 from outside), are engaged in compiling union catalogs, creating databases of experts, providing training to library staff, ILL, online facilities, reference service, assistance in retrospective conversion, etc.

(e). Information and Library Network (INFLIBNET)

Information and Library Network (INFLIBNET) is a versatile, integrated library and information system created in 1991 to support teaching and research in higher education. The information and library network centre will network 123 universities, 23 institutions, 6,100 colleges, and 200 libraries affiliated to other organizations through UGC. It promotes automation, creates union catalogues, provides access to information sources, provides training, etc. INFLIBNET has developed "SOUL" (Software for University Libraries) software for automation in-house functions. SOUL is installed at 15 university libraries and has developed five utility software packages for participating universities.

Conclusion

Apart from this, the public libraries render a yeoman service in the adult education through extension services and audio-visual aids, viz; story hours, lectures, book exhibitions, displays, book weeks, and motion pictures, newsreels, film strips, music stores, phonorecords, and the like. These aid mass education libraries also strengthen communication and collaboration between and among the research, business, government and educational communities in the society and contribute to the life long learning opportunities.

It is evident from the above that the different types of libraries play a significant role on different styles in educating the citizenry of a nation. The utility of a library in education can at once be felt and generalized particularly when we look into the educational conditions of the poor. Libraries make available all the relevant books and other materials almost free of cost, and the children of the poor and the rich alike can derive equal amount of advantages out of this free service that helps in pursuing constructive education.

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CHALLENGES AND CONCERNS FOR LIBRARY AND INFORMATION SCIENCE (LIS) EDUCATION IN INDIA- AN OVERVIEW

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Abstract

Today, the LIS profession has attained the status of a full-fledged discipline in India. However, it has low recognition and has not been regarded at par with other well-known professions. As a result, most students do not opt for librarianship as a first choice of study. National bodies such as ILA, IATLIS and IASLIC should give serious thinking to find the timely solutions for the problems prevailing today. There should be a National Accreditation Body to apply rigorous parameters before granting accreditation to a library school. This will help to establish quality control in LIS schools. Attention should focus on the adoption of relevant and up-to-date curricula, high quality faculty, willing students and good infrastructure in needed in every school. This is necessary to improve the quality of the products, creating better job opportunities for graduates and raising the social status of the LIS profession.

Keywords: *LIS education, ICT, LIS Education Systems, LIS profession, Digital Library, National Knowledge Commission.*

Introduction

Library and information science professionals are not only having to adapt to change in library services but also require in-depth and structured education and training programmes for occupation engagements in all library types. However, one important aspect of such professional discourses derive from the search for suitable, relevant academic and professional programmes is one that should be made available in our library schools in response to societal needs based on the various library types.

Education in Library and Information Science has taken a new turn in the face of far-reaching developments sparked off by the trend towards globalization. Although the challenges for libraries in Africa have been enormous, they are not insurmountable given our human capacity to adapt to change. It is largely true that libraries in Africa are adapting to change particularly on innovations brought about by the application of ICT.

With the growth of information technology, LIS Schools have understood the need of periodic examination and analysis leading to necessary changes and improvements in curriculum for the interpolation of new and fast developing areas of information technology and computer science. The objective for training of LIS professionals is to promote library, to educate, to articulate and provide for the need of the clientele to increase productivity and economy.

Laws of Library Science:

An Overview According to Shiyali Ramamrita Ranganathan considered by librarians all over India as the father of library science, "there can be no doubt however, that there are certain essential principles underlying the management of library according to the present

days' need and conception". Ranganathan expounded these principles in a systematic form and reduced them to five cardinal principles. He has developed all these rules of library organization and management as the necessary implication and inevitable corollaries of his five laws. In the context of library science, Dr. S. R. Ranganathan conceived the five laws of library science in 1924. The statement embodying these laws were formulated i.e. the laws took the final form in 1928 and a detailed account of these laws and their implication were published in the form of a book in 1931 by Bombay Asia Publishing House (This is also the year in which Melville Dewey passed away). Most librarians worldwide accept them as the foundations of their philosophy. The five laws of library science are:

1. Books are for use.
2. Every reader his/her book (i.e. books are for all).
3. Every book its reader (i.e. every book in a library must find its reader)
4. Save the time of the reader (i.e. a user is supposed to be a busy person. So his/her time must be saved). Corollary: Save the time of the staff.
5. Library is a growing organism (A library always grows in terms of document i.e. book, reader or user and staff).

1. Books are for use (First Law):

Recognition of this law helps in removing restriction on the use of book, i.e. making library service free from universal. The aim of library is to ensure maximum use of reading materials. The first law is to be achieved through the following factors:

(a). Services, usages and accessibility: A few book kept in constant and extensive use is more valuable than thousands of book kept in palatial building. The Library schedule must be convenient to the reader. The large Library should open their door to the readers on holidays for sometimes.

(b). Publicity: The librarian should give fair publicity about the services offered by his/her library. He/ She should always publicize add new addition to the library so as to inform his/her clientele to what new materials has been acquired. Latest arrival should be displayed.

(c). Building: The library building should be attracting. Exterior should be inviting and interior should be well organized and decoration such a way so that it could fascinate the readers or users. There should be proper lighting and ventilation, illustration on the wall, colored wall, neat and clean environment, soundless room encourages the readers to study or read more and more times.

(d). Equipment: The library equipment's should be neat and attractive. The book-racks should not so high. The reading room should be attractive and the chairs and tables should be suitable for continuous reading.

(e). Open access: Access to the library shelf should be unrestricted so that the readers can go to the shelves and pick out the book most suitable.

(f). Co-operation of library staff: Staff should be congenial towards the readers and should always be ready to help the readers.

2. Every Reader his Book (Second Law)

According to Ranganathan, if the First Law replaced the concept that, "books are for preservation", the Second Law widens the concept that "books for the chosen few." If the approach of the First Law is from 'books' point of view, the approach of the Second Law is from 'users' point of view. It emphasizes the availability of library services to every kind of reader, irrespective of age, sex, vocation, the capacity for self help and the ability to read.

Implications of the Second Law It imposes a number of obligations on:

- a) The State,
- b) The Library Authority,
- c) The library staff, and
- d) The readers

(i). Obligation of the State:

Establishment and maintenance of library systems and their development along proper lines is a State's responsibility. To meet this responsibility, the State has certain obligations. The first and the foremost is the library legislation. Through library legislation, the State can create the public library system in different areas by its policies and decisions, which makes adequate provisions regarding library cess, percentage of the cess to be collected from the people and grants to be given by the Government for library system. Legislation leads to cooperation between libraries in a State and integrates them with State Central Library at the apex. This type of coordination strengthens their resources through interlibrary loan, which enhances the efficiency and standard of service for the readers.

It also recommends making a provision for

- Union Library Act
- National Central Library Law
- Finance

The Law desires an integrated library grid (horizontal and vertical levels) of public library system.

(ii). Obligation of Library Authority:

The choice of the books and choice of the staff are the two necessary obligations of library authority

- ❖ **Choice of Books** Selection of books is determined by the demands of the users. Demand refers to the selection of reading material for a given library. It is the duty of the library authority to make necessary provisions to build up collection for the community to be served. A comprehensive user survey of different groups of people can be done in this respect. This will help to build up collection according to the tastes and interest of the readers.
- ❖ **Choice of Staff** Careful selection of books is not an ultimate aim of the library. To exploit these resources, competent library staff is needed. Only competent staff can satisfy the user's requirements and be able to locate books and other materials that they want. To implement the Second Law, the library authorities should make all possible efforts to recruit well qualified library staff at the stage of planning.

(iii). Obligation of the Library Staff :

The objectives of Second Law cannot be achieved unless the library staff discharge their obligations in an efficient manner. To perform their duties, the library staff has to adopt certain attitudes and practices to realize the word "His". Providing reading material is not the only duty of the library staff. The staff must ensure that readers get the material of their interest before leaving the library.

(iv). Obligation of the Reader:

The Second Law imposes certain obligations on the reader towards library. It is the duty of the reader to follow the rules and regulations of the library in order to use and utilize library resources in an effective and efficient manner. Thus, by fulfilling above listed four obligations, it becomes possible to provide every reader his book. The Second Law recommends that all the libraries of a country/region cooperate with each other and work as a single system. The entire documentary resources of a country should be regarded as a single pool of knowledge. Every book lying idle on the shelf of any library should be made available to readers.

3. Every Books its reader (Third Law):

The third law 'Every book its reader' point out the ultimately the book is meant for reader and not for filing stack room. It relates to the finding out for every book in the library. Books cannot reach the hands of the readers by their own accord so it is the duty of the librarian to bring the readers into contact with the books. The third law is to be achieved by the following factors:

- **Proper cataloguing:** Proper cataloguing can also help in the use of books. A classified catalogue with analytical entries for all the hidden subjects in a book will go a long way in this direction.
- **Book selection:** Book selection should be for all users. Books which are not likely to be demanded by readers should not be selected for procurement.
- **Publicity:** The librarian should take care to draw the attention of the readers to those valuable books which lie unused and uncared for long period. Besides he must give prompt publicity to new arrivals of books. This could be done by inserting a notification in the press or by periodical circulars, notices and display, etc.
- **Open access:** Open access of Bookshelves can also help a lot in this respect. Shelf Arrangement The Law emphasizes the need to arrange the books on shelves in classified sequence based on their thought content. This arrangement brings books on the same subject together for easy browsing. If the shelf area is provided with well devised guides and labels, the use of each item increases.

4. Save the Time of the Reader (Fourth Law)

This Law requires that there should be no time lag between the demand received from the user and the document supplied. This Law makes its approach from the point of view of the user. It almost completely centres on the user from the moments he/she enters the library to the moments he/she leaves it. The objective of this Law is to save the time of the reader. To provide better services, it is required that, latest technologies in library operations be adopted and users be trained to use them independently.

5. Library is a Growing Organism (Fifth Law)

The fifth law is Library is a growing organism. Dr. Ranganathan compares library to a growing organism. In a living organism the growth is of two kinds: the child growth and the adult growth. We can notice that child growth is characterised by increase in physical dimensions and it is fast and visible. On the other hand, the growth in adults is mainly in the nature of replacement of cells. It is a kind of internal qualitative change, which may not be perceived, and as such, not visible. When we say library is a growing organism, we mean that library is not a static entity, but a dynamic growing entity.

- a. **Book Stock:** In the initial stages of development, the growth of books including the periodicals will be rather fast. This naturally impacts the size of the stack rooms, size of card cabinets, size of the catalogue room, number of periodical display cabinets and the number of book racks for accommodating the books.
- b. **Readers:** When the library functions properly in keeping with the spirit of the first law of library science, the readers of the library are bound to grow. That means the readers need proper facilities by way of reading space etc. and new types of services need to be organised.
- c. **Staff:** The staff should be provided with opportunities to receive training in new areas of professional development. The motto of the staff should be to render efficient service and save the time of the readers. For this purpose, constant updating of skills and growth in professionalism by learning innovative techniques and new areas of professional development is necessary.
- d. **Classification and the Catalogue:** The fifth law also advocates that care be taken while planning and designing a library building by making provision for the expansion of the building both horizontally and vertically. The need for more space often arises sooner than anticipated and lack of provision for expansion would block the development of library.

Need of the Laws of Library and Information Science

In the past, before the formulation of library science laws there was no evidence of an overall view of libraries. It looked as if future development were totally unpredictable. By proposing the laws Ranganathan solved the problem. The basic needs of the laws of library science are given below:

- **Give Pressure at the Subconscious Level to Work:** Scientific methods are applicable equally in both natural and social sciences. The only difference lies in the status of the basic principles. These were hypotheses in the natural science and normative principles in the social sciences.
- **Helps Library Science to Become an Independent Subject:** A subject cannot stand in its position unless some fundamental laws are not attached to it, so by proposing the laws Ranganathan put the first stone in this direction.
- **Denote Library Practices:** Laws of library science contain in a latest form all the library practices of the past and the present and those which are likely to be evolved in the future.
- **Serve as a Higher Court:** These laws are applicable to any problem in the areas of library science, library service and library practice.

Challenges Faced by LIS Professionals

Over the past few decades with the advancement in the information communication technologies (ICT's) the nature of library and information environment and the mode of services has changed drastically in a dynamic way. The library has shifted from the traditional library to automated library, then hybrid library and then to digital library and virtual library and presently, it is shifted to Library 2.0 and Library 3.0. Whatever be the structure of the library its philosophy is the same but the actions are changing. They normally act as an important centre of cultural heritage, to promote thinking ability, to educate people, to enlighten people, to know the world and helps to buildup human networking. To achieve this, LIS professionals:

- Should be imaginative and take risks
- Be independent and flexible
- Read constantly and experiment endlessly
- Be Learning and be self-teaching
- Have an understanding of potentials of ICTs
- Have an understanding of Human Factors
- Observe the professional developments, try to adopt and share with colleagues
- Have the functional roles for resource discovery, resource provision and resource delivery.

In present day environment, professionals owe much greater responsibility to be effective information professional. Closer look at the existing skills of the professionals reveals that for facing the challenges of today and tomorrow, they not only need to acquire wider range of skills but also need to keep themselves up-to-date.

LIS Curriculum

Curriculum is the core of the reform. Most of the library schools and departments have revised or in the process of re-designing their curricula. In their curricula, courses relating to traditional library science with names such as "History of books" and "Libraries" disappeared. Instead, many computer-related courses were added.

India has a National Policy on Education in general, but there is a dearth of National Policy in LIS. There is also an absence of a national body to make projections for manpower requirement at different levels. The Working Group on Libraries in 2009 raised a new hope in this regard by recommending the permanent National Commission on Libraries. It also recommended revising and revamping LIS education and training and encouraging research. Since its inception in 1956, the UGC set up the following committees for improvement of LIS education vis-a-vis services:

(a). Ranganathan Committee (1967):

The recommendations of this committee incorporated the provision that the UGC as well as the state Government should offer financial assistance to the college and the university libraries for purchasing the required books, periodicals, etc.

- The committee proposed the formula that funding be given at the rate of Rs. 15 per enrolled student and Rs. 200 per teacher and research fellow.
- The initial library grant in case of new university or department was also recommended in the report.
- The committee emphasized that open access system should be introduced in every academic library.
- The committee opined that: “reference service is the essential human process of establishing contact between the right reader and the right book by personal service.
- Reference service is vital in promotion of reading habit in student [therefore] each library should provide an adequate number of reference librarians to function as library hosts and human converters”.

Besides these, the committee also suggested the copying facilities for book/reference material, the appointment of regular committee to investigate the standards at various levels of teaching, examination and research work as well as the regular appointment of full-time teaching faculty in place of part-time teacher. The report of the committee incorporated certain standards in its recommendations that the reader receives the book within two weeks after releasing and due library process, the assessment period of periodicals ought to be three years, the management of regular staff, the proper of books, the co-operation between university and college level library located in the same region as well as the allocation of annual recurring grants in consultation with the concerned librarian along with the faculty members.

(b). University Grants Commission (1953):

The role of UGC is noteworthy in enriching the academic libraries in higher education through financing as well as the systematic planning and vital leadership. UGC allocates grants to number of universities for building construction. In addition to this, a liberal financial assistance has been ensured based on a tentative formula of Rs. 15 per student and Rs. 200 per teacher and research fellow for the annual purchase of books. The new university libraries are granted a special initial grant. UGC has helped the professionally qualified academic libraries to get better pay scales equal to the teaching members of the university (Bhatt 130) UGC has been allotting more funds for the development of academic libraries. The provision was made to initiate the work for this function in the 5-year plans of the country.

(c).INFLIBNET:

UGC has established a national information network named INFLIBNET in 1986 at Gandhinagar. It functions the information communication of the libraries of all universities, higher educational and research institutes of our country. The centre INFLIBNET updates the libraries of universities and college at national level. The task of automation of libraries, digitization of resources, software development of libraries and conducting training programme, etc. are well-managed by this centre. The more considerable step towards advancement in this field is the development of software for university libraries (SOUL) which is available free of cost to INFLIBNET members. The centre has developed Shodhganga, a reservoir of Indian theses which has a database of thousands of theses from a number of universities across India.

(d). Kothari Commission: (1964-66)

Another significant change initiated with „The Education Commission“ under the chairmanship of Dr. D. S. Kothari. The commission paid due attention towards the development of university libraries and stressed on positive steps to modernize the framework of library. The committee introduced norms for financial support and suggested required equipment in the library, facilitating the students for the better use of books, proper documentation and inter-disciplinary communication. The report of Kothari Commission ardently mentioned that: “nothing can be more damaging than to ignore its

library and to give it a low priority. No new college, university or department should be opened unless adequate numbers of books in the library are provided”.

Impact of ICT on LIS Education

During the last few years, it seems in India a major changes as regards to LIS profession and professionals. India is a significant place in the world as regards to its history of vastly developed civilization and culture and way of life. But, in current years, India is having all types of libraries, which are located at the well-known places of learning. They include State Central libraries, Regional libraries, Oriental Manuscript libraries, and libraries attached to educational institutions, Research centers, Religious/Cultural organizations, Learned Societies and libraries managed by private organizations.

LIS curricula need to consolidate ICT concepts, knowledge, skills and proficiency into core competencies, and LIS schools need to provide adequate content and practice that will enable LIS graduates to adopt and use of ICT application in effective manner. The use of electronic resources in teaching and learning positively impacts the delivery of LIS modules. Some of the new approaches, methods, techniques and instructional resources/tools of teaching/learning, when innovatively used, not only make it easier for students to learn. But also insidiously acquaints students with the ICT tools.

The IT revolution of 1990s had major impact in the syllabus of BLIS/MLIS level courses of all the universities in India UGC and various State Universities also changed the NET & SET syllabi for library and Information Science subject and the major changes were made in 2000s.

ICT-Components and impact on society.

- Computer- Components and Impact on Libraries, Operating Systems.
- Network & Networking, ISDN, OSI.
- Library Automation, bar coding technology.
- Internet, Search Engines, DOI, OSS, Institutional Repositories.
- National & International Information Systems, NISSAT, NASSDOC, NISCAIR, DESIDOC, MEDLARS etc.
- Telecommunication Technology.
- Types of e-Resources.
- Web 2.0, Semantic Web, Website development.

According to CISCO's definition quoted by Jeevan eLearning is over searching umbrella that encompasses education, information, communication and training. It is the web enabled system that makes information and knowledge to those who need it; they need it-anytime, anywhere.

Problems of LIS Education

Library Science programmes at the university level have existed for more than six decades and have strong roots, but the profession still suffers from many problems, which are affecting the status of LIS profession. The most important is an urgent need for a national level accreditation body. Not much has been done, even with the establishment of the National Assessment and Accreditation Council (NAAC). There is a need that all the organizations running LIS courses without adequate facilities be abandoned. Other problems requiring discussion by the UGC and other national level professional bodies are discussed below:

(a). Accreditation : To achieve academic excellence, it is of utmost importance that standards and norms of education be prescribed and adherence to them be made mandatory. Unfortunately, there is no national accreditation body for LIS education in India. As a result, new LIS schools are opening at a fast pace following different patterns of education and without the basic minimum facilities, resulting in mass production of professionals with sub-standard education and having least or no exposure to practical librarianship. In principle, no new LIS school should be established without the approval of such an accreditation agency. This agency should be responsible for recommending

minimum standards in terms of faculty strength, intake criteria, teacher-student ratio, evaluation methods, library and laboratory facilities, availability of teaching materials, finance and physical facilities, etc.

(b) Mushrooming of Library Schools : There is no check and balance on the emergence of new LIS schools; and this results in a large number of institutions emerging without offering the basic facilities. Emergence of such institutions has resulted in mass production of substandard library professionals and thus, creating an increasing problem of unemployment in the job market. In some universities, the trend of paid seats has started. The scenario in many universities that conduct distance education is not very promising as they do not have adequate number of teaching centres and computer laboratory, as well as feedback from students. This has resulted in a passive teaching-learning processes. Competition in the job market is increasing day by day as production is much more than the demand.

(d) Lack of Library Facilities: Many LIS schools have either no library at all, or a library with inadequate collection of text-books, reference books and practical tools (classification schemes, cataloguing codes and list of subject headings). Availability of the latest editions of textbooks and reference sources is altogether out of question. The library, for library science students is like a workshop or a laboratory to do practical assignments, learn and create new things. No library science school should be established without having an adequately equipped library, required for day to day practical classes.

(e) Dual Responsibility: In 1979, the UGC Panel on Library and Information Science recommended for the independent status to the LIS departments but in some states such as Maharashtra and Karnataka, professor of LIS is also in charge of the university library, thus, holding dual responsibility. This is not a healthy practice and is against the recommendation made by the panel.

(f) Information Technology Laboratory: The majority of the LIS schools, particularly after the submission of the Curriculum Development Committee (CDC) report in 1992, are offering courses on computer applications to prepare students for the electronic information environment; unfortunately most of the schools do not have well-equipped computer laboratory. Competent professionals cannot be produced with merely theoretical exposition; they require adequate practical exposure by working in a well-developed computer laboratory. Practical training for computerized routines such as house-keeping jobs, provision of information services, Internet access, Online and CD ROM searching, etc., is required.

(g) Students' Selection Criteria : Library and information science is slowly becoming popular, students with better qualifications are joining the course but they are not enthusiastic in opting for library science as their first choice. Therefore, more attention towards selection criteria is needed to attract the best brains. Even to attract middle level talent, incentives like scholarships and fellowships are needed. Merit (as in many universities) should not be the only criteria for admitting the students. Admission test and interview should be adopted to select appropriate students, with pleasant personality, good general knowledge, communication skill, inborn love for books, aptitude towards librarianship and desire to serve others.

Emerging Trends

With the growth and development of LIS education, various trends are emerging, as listed below:

- ❖ Departments are carefully viewing their curriculum to put more emphasis on emerging areas like computer and communication technologies, and reducing emphasis on traditional techniques like classification and cataloguing.
- ❖ Departments have started establishing their own computer labs and are emphasizing upon practical training on the use of IT, making the students

competent to work effectively and efficiently in the electronic information environment.

- ❖ The trend of offering two-year integrated courses is emerging to eliminate duplication of course contents at BLIS and MLIS levels and providing sufficient time for teaching computer and communication technologies, and relating it to library work through practical training.
- ❖ The beginning of PG Diploma courses in some specialized areas, like Archival and Documentation Management, Library Automation, Networking and Information Technology, etc.
- ❖ With the introduction of Information Science curricula, there is greater emphasis on teaching LIS related to information organizations that offer specialized services. As a result, Data Banks, Information Analysis Centres, Translation Centres, Patent Libraries have marked the beginning of a new milestone in the global view of information activities.
- ❖ Like industrial and production management, quality standards are also now being applied to libraries, leading the trend of emergence of ISO certified libraries in India. Therefore, LIS departments are also introducing components of total quality management in curriculum.
- ❖ More LIS departments are getting independent status and privileges like other departments of the university in terms of full-time teachers and full-time head.
- ❖ To face the technological challenges, more existing faculty members are engaging themselves in computer and IT related courses. New faculty positions are created and filled up with the LIS professionals having computer and IT related qualifications. electronic information environment.

Conclusion

Library and Information Science Education as a field and area of study is indispensable in this competitive era of knowledge and information management and the technological advancement in the area of ICT has made significant changes in the profession towards achieving the desired objective and to meet up with the modern trends of effective information services delivery. Library and Information Science are very essential for the development of a society. It helps in overall personality development and quality of life of a human being. It also helps in the preservation and conservation of cultural heritage of a country. The information as resource is very crucial for the development of a country. The libraries are responsible for socio-economic development. Now a day, progress of a country is measured on the basis of "information rich" or "information poor". LIS can also be seen as an integration of the two fields – library science and information science, which were separate at one point.

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16

A COMPARATIVE STUDY AMONG MOTOR FITNESS AND NUTRITION STATUS OF HIGH SCHOOL BOYS

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Abstract

Concept of Physical fitness is as old as mankind. Keeping in mind the survival of fittest, down through the ages, only strong and agile people can defend invader, protect themselves and their property. It is a hard fact that physical fit people are in a better position to bear the rigorous and abnormal stress and strain than those who are less physical fit. The basic movements like running, jumping, climbing, throwing, lifting, etc. require specific physical attributes such as muscular strength, muscular endurance, cardiorespiratory endurance, strength balance and coordination.

In spite of the interest that the dynamic and reciprocal interrelations between nutrition, physical activity, body composition and physical fitness have always evoked, their recognized public health relevance and hypothetical socio-economic importance, it is surprising how incomplete and often conflicting is still at present our knowledge of the mechanisms involved in their regulation.

Keywords: *body mass index, motor ability status, nutritional status, overweight, obesity*

Introduction

Doing physical activities is advantageous for physical health. It increases the capacity of the body. It leads to many health benefits of health. People with the best physical fitness are less prone to diseases. It also leads to psychological benefits. It improves mood and self-esteem and reduces anxiety, depression, and stress. Adopting a physical activity results in a positive environment and positive mood. It also impacts health positively. Doing physical exercises is not easy; there are many challenges and barriers in front of you in the beginning. Once you indulge in the **motor fitness test** and do physical fitness, it modifies your physical health. Identify the barriers in physical activity, increase your self-efficiency, set your goals, make plans for your setbacks, and make your self-monitoring progress.

Nutrition plays an important role in physical fitness and health. Nutrition is related to the body's intake and consumption of food. Food is the prime necessity of life. It also affects growth and development. It is related, through its various processes, to posture, fatigue, body size and physique, mental health, organic development in general and resistance to disease. There is an indirect relationship with ability in motor learning and performance and even some evidence of relationship with personality development.

Physical fitness is necessary for everyone to maintain their body. Physical and psychological health is maintained positive with the help of general motor fitness . The general motor fitness test includes six beneficial components: health and ability.

(i). Coordination:

Making bodies and senses move accordingly to produce fluent and controlled movement. It is our body parts synchronisation to enhance motor skills.

Example: hand-eye coordination in volleying a table tennis ball, hitting a ball, juggling.

(ii). Reaction Time:

In the shortest period, the ability to respond to any event or happenings. It is the interpretation and reaction to an expected or unexpected situation.

Example: Sound of a pistol makes people run here and there; it is an expected event. A bicycle in front of you, your reaction in this situation is an unexpected event.

(iii). Agility:

The body can change direction and stop quickly. A person can control their direction and body's position during momentum.

Example: Doing sprinting by changing course to tennis ball.

(iv). Power:

Our muscles can transfer energy to apply force as fast as possible. Speed and muscular force, when combined, power is formed.

Example: Gymnast performance on rings and uneven bars, throwing or lifting heavy objects or weights.

(v). Balance:

It is the ability to hold on to a particular position without falling. It includes stabilising the body while standing or maintaining motion. There are two types of balance- static balance and dynamic balance. Ice skating, bicycle, and skiing are exercises of balance.

Static Balance, i.e., is the upright remaining while staying still or standing on one leg. Dynamic balance is the stability in motion.

(vi). Speed:

It is the ability to move the limbs in the fastest possible time. It is the ability to move your body swiftly. It is associated with running and other exercises like throwing or kicking a ball, depending on the hand movement.

Motor fitness test:

In the **motor fitness test**, school students of 17 years of age are considered. Andre advised to warm up themselves before participating in the test, stand all the students must be medically fit.

The **general motor fitness test** includes:

(a). Pull-Ups (For Boys):

It is done to measure the strength of the f shoulders and arms. In this test, the bar is adjusted according to the boy's height, and the bar is held with the palms facing away. The boy is asked to pull his body up so that his chin reaches the bar's level. Everyone who pulls up is awarded by one point. One trial round is also given before starting the test.

(b). Flexed Arm Flange (For Girls):

It is done to measure the strength of the arms and shoulders. The bar is adjusted according to the girl's height, and the bar is held with an overhand grasp. The girl is asked to lift her body till her chin reaches bar level. The Score is provided as per the time in seconds; she holds the bar.

(c). Flexed Leg Sit-ups:

This test is done to measure the strength and endurance of the abdomen. The student is asked to lie on the floor by making a 90 degrees angle of knees. The hands must be held behind the head with interlocked fingers. Another person holds the feet. The student is then asked to curl up and touch the knees with an elbow. The score is counted as per the sit-ups done in 60 seconds.

(d). Shuttle Run:

It is used to measure speed and agility. Two parallel lines are drawn behind which two wooden boxes are kept. The youth has to run and pick the wooden box at the initial lines two times. The score is counted in which the student took less time.

(e). Standing Long Jump:

It is done to measure the power. The student is asked to stand behind the initial line with feet apart and, before jumping, bend the knees, swing the arms, and land on both feet. The distance in inches is measured.

(f). 50 Yard Dash:

It is done to measure the speed. The student is asked to run 50 yards from the initial line and the total time to complete 50 yards.

(g). 600 Yard Run-Walk:

It is done to measure endurance. The student is asked to either run or walk 600 yards. The time is measured either in minutes or seconds.

Objective

- Prime objectives of the study were to study motor fitness and Nutrition status of High school boys.

Methodology

The aim of the study was to find out The Interrelationship among Motor Fitness Nutritional Status of High School Boys. To achieve the aims and objectives of the study there was a need for selection of subjects, samples, samplings techniques, tests and measurements for the collection of related data.

Selection of Subjects; For the purpose of present study seven hundred eleven (N=711) high schools boys were selected in Tumakuru district. The total subjects were randomly selected from urban area schools and rural area schools of Tumakuru district.

Motor Fitness Variables and Criterion Measures

Sl. No.	Indiana Motor Fitness Test Variables	Motor Fitness Variables	Criterion Measures
1	Chin-ups	Arm and Shoulder Girdle Strength Endurance	Maximum numbers
2	Push-ups	Arm and Shoulder Girdle Strength Endurance	Maximum numbers
3	Standing broad jump	Leg power	Centimeters

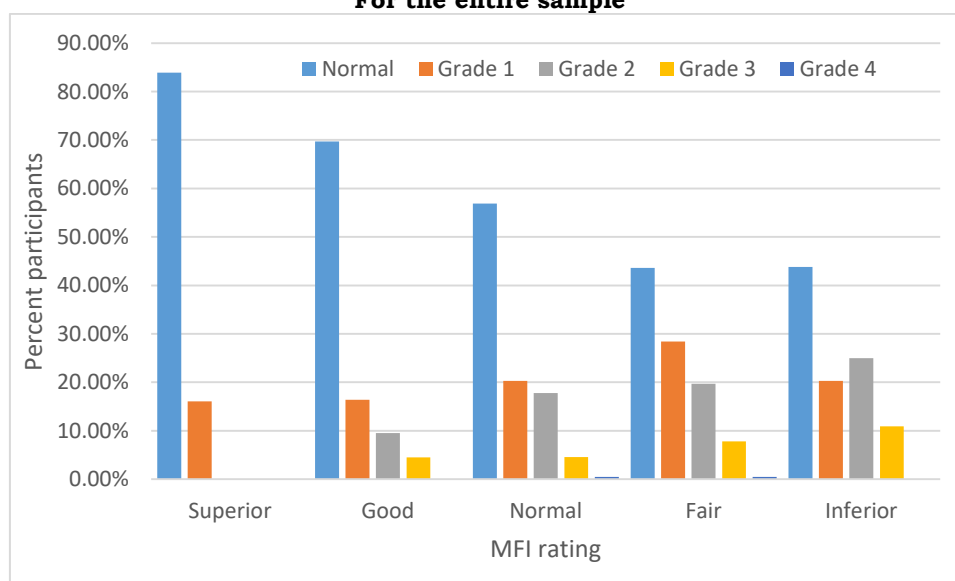
Sl. No.	Study Variables	Tools	Criterion Measures
1	Nutritional Status	NCHS Standards (IAP)	Percentile value

Table : Frequency and percent responses for Nutritional Status by Motor Fitness and results of cramer's V test for the total sample

Nutritional status grading		Motor fitness rating					Total
		Superior	Good	Norma 1	Fair	Inferior	
Normal	F	26	140	112	95	28	401
	%	83.9%	69.7%	56.9%	43.6%	43.8%	56.4%
Grade 1	F	5	33	40	62	13	153
	%	16.1%	16.4%	20.3%	28.4%	20.3%	21.5%
Grade 2	F	0	19	35	43	16	113
	%	0.0%	9.5%	17.8%	19.7%	25.0%	15.9%
Grade 3	F	0	9	9	17	7	42
	%	0.0%	4.5%	4.6%	7.8%	10.9%	5.9%
Grade 4	F	0	0	1	1	0	2
	%	0.0%	0.0%	0.5%	0.5%	0.0%	0.3%
Total	F	31	201	197	218	64	711
	%	4.3%	28.3%	27.7%	30.7%	9.0%	100.0%
Test statistics		CV=.134; p=.000					

On the whole in Nutritional Status we find 56.4% of the selected sample as normal, 21.5% of them were in Grade 1, 15.9% of them were in Grade 2, 5.9% of them were in Grade 3 and remaining 0.3% in Grade 4. In Motor Fitness we find that only 4.3% of the sample fall under superior, 28.3% of them fall under good, 27.7% of them were in normal, 30.7% of them were fair and remaining 9.0% of them were in inferior. When Nutritional Status and Motor Fitness were associated a significant association was observed between them ($CV=.134$; $p=.000$), indicating a mutual agreement between Nutritional Status and Motor Fitness

Figure : Percent responses for Nutritional Status by Motor Fitness For the entire sample



Statistical Analysis

The data collected were later subjected to statistical analysis using descriptive statistics like frequency and percentages, mean and standard deviations. Inferential statistics included in the present study are Cramer's V, ANOVA-one way and two-way, and Scheffe's post hoc test. Along with descriptive and inferential statistics, graphical presentations have been depicted wherever necessary.

Results: In Rural sport participants, a significant relationship was observed between Nutritional Status and Motor fitness, indicating a mutual agreement between Nutritional status and Motor fitness.

The hypothesis concerning Nutritional status and Motor fitness of rural high school sports participant's, is rejected as the obtained correlation coefficient was found to be statistically significant.

Conclusion

Sports have become a part of human life and living. To take part in sports and games is one of the very common traits of human character and it starts developing from early childhood. But with the development of age, very few people dedicate themselves to become true sports persons by serious practice and training on regular basis, whereas some people take it as their recreational activities or participate in amateur sports. Physical fitness may be defined as the ability of the human organism to function effectively as well as efficiently. The different components of physical fitness have specific contribution to total quality of life and healthy existence. These components of physical fitness including

muscular strength and endurance, cardio-respiratory endurance, speed, agility, balance, flexibility, power etc. constitutes the characteristic feature of an athlete and determinant factor of athletic performance. The interaction of these physical fitness components under a wide range of conditions plays an important role in sports performance.

The investigator conclude that there is a relationship between Nutritional status and Motor fitness in high school sports participants of urban and rural area. Nutritional status of urban sport participants do not have relationship with Motor fitness. There is no relationship between Nutritional status and Motor fitness in rural sport participants

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17

IMPORTANCE OF VISION AND INNOVATIVE APPROACH FOR EFFECTIVE LEADERSHIP IN HUMAN RESOURCE MANAGEMENT- A BRIEF STUDY

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Abstract

Innovation is an art of responding the market and technological challenges and the future trends of business for organizations in most suitable way that can lead organizations towards long term success and sustainability. It is necessary to make the products, services and business model compatible with the potential market demands and customer needs in order to meet the organizational goals and sustainable development. Leadership is one influence, one work of art and the process of impact on people, in sense that those who are affected are voluntarily and willingly participating in the creation of new values in the organization.

Keywords: Leadership, Motivation, Management, Human resources management, Employee satisfaction.

Introduction

Today's managers nobody needs to remind that we are living in a global economic environment that is more complicated and subject to changes. Every year, new technologies, markets and competitors in an increasing extent appear. The emerging threats and opportunities are more difficult to guess. In addition, we live in an extremely complex and interdependent world in which for the business success is extremely important quality of relationship with strategic partners, external and internal customers and other stakeholders. While the future development is extremely difficult to predict, there are two trends to be predicted with great care. The pace of change continues to grow as well as their complexity and interdependence. Nearly a decade experts have been aware of upcoming trends and even talked about creating an agile company, i.e. organizations that anticipate and react to changing business conditions by harmonizing of highly productive internal and external relations.

To ensure success, companies must develop a more agile way of organization that is in line with the increasing level of complexity of the business environment, although for most companies this is still just more aspiration than a reality. It is therefore necessary to develop leaders that are more agile and something like that includes the ability of effective leadership in the complex conditions of constant changes. The survey showed that only 10% of managers have a satisfactory degree of agility that is required to operate in turbulent economic times.

Leader vs. Manager

Management and leadership are different but both are important. The challenges faced by modern organizations include the full reality of management and the commitment to modern management towards the attractive vision.

In American literature is very popular definition of the difference between a leader and manager who is a pun: the leaders are doing the right things, and managers do things

right. Although popular, this definition is certainly not sufficient and complete, because it assumes that the positions of leaders and managers are at the opposite sides, but that certainly is not the case in organizations, given that any business environment needs the work of leader and manager. They are not competitive but complementary. Organization requires both in order to prosper. Strong leadership and weak management and vice versa, can easily lead the organization at risk. The consequences of strong leadership and weak management in a complex organization are:

- Strong long-term vision with no short-term planning and budgeting
- Almost cult culture in the organization without a lot of the specialization, the structure and rules
- Inspired people who rarely or never use the control systems and solving problems discipline.

The situation in these organizations often goes beyond control. When there is no respecting the limits of work, approved budgets and promises given to consumers, the real threat to the organization grow. The consequences of a strong management and a poor leadership in a complex organization are:

- a) Insisting on short-term period, details, eliminating the risk, and ordinary rationality, with small focus on the long term, large scale strategies that involve risks, as well as human values
- b) A strong focus on specialization, the work is much more important than people, while they are slaves to the rules, with a minimal insisting on the integration, alignment and personal involvement of people.
- c) Control and prediction are in the foreground, growth, training and inspiration are not.

The situation in these organizations is a rigid, non-innovative, and therefore the organization is unable to cope with changes in market or technology. If a company has a strong market position, performance is deteriorating slowly, if does not - very quickly

Importance of Vision and Innovative Approach for Leadership

The success of the entire business depends on the most important resource of any organization which is certainly human resources. They are creators and makers of new technical, technological and organizational solutions, creators of new values, controllers of working process and development of business systems. Precisely, the role of a leader is to motivate its co-workers to their potential contribution in achieving the objectives of the organization. Leadership and motivation are key factors influencing the success of the organization, as well as employee satisfaction. Therefore, the connection and interconnection of successful leadership and proper ways of motivating employees are essential for all organizations.

There are different theories presented by the scholars to explain and identify the characteristics of leadership in an organization, in terms of their effectiveness.

(i). Contingency Theory

Fiedler presents the contingency or situational theory of leadership by highlighting the three important factors which has effect on the performance of leaders. Some of them are listed below:

- ❖ **Leader-Member Relations:** It describes that what are the relations between employees and the leader and up to what extent the employees have trust on leader's and how much the leader can attract h/her employees and subordinates and up to what level the leadership is source of inspiration for them.
- ❖ **Task Structure:** This factor talks about the nature of jobs for employees whether they are routine or non-routine, in order to manage and get the maximum output of employees work.
- ❖ **Position Power:** The position power is the power of leadership which she/he has in the organization. The leadership with the power of decisions and their

implementation is needed to handle and manage the organizational issues with confidence.

(ii). Path-Goal Theory

Path Goal theory claims that the most successful leaders are those who keep their employees and subordinates motivated defining and making the path of work clear to them through their clear vision. The main characteristics of a leadership according to this theory are to motivate their teams to meet the organizations goals by keeping control on the outcome of their work and activities. Leaders also appreciate the employees and give rewards on their good work, and to raise and maintain the enthusiasm by giving them confidence about their ability as well as to work.

(iii). Managerial Grid Theory

Robert R. Blake and Anne Adams elaborated the theory of leadership grid. This theory describes the concern of leadership with the customers demand based production by focusing the better management of teams by leadership styles. This approach may be difficult to implement in certain circumstances. In the theory leaders keep their teams motivated and flexible to realize the need of change and accept it.

(iv). Leaders Style Theory

This model highlights the urge of high quality decisions in organizations, which are well acceptable for both employees and leaders. In this model different ways are described for leaders to make appropriate decisions. This model also guides leaders in finding the level to which the employees can be the part of the decision making processes.

(v). Transformational Leadership theory

The transformational leadership means when leader transforms, or changes, he/her subordinates in three significant ways. These ways may lead to win the trust of subordinates for leaders. That can increase the output of their work and doing job activities which can help to achieve the organizational goals in better ways. Some main characteristics of transformational leaders are that they increase the employee's confidence and awareness so they can enhance their performance, and also make them able to understand their personal outgrowth and development. The transformational leadership also increases the level of dedication and motivation for employees to work for the betterment of organization in spite of their personal interest.

The qualities of transformational leadership may include:

- Ability to work as change agents
- Courage to take bold steps.
- Ability to trust on others.
- Value driven characteristics.
- Good learning abilities.
- Strong mental model to work in complex situation.
- A clear vision

From the above debate it can be seen that different scholars and researchers put the light on characteristics of leadership from different angles. There may be some difference in opinions and approaches to analyze these characteristics but all the authors agree on the point that the leaders must have some qualities to become effective leaders.

Effective Leadership Behaviors

So many Different leadership studies highlight the importance of effective leadership behaviors, whether they are based on under-graduates or commercial managers at every level in an organization. In short words, there are commonalities that emerge from this research time and again, which characterize positive behaviors and negative behaviors. Whilst there may be significant differences at the detailed level there seems to be a broad consensus of positive leadership behaviors:

- Effective project planning and management

- Conducts regular, effective meetings to set objectives, allocate tasks and review performance
- Identifying the right person for the right role
- Appropriate delegation of responsibility whilst retaining accountability
- Consults and includes others in decision-making
- Shows an interest in others and responding to their needs whether that is for more information, guidance, support, personal development, positive feedback or reward and recognition

Management Skills - Leadership Skills for Efficient Functioning of an Organization

The success and failure of an organization is directly proportional to the effectiveness of the management. The superiors must share a healthy relationship with the employees for them to deliver their level best.

Leaders need to acquire certain skill sets for an efficient functioning:

- ❖ Management needs to be **impartial towards its employees**. Rules and policies should be same for everyone. Favoritism is a strict no at the workplace. No employee should be granted special favors.
- ❖ **The superiors must ensure that employees do not fight amongst themselves**. Conflicts must be avoided at the workplace as nothing productive can be gained out of it. Make sure individuals do not have problems with each other and gel well. In cases of conflicts, management must intervene and sort out differences immediately. Make the employees sit face to face and let them discuss things amongst themselves.
- ❖ **Make sure employees adhere to the rules and regulations of the organization**. Set clear objectives for the employees. Targets must be predefined and the employees must know what they are supposed to do at the workplace. Discipline must be maintained at the workplace. The employees must come to work on time and strict action must be taken against those who do not follow company's policies.
- ❖ **Be a good listener**. The management must interact with the employees more often. Such initiatives go a long way in motivating the employees and make them stick to the organization for a longer span of time.
- ❖ **The "Hitler approach" does not work in the current scenario**. Be a mentor to your employees rather than being a strict boss. Guide them in their work. Try to help them in their assignments. Help them come out with innovative solutions.
- ❖ **Motivate the employees from time to time**. Design lucrative incentive plans and schemes to bring out the best in them. Appreciate each time they do good work
- ❖ **The leaders must promote healthy discussions at the workplace**.

Roles for Effective Leadership in Organization

In any group, there are key leadership roles to be performed if the group is to function well. Sometimes those roles are assigned formally to particular persons. Sometimes those roles are assumed de facto by group members. When key roles are neither assigned nor assumed, a "vacuum" exists that usually creates problems for the group. A common example in groups is taking a decision without assigning anyone the role of being accountable for follow-through. The following are some key leadership roles and behaviors associated with performing that role well:

1. Inspiring others

- Providing a vision for action ("keeper of the vision")
- Identify "what" to accomplish, while leaving the "how" flexible.

2. Mentoring others

- Acting as a sounding board
- Championing staff in the organization
- Ensuring that staff have "risk-free" trial periods when learning new skills.

3. Supervising others

- Identifying and removing obstacles to performance
- Planning with staff for ongoing professional development
- Assisting with performance enhancement
- Providing feedback on performance
- Evaluating performance against agreed criteria.

4. Ensuring follow-through

- ✓ Summarizing and clarifying actions to be taken
- ✓ Monitoring implementation steps
- ✓ Setting time for review and evaluation of decisions.

5. Facilitating group process

- Clarifying the group task
- Ensuring that everyone's contributions are heard
- Safeguarding time parameters
- Assisting the group in reaching consensus
- Assigning follow-through responsibilities.

The Challenges of 21st century

In today's globalized society, leaders are faced with the challenges of a changed environment and with completely new and important issues of leadership. Some of these issues relate primarily to the leadership in the areas in which completely different culture, gender differences in leadership, online leadership, empowerment of employees, etc. cross each other.

(a). Development of trust

Leaders in today's environment are faced with an increasing effort to develop confidence with their subordinates to effectively perform the task. Trust is defined as the belief in the integrity, character and leadership ability. The followers who believe leader are vulnerable when it comes to actions of the leader because they believe their rights and interests will not be abused. Studies have confirmed there are five dimensions that make up the concept of trust:

- ❖ **Integrity:** Honesty and sincerity
- ❖ **Competence:** Professional and inter-personal skills and knowledge
- ❖ **Consistency:** Reliability, predictability and good assessment when it comes to managing the situation
- ❖ **Loyalty:** The desire to protect people, physically and emotionally
- ❖ **Openness:** The desire to share ideas and information freely

(b). Moral Leadership

Leadership is not free of value system so moral leadership includes means the leader is using in an attempt to achieve the objectives and content of these goals. Only recently have researchers and ethics of leadership began to consider the ethical implications of leadership. One of the main reasons may be a growing interest in ethics in all areas of management. Many corporate financial scandals have greatly contributed to the issue of ethics put into focus the issues of management and leadership. Thus, before assessing whether a leader is effective, it is necessary to consider the moral code of its objectives and means used to achieve these goals.

(c). Leadership Online

An important aspect of leadership is the online performance management, by definition, facilitating and encouraging. It is therefore important to ensure that all virtual team members understand the goals of the team, their responsibilities in achieving these goals and how to evaluate the achievement of goals. While these are important responsibilities of leaders valid for all situations, they are particularly important in a virtual working environment with no direct interaction that transmits expectations or points to problems related to performance. The biggest challenge regarding online leadership is a matter of

trust, because virtually Leadership provides numerous opportunities for the violation of trust.

(d). Authorizing staff

In modern organizations, there is the increasingly common phenomenon in terms of authorizing employees. Therefore, leaders, in addition to power and authority, transfer a portion of responsibility to employees. One of the main reasons for the transfer of the mode of liability is a more frequent need to make decisions quickly, and those people, who know most about certain issues - often to those at lower organizational levels, can do this in the best way. If the organizations need to compete successfully in a dynamic global economy, they must be able to make decisions and make changes quickly.

(e). Cross-cultural

leadership The conclusion from the study of leadership is that effective leaders do not use only one style. They adapt their style to a particular situation, and a national culture is certainly an important variable in determining the component, which will be the most effective style of leadership in modern organizations. National culture affects leadership style because it affects how followers will react, and therefore leaders cannot randomly choose their own style. From today's leaders primarily is expected to learn the business culture of the country where they are located.

(f). Differences in gender and leadership

More women are now in managerial positions, and many will continue to take the positions of senior management. Due to the increasing influence of the tendency of women to high positions, in recent years a number of studies on gender and leadership styles have been conducted. The general conclusion is that men and women really apply different styles. Specifically, women tend to implement more democratic and partipicle style. Women encourages participation, share power and information, strengthen self-evaluation of followers. They guide through inclusion and rely on their charisma, expertise, contacts, and interpersonal skills to influence others. Women tend to apply transformational leadership to transform others through the transformation of self-interest in organizational goals. Men are more inclined to use commanding and control style. They rely on the formal position of authority when it is necessary to influence someone.

Strategic Intelligence

The five elements of strategic thinking:

1. **Prediction;** - in today's changing environment it is very important to set a clear strategy of action and set the key parameters that shape the future. The business involves a sense of anticipation for the upcoming changes.
2. **Systems thinking** means a completely different way of looking at things, the ability to synthesize, integrate, conceptualize information prior of collecting different parts of the whole.
3. The vision involves a combination of prediction and systemic thinking in a holistic vision, and then creating a realistic vision of the world of business.
4. The motivation is the ability to get interest the employees to accept your goals and implement the vision. Many leaders have so-called hard skills, but sometimes it is important to have soft skills and to motivate your employees. Most leaders seem to improve the system, reward or punishment. Modern leaders must possess the ability to recognize what it is the thing that motivates individual employees.
5. Partnership, involves the creation of strategic alliances. Given the enormous financial and social changes, it is very important to understand the personality of today's leaders.

Looking back at the twentieth century, it can teach us much about what caused the successes or failures of the leaders of that time.

Conclusion

Leadership is a process by which a person influences others to accomplish an objective and directs the organization in a way that makes it more cohesive and coherent. Leaders carry out this process by applying their leadership attributes, such as beliefs, values, ethics, characters, knowledge, and skills.

Although your position as a manager, gives you the authority to accomplish certain tasks and objectives in the organization, this power does not make you a leader. It simply makes you the boss. Leadership differs in that it makes the followers want to achieve high goals, rather than simply bossing people around. The dominant problem today is the issue of human resources and motivation for work.

At the beginning it is important to determine the key factors that affect the success of the company and the employees' satisfaction; because we don't only have to create new knowledge in the enterprise, we have to especially encourage human resources to share their knowledge and experience with others. Human opportunities and knowledge, because they are undoubtedly great, are no longer in focus as much as motivating and encouraging constructive change of these opportunities in the function of achieving organizational objectives and development.

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SALES PROMOTION STRATEGIES OF ELECTRIC TWO WHEELER VEHICLES IN KARNATAKA-A STUDY

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Abstract

Broadly speaking promotion means to push forward or to advance an idea in such a way to gain its acceptance and approval. Promotion is any communicative activity whose main object is to move forwards the product, service or idea in a channel of distribution. It is an effort by the marketer to inform and persuade buyers to accept, resell, recommend and use the article, service or idea which is being promoted. Promotion is a form of communication with an additional element of persuasion. The promotional activity always attempts to affect knowledge, attitudes preferences and behaviours of the recipients i.e. buyers. The element of persuasion to accept ideas, product, services, etc is the heart of promotion. In any exchange activity, communication is absolutely necessary. You may have the best product, package and so on. It may have fair price. But people will not buy your product, if they have never heard of it, and they are simply unaware of its existence.

Keywords: *Communication, Sales promotion, Market strategy, Selling promotion*

Introduction

India is home to the world's fastest-growing e-scooter market, with more than 2.5 million e-scooter users. This burgeoning market presents a unique opportunity for dealerships looking to capitalize on this trend and make the most of the potential in this space. But how can you make sure your dealership stands out from the competition? What are some effective marketing strategies for an **e scooter dealership** in India? In this blog post, we'll explore five effective marketing strategies to help you reach your target market and maximize profits in the competitive Indian e-scooter market.

Strategy 1: Focus on Tier 2 and 3 cities

There are several effective marketing strategies that an e-scooter dealership can use to boost sales and gain market share. One such strategy is to focus on Tier 2 and 3 cities.

The well established electric scooter franchise in India often overlook Tier 3 cities due to lack of connectivity, but they offer a vast potential market for electric scooters in india. These cities typically proliferate, with large populations of young people and farmers looking for convenient, affordable transportation options.

An **E-scooter dealership** focusing on these cities can build a solid customer base by offering competitive prices and convenient financing options. Additionally, they should

focus on creating a good user experience, through marketing events, as this will be a crucial driver of word-of-mouth marketing in these markets.

Strategy 2: Use Influencers

Social media is a powerful tool that business owners can use to reach out to potential customers. Platforms like Instagram and Snapchat have a considerable user base in India, making them ideal for marketing e-scooters.

One way to make use of these platforms is to collaborate with influencers. It involves working with people with a large social media following and can help promote an **electric scooter franchise in India** to their audience.

There are a few things to keep in mind when choosing influencers to work with:

1. Make sure they have a relevant audience for your products or services.
2. Ensure that they align with your e scooter dealership business values.
3. Be sure to negotiate an agreement that is beneficial for both parties.

When done correctly, collaborating with influencers can effectively reach out to potential customers and promote your e scooters.

Strategy 3: Create a Unique Selling Proposition

Creating a unique selling proposition (USP) is one of the most effective marketing strategies for a successful electric scooter franchise in India . A USP is a feature or quality that makes your product or service different from and better than your competitors. In other words, it's what sets you apart.

For an e-scooter dealership in India, there are several possible USPs to choose from. For example, you could focus on offering the lowest prices, the largest selection of scooters, or the best customer service. Or, you could focus on being the only dealership in your city that sells a particular brand of scooter.

No matter which USP you choose to focus on, make sure it's unique to your dealership and that you can commit to delivering on it. Make sure your USP is prominently aligned with the **electric scooter franchise in India** that you have partnered with and in all of your marketing materials once you've determined what it is.

Strategy 4: Offer Test Drives

Dealerships could provide test drives to promote e-scooters in India and boost sales. It will allow potential customers to test the product and see if it meets their needs before making a purchase. An E scooter dealership should promote test drives through social media campaigns, events, and other marketing channels. Dealerships can also offer discounts or other incentives for customers who sign up for a test drive.

This strategy could increase sales and awareness of your products, as it will give potential customers a chance to experience the product before they make a purchase. Additionally, offering test drives can help build trust and loyalty between dealerships and customers, as customers can try out the product and see if it meets their needs.

Strategy 5: Collaborate with Local Businesses

An e scooter dealership must work with nearby businesses to reach the local market. It will give them access to a more extensive customer base and allow them to create a more comprehensive marketing strategy.

Some ways in which an **e-scooter dealership** can collaborate with local businesses include:

1. Sponsoring local events: This is a great way to get your brand name out there and show your support for the community.
2. Offering discounts: Many businesses are always looking for ways to save money, so offer them a discount on your products or services.
3. Collaborating on marketing campaigns: Brainstorm with local businesses how to promote your products or services jointly. It could involve social media, print ads, or even joint giveaways.

4. Selling to businesses: Offer special deals or discounts on bulk orders to local businesses. You can get your products into retail stores in your area.
5. Offering maintenance services: Many businesses will need their e-scooters regularly serviced, so offer them scheduled maintenance, repair, and parts replacement services at a discounted rate.

These are just a few ways to collaborate with local businesses. By developing relationships with business owners in your area, you can gain access to a larger market and better position yourself as a leader in the e-scooter industry.

A century ago, fuel cars replaced horse-drawn carts and redefined transportation. And with the advent of electric vehicles (EVs), we are now ushered into a new era of mobility. EVs are disrupting the automotive industry through constant upgrades and growing popularity.

The EV industry is evolving in a number of ways. The technology behind EVs is improving, and so are the supporting facilities. At the same time, consumers have become more aware of electric vehicles as a viable option for their next vehicle purchase. In addition to these trends, fuel prices are ever-increasing while prices of EVs continue to fall. This means that more people can afford to drive an EV.

EV business owners need to tap into this opportunity by marketing their products in the best way possible and increasing sales. But how exactly do they do that? Let's find out in this blog that'll simplify the marketing of electric vehicles for you!

Winning strategies for EV marketing

- **Leverage social media**

Social media is a great way to reach your potential customers as well as engage existing ones. Social media is a great place to build trust and credibility with potential customers who are sceptical about buying an EV.

Social media offers yet another benefit: it's fairly inexpensive when compared with other forms of advertising. Suppose you don't have a budget for paid ads on social media platforms like Facebook or Instagram. In that case, it's worth considering posting organic content like photos, videos, and blog posts that will attract attention from people interested in EVs.



- **Focus on email marketing**

Emails are great at keeping your brand top-of-mind with existing customers while also introducing it to potential customers who haven't heard of you yet. It's an easy way to inform your audience about new product updates, offers, or any related details. One important thing to remember is that the key to a successful email marketing campaign is personalisation.



- **Highlight customer reviews**



EVs are relatively new in the market; hence, most users are apprehensive about buying them. One of the best ways of overcoming this is by using ratings and reviews from existing customers. Reviews are a great way of building credibility and trust in the mind of potential customers. It's also a great way of increasing your brand awareness and sales. Positive reviews give potential customers the required confidence and assurance about making a purchase. Hence, it's imperative to include them in your marketing strategy.

- **Rope in influencers**

Still trying to figure out how to promote your electric vehicle business? Roping in influencers can be one of the best options to explore. Influencer marketing is an effective way to reach potential EV buyers. You can partner with influencers who have a large following and are passionate about EVs.

They can be used to increase awareness about your product, spread your message to a wider audience, promote your brand, and create content. The best thing about getting an influencer involved is that it will gain the trust of your potential buyers as they will relate more to the influencer.



- **Get your targeting right**

You need to get your targeting right to drive a successful EV marketing strategy. For this, you must better understand your customers by identifying their needs, pain points and preferences. This must be followed by mapping a proper buying journey for them. It would be best if you also considered the stage at which your potential customer is in their buying journey. These stages can roughly be as follows:

- Awareness- Looking for information about EVs
- Consideration- Trying to make a decision about buying an EV
- Conversion- Ready to buy the EV



You then need to create personalised marketing strategies for each of these customers.

Global marketing presents its latest EV model as the best electric car ever built and most of the OEM's structure receives the news with enthusiasm. The retail network is less passionate and certain sales consultant are really pessimistic. The car is sold as a "normal" one and complaints about price, range, charging points availability, recharging times and depreciation become harsher. Sales are far from expected, insiders explain that the EV was an "emission-offsetter" and business goes on as usual.



Living with these vehicles allows to learn more about Customer's perception and real-world advantages and constraints. I've already tested most of the electric cars on the market, so this time I went for something different: the new BMW C evolution. From outside, this electric scooter is very similar to the "regular" BMW C 600, from inside this is an entirely new vehicle that takes maximum advantage of the BMW i3 technology. Build to the most higher safety standards, the C evolution is a mature product, beautifully put together and with serious sales pitches (see the video at the end of this post). This scooter has the same range as most of mainstream electric cars (roughly 100 km), which means that by scooters' standards is a much better range value (about 50% of the range of a petrol scooter) than in cars. Between the too light "pedalec" compulsory electric drive in bicycles and the limited range of electric cars, scooters may be the type of vehicle most suited to electrification, right now.

For most of urban commutes, the range of the BMW C evolution is more than enough, especially if your journeys occur between charging points. In addition you can benefit from a vehicle fun to ride (see "dynamic mode" in the video) with very low operational costs (energy and maintenance), extremely silent, appealing and original. Customers love

the riding experience, like the product and are desiring to have it. The price seems to be the major inconvenient. I've seen more challenges to overcome in other EVs...

1) Communicate explaining.

EVs do not answer to all mobility needs but satisfy most of them. In frequent urban journeys under 100 km between charging points, EVs are much cheaper to use than an IC (internal combustion) vehicle, more pleasant to drive and less pollutant. In urban circuits, an electric motor offers a more "zen" drive because torque is available from low revs and there is no clutch and no gearbox. If you are driving an electric car, taking advantage of energy regeneration allows you to use only one pedal to accelerate and (nearly) stop the vehicle. These and other key-advantages of EVs must be explained and demonstrated in all communication opportunities.

Experimenting is a part of the Customers' learning process. Everybody needs to drive an EV to understand its advantages and lots of people didn't do it yet. Promote as many test-drive sessions as you can.

2) Don't sell.

Commercial pressure and appealing and detailed explanation don't combine. EVs need to be sold with a non-selling approach. Traditional car retail is so used to commercial pressure (incentives, campaigns) that is very difficult for sales staff to adopt consistently this approach. The "agency" retail concept with "Product Genius" used by BMW i seems a good option for EVs, considering the lower levels of product competition in this market segment. If your brand doesn't have this solution try to use sales EV specialists with large geographic reach.

3) Go social!

As we have seen before, Customer education is a priority in EVs marketing. Sales consultants should bet on social media to easily access their Customer base, using text, images and videos. They shouldn't use only brand content: Train them to create their own videos explaining in their own words, driving in recognizable roads. Let them be genuine but encourage professionalism.

4) Emphasize the "novelty".

Almost all vehicles are good vehicles but they are also very similar! Most Customers change their cars and motorcycles and don't get a radical new product. EVs are refreshingly new. New sensations, new economies and... New constraints. Although all innovations do have downsides, novelty is a selling argument.

5) Open your mind!

Most of EVs opponents miss some "petrol-pleasures" (e.g. sound, manual gearbox) and argue about the typical EVs' disadvantages (range, price and depreciation risks). Many industry insiders tend to be "technology nostalgic", missing carburetors when the injection arrived, V8s versus 4 cylinders turbo, manual parking brakes versus electronic and so on. I own a powerful "flat six" but I admit that EVs can be really pleasant to drive, as the Dynamic mode of this BMW C evolution demonstrates. The different Driving modes of this motorcycle are the equivalent to the IC engines' downsizing trend: small ultra-efficient engines allow great economy at low speeds, turbo and electronics allow great performances with consequent impact on fuel consumption. Customer choice how to use the engine.

Vehicle electrification is an unavoidable trend. From mild systems (start-stops) to full electrification, there are several options to consider and all vehicles will offer at least one of these solutions.

Conclusion

Overall, the ecosystem for a profitable electric scooter franchise in India is rapidly growing, and it's becoming increasingly important for dealerships to stay ahead of the competition. By effectively implementing marketing strategies such as content marketing, influencer outreach, online advertising, email campaigns and utilizing social media platforms, an **e-scooter dealership** in India can gain a competitive edge and increase their

customer base. With these strategies in place, dealership owners can build trust with potential customers and create an enjoyable buying experience that will keep them coming back for more.

The EV market is rapidly growing, and you'll want to be sure that you're doing everything in your power to take advantage of this opportunity. As you can see, there are many ways to get your EV marketing right. With such diverse marketing approaches available, it's important to focus on what works best for your business and your customers. And if you wish to take your EV marketing to the next level, collaborating with a team of digital marketing experts is the best way ahead.

Amura Marketing Technologies is a leading digital marketing agency with over 15 years of experience, an on-time delivery record, extensive market understanding, agile processes, and a team of 150+ digital experts. Through our data-driven MarTech solutions and full-funnel growth marketing approach, we ensure that your brand gets a digital edge. So, are you ready to rethink your EV digital marketing? Get in touch with us today!

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PHYSICAL EDUCATION: EFFECT OF PHOTOTHERAPY

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Abstract

Clinical investigations have demonstrated the effectiveness of phototherapy on the muscle activity. The aim of this study was to investigate the effect of low-level laser therapy (LLLT) on the tibia is anterior muscle of regular physical activity practitioners by electromyography, biomechanical, and biochemical (lactate) analysis. Double-blind controlled clinical trials were conducted with 12 healthy females, regular physical activity practitioners, between 18 and 30 years. The LLLT application (780 nm, 30 mW, 0.81 J/point, beam area of 0.2 cm², 27 s, ≈29 points) in the tibialis anterior muscle occurred after the delimitation of the points on every 4 cm² was held. It was observed that (a) a significant torque increase ($p < 0.05$) post-LLLT compared to the values after placebo therapy at the beginning of resistance exercise, (b) both muscle torque (isokinetic) and median frequency (EMG) showed a faster decay of the signals collected after placebo and laser treatment when compared to control values, (c) no significant change in torque in the strength test of five repetitions, (d) a significant muscle activity decrease ($p < 0.05$) after laser therapy compared to control values, and (e) an increase in lactate levels post-LLLT ($p < 0.05$) after 30 min of exercise. It is concluded that the LLLT increased the muscle torque at the beginning of the exercise and maintained the levels of lactate after resistance exercise. Therefore, the LLLT with the parameters used in this study can be utilized in rehabilitation to improve muscle performance in elite athletes.

Keywords: *exercise recovery, low-level laser therapy, muscular soreness, photobiomodulation*

Introduction

Physical activity that is novel, demanding, and high in volume often results in exercise-induced muscle damage (EIMD). Eccentric muscle actions appear especially likely to induce damage. Exercise of this nature may cause intracellular muscle damage, impair muscle function, lead to swelling and inflammation, and cause delayed onset muscle soreness (DOMS). While the exact mechanisms of EIMD are unclear, both metabolic and mechanical pathways are likely contributory. Tee et al. suggested that oxidative stress, a delayed inflammatory response, and impairment of excitation-contraction coupling represent a metabolic cascade resulting in EIMD. Proske and Morgan described a mechanical pathway where sarcomere disruption occurs via high myofibrillar tension. Moderate EIMD is a normal outcome following vigorous activity, and can play a role in beneficial physiological adaptations. Excessive EIMD, however, may hinder training and performance. Therefore, reducing EIMD symptoms may prove beneficial. Phototherapy (PhT), a non-thermal process where chromophores react to light, inducing photochemical and photophysical responses in varied tissues, may help athletes reduce the detrimental effects of EIMD.

Phototherapy, otherwise referred to as photobiomodulation, light-emitting diode therapy, or low-level laser therapy, is a non-ionizing light therapy. Phototherapy may employ light emitting diodes, lasers, and broadband light ranging on the spectrum from visible to infrared.⁷ Phototherapy has been shown to potentiate aerobic performance,^{8–14} increase the number of muscular contractions that can be performed prior to fatigue,^{15–23} and hasten recovery following exercise-induced muscle damage.^{10,16,21,24–31} While tenets of the treatment vary (dosage, pre vs. post exercise application, pulsed vs. continuous application), PhT generally appears to enhance some types of performance.

While the efficacy of PhT toward aerobic performance potentiation and recovery appears well established, the influence on strength performance and recovery is unclear. Reduced decrements in strength following EIMD as measured by maximal voluntary contraction (MVC)^{10,16,24–27,30} or repetitions until exhaustion³¹ have been reported. These investigations have primarily used single joint assessments of strength. Malta et al.³² performed the lone investigation where short-burst, anaerobic tests were used to assess the influence of PhT on recovery from EIMD. The countermovement jump (CMJ), a multi-joint movement, was included as a dependent variable. The authors reported no difference between groups, though while there was little previous evidence to suggest that PhT may minimize decrements in CMJ following EIMD, the lack of difference in any recovery marker whatsoever appeared to conflict with most of the literature. The authors acknowledged as much, and called for further investigation.



Given the preponderance of athletic activities which rely primarily on multi-joint, functional movements, it is important to investigate how these are influenced by PhT during recovery from EIMD. The improvements in recovery observed in slower, isolated assessments of MVC are suggestive of potential benefits toward recovery of functional movements, but this requires confirmation. Therefore, the purpose of this study was to assess the influence of PhT on functional movements (vertical jump, agility), and perceptions of muscle soreness following EIMD caused by high volume sprinting and decelerations. The null hypothesis was that following EIMD, PhT would not expedite recovery for agility and VJ, or decrease perceptions of muscle soreness compared to CON.

Fatigue is an often-forgotten aspect of an athlete's risk of injury. Fatigued muscles in the lower extremity require less force to reach muscle failure under high-intensity eccentric-loading conditions and to display negative effects on lower extremity biomechanics and neuromuscular fatigue.

Phototherapeutic effects linked to reinforcement of microcirculation, enhanced adenosine triphosphate synthesis, and mitochondrial function have been observed after exposure to light. Reduced reactive oxygen species release and creatine phosphokinase activity and increased production of antioxidants and heat shock proteins have also been reported after PBM. Albuquerque-Pontes et al³⁸ demonstrated that PBM in intact skeletal muscle can increase cytochrome c oxidase activity, which up-



regulates mitochondrial activity to increase adenosine triphosphate production, and decrease oxidative stress and reactive oxygen species production. These findings support the ergogenic effects seen in healthy individuals.

The device settings we chose were based on scientific evidence in the currently published literature. We sought to minimize manufacturer bias by using only doses and wavelengths described in the literature. Two recent systematic reviews, one including a meta-analysis, demonstrated positive outcomes on physical performance using single-diode and multidiode laser, multidiode LEDs, and combinations of both devices.

The low-powered pulsed laser/light group demonstrated preservation of muscle performance compared with the placebo group at all time points measured; the low-powered continuous laser/light group did so after the time points beyond 24 hours. The low-powered pulsed laser/light group experienced less muscle fatigue than the low-powered continuous laser group, although the difference was significant only at the 1-hour time point. Interestingly, the MVC results were similar to those previously observed using the low-powered continuous laser/light device and those seen by Antonialli et al using the low-powered pulsed laser/light device.

Previous researchers have also shown that injury rates increase with the accumulation of fatigue and have negative effects on biomechanics. Full recovery can take several days. Fatigue is an often-neglected aspect of the decision to return an athlete to sport or the assessment of an athlete's risk for injury. Preservation of strength, as seen in both low-powered groups (low-powered pulsed laser/light and low-powered continuous laser/light), results in a reduction in fatigue and in the increased ability of the quadriceps muscle to exert maximal or near-maximal force. Sport-specific movements may be performed with better neuromuscular control, which can reduce the risk for both acute and overuse injuries.



Fatigue or a decline in performance may occur more rapidly at high temperatures. Muscle temperature depends on many factors, including activity, blood flow, core temperature, proximity to the skin surface, and environmental temperature. Participants reported feeling heating during the high-powered continuous laser/light treatment even though the evaluators “scanned” the tissue as directed in the operator's manual. When higher-powered lasers are used to deliver energy, a corresponding increase in the surface temperature is recorded. This can create up to 6 times more heat in darker-pigmented skin than in lighter-pigmented skin-color groups. The temperature increase may be related to the mean output of power, the mode of delivery, and the wavelength used in the high-powered continuous laser/light group.

When using a high-powered laser, Kim and Jeong noted that if the hyperthermia lasts for several minutes, significant thermal damage may occur in biological tissues. The increase in human skin temperature can be significantly underestimated if the dependence of the optical properties of human skin on temperature is ignored during PBM treatments. Total irradiation time was substantially lower; however, participants discerned appreciable heat during the application.

Both low-powered laser devices (pulsed laser/light and continuous laser/light) improved recovery times. The low-powered pulsed laser/light group demonstrated accelerated recovery to baseline that was nearly 100% faster than the placebo group, and the low-powered continuous laser/light group demonstrated a 50% acceleration. The low-powered pulsed laser/light group returned to baseline at 48 hours compared with 72 hours for the low-powered continuous laser/light group and 96 hours for the placebo group. The low-powered pulsed laser/light group maintained strength at almost 100% from

immediately after to 48 hours after eccentric exercise; from 48 to 96 hours after eccentric exercise, participants were able to perform with 5% to 15% more strength over the baseline measurement. Tissue heating may have negatively affected the phototherapeutic outcome in the high-powered continuous laser/light group, as indicated by the increase in CK activity. The “pulsing” of the low-powered pulsed laser/light device and the low power of the low-powered continuous laser/light device may explain the superior results compared with the high-powered continuous laser/light treatment, because both devices generate only a small amount of superficial heat.

The MVC results of the high-powered continuous laser/light group are similar to those of Larkin-Kaiser et al, who applied 360 J using a high-powered laser and demonstrated a small, nonsignificant difference between placebo and the active groups at 24 hours and no difference at 48 hours after the treatment. However, we delivered nearly 50% of that dose and found similar reductions in MVC, which were not reversed during the course of the study.

Although the dose we selected for the high-powered continuous laser/light group (the power density was between both low-powered pulsed laser/light and low-powered continuous laser/light groups) did not exhibit a positive effect on muscle performance or pain compared with placebo, it did demonstrate an effect on CK activity ($P < .05$). Therefore, the selected dose for the high-powered continuous laser/light group cannot be considered too low to achieve biological effects. Laboratory studies have shown that more is not necessarily better and that the positive effects may, in fact, be lost when overdosing or overpowering (or both) PBM.

Normal recovery occurs between 24 and 48 hours. However, participants in the high-powered continuous laser/light group did not fully recover to baseline; in fact, they recovered only 60% to 70% of their original MVC. Individuals being treated with this type of high-powered device may exhibit a decreased level of performance. Moreover, the incidence of overuse injuries may increase. These would be alarming findings because in many sports, daily practices including multiple events are common.

The low-powered pulsed laser/light group maintained CK activity levels near baseline from 24 to 96 hours, even though the placebo group increased nearly 50% at 24 hours and experienced a marked increase of 215% at 48 hours using the same eccentric-exercise protocol. The low-powered continuous laser/light group demonstrated decreased CK activity at 24 hours, which was 35% less than the decrease seen in the low-powered pulsed laser/light group at the same time point. Compared with placebo, an increase in CK activity was evident, indicating additional muscle damage from the high-powered continuous laser/light treatment.

Although the literature suggests a range between 125 and 180 J, the dose delivered by the high-powered continuous laser/light did not exhibit the same prophylactic and stimulatory effects on muscle performance and recovery. The additional CK activity in the high-powered continuous laser/light group correlates with the decreased muscle strength noted in MVC. These participants fatigued faster than those in the other groups, which may have caused the muscles to work harder and experience catabolic effects. No participants dropped out of our study, but Larkin-Kaiser et al²⁸ had 1 participant drop out because of excessive arm pain. This corresponds with our finding that the high-powered continuous laser/light treatment did not improve muscle performance or modulate the pain associated with DOMS. Further studies of the effects and mechanisms behind high-powered laser/light may provide optimal settings; insufficient data have been published to date for high-powered lasers.⁴² Finally, it is important to highlight that for time points when differences ($P < .05$) were observed in favor of the low-powered pulsed laser/light compared with both the placebo and high-powered continuous laser/light conditions, confidence intervals among treatments tested did not overlap. This leads us to believe that the observed

differences are clinically meaningful and can help health care professionals to make better clinical decisions.

We conclude that low-powered pulsed laser/light (with a combination of different wavelengths and light sources) showed better effects on performance enhancement and postexercise recovery than low-powered or high-powered continuous laser/light. Additionally, high-powered continuous laser/light did not have any effect on performance enhancement or postexercise recovery. Our findings can help clinicians make better decisions regarding device choice

Conclusion

In conclusion, phototherapy applied as a preconditioning treatment during passive recovery intervals between bouts of high intensity and high volume resistance exercise significantly attenuated fatigue and maintained muscular performance of the quadriceps femoris muscle group. Preconditioning skeletal muscle with phototherapy intermittently during recovery intervals with fatiguing exercise may be a beneficial, noninvasive and safe ergogenic aid for athletes that require high levels of muscular endurance.

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SOCIAL NETWORKS AND ITS POSSIBLE IMPLICATION IN ACADEMIC LIBRARIES -A STUDY

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Abstract

Social Networks can be used for providing user centric service in social library environment. User attitude towards library is changing day by day. User wants most practical and speed information in e-learning age. Social media encompasses many forms such as social networking sites like blogs, vlogs, instant messaging and virtual communities. Among the social media, Facebook appeared as a major platform and emerged as a winner because of its large user base. The rapid rise of social media provides numerous possibilities for academic institutions to exploit this media to extend its learning and teaching endeavors. Nonetheless, this has no boundary; it is suitable for administrators, managers, learners and teachers in academic institutions too. The Social networking is a medium that lets the users to interact and work collaboratively with others, including the ability to browse, search, invite friends to connect and interact across the globe. Social software in the web 2.0 world not only enhances the practical usability in the library but also helps the diminishing librarian's role through value addition to profession itself.

Keywords: Face Book, Twitter, Library, Social Networking, Reference Service, YouTube, Flickr, Blog, Web 2.0 Technology.

Introduction

Social networking sites are extremely popular across age groups and are central forums for accessing and sharing information. LIS Professionals are responding to the popularity of social networking sites and their expanding role in the creation, use, and sharing of information by engaging them as a central medium for interacting with library patrons and providing services to meet their information needs.

While many libraries already have a social network media presence via Face book and Twitter, how are academic libraries considering social media as part of their core communication and engagement strategies? How are libraries preparing their LIS professionals to communicate and engage professionally using social network media through the inclusion of social media in library strategic plans? In short, how is libraries future planning for the inclusion of formal social media roles in their institutions? Some of the social media websites: Social Bookmaking. (Del.icio.us, Blink list, Simply)Interact by, tagging websites and searching through websites bookmarked by other people's) Social News. Interact by voting for articles and commenting on them B) Social Networking. (Face book, Hi5, Last.FM) Interact by adding friends, commenting on profiles, joining groups and having discussions. c) Social Photo and Video Sharing. (YouTube, Flickr) Interact by sharing photos or videos and commenting on user submissions. d) Wikis. (Wikipedia, Wikia) and also MySpace, Facebook, Hi5.Friendster,Orkut, Bebo and Tagged Interact by adding articles and editing existing articles.

Table 1 :- Date of Launching of various social Networking Media

YEAR OF LAUNCHING	NAME OF SOCIAL NETWORKING MEDIA
1995	Wiki
1997	Weblogs
1999	MSN messenger
2003	LinkedIn, MySpace, Delicious
2004	Flickr, Face book (not open to all)
2005	YouTube, Windows Live Messenger(re launch of MSN messenger)
2006	Twitter, Face book (open to all) slide share

Benefits of social Network in Academic Libraries

The real utilization of social media is based on active human networks. Technology is an enabler; one should have IT literacy skills, its social dimensions and where to use know-hows. Creation and application of knowledge are only possible when collaboration, communication, and consolidation happen. The following are some of the key benefits of social network in academic libraries:

1. To identify the individuals, teams, and units who play key roles in academic activities.
2. To contextualize knowledge and to make out opportunities to accelerate knowledge flows across functional and organizational boundaries.
3. To form study groups, encourage research based projects and even help with academic support for distance education.
4. To strengthen the efficiency and effectiveness of existing, formal communication channels and improving library's weaker areas

Review of Literature:

- In the Huang study, Taiwanese students' online habits were studied longitudinally over a two and a half year period, with little change in their usage of MSN messenger, email or chat room usage, possibly indicating that the technologies had been adopted to saturation levels, and that further development of the software is required to ensure its further growth.
- Valkenburg, Peter and Schouten, tried to investigate the impact of Social Networking Websites on adolescents' self-esteem and well-being. The survey was conducted amongst a group of 10- 19 year-olds who had an online profile on a Dutch Social Networking Website. The study found that the frequency with which adolescents used the site had an indirect effect on their social self-esteem and well-being. Positive feedback on the profiles enhanced adolescents' social self-esteem and wellbeing, whereas negative feedback decreased their self esteem and well-being.
- Seufert et al (1999) defines social networking in terms of knowledge networking assignifying a number of people, resources and relationships among them, who are assembled in order to accumulate and use knowledge primarily by means of knowledge creation and transfer processes, for the purpose of creating value. The concept of social networking is one of the tools of Web 2.0, which also forms the basis of library 2.0.

Objectives

This study has been conducted keeping in view the following objectives:

- To find out the Academic libraries' websites which have social networking/ web 2.0 application; and
- To identify types of web 2.0 technology that is applied in central universities libraries' websites.

Social Media Networking and Teaching

The social networking literate librarian is capable of teaching these skills to library patrons and peers. This includes guiding and training patrons through targeted aspects of

social networking sites that arise in their use as resources and tools, teaching about the use of social networking sites for scholarly purposes, and teaching faculty and instructors about the role of social networking sites and considerations for issues affecting their students' work. Especially in this digital Environment academic LIS professionals need a new branch of skill sets specific to utilizing and leveraging social networking sites to provide quality services and maintain their role as information experts in a Web2.0 world. The following competencies are a suggested set of skills that Academic LIS professionals should possess as social networking literate information professionals capable of implementing library services and utilizing information within social networking sites. These include skills for interacting with patrons within the sites, understanding and articulating the nature of social networking sites and their potential roles related to library services, creating presences and content, evaluating and applying information, and having the ability to assist patrons with gaining and applying these skills.

Application of Social Media in Academic Libraries content communities

Library encourages to share on some particular kind of content. They differ according to the type of content (text, photos, videos, power point presentations, etc.) they share. Some of them have earned a great popularity as it is capable of content organization and sharing. As for example,

- Text Sharing—Book Crossing.
- Photo Sharing—Flickr, Picasa, Photo Bucker.
- Video Sharing—YouTube, Daily Motion, Metcafe.
- Presentation Sharing—Slide Share, Prezi, Scribd.

Social Networking

(i). Myspace: - Here library users can use html to customize their profile and they can add new graphics and videos on it.

(ii). Face book: -With the help of Face book, library users can be informed with different upcoming events and share the information about their new arrivals and editions of books. Face book mainly helps in marketing of services and products. Photo can be tagged through the use of it. Ask-A Librarian service can be exploited by using it.

(iii). Twitter: - Twitter is a free social networking used to send and read messages known as tweets. At present librarians share all kinds of news regarding library through the use of twitter. Librarians can highlight new materials, new groups, meetings and more with some of these suggestions through twitter.

(iv). LinkedIn: - It is a professional networking site. It can be used by the librarians to create professional connections and to market library services among other library professionals spread all over the world and can also share their ideas and professional experiences.

(v). WEB 2.0:- The term was coined by Darcy DiNuccie in 1999 and the term was popularized by Tim O'Reilly⁴. The term includes weblogs, wikis and syndications. It is nearly synonymous with social media.

(vi). Blog: - Libraries can use Blogs to keep their users aware with the latest developments in the field of library related matter. Blogs can be subscribed through RSS feeds. Blogger and Word Press are the examples of blog. In addition to this blog can be used as follows—

(vii). Wikis: - The most recognized wiki is Wikipedia. A few other wiki services are wikia, wiki how, wiki dot, Wikimedia, wiki news, PB works.

Use of Social Networking Sits in the Libraries

But providing quick and easy retrieval information to user is a great challenge to library. Therefore library should find and search some new techniques for impacting valuable information to the user. The impact of SNS in libraries is growing day by day. Many libraries are using social networking platform to interact and reach out to their patrons or clients. It has also become a level playing ground for academics and students to interact on issues pertaining to course work. Students also use this platform to share information amongst

themselves on any subject and topic. The use of these tools has been affirmed by Bell (2007), that Academic libraries do not only use social media for communication purposes, but had adapted their research strategies to this environment. Libraries with social networking wall. The walls are mostly used to:

- Announce programmes of the library
- Give students the opportunity to ask questions pertaining to the use of the library
- Teach basic search tools
- Paste new books on the wall to inform the University Community
- Send brief updates to patrons
- Ask a Librarian

Academic Libraries can also respond to the needs of modern day patrons by applying efficient technologies such as social networking, mobile application, and online check in/check outs to their service delivery. These developments in the operations of library service delivery should encourage libraries to reinvent itself to respond adequately to this call by investing in technologies that have direct effect on the operations of the library. To achieve this, libraries must upgrade library staff skills in information Technology (IT) so as to be able to understand and use Social Networking sites to their maximum.

Social Networks and its Possible Implication in Academic Libraries

Social media sites become one of the massive online platforms in the world for sharing real time information. Academic libraries are now engaged on social media in order to connect with diverse community groups and move beyond the traditional bounds of the library. The need of the hour is how best LIS professionals can exploit the disruptive changes for the societal benefit. In the US libraries have been using social media tools to connect with users and to market programs and services . It is observed from the literature that the most frequent type of postings in social media was related to announcing upcoming events held in libraries.

Posts about community news or emotionally inspiring messages elicited much engagement from users and posts having an image or images tend to receive more user engagement. Facebook use by libraries falls into five areas of interest; "how-to" kind of studies, library-centered case studies, student-based research, service-provided analysis and perceived-use study.

Academic Librarian can make use of social networks in three ways, i. e. information communication, knowledge organization and access and information dissemination.

- A. **Information Communication:** By using social media platforms academic librarian can keep constant touch and effective interaction with teaching faculty, students and research scholars in online collaborative environment. MySpace, Facebook, Ning, Blog, LinkedIn and Twitter are some of the best applications for information communication.
- B. **Knowledge Organization and Access (KOA):** Social software can help professionals in KOA environment for getting handy information which can be accessible with the web 2.0 social networking technologies. For example, aNobii, it helps book lovers to share reviews and recommendations. It also prepares due date alerts, lending, and discussions. Delicious - it uses a non-hierarchical classification system in which users can tag each of their bookmarks with freely chosen index terms. Netvibes, Library Thing and Librarians are other examples.
- C. **Information Dissemination:** Information sharing is the major part and crucial area where LIS professionals should think seriously while considering and designing library activities in digital environment. End user satisfaction should be given first and foremost priority by providing right information at the right time in a right way from anywhere. Some of the critical tools used for information distribution are; Flickr, YouTube, Teacher Tube, Second Life, Wikipedia, Footnote, Community Walk, SlideShare and Digg.

Role of Librarian while using Social Media in Libraries

Due to advent of internet, the librarian of the 21st century, popularly known as –Librarian 2.0, can understand the web users deeply in terms of their goals and aspirations, workflows, social and content needs, and more. Librarian 2.0 is where the user is, when the user is there. For the utilization of social media, a librarian—....Social media are dynamic and can change rapidly as the technology is changing faster. However in near future librarian may have to track how the web users use library profiles or how their users access the library catalog or do something else that librarian cannot anticipate presently. So the librarian needs to change their role accordingly in the hi-tech digital environment of 21st century to continue to deliver their services for the web users.

Adopts the new communication mode of choice - telephone, Skype, IM, SMS, texting, email, virtual reference, etc. Cannot avoid traditional cataloging and classification and chooses tagging, folksonomies, and user-driven content descriptions to inform the web users about OPAC as and when necessary. Combines e-resources and print formats.

- ❖ Connects people with web technology in the LIS domain.
- ❖ Connects the web users with subject expert for discussions, conversations
- ❖ Uses the latest tools of communication for sharing of information.
- ❖ Uses and caters everything from laptops to PDAs to iPods.
- ❖ Develops targeted federated search and adopts the open URL standard.
- ❖ Embraces non-textual information and graphics, moving images, audio, and video.
- ❖ Encourages user driven metadata and user developed content and commentary.
- ❖ Learns the power of the Web 2.0 opportunities.

Challenges

To choose and keep a constant track on a wide range of social media tools, we may have to define the criteria for evaluation of these tools and content they carry. It is important to choose a platform, which our customers frequently use and identify. There are several challenges involved when adopting social networking tools in library and information centres, like;

- ❖ **Lack of Awareness and Skills:** Most librarians lack the IT skills that could be required to adopt the social networking sites for effective library services. Some librarians are not even aware of useful features of social networking tools; even the few that are aware are still struggling to find out the productive uses of these for library services.
- ❖ **Weaker Network Bandwidth:** Several institutions have limited Internet bandwidth to implement social media platforms. Poor connectivity can frustrate effective online participation and interaction with users.
- ❖ **Technophobia:** A number of librarians and users are afraid of handling new technologies. They keep on stick to traditional library services, their comfort zone and are not willing to embrace the change.
- ❖ **Unreliable Power Supply:** The interrupted supply of power discourages people from participating in the social media activities.
- ❖ **Copyright Issues:** The free access to information where people copy, paste and edit content without acknowledging the original author is a serious challenge to copyright management.

Social Networking sites are changing Library Environment

Academic library and information centres are applying the new technologies and trends to build their library services popular and user friendly. The present idea of a library as substantial place where users can visit to get information is quickly changing to a social cyberspace where users contact, communicate and contribute to existing information. The potentials of the new technology offers the open access protocols which present the opening for free access, free interaction, free communication and contribution to knowledge. Library services through modern technology are making new instinctive tools, continuous change, flexibility and evaluation while encouraging user posting, sharing, cooperation,

communication, and personalization. Sekyere (2009) defines that social networking sites hard works are a successful and new technique of student outreach; others argue that social networking by academic librarians is an effective use of librarian time and effort.

Social networks provide enhanced right to use information. It puts the library where the users are. It enables users to share their knowledge and in turn, helps bring others into the library. It helps simply to post future events or book exhibition. These types of postings rapidly increase when users share the information with their friends through their social networking sites channels. This opportunity helps to promoting library services and activities. A social network has several ways to invite user group to present feedback and to engage with others in online area

Conclusion

Social networking is evolving and is sin qua non to modern life. It has been doing different roles such as communication, teaching, promoting etc. The rapid rise of social media provides numerous possibilities for academic institutions to use it to extend its learning and teaching endeavors. This media improved teacher learner communication, out of the class sharing of information and knowledge resources and improved delivery of education. Academic Library Users Social networking sites could be effectively used to disseminate information and promote pleasant professional relationship among librarians and library users. It encourages academic collaboration. Social networking site should be introduced to attract them to the library environment. Social networking sites would help establish a cordial relationship between librarians and patrons; market the library's services Social networking website provides great opportunities for Library professionals to interact with their users as it places them in the digital social space of their users. Library professionals can get first hand information about the user through interacting with them. They can then understand the behavior of the user and design services to meet the needs accordingly. Social networks are a great way to test your commitment to open communication.

Social media surfaced in a variety of social networking platforms such as, blogs, vlogs, instant messaging, social bookmarking and virtual communities. It has also improved sharing of learning resources in rural areas and difficult hilly terrains. Because of wide spread accessibility from mobile phones, use of social media for sharing scholarly information is on the increase. It has improved connectivity among learners, increased participation and collaboration and sharing of information including text, pictures, audio, video, etc.

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EFFECTS OF TECHNOLOGICAL ADVANCEMENTS ON MODERN SPORTS

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Abstract

Sport and exercise science like most areas of life have been affected greatly by technological advancements. It is difficult to imagine modern sports and various sub-disciplines of exercise science without technologies. The use of technologies is, without exception, tainted with frustration and ambivalence. Paradoxically, it is the omnipresence of technology that has contributed most to people's inability to fully grasp the scope and depth of its influence and also uncertainty as to what role various technological advancements play in sports. Indeed, the influx of sport technologies has profoundly changed the landscape of sport and exercise science. Importantly, technology has in many ways changed what we think of as the athletic body. Therefore, this paper examines the impact of technology on sport performance, considering the theories of technology and quest for improved performance, types of sport technologies, the advantages and disadvantages of sport technologies in modern day sports. It is recommended that those managing, handling and using sport must be equipped to make wise choices on the type and use of sport technologies that would assist in the right performance

Keywords: *Technology, Right performance, sport and Exercise, Skill development*

Introduction

The introduction of technology has given us the best way to enjoy sports. Do you know the use of technology even makes sports better? We have accustomed ourselves to using technology in different aspects of life. Whether it is education or healthcare, manufacturing or infrastructure, we find technology everywhere.

The recent development in technology is encouraging the development of sports in various dimensions. From the players' aspect, we find a better place for practice and skill development. From the spectators' point of view, we see the perfect use of technology in sports. Let us find out in detail.

The Use of Technology in Sports

1. Technology used During Training

Back in the day, we use to have a view or two of the sports played. There were limited cameras that can even properly zoom on the sportspersons and athletes. We have no high-definition feed of the channels that offer a 360-degree view of the sport's actions right away. We have come a long way in the development of technology related to sports. The athletes are faster and stronger than the previous generations. The coaches and managers now use tactical software platforms to analyse the performance of the sportspersons. They even use sensors to measure the vital functions of players during exercise sessions and field actions.

Previously, trainers and coaches had to follow extensive paperwork to find out the performance of a player or a sports team. Imagine how many things a coach had to keep in his mind regarding individual players. These days, we can design charts and graphs and can even get detailed reports offering deeper insights into individual or team performance. The principle of sports training depends on the latest technology used.

Players wear sensors and GPS to monitor their movements. The management team can track the actions of players. The latest technology can also track how an athlete is performing on the field. The best types of shoes and sports gear are designed after comprehensive research and development to offer a better ground for better performance.



Technology used in Live Games

Technology is also used during live games to make better decisions. In fact, technology is used to make the performance of athletes better. Let us find how technology is revolutionising sports.

🚦 Video Assistant Referee (VAR)

This VAR technology was used in the 2018 FIFA World Cup. It literally transformed the way decisions are made in international football matches. The other major leagues have adopted the same technology for making fair play. The video cameras and sensors used in the game assist the referees sitting in a control room to make better decisions. They can correct the non-call or missed calls in the game along with penalties, goals, etc. Previously, these decisions were very hard to make by the referees and linesmen as football is a very fast game.

Now, with the use of slow motion, repeat telecast, zooming in, and other excellent features, referees can have a clearer and better view of the moments to make accurate decisions and to make the game fair for both teams.

🚦 Hawk Eye Technology

This technology has been designed by the engineers of Roke Manor Research Limited located in England. As the name suggests, there are 6 to 7 high-speed and high-definition cameras that can be set on a field in different locations to offer a haw-eye view of the game. This technology in sports is based on the fundamental principles of triangulation. In this technology, timing data and visual images are used to showcase the right moments from different angles. This technology has been developed in 2001 and is in use since then. It was first used on 21st April 2001 in the India-Pakistan test match held in Lord's Cricket Ground. Since then, this technology is used in rugby, badminton, tennis, and cricket.

Technology Making Sports Better

🚦 Goal Line Technology (GLT)

Another technology used in football, the GLT is a unique way to determine whether the ball has crossed an imaginary line to detect offsides and goals. It is tough for the referee and the linesmen to determine whether the ball was in the goal from different angles.

This technology has been used since 2012 by the referees in the control room to make better goal-related decisions and to avoid contradictions. It is used by the International Football Association Board (IFAB) and The Federation Internationale de Football Association (FIFA).

This advanced sports technology uses the Hawk-Eye and GoalControl 4D systems to provide split-second videos automatically to the control room for making a prominent decision. In

fact, the latest version of GoalRef, a low-frequency radio-based goal sensing system, sends signals to the field referee's watch if the ball enters the goal line.

✚ **Automatic Ball-Strike System (ABS)**

This is a unique technology used in baseball games to detect strikes and measure balls. This technology has the capability of replacing the umpires present on the field as it can measure the exact points through which a ball passes over the home plate.



Importance of Technology in Sports

- ✚ There are other remarkable types of technologies used in sports and training. The training sessions are made more productive by measuring the physical aspects and output of players. The movements are tracked to analyse and make them better.
- ✚ These days, athletes and sportspersons use exclusive protective gear for better and safer performance. In fact, differently-abled athletes used prosthetics to perform and participate in national and international sports events.
- ✚ The importance of technology in sports is pretty much clear now. There are limitless possibilities for using different other technologies in different sports. From wearable to training tech gear, we observe how technology has been redefining sports exceptionally throughout the years. We hope to see more development in this aspect.

Advances in technology have had a profound impact on sport including:

- ✚ Analysis of sport performance and enabling coaches to greatly improve the quality of feedback to players/athletes
- ✚ Increase accuracy in time measurements of sport performance
- ✚ Enabling referees, umpires and sport officials to make better decisions on rule infringements
- ✚ Improvements in the design of sport equipment and apparel
- ✚ Providing spectators with better viewing of sport performance

The video camera became commonplace in the 1980's and provided sports coaches with a way to capture and analyse sport performance like never before. The video camera is perhaps the single most important development in coaching in the modern era of sport.

Electronic timing controlled by computers is employed to measure performance times of athletes in a great many sports including Athletics, Cycling, Skiing, Bobsled, Triathlon and many more. In the case of Athletics, the electronic timing also measures the athlete's reaction time to the start gun in case the athlete moves too early in the blocks.

The Force Platform is an apparatus placed under the feet of the athlete and measures their 'ground reaction force'. This is useful in sports such as Weightlifting and enables measurement of force and acceleration throughout the athlete's performance of a lift. Curiously, the measurement of force is due to the miniscule change in properties of crystals upon which the platform rests.



Hawkeye, a computer system first used in 2001 for showing the trajectory of a cricket ball has made an immeasurable difference to the sport of Cricket. Hawkeye produces all manner of statistical analysis such as ball speed, ball pitch on the wicket and trajectory

of the ball after bounce. Hawkeye is now used in Tennis to assist in determining whether a shot is "in" or "out". The analysis of sport performance provided by Hawkeye has greatly enhanced the spectator's knowledge and involvement.

As a result of miniaturized video cameras, spectators are also now able to witness sport performance in ways that previously was not possible. Video cameras can be placed in places such as racing cars, cricket stumps, goal posts, and even on the athlete themselves.



Sporting equipment continually undergoing research and development to improve sporting performance. Some of the best examples include: Fully body swim wear, made of polyurethane, made a huge impact in the 2008 Olympics only to be banned a year later because it was too obviously making a difference to sporting performance. Kevlar fibre (5 times stronger than steel yet lighter, used in the manufacture of sails, bicycle tires, football boots, tennis rackets, helmets, body armour and more. Raving cycles and rowing shells made of lightweight but strong materials, and minimise drag though the air or water.

Some people decry the use of technology to improve sports performance but in reality it is inevitable. The research and development of sport apparatus and apparel is an industry in itself which creates opportunity for investment and employment.

The Role of Technology in Sports

Technology has revolutionized numerous industries, and the world of sports is no exception. From enhancing athlete performance to improving fan experience, technology plays a pivotal role in shaping the future of sports. In this article, we will explore the various ways technology is making an impact in the world of sports.

- **Performance Tracking and Analysis**

One of the most significant contributions of technology to sports is the ability to track and analyze athlete performance. Advanced sensors and wearable devices can monitor various metrics such as heart rate, speed, distance covered, and even body movements. This data provides valuable insights for coaches and trainers to identify strengths, weaknesses, and areas for improvement. With this information, athletes can optimize their training routines and make data-driven decisions to enhance their performance.

- **Video Analysis**

Video analysis has become an indispensable tool for sports coaches and athletes. *High-speed cameras and sophisticated software* allow for detailed examination of an athlete's technique and performance. Coaches can break down the footage to identify flaws in form or strategy, enabling targeted training sessions to address these issues. Video analysis not only benefits individual athletes but also helps teams strategize and analyze opponents to gain a competitive edge.



- **Instant Replay and VAR**

In many sports, technology has revolutionized the way referees make decisions. Instant replay systems have been introduced to review critical moments in a match, such as goals, fouls, or offside situations. This helps ensure fair play and reduces human error in decision-making. Moreover, Video Assistant Referee (VAR) technology has been implemented in various sports to assist referees in making accurate calls, especially in situations where the naked eye might miss crucial details.

- **Sports Equipment and Gear**

Advancements in technology have also led to the development of innovative sports equipment and gear. From lighter and more durable materials to improved designs, athletes now have access to cutting-edge equipment that enhances their performance. For example, in swimming, the introduction of *high-tech swimsuits* made of hydrophobic materials significantly reduced drag and improved swim times. Similarly, advancements in sports footwear have led to shoes with better cushioning, traction, and stability, reducing the risk of injuries.

- **Fan Engagement and Experience**

Technology has transformed the way fans engage with sports. Social media platforms provide a direct line of communication between athletes, teams, and fans, allowing for real-time updates, behind-the-scenes content, and interactive experiences. Virtual and augmented reality technologies have also enhanced the fan experience by offering immersive viewing experiences, allowing fans to feel like they are part of the action. Additionally, mobile applications and online platforms enable fans to access live scores, statistics, and highlights, ensuring they stay connected even when they can't attend matches in person.

Sports Broadcasting

The advent of technology has completely revolutionized sports broadcasting. High-definition cameras, multiple camera angles, and advanced graphics have elevated the viewing experience for fans. Furthermore, live streaming platforms and online sports networks have made it possible for fans to watch their favorite sports from anywhere in the world, breaking geographical barriers and expanding the global reach of sports.

Injury Prevention and Rehabilitation

Technology has also played a vital role in preventing injuries and aiding in the rehabilitation process for athletes. Advanced imaging techniques, such as MRI and CT scans, help diagnose injuries accurately, allowing for targeted treatment plans. Additionally, technologies like cryotherapy chambers, laser therapy, and wearable devices can aid in the recovery process, speeding up healing and reducing downtime for athletes.

Key Takeaways:

- ❖ Technology has revolutionized the sports industry, impacting athlete performance, fan engagement, and more.
- ❖ Performance tracking and analysis tools help coaches and athletes identify areas for improvement and optimize training routines.
- ❖ Video analysis enables detailed examination of technique and strategy, benefiting individual athletes and teams.
- ❖ Instant replay and VAR technology ensure fair play and accurate decision-making in crucial moments.
- ❖ Advancements in sports equipment and gear enhance athlete performance and reduce the risk of injuries.
- ❖ Technology enhances fan engagement through social media, virtual reality, and mobile applications.
- ❖ Sports broadcasting has been transformed with high-definition cameras, advanced graphics, and live streaming platforms.
- ❖ Technology aids in injury prevention, diagnosis, and rehabilitation for athletes.

- ❖ The role of technology in sports continues to evolve and shape the future of the industry.

Conclusion

If you are passionate about the intersection of technology and sports and want to pursue a career in this exciting field, consider taking the NYU Fundamentals of Global Sports Management online course and certificate program offered by Yellowbrick. This comprehensive program will provide you with the essential knowledge and skills to thrive in the sports industry, covering topics such as sports marketing, event management, and sports analytics. Don't miss this opportunity to gain a competitive edge and kickstart your career in sports management.

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DOPING IN SPORTS: THE PERSISTENT MORAL DILEMMA

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Abstract

Through doping, we understand the use by athletes of substances prohibited by the antidoping agencies in order to gain a competitive advantage. Since sport plays an important role in physical and mental education and in promoting international understanding and cooperation, the widespread use of doping products and methods has consequences not only on health of the athletes, but also upon the image of sport. Thus, doping in sports is forbidden for both ethical and medical reasons. Narcotics and analgesics, anabolic steroids, hormones, selective androgen receptor modulators are among the most frequently utilized substances. Although antidoping controls are becoming more rigorous, doping and, very importantly, masking doping methods are also advancing, and these are usually one step ahead of doping detection techniques. Depending on the sport practiced and the physical attributes it requires, the athletes will look for one or more of the following benefits of doping: recovering from an injury, increasing body recovery capacity after training, increasing muscle mass and strength, decreasing fat tissue, increasing endurance.

Keywords: *Moral identity, Fair play, Attitudes towards doping, athletes and non-athlete students*

Introduction

Sport has to provide opportunities for athletes to compete and thus demonstrate their skills in fair play. However, in contemporary highly competitive sport, moral norms are often overlooked for other more selfish interests, such as winning at any cost. Therefore, some athletes not only try to put effort into improving their mastery in order to succeed, but at the same time take risks by using banned performance-enhancing drugs or methods referred to as doping. Some studies have revealed that up to 57% of elite athletes use doping for performance improvement. World Anti-Doping Agency doping control tests showed that different groups of banned substances are disproportionately spread in different sports disciplines but doping itself is used in both individual and team sports. Although efforts are being made to test athletes more, this has not yet yielded significant results. Therefore, in order to develop and improve doping prevention programs, it is important to have a good understanding of the factors that influence athletes' choices to use doping in sport.

Research suggests that various personal and psychosocial factors influence athletes' choices to use doping, but the attitudes of athletes play a special role. The evidence suggests that attitudes are reliable predictors of behavior. A meta-analysis of Ntoumanis et al. and Blank et al. found that athletes' attitudes towards banned substances were among the strongest predictors of intention to use or actual practice of doping. Besides, a recent study by Nicholls et al. also suggested that athletes' more positive attitudes towards doping were related to cheating behaviors. Therefore, understanding the factors that influence a person's attitudes towards doping is important.

doping in sports today. It is not as extreme as some of the others doping drugs. Most of creatine out there is not illegal. Creatine is a compound that is made in our bodies. It can be taken as a dietary supplement. This supplement does many things to your body including: provides additional energy for your muscles, volumization of you muscles, Buffer lactic acid build-up, and enhances protein synthesis. It can be consumed by powder, gum, tablets, or liquid. A good sport to take creatine in is explosive sports such as football, and baseball. It is not good to take creatine in a long distance sport. It is not because it can dehydrates you very easily.

Positive effects of doping

The purpose of taking doping drugs is to increase an athlete's performance in her or his sport. There are a number of benefits as a result of taking doping drugs. This is why there is a high demand for these drugs in the sporting world today. Here is a list of the benefits athletes can receive if he or she decides to dope in sports. Underneath the benefit is the doping drug that is used to help the athlete

- An athletes endurance is much better and will last much longer. o Blood doping o Anabolic-androgenic steroid
- An athlete can become much quicker and faster. o Steroids
- An athlete can become much stronger and much more explosive o Creatine o Anabolic-androgenic steroid
- An athletes recovery time can be much quicker and more effective. o Narcotics

Negative effects of doping

Taking Doping drugs can have terrible effects on your body. The well known doping drug, steroids has a number of negative effects to the body. Steroids interrupt the normal development of hormones throughout your body. When this happens your body experiences changes that can not be irreversible. Changes such as sperm production, baldness, breast development in men, breast reduction for women and voice deepens for woman. The negative effects on a persons Cardiovascular System is it increases LDL, and decreases HDL. The risk of high blood pressure is higher. Also the risk of heart attacks is very high. If a person takes a large amount of steroids it increases irritability and aggression. The doping drug, blood doping, causes much stress on the heart. The reason for this is that your red blood count increases which causes the blood in your blood stream to be thick. The human heart is not used to pumping such thick blood. Which leads to different kinds of heart diseases. Because this method of doping is taken in by needles (usually shared needles) the person has the risk of AIDS. Narcotics are a street drug. Because this drug is a street drug, many people share needles. This gives the risk of passing different diseases from one person to another. Overdosing of Narcotics can cause death. Withdrawal effects include limited vision, reduced sex drive, menstrual, chronic constipation, mood swings, and muscle twitches. The doping drug creatine is a fairly new product. The long term effects have not been able to be tested yet. The known effects of creatine is that it can cause cramping, diarrhea, increased urination, and dehydration. If you over dose and take a large amount of creatine the same effects of drinking sea water. This is caused because if creatine sits in your system it can draw water from the body, which causes the intestine to contract.

Doping has become a key and complex issue in the sports world, which deserves serious consideration, as specialists are still striving to understand how and why it happens, and how to prevent it. "Sensational" revelations in the press reflect the gravity of a worrying situation resonating in most sports disciplines. Cases of doping compromise the credibility of performance in sport, the mediatized victories of some "arena heroes" becoming questionable and disputable. Nowadays some sporting disciplines seem to have managed to surpass the human limits and sometimes even the legal limits. The financial interests, the pressure to obtain better results, the media coverage of sports competitions and, last but not least, the human nature can explain this phenomenon.

It is clear that in some disciplines such as athletics or cycling, human performance cannot improve endlessly. Nowadays, sports are no longer just sports; as sport become an industry, a business, a reason for political or national pride, and these facts can only lead to breaking any rules to win. Sometimes, consciously, camouflaged, with a network of specialists behind or on their own, some athletes think "maybe they won't catch me"; because today sports mean sponsors, advertising contracts and money and for that some believe that any risk is worth taking. Even risks to their own health (often with huge and irreversible consequences) no longer matter.

How does an athlete win a lot of money? From an important race and from sponsors. Where do organizers of sporting events have substantial prize money? From sponsors. Why do sponsors give substantial amounts of prizes? For publicity and to be associated with a first class sporting event where the best athletes participate. Who is watching a first class sports event? Everyone. The same people that will no longer watch the event when the athletes no longer offer the necessary show. The athletes today can be associated to the gladiators from Ancient Rome who were providing The commercial side of a sporting event is also an important matter. If people like the event in the modern arena, then the commercial success of the sporting event is assured and the sponsors are satisfied and will finance future events, thus providing funds for the organizers to give substantial prizes for the athletes.

The doping phenomenon in sports is increasing and diversifying, as are the drugs used for doping. There is a permanent race among those who invent new doping methods and sports ethics organizations that are searching for more performant methods to detect them. Unfortunately, most of the times, those in the first category are always one step ahead.

Improving scientific procedures used to detect prohibited substances is of course a necessity and also a challenge. Stricter legislation with the involvement of authorities is required to prevent the spread, marketing and use of such substances. Resolute action is required to restore fair-play throughout the sports industry and last but not least, the ethics and fair-play education of young athletes. The aim of this review is to gather and critically analyze recent developments and information regarding this sensitive issue, in order to offer a better understanding towards its foundation provided by previous research and to help develop practical strategies to effectively combat doping in sports.

Doping from the beginning to the present day

Over time, there have been several definitions of doping. Beckmann's sports dictionary describes doping as the use of performance-increasing substances, which would place the athlete on a superior position than that he would normally have obtained. The first official definition of doping dates from 1963 and it was issued by the European Committee Council: "Doping represents the use of

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substances or physiological mediators, which are not normally present in the human body, introduced as an external aid to increase the athletes' performance during a competition"

According to the Anti-doping Convention of the European Council - "Doping in sports" means the administration or use of doping agents or doping methods by athletes. The doping agents or methods referred to are those doping agents which have been banned by the Anti-Doping Agency and which appear on a list of ineligible substances. "Athletes" are those persons normally participating in organized sports activities. Doping is not a modern term; in Norwegian mythology the use of performance/strength-increasing substances has been reported; as bufotenin, a substance known to increase the physical performance obtained from frogs skin or from Amanita mushrooms species.

In ancient Greece, the use of prohibited substances was not discouraged, as specialists offered athletes various ingredients in order to increase physical performance; and this was considered absolutely normal, those who offered such substances being considered medical specialists in sports. Doping methods were used also in the Roman Empire, where racing horses were doped with various blends of substances aimed to increase their speed and stamina; also gladiators have been mentioned as users of strength-increasing agents.

Doping was described in modern sports in the second half of the XIX century. During the Saint Louis marathon in 1904, Tom Hicks died as a result of using a mixture of cognac and strychnine. After multiple incidents in competitions, in 1928, the International Athletics Federation (IAF) became the first international federation to ban doping in athletic competitions; 32 years later anti-doping testing was implemented. Regarding the Olympics, the first official controls took place at the 1972 Olympic Games in Munich for conventional substances. Anabolic steroids were the first substances controlled at the 1976 Olympics in Montreal and as a consequence many athletes were disqualified and lost their medals. This led to a decision by the International Olympic Committee (IOC), which stated that the results of doping tests should be made public within the competition.

That was the beginning of an open fight that begins in the 1980s between those seeking and finding new doping substances that are not yet on the antidoping list and the authorities that try to detect these substances. It is clear, however, that between these two sides there is a gap in favor of those interested in cheating. Introducing anti-doping controls outside competitions was a new milestone in the anti-doping campaign in 1989. In modern professional sports, many athletes have been tested positive with forbidden substances, perhaps the most publicized case being that of Canadian Ben Johnson, the famous 100 meters runner for the use of anabolic steroids. It was the first doping scandal in the history of the Olympic Games, which led to Johnson's suspension for two years and then for life, because he tested positive again in 1993.

After the fall of the Iron Curtain, information about industrial, systematic and scientific doping from the former German Democratic Republic and in general from the communist states started appearing, with dozens of athletes experimenting the side-effects after the end of their career. This information revealed a negative aspect of sports history, unscrupulously used as a propaganda tool to demonstrate the superiority of the socialist society in which the athlete and his health represented nothing.



Currently, doping is considered as any violation of the following rules: the use or attempt to use a forbidden substance or a prohibited method, refusal for sampling after receiving an invitation to doping control in accordance with anti-doping rules, avoidance of sampling, falsification or attempt to falsify any part of the doping control, possession of prohibited substances and / or methods, trafficking or attempted trafficking of any prohibited substance and / or methods.

Doping Today

Depending on the country's legislation, doping substances can be bought from pharmacies / supplement stores or, most commonly, from the black market. For a substance or performance improvement method to be classified as doping, it must meet at least two of the following three criteria: to improve performance, to present a hazard to the health of the athlete and to violate the spirit of sport. Other methods of improving performance such as blood transfusions are also included in the doping category.

The number of doping substances is very high, and their individual cataloging is not the purpose of this article. Instead, we can make a general classification according to how they act. A classification from S0 to S9 (Table 1) for prohibited substances and from M1 to M3 (Table 2) for prohibited methods has been developed.

Table 1 : Banned substances both during and outside the competition

S0. Substances that have not been placed on the market	Retired drugs such as sibutramine;	Designer substances: tetrahydrogestrinone	Drugs used in veterinary medicine
S1. Anabolic agents	Exogenous anabolic steroids: androstendiol and gestrinone	Endogenous anabolic steroids with exogenous administration: dihydrotestosterone, testosterone	Other anabolic agents: tibolone, zilpaterol, zeranol
S2. Peptide hormones and growth factors	Erythropoiesis stimulating agents: erythropoietin, darbepoetin	Luteinizing hormone in men; choriogonadotrophin	Corticotrophins, Growth Hormones. Insulin-like growth factor 1 (IGF 1)
S3. Beta 2 agonists	Salbutamol-1600 µg /24h	Formoterol 54 µg/ 24h	Clenbuterol
S4. Hormones and metabolic modulators	Aromatase inhibitors: aminoglutethimide	Metabolic mediators: insulin	-
S5. Diuretics and other masking agents	Masking agents: glycerols, plasma substitutes	Diuretics: Acetazolamide, Furosemide, Indapamide	-
S6. CNS stimulants	Nonspecific stimulants: amfepramone, fenfluramine	Specific stimulants: adrenaline, ephedrine, pseudoephedrine	-
S7. Narcotics	Buprenorphine, fentanyl	Metadone, morphine	-
S8. Cannabis extracts	Cannabis, hashish	Tetrahydrocannabinol	-
S9. Corticosteroids	Cortizon, Hydrocortisone	Prednison, Metilprednisolone	-

Table 2 : Prohibited methods

M1. Manipulation of blood and its components	Administration of products containing red blood cells in the circulatory system	Increasing the amount of oxygen or its transport
M2. Physical and chemical handling	Altering the integrity and validity of the sample collected during anti-doping control	Intravenous infusions or injections of more than 50 mL for 6 hours
M3. Genetically doping	Transfer of polymers of nucleic acids or their analogs	Use of normal or genetically modified cells

Since 2004, the World Anti-Doping Agency (WADA) has annually updated their Code and related documents that outline the official international anti-doping standards.

Substances which are not on the list of prohibited substances with possible doping effect

One of the substances that are currently extensively studied for doping potential is paracetamol, a substance commonly used as an analgesic and antipyretic. It has been noticed that in the case of cyclists, the athletes performances have been improved. So if in the case of cyclists it can increase performance, by lowering body temperature; why couldn't it be used for athletes practicing marathon, or athletes who run the 5000 and 10000 meters distances ? Some herbal extracts were suspected to have doping effects, so the ginseng root was tested to detect possible performance enhancing effects, but according to studies conducted on athletes under the supervision of the IOC, no positive tests were observed. However, it is specified that due to contamination with other doping substances, the tests could be positive, due to which the nutraceuticals should be carefully checked prior to use, in order to prevent possible disqualification from competitions. Studies have also been conducted to see whether NSAIDs, diclofenac and ibuprofen, both being non-selective COX non-steroidal anti-inflammatory drugs, could have an effect on the testosterone / glucuronidated epitestosterone ratio, but the results did not reveal any modification.

Substances that are not forbidden but can increase the performance of the athlete

L-carnitine is an endogenous compound, an aminoacid synthesized in the liver and kidneys from lysine and methionine, two essential amino acids. It can be found especially in food of animal origin, but also in plants such as soy beans, although in much smaller quantities. L-carnitine administration increases the HDL cholesterol fraction, and has neuroprotective properties in Alzheimer's disease. For athletes, the use of L-carnitine is based on the release of energy from lipids, saving a part of the glycogen from the muscles. Arginine is a semi-essential amino acid that could be used to increase performance, because of NO (nitrogen monoxide) release and the formation of citrulline, NO having a vasodilatory effect. Athletes can use arginine to increase physical performance, muscle mass and also their resistance in high effort.

Hydroxycitric acid is a substance often found in food supplements and it can be extracted from species such as Hibiscus sabdariffa or Garcinia cambodgia. It was reported to be used for weight loss, but according to clinical trials, it does not have lipolysis effects. Tyrosine is an essential amino acid that cannot be synthesized by the body and should be obtained through careful nutrition. It can also be used by athletes, with many beneficial effects such as reducing fat, controlling appetite. However, it is a dopamine precursor and so people with mental disorders or hyperthyroidism should not use it, as well as people with high risk of skin cancer because this amino acid leads to increased melatonin secretion. Another aspect to be considered is the period of the day when it is administered, because it is a precursor of adrenaline and noradrenaline that can cause stimulation of the nervous system. Other amino acids or derivatives used to increase muscle strength and endurance

are: carnosine, citrulline, glutamine, glycine and taurine. Taurine and carnosine have particular effects, being used as energizing substances.

Substances that are dopant only if certain doses are exceeded

There are some pharmacological classes of substances that have a quantitative upper limit, so can be used only in very small amounts, as: central nervous system stimulants such as caffeine and beta 2 selectives such as salbutamol or fenoterol. Caffeine can be considered as a dopant substance due to its effects: slight bronchodilatation, which is beneficial for athletes participating in endurance races, and also increases the diuresis which can be beneficial if an athlete is doped and wants to rapidly eliminate the other drug in their body. Other effects of caffeine are: cerebral vasoconstrictor, increases gastric acidity and also the appetite. An athlete is considered doped when the urine concentration of caffeine is above 12 µg/mL.

Most beta 2 selective substances are banned from competitions, but there are exceptions such as salbutamol, which has a maximum inhalation dose of 1.6 mg/24h. If salbutamol is present in a concentration higher than 1000 ng/mL in urine the athlete can be considered as doped. Formoterol is a substance used in asthma and it is in the same category as salbutamol. The dose of inhaled formoterol is 54 µg/ 4h, and urine concentration should not exceed 40 ng/mL, otherwise the athlete is sanctioned according to the rules.

Specific central nervous system stimulants are substances that also have thresholds, ephedrine and methylefedrine are prohibited when the concentration reaches values higher than 10 µg/mL, pseudoephedrine is prohibited when concentrations are greater than 150 µg/mL. Adrenaline is not forbidden when used locally in nasal or ophthalmic administration. Other substances that have a superior limit, that can lead to the elimination of the athlete from the competition are: bupropion, nicotine, pipradol, phenylephrine and phenylpropanolamine.

Substances subject to a monitoring program

There are three classes of substances part of a monitoring program: central nervous system stimulants such as bupropion, nicotine, phenylephrine, phenylpropanolamine, sinephrine and pipradrol; narcotics: hydrocodone, tramadol, talpentadol; and glucocorticoids, banned in competition through all ways of administration. Also, telmisartan, a angiotensin II antagonist class on AT1 receptors and meldonium substance used in angina pectoris, can be included in the same category. Central nervous system stimulants as well as narcotics will not be used in competitions, while glucocorticoids, meldonium and telmisartan are banned both outside and in competitions. Due to the fact that methylmorphine (codeine) converts approximately 10% into morphine, the codeine/morphine ratio should also be checked and is only monitored in competitions.

Conclusion

The fight against doping continues, but anti-doping agencies will always be one step behind manufacturers of new undetectable substances with pharmacological properties similar to those already available on the market. Much of the substances used today can be easily detected, but the development of new, cheaper and faster methods could help the Anti-Doping Federation. The existence of rules and Codes, as well as Anti-Doping Procedures and Biological Passports make doping more and more difficult to achieve. Another major factor that can lead to doping is the financial side, good results get sponsors and publicity, for some athletes being more than enough motivation for doping.

Injuries are another reason why many athletes endanger their "clean" athletes' status, their will to return to competition can lead to compromises that can end their career. Coaches have an important role in athletes' doping, most of the time, they are responsible for the illegal actions of athletes by offering them the forbidden substances or by acquainting them with people who are involved in doping. There are also athletes who do not know the utility of a substance or if it is on the forbidden list and with their doctor's recommendation

they use the substance which may be on the forbidden list. Another interesting case is that of food supplements purchased from unauthorized sites on the Internet. By having good ads with a convincing message, these supplements can be bought by an athlete. Unfortunately there is no organization to determine the composition of these food supplements, so when an athlete decides to use them, he is taking the risk of potential doping.

It is important to note that from the legal point of view, the athlete is 100% responsible for the substances that enter his body. Thus, if the athlete ingests accidentally an forbidden substance, he is still responsible for it. Carrying out anti-doping controls both in and out of competitions is a benefit for athletes who do not use banned substances, the number of athletes who have been positively detected outside competitions is much higher than those who are found doped in competitions.

Athletes who use different medication and have the consent of physicians should be careful to declare the use of such substances so that if the athlete is positively detected with it, the authorities know that the substance is needed to improve their health condition.

Current legislation is not very severe, perhaps if the repercussions of being positive with illegal substances were higher, violation of rules would not be so common. Athletes should be educated about doping, and about the side and adverse effects of the use of the various prohibited substances, with the aim of educating athletes to prevent the doping phenomenon.

To minimize the phenomenon of doping, information and prevention programs, starting with athletes at a young age, and involving other stakeholders (e.g. the athletes' doctors, coaches or family), are necessary to establish and maintain correct attitudes and behaviors.

Finally, we can conclude that taking into account the human nature and the social and economic implications of professional sports, the end of doping in sports is most likely an unrealistic term.

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IMPACT OF INFORMATION COMMUNICATION TECHNOLOGY ON LIS EDUCATION IN INDIA: PROBLEMS AND FUTURISTIC PERSPECTIVES

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Abstract

Library and Information Science students in India have to compete with other professionals to survive in the information business; they have to be equipped with a curriculum, which can make them function as competent information professionals. In the networked environment there is a strong need for continuing professional education and training. Library professionals requires training and retraining to use IT-based resources and services, such as e-mail, FTP, telnet, www, browsers, search engines, databases, system software, application software, electronic journals, computer conferences, scholarly discussion lists, mailing lists, Usenet newsgroups, websites, CDs and DVDs.

Keywords: LIS Education, Technology, Cloud Computing, India, Library automation, Digital Era.

Introduction

In the fast changing world of the 21st century, several professions are adapting with changes and pacing with new useful technologies for their survival and advancement. In India a major changes as regards to LIS profession is seen only in last few years and LIS Department and Faculties want to effectively utilize availability of limited resources and try implementation of those are programs in LIS Schools. The first training course in Library Science in India was established at the Central Library, Baroda in 1911/12 by W. A. Borden and at Punjab University in 1915 by A. D. Dickinson. Gradually other universities and library associations started setting up library schools. Madras Library Association and Bengal Library Association started certificate courses in 1929 and 1935 respectively. Postgraduate courses also started in other universities subsequently, such as Andhra University (1935), Banaras Hindu University (1941) and University of Delhi (1947). The University of Delhi started providing facilities for research leading to doctorate degrees. It was the first institution to start the M.Phil courses in 1977.

In addition to formal teaching courses, many universities have introduced correspondence courses at various levels of education. This provides facilities to library personnel working at the lower level to improve their qualifications and update their limited knowledge and skills and also to those who could not get admission to formal courses earlier. In India, Library Science has almost been recognised as an established discipline now at par with other social sciences courses in the university education system.

In spite of this, LIS education is currently facing a turning point. Various factors have contributed to bring about the change from the conventional to an automated library operation. Today only computerized libraries can participate in networking at the national and international levels. Most of the computerized libraries suffer from paucity of competent personnel at top and middle level managerial positions.

Presently in India, Library and Information Science (LIS) education is imparted through more than 118 universities and institutions. A total of 105 universities provide Bachelor of Library and Information Science (BLIS) courses, 78 universities provide the Master of Library and Information Science (MLIS) courses, 21 are offering two-year integrated courses, 16 universities provide M.Phil in Library and Information Science, 46 universities provide Ph.D in Library and Information Science and 2 Universities provide D.Litt Degree. Besides this, the National Institute of Science Communication and Information Resources (NISCAIR) which was earlier known as the Indian National Scientific Documentation Centre (INSDOC), New Delhi, and Documentation Research and Training Centre (DRTC), Bangalore, provide Associateship courses in Information Science, which are equivalent to the MLIS degree. Presently the following LIS courses are available in India: -

- Certificate course in Library and Information Science (C.Lib.Sc)
- Diploma in Library and Information Science
- B.Lib.Sc. /BLIS (Bachelor Degree in Library and Information Science)
- M.Lib.Sc. /MLIS (Master Degree in Library and Information Science)
- PGDLAN (Post Graduate Diploma in Library Automation and Networking)
- M.Phil (Master of Philosophy) in Library and Information Science.

Required Skills for LIS Professionals

In the Indian context, the scope of the subjects taught varies from university to university and the students who come out of these universities with degrees mostly fail to perform in a technical or a research library. The electronic environment of the 21st century demands a range of skills from library and information science (LIS) professionals, which include technical skills, IT skills and managerial skills. Library users are turning towards the LIS Professionals for help and advice on search techniques, database development, quality of online databases, and choice of databases that are available. As a result, LIS professionals need organized training programs, which can be in the form of workshops, conferences, seminars, symposia, and so forth.

Information Technology and LIS education

After the USA, UK and some European countries, India is one among to provide ICT oriented LIS education to the students. In late 1960s and early 1970 teaching of computer application commenced in Indian Library Science Departments. The courses run by the DRTC and INSDOC also included a paper Library automation. Now a day's information technology is a subject in library science education.

Implementation of Information technology in libraries

- ❖ Almost all libraries turned to Automated libraries and digital libraries
- ❖ Different Library software's are used by libraries to manage the library activity
- ❖ Easy retrieval of information can be possible through internet via Google and other search engines
- ❖ Databases are available for easy retrieval of information.
- ❖ E book , E-journals, Subject gateways are available for information retrieval
- ❖ Cloud computing, institutional repositories, online courses, open access journals etc. brings tremendous change in the use of information.

Levels of LIS Education

The LIS education in India is offered at various levels such as certificate, diploma, degree, Associate ship in Information Science (AIS), M.Phil and Ph.D. These programmes are offered on regular basis as well as through correspondence courses or distance education. Details about the types of courses are as follows.

(a) Certificate Course: Certificate courses are mainly conducted by library associations; however, some departments in universities and affiliated colleges are also conducting this Singh, S.P. 4 course. The duration of the course varies from few months to one academic year. The courses aim to train the students for semi-professional or junior level jobs after high school or senior secondary education.

(b) Undergraduate Diploma Course: The Diploma courses are conducted at two levels, that is undergraduate and postgraduate levels. Undergraduate courses are conducted by women polytechnics as a two-year course after higher secondary or intermediate. It prepares students to be junior librarian and hold library assistant positions.

(c) Postgraduate (PG) Diploma Course: PG courses in some selected LIS areas of specialization are offered at the university level as a one-year course after the Bachelor of Library and Information Science programme. At present, only three universities and one deemed university are offering these programmes (Association of Indian Universities, 2003). They are

- University of Kerala, PG Diploma in Information Technology ;
- University of Mysore, Post MLIS Diploma in Library Automation;
- Gandhigram Rural Institute, PG Diploma in Archives & Documentation Management; and
- University of Hyderabad, PG Diploma in Library Automation and Networking (Association of Indian Universities, 2003, p.2)

(d) Bachelor of Library and Information Science (BLIS): This is a one-year degree course conducted by universities after students graduate with a basic degree. However, in some colleges, Library Science is offered as an optional subject at the Bachelor of Arts level. For this, the students opt for Library Science as one of the optional paper, along with other optional papers in social sciences or the humanities. Students passing with this option would be considered at par with other degrees .Bachelor's degree prepares students for professional positions in college and university libraries or as a school librarian. At present, 120 Indian universities are offering BLIS.

(e) Master of Library and Information Science (MLIS): It is a post-graduate course offered after BLIS. Presently, a total of 99 universities are offering MLIS, 21 of them are offering two-year integrated course directly after BLIS. Many of the universities, which were initially offering BLIS and MLIS courses, have now switched over to a two-year integrated course. The North East Hill University (NEHU) was the first Library and Information Science Education in India 5 University to start the course in 1986, followed by the University of Madras in 1988. In 1989, Madras also started MLIS through distance education.

(f) Associate ship in Information Science: Since 1964, the Indian National Scientific Documentation Centre (INSDOC) New Delhi has been offering a two-year programme in documentation, which in 1977 the programme was renamed as Associateship in Information Science (AIS). On the 30th September 2002, INSDOC merged with the National Institute of Science Communication (NISCOM) and was renamed the National Institute of Science Communication and Information Resources (NISCAIR). The qualification for admission to the NISCAIR's programme is a master's degree in any subject or a BLibSc /BLIS with three years library experience. The Documentation Research and Training Centre (DRTC), established in 1962 in Bangalore, is also awarding AIS. Admission requirement to DRTC is a bachelor's degree in library science or a master's degree in any subject with a minimum of two years library experience.

(g) Other Specialised Programmes: The Indian Association of Special Libraries and Information Centers (IASLIC) and the National Archives of India also offer specialized courses. IASLIC offers a one-year diploma programme in special librarianship and the National Archives of India offers a one-year diploma programme in archives and related subjects.

(h) M.Phil in Library & Information Science: This is a research programme offered by university departments after one's completion of MLIS. The University of Delhi started this programme in 1978, followed by many other universities such as Andhra, Tirupati, Annamalai, Vikram (Ujjain), and Gulbarga. At present there are 16 universities Singh, S.P. 6 offering this programme. The basic requirement for admission is similar in all the universities but the duration of the course may vary.

(i) Ph.D. Programme : This is an advanced level research programme being offered after the completion of MLIS or M.Phil degree in library science. Today, 64 universities in India are providing facilities for the Ph.D programme. The general qualification for admission is MLIS. However, LIS teachers and librarians in lecturer's scale are exempted from this requirement.

(j) D.Litt. Programme: Two universities, Banaras Hindu University, Varanasi and Utkal University, Bhubaneswar offers D.Litt. programme in library science. So far only one D.Litt. degree had been awarded in India since 1992 by Utkal University, Bhubaneswar, to Dr D.B.Shukla on the topic 'The work and impact of a pioneer in library and information science: a critical study of the works of Prithvi Nath Kaula'.

Issues and Challenges

LIS Professionals have to face many challenges to meet the present and future generations and prospects of Library and Information Science to bring the quality education and practice. The ultimate aim and purpose of doing the professional courses is to obtain an excellent job. But nowadays most of the open universities have limitless intake of students; as a consequence, qualitative students are not coming out from these universities. In addition, notwithstanding having higher degrees with good percentage, they are ineffective and unproductive in the field of professional. Following points are other biggest challenges and issues that the LIS education system is facing in this day and age:

- Lack of Admission procedure
- Lack of finance policy
- Inadequate Infrastructures
- Inadequate of Knowledge and Training
- LIS course duration, curricula
- Insufficient Contact Classes
- Absence of Accreditation
- Lack of supporting policy
- Lack of a global Perspective
- Lack of Library Visit
- Lack of Permanent Faculty for Distance Program
- Lack of Evaluation & Medium of instruction.

LIS education in India: current scenario

The LIS education in India can be discussed at four levels.

1. Geographical distribution of LIS schools and levels of education;
2. Curriculum development during 25 years;
3. Infrastructure available in the LIS schools; and
4. Developments in the course contents.

1. Geographical distribution of LIS schools and levels of education LIS education

In India has undergone a long way since the introduction of one year-P.G. Diploma course at University of Madras in 1937 which in fact served as a model for the development of library science education programmes in the country during the pre- and post independence period until 1950s. It is estimated that there were five universities conducting diploma course before independence. During the 1970s, the number increased to 42 and at present 167 universities and their affiliated colleges are conducting LIS courses. The degrees offered by the universities at various levels are, Certificate course in Library science; Diploma and Post diploma in Library science; Honors course in Library and information science; BLIS; MLIS one year; 2 year integrated course in MLIS; M.Phil; Ph.D. in Library & information science; Certificate in ICT application in Library (CICTAL); P.G. Diploma in Library automation and Networking (PGDLAN).

2. Curriculum developments

In LIS, the curricular change is a well-accepted and continuous phenomenon in India. At the university level, after independence, the UGC controls mainly the general course structure of various curriculums. A review of the literature shows that since inception UGC

has given due emphasis on the curriculum design for the LIS departments along with the developments in the University and college libraries. The first such review committee is known as Ranganathan committee (Ranganathan, 1965) on Library science education entitled “Library science in Indian Universities”. In 1980s, a marked change in LIS education programme was required due to the introduction of IT in to the Library field. As a result the next attempt for the revision was initiated by the UGC in the early 1990s. The UGC constituted CDC (Curriculum Development Committee) on library & information science under the Chairmanship of Prof. P.N. Kaula (1993). The report of this committee was published in 1992 under the title” Report of the curriculum development committee on library & information science.” The publication of this curriculum helped the university departments to update their syllabi as per the requirement in the profession during these periods.

3. Infrastructural facilities available

Adequacy of infrastructural facilities is one of the important elements for offering qualitative teaching. The infrastructure includes the teaching and other non-teaching staff and laboratory equipments. It is noticed that except few university departments, the majority of the departments do not have the proper infrastructure facilities. The teaching departments are suffering from the minimum staff having the latest knowledge of ICT although many developments are occurring in this field. At the same time, the laboratories attached to the teaching departments have inadequate number of computer and other equipments to train the library professionals. The UGC is also in its stride to having comprehensive and proper training facilities for the in-service training for the LIS teachers.

4. Developments in the course contents

The model curriculum designed by the Karisiddappa committee (2001) made maximum efforts to incorporate a considerable number of IT components. At the same time the report has recommend that the “ revision of syllabus is required to be undertaken very cautiously with break –even manner, not entirely overawed either by the invasion of IT or by sentimental attachment to various philosophical and historical components”. The report provides six core modules and one elective module. The modular system is framed as per the UNICCO report published in 1987, Asia-Pacific report named “ A curriculum for an information society”, 1998 and other similar works done in the field.

Futuristic Prospective of LIS Education in India

, they are.

- ❖ Modern LIS education requires infrastructure such as media labs, IT labs, and information products for practical approaches.
- ❖ Libraries and information centers are increasingly organizing their work around newly emerging technologies and tools.
- ❖ Information professionals is changing and expanding and their existing skill sets and competencies are becoming obsolete, LIS schools are required to constantly take notice of the skill sets and new competencies that are in demand in the market place and accordingly create new wherewithal and conform their curricula to meet the requirements of present times and times ahead.
- ❖ In smart class rooms having interactive board and connectivity with the intranet, faculty can select electronic content to help the students in just-in-time learning.
- ❖ The LIS schools must initiate research-based teaching and ensure more emphasis on training keeping in view the vast potential of info-business.

Indian Initiatives to development of LIS Education

In India most of Library Associations, Professional Associations, State as well as Central Government body’s are engage in to improvement of education systems in India, in various level, its including LIS education system also, some of well known associations, centers are in that way, there are,

- ❖ The Inter University Board of India was formed on 23 March 1925 with a view to promote inter-university cooperation and interaction. In 1943, the Inter University Board of India resolved that, “in order to maintain uniformity of standards at various centres for training for librarianship, it is necessary that only graduates be admitted to the diploma course”. It became necessary as the Board dealt with the issue of equivalence of degrees awarded by foreign and Indian universities. The Board adopted a new name, Association of Indian Universities, in 1973 and is still very active.
- ❖ The Ministry of Education, Government of India set up a nine member committee under the Chairmanship of Shri K.P. Sinha to recommend the future library structure and its development in India. The Committee recommended to the Government of India to set up an expert committee to suggest complete reorganization of the syllabus, teaching methods and conduct of examination of the then prevailing library diploma course. It recommended that UGC should provide financial assistance to universities offering diploma courses for establishment of full teaching departments. It also recommended that the terms and conditions of work of library science teachers should be same as those of other departments.
- ❖ In October 1985, the Government of India set up a Committee on National Policy on Library and Information System (CONPOLIS) under the Chairmanship of Prof. D.P. Chattopadhyaya, recommended that IT should be used as a tool for maintenance of standards in LIS education. Professional development activities are strengthened in a systematic way. An accreditation agency for LIS courses was suggested to check falling standards due to proliferation of schools. It was also suggested to establish a National Centre for Higher Education and Research in LIS.
- ❖ Two unique courses were developed by the Documentation Research and Training Centre (DRTC) and the Indian National Science and Documentation Centre (INSDOC) to cater to the needs of special libraries in particular. However, the inculcation of the graduates from these institutions in teaching programmes has given a new direction to the educational paradigm of LIS. While DRTC is an autonomous central institute under the Indian Statistical Institute, INSDOC is a constituent centre of the Council of Scientific and Industrial Research. The National Centre for Science Information is also offering a postmasters degree course with intensive application of IT to LIS.
- ❖ The National Information System in Science and Technology/Department of Scientific and Industrial Research (NISSAT/DSIR) and other research and development organizations like Defense Scientific Information and Documentation Centre (DESIDOC) and Sectoral Information Centres under NISSAT have also contributed to this process of technology application in libraries and the manpower development to man many of these libraries and information centres (LIS Education).

Conclusion

The ground reality of the present LIS education system in India indicates that the quality improvement is essential and unavoidable, not only for its survival but also for facing the major changes and challenges of today and tomorrow. Library schools in India need to look forward and take full advantage of the opportunities lying ahead of us. The use of information technology for training LIS students and professionals has become crucial for meeting the challenges of twenty first century. It has been predicted that a country that leads information revolution will prove to be more powerful than any other country. The significance of the role of library schools to train manpower for coming decades can contribute to the progress of the nation. The technology brings greater change in our everyday life.

The technology enhance retrieval of up to-date information through cloud computing, internet etc. using tab, smart phone etc within seconds. No one has to go to library for information collection. E-learning and distance education bring tremendous changes in the

use of information sources. Through online information resources easily and within short time we can retrieve our relevant information with no cost apart the availability of net. In this situation future of library and information science education is very perceptible. The concurrency of LIS education is a demanding factor for sustainability of library professional. The influence of IT in education also reflects in LIS education. In order to develop our skills to face the need of E-user is one of the greatest challenge LIS education in India have many things to further do.

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INFLUENCE OF NUTRITION ON ATHLETIC PERFORMANCE: AN IN-DEPTH STUDY

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Abstract

Nutrition can play a very important role in the performance of a player. The winning of the gold medal or failing to get it can depend to a great extent on the nutrition pattern being followed. However, this is not only restricted to professional players but nowadays, a large number of amateur players also practice daily to keep them physically fit. Therefore, it is essential for the professional players to follow a guided and planned nutritional diet and training sessions. In addition, other advantages of adequate food intake in sports are related to changes in body composition, reduction of injuries, and prolongation of professional career length.

Keywords: Diet, Nutrition, Sports Performance, Athletes, Nutritious Meal.

Introduction

Proper nutrition is vital in optimizing athletic performance, enabling sportspersons to achieve their full potential. Nutrients and fluid balance significantly affect players' vigor, recovery, and achievement. Moreover, timing and eating schedules are critical in refining sports outcomes. Athletic performance can be enhanced through proper nutrient consumption, hydration management, and individualized dietary regimens, which optimize the significant impact of food constituents on energy and body recuperation.

Impact of Nutrients on Energy and Recovery

One of the cornerstones of athletic prowess is the intake of appropriate nutrients. For instance, micronutrients and macronutrients are the two main elements crucial for sporting performance. In this case, athletes should consume optimal ratios of macronutrients, including carbohydrates for fuel, proteins for muscle repair and growth, and fats for energy and recovery, to achieve training goals. Many minor nutrients, such as vitamins and minerals, are essential for enzymatic reactions and overall physiological functioning, directly impacting an athlete's performance and restoration. Additionally, poor dietary macroelement consumption can impact micronutrient intake, which many athletes need to meet (Hadeel et al. 2023, p. 1). Many trace elements are found in foods that are also sources of macronutrients. For example, a diet lacking primary nutrients, such as protein-rich foods like meat, dairy, and legumes, can result in deficiencies of essential microminerals like iron, zinc, and calcium. Thus, a balanced intake of macronutrients and nutrient traces is crucial for athletes to achieve their training goals and perform at their best.



Significance of Hydration for Athletic Performance

Hydration is often underestimated, yet it remains a crucial factor influencing athletic performance. Acute dehydration reduces wrestlers' muscle strength, work capacity, and energy release (Ceylan et al. 2022, p. 2). Severe parchedness occurs when an athlete loses more fluids through sweating than they consume, and this imbalance can occur during intense training sessions or competitions. It can hinder cognitive function and decision-making in competition, causing decreased delivery and increased fatigue, making proper hydration essential for optimal performance and preventing heat-related illnesses. Therefore, athletes should prioritize liquidating to maintain execution, prevent ailments from heat, and make informed decisions.

Timing and Individualized Nutrition Plans

The timing of nutrient intake plays a significant role in maximizing athletic performance. For example, consuming protein before or after a workout significantly increases muscle protein synthesis. The pre and post-workout nutrition window supplies the body with essential nutrients to prepare for and recover from exercise. Eating before training provides energy, while post-workout nutrition replenishes muscle glycogen and aids protein biosynthesis. Furthermore, older adults may benefit from higher protein intake, timed throughout the day, to optimize resistance training results. Individualized nutrition plans tailored to an athlete's needs, body composition, and training demands are essential for optimal performance outcomes. Hence, ideal athletic conduct and results can be realized over customized nutrition plans and suitable nutrient scheduling.

Nutrition and Diet

Since childhood days we have studied that we should eat a balanced diet so that our body gets all the energy it needs to function correctly. The number of calories in a food is actually the amount of energy stored in that food. Our body uses calories from food for out day to day activities like walking, talking, breathing and many other important functions. The person on an average needs to take in about 2,000 calories every day to maintain their weight. However, an individual's specific daily calorie intake can change depending on their gender, their age and the amount of physical activity they do. Men in general need more calories than women do and people who work out need more calories than other people who don't. Thus a person who is specifically interested in sports and a person who has some fixed goals which he wants to achieve, feel the need of particular diet and nutrition which can help him achieve his objective



Sports Nutrition

Dietetics or Nutrition is a special study which is concerned with the scientific and practical knowledge of diet and food habits of human beings in general. Sports nutrition is a special study in the field of nutrition that helps to study the human body and how it can be used for exercise. Here sports nutrition can be defined as the study and application of knowledge of nutrition to a daily eating plan focused on providing the fuel for physical activity, which can help in the repair and rebuilding of the body which is required after hard physical workouts. It is also used for gaining the best performance from an athlete in any competitive event in addition to improving his overall health and physical wellness. Sometimes sports nutrition is often considered to be only for "sports persons," which is often considered as just being available only for those individuals who are performing at the highest level in a particular sport. But we should not forget that sport does not relate only to the elite players but it also refers to any individual who is regularly active, whether it is a

fitness enthusiast or the young amateur player or the professional sportsman, everybody needs a planned diet for a healthy performance. However, the diet that will be best for an individual will depend on the amount and the intensity of work done by an individual. This can range from those who are just starting to get more active, those meeting the activity guidelines (of 150 minutes moderate activity per week), those who are active at higher levels (such as those training for an endurance event such as a marathon or doing organized team sports) or professional athletes. For professional players, getting diet advice from a qualified sports nutritionist or dietitian is likely to be an important part of their training support.

Athletes and Nutrition

Athletes are very devoted to their sport. They exercise daily, train with professionals, raise weights, have interaction in team practices and compare against each other. All this commitment is created in an attempt to form the material body work with a lot of efficiency. Continuous exercise and coaching, conditions the muscles in such a way that a basketball player would need to coach the muscles within the arm to throw a basket with pinpoint accuracy, hockey and football players would like their respiratory system to function in depth as per demand of the need for endurance and importantly for outrunning their opposition teams. In this generation the players have set a benchmark in each competition in sports which has already reached unprecedented levels. Even then it remains to be answered whether athletes are gaining the proper diet to perform their activities?

Food that act as fuel for Exercise

Nutrition can play a very important role in the performance of a player. The winning of the gold medal or failing to get it can depend to a great extent on the nutrition pattern being followed. However, this is not only restricted to professional players but nowadays, a large number of amateur players also practice daily to keep them physically fit. Therefore, it is essential for the professional players to follow a guided and planned nutritional diet and training sessions. In addition, other advantages of adequate food intake in sports are related to changes in body composition, reduction of injuries, and prolongation of professional career length. Key Words: Diet, Nutrition, Sports Performance, Athletes, Nutritious Meal.

➤ CARBOHYDRATES:

Carbohydrates are compounds that are made up of carbon, hydrogen and oxygen. Carbohydrates contain sugar, starch and cellulose which can be broken down to provide energy to the body. For players, if their food does not contain enough of these compounds, it is likely that their output will slow down as carbohydrate is the main fuel needed for the brain and muscles during workouts. The body will store carbohydrates within the muscles and liver as glycogen. These glycogen stores are restricted hence for those who are doing workouts and training at a high level, it's necessary for them to keep it completely fuelled at the beginning of any exercise. If glycogen levels are not maintained properly then while pursuing high intensity training for long periods an athlete may feel too tired, experience lack of energy and not be able to give their best. So, regular intake of carbohydrate-rich food is necessary to keep the energy levels to the fullest. The proper choice of food will facilitate and make sure that the body has enough energy for all the activity as well as help in recovery at times. Wholegrain varieties provide fibre, and a range



of vitamins and minerals including vitamin B, iron, and calcium are an important source of carbohydrates in our diet. For athletes and individuals who enjoy being active to a higher level, taking in additional carbohydrate may be helpful for increased performance. Where athletes practice for long hours at a stretch like training for a marathon or playing at a national level, consuming some carbohydrate while exercising in the form of a sports drink, can also improve an athlete's performance.

✚ **PROTEINS:**

Proteins are mixture of amino acids that join together in various ways to make up, bones, muscle, tendons, skin and many other tissues. When a person eats food during ingestion, proteins are broken down by the body and amino acids are formed. Protein is one of the main part of the body tissues which is necessary for cellular growth and repair. Athletes want protein mainly to repair and makeup the muscle which is broken down during physical exertion. Doing physical work out breaks down the fibres in the muscle and the body has to quickly rebuild those fibres in order to support performance by the athlete in future. When the body does not have enough quantity of carbohydrates, the body looks for protein as a source of fuel for all kind of physical activity. In case of high intensity physical activity being carried out the muscle tissue becomes an energy source because there is an insufficient amount of fat and carbohydrates consumed. Therefore it is necessary to maintain an adequate protein intake every day, to make up for the protein lost in the muscle tissue.

✚ **FATS**

Fat is the most important source of fuel during prolonged exercise. The body has an unlimited storage capacity for fat, making it the largest reserve of energy in the body. It is integral for many metabolic processes such as energy production, synthesis of vitamin D, cholesterol, hormones, and transporters of lipid soluble vitamins. Fats are of two types saturated and unsaturated. Where saturated fats are gained from plants they do not pose a risk and can be eaten by the athletes but unsaturated fats should be avoided by athletes as it can lead to heart related diseases. However, fats do hold a place in sports nutrition. Fats are not rich in oxygen, and they can release a large amount of energy at a faster speed than other nutrients. This can provide an athlete with a concentrated source of energy. Fat is important for endurance exercises and for sportsman who practice for longer duration of time. Fats also help in and protecting the main and important organs of the body. Sportsman can get fat from food such as milk, butter, meat and oils. They need carefully keep a record of the type and the amount of fats they eat.

✚ **BODY HYDRATION:**

As water is important for life same way hydration is important for health, especially in athletes and those people who are physically active. Drinking enough fluid is important for maximizing exercise performance. When we exercise our body temperature also rises. The body tries to cool down by sweating which causes the loss of water and salts. Generally, the more a person sweats, the more they need to drink fluids to maintain their body hydration. Dehydration can cause tiredness and affect performance by reducing strength and aerobic capacity. So, especially when exercising at higher levels or in warmer conditions, it is important to try and stay hydrated before, during and after exercise to prevent dehydration and drinking water is the best option. If an athlete is doing more intense exercise they may gain more by having drinks containing some carbohydrates, and other electrolytes including sodium. For e.g. in long distance running or competitive swimming when carbohydrate stores may substantially reduce leading to sodium losses most athletes benefit from developing a personal hydration plan. A general rule for training is to consume a minimum of:

- Two cups of fluid prior to training
- Four to six ounces of fluid every 15 minutes of exercise

✚ **SUPPLEMENTS:**

Supplements are only a small part of a nutrition programme for training. Athletes are often advised to follow a 'food first' approach and avoid using supplements. For most people who are active, a balanced diet can provide all the energy and nutrients the body needs without the need for supplements. Sports supplements can include substances that may have been associated with increasing athletic performance example creatine, sodium bicarbonate or nitrate. The main reasons people take supplements are to correct or prevent nutrient deficiencies or to achieve a direct performance benefit.

Planning a nutritious meal:

Without adequate calories from the healthiest food sources, we will struggle to achieve our performance goals. We should plan a nutritious meal by choosing at least one food from each category. Carbohydrates Protein Healthy Fat Fruit Whole eggs (white and yolk) Avocado Oatmeal Greek yogurt Peanut butter Starchy vegetables (sweet/white potatoes, squash) Milk Nuts and seeds Non-starchy vegetables (broccoli, leafy greens) String cheese Olive or canola oil (the latter, if baking) Whole-grain bread or crackers Lean red meats Coconut oil High-fiber, non-sugary cereals Poultry Flax seed (add to baking or cooking) Quinoa Fish Brown or wild rice Hummus

Nutrition to be taken on game day: There are a few golden rules when it comes to eating on the day of the game: We need to remember, proper nutrition for the "big tournament/race/meet" does not happen on the day of the event alone. It happens on the days, weeks, and months leading up to the competition We should never experiment with a new dietary/supplement protocol on the day of the big game we should first, try it out prior to a practice or training session to make sure that we can tolerate it well. As we get closer to the game or competition we should make our meals smaller. Additionally, we may want to limit dairy, fat and fibrous carbohydrate sources during the last one to one and one-half hours before the event or practice, as these may cause gastrointestinal disorders.

Fuel for exercise

When carbohydrate is delivered at desirable rates during or after endurance exercise, protein supplements appear to have no direct performance increasing effect. Carbohydrate and fat are the two major fuel sources oxidized by skeletal muscle tissue during prolonged (endurance-type) exercises.

The relative contribution of these major fuel sources largely relies on the exercise intensity and duration. Endurance performance and endurance capacity are largely ordered by endogenous carbohydrate availability. As such, meliorate carbohydrate availability during prolonged exercise through carbohydrate ingestion has dominated the area of sports nutrition research. As a result, it has been well established that carbohydrate intake during prolonged more than two hours moderate-to-high intensity exercise, increase endurance performance.

Championship season leads to significant performance benefits for most athletes. Both intra and extracellular buffering agents may enhance performance, but more researches are in demand to various power sports having different body compositions activity and body weight requirements, but increasing the power-to-weight ratio during the examination, the potential long-term effect of buffering agents on training adaptation. Interactions between training desired physiological adaptations, competition, nutrition requirement an individual approach must be continuously adjusted and adapted.

Low pre-exercise muscle glycogen decreases high-intensity performance, so intake of carbohydrates should be emphasized during whole training and competition phases.



Training for major power sports includes various routines that place a wide range of physiological demands on the athlete. There are strong grounds to suggest that the timing, type and amount of protein intake determines the post-exercise recovery and adaptations. This requires a miscellaneous nutritional strategy to hold general training needs. Most power sports feature requires Competition agenda, which require aggressive nutritional recovery strategies to make optimal muscle glycogen re-synthesis.



An athlete's carbohydrate ingestion can be evaluated by his total daily intake and the timing of uptake in relation to exercise maintains enough carbohydrate substrate for the muscle and central nervous system. Carbohydrate availability is enhanced by consuming carbohydrate in the hours or days prior to the session or activities, intake during exercises and provides additional fuel during recovery between sessions. This is an important for the competition arrangements or for high-intensity training where optimal performance is require. Carbohydrate intake during exercise must be increased according to the requirement of the event or games. During sustained high-intensity sports lasting more than one hour, small amounts of carbohydrate (Simple and Complex) including even mouth-rinsing (like carbohydrate rich juice) increase performance via central nervous system effect. While 30-60 gm h⁻¹ is a suitable target for sports of longer duration, events more than 2.5 hours may promote benefit from higher ingestion of up to 90 gm h⁻¹. Products containing special mixture of different carbohydrates may increase absorption of carbohydrate at high rates. In real life, athletes attempt training sessions with varying carbohydrate accessibility whether applying additional strategies to increase the training adjustment.

Holway and Spriet in 2011 states that implementation of a nutrition program for team sports involves a diligent effort of scientific research together with the social acquirement necessary to work with a sports medicine and coaching staff. The demand of energy is high during pre-season training and matches and is moderate during training in the competitive season. Dietary planning must include enough carbohydrate on a moderate energy requirement, while also completing protein needs. Strength and power team sports require muscle-building program that must be accompanied by enough nutrition and anthropometric measurements (including height and weight) can help the nutrition practitioner to monitor and assess body composition analysis periodically.

Conclusion

The impact of nutrition on athletic performance is undeniable. Proper nutrients and rehydration pointedly shape energy, recovery, and feats. Raising athletic potential can be attained via initialed nutrition plans, apt nutrient timing, and a sane intake of nutrients. By spotting the vital role of nutrition, players can elevate their conduct and reach peak levels.

The main concept that underlies healthy eating and enhancing sports performance is maintaining a balance between the amount of food consumed and the amount of energy that is to be used for work. Since athletes take part regularly in physical exercise, they will need to absorb more energy from the kind of food they eat. The body of the athlete is trained in such a way that with long hours of practice and training it is made fit to excel in sports performances. It is important for the athlete to maintain their body by eating proper and nourished food for pursuit of such athletic expectations. Athletes need to focus on

maintaining a proper diet and fix a proper time for physical training and proper rest together. Good eating habits are important to achieve the maximum output in physical performance but this does not mean that we should place food in different categories of good or bad. To achieve a healthy lifestyle an athlete should eat food from various food groups and make better food choices at the same time. Daily food choices should include food of all types' carbohydrates, proteins, fats, vitamins and minerals and most importantly fluids, example water. Athletes are best equipped to gain their maximum potential only when they take the right amount of food at the right time. Thus we can say that Nutrition does have an impact on athletic accomplishments.

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LONG TERM ATHLETE DEVELOPMENT (LTAD) STAGES - A CLEAR PATH TO BETTER SPORT, GREATER HEALTH, AND HIGHER ACHIEVEMENT

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Abstract

The Long-Term Athlete Development (LTAD) model describes what children, youth, and adults need to be doing at the right time to develop in sport or activity. Both kids and adults will get active, stay active, and reach the greatest peaks of sport performance when following this model. Long term commitment to physical literacy and sport skill development is vital to optimize athletic potential. This commitment requires time. There are no shortcuts to success.

Keywords: Better sports, Greater health, Higher achievement, Long-term, Sports skill and Long Term Athlete Development (LTAD).

Introduction

Individuals can experience failed attempts to participate in organized sports when too much emphasis is placed on competition and not enough attention on developing proper athleticism (appropriate movement skills). If you have limited movement skills, you stop participating. Neglect leads to decreased interest in physical activity and failure to develop *physical literacy*, proper training to improve athleticism, in a sequential and progressive manner. As a result, it is important that your first experience in physical activity be a positive one.

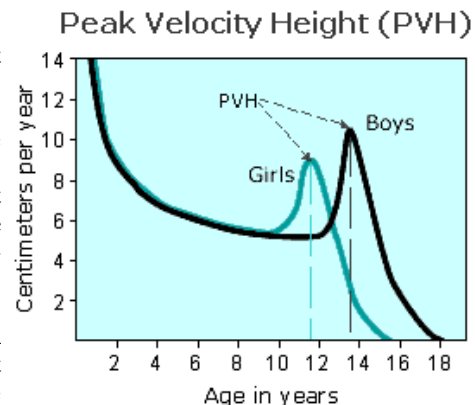
One key concept in the LTAD model is “windows of opportunity”. There is a window of opportunity/point in time that exists in which individuals should train certain skills to maximize their potential enhancement. When that point in time passes, your ability to reach full potential decreases. For example, before puberty, we have what’s called a speed training window (quickness, agility, change of direction) where athletes should train for speed. After puberty, we have a strength training window.

Athletic model indicators

One practical solution is to use the onset of Peak Height Velocity (PHV), which is influenced by genetics and environmental factors (climate, cultural & social), as a reference point for the design of training programs.

PVH is the point in a child's development when they reach their maximum growth rate. The average age for reaching PVH is 12 for girls and 14 for boys. Peak weight velocity usually follows shortly after PVH.

Following PVH, Vo2max and strength increase significantly as a result of growth. Most girls experience their first menstrual cycle



approximately one year after PVH.

Using simple measurements (standing height & sitting height) PHV can be monitored, and appropriate training can be set to match the athlete's development.

Factors of LTAD

- **Fundamentals** - Learning basic movement and sports skills should be made FUN
- **Specialization** - Well-rounded, multisport athletes have the highest potential to achieve
- **Trainability** - Missing optimum opportunities significantly affects a child's ability to reach his or her potential
- **Ten Year Rule** - Refers to the '10 year - 10,000 hour rule' relating to the need of practice for three hours a day for 10 years to become proficient
- **Physical/Mental/Cognitive/Emotional Development** - Focusing while remaining calm and confident is an essential skill to long-term performance
- **Biological Age vs. Chronological Age** - Chronological age is a poor guide to segregate adolescents for competition
- **Periodization** - Segmenting the calendar year into appropriate time intervals for preparation, competition, rest and recovery
- **System Alignment and Integration** - We need a structure that is athlete-centered and looks at the individual player's development
- **Calendar Planning for Competition** - There needs to be a better system for how to best use our kids' time on and off the ice
- **Continuous Improvement** - The LTAD principles on which ADM is built address core needs for all players



USA Hockey's American Development Model

Hockey for Life

Any Age – Players can enter at any stage. 'Hockey for Life' can provide quality recreational opportunities for all ages. USA Hockey also hopes that as adults we lead a physically active life style and continue to contribute to the sport through volunteerism as coaches, referees and administrators.

Active Start	FUNDamentals	Learn to Train	Train to Train	Learn to Compete	Train to Compete	Train to Win
<p>Ages 0-6 This early development period is essential for acquiring fundamental movement skills (running, gliding, jumping, kicking, catching, striking...) that lay the foundation for more complex movements, thereby preparing children for a physically active lifestyle. USA Hockey encourages activity that incorporates fundamental movement skills in the 4 environments that lead to physical literacy: - In the water: Swimming - On the ground: Athletics - In the air: Gymnastics - On ice and snow: Sliding (skating) Kids should start with a learn to skate program and then learn to play program as their initial steps into ice hockey.</p> <p>6 & Under (Mites) 50 – 60 ice sessions 2- 3 ice per week 50-60 minute ice sessions 7 – 9 skaters per team; no full-time goalies 34 – 40 quality practices 16 – 20 cross-ice game days</p>	<p>Ages 6-8 Female Ages 6-9 Male The objective of this stage is to refine fundamental movement skills and begin to acquire basic sports skills. This is the time when a foundation is laid for future acquisition of more advanced skills. The focus is on the development of physical literacy. Fundamental movement skills should be mastered and motor development emphasized, while the participation in many sports/activities is encouraged. For optimal skill acquisition, the basic hockey skills of skating and puck control are introduced. FUN competitions are also introduced in a team environment.</p> <p>8 & Under (Mites) 50 – 60 ice sessions 2- 3 ice per week, 1 off-ice 50-60 minute ice sessions 9 – 12 skaters per team; no full-time goalies 34 – 40 quality practices 16 – 20 cross-ice game days</p>	<p>Ages 8-11 Female Ages 9-12 Male This is the period of accelerated learning of coordination and fine motor control and is the critical stage for the acquisition of hockey skills. Prior to the beginning of the growth spurt, players have the best opportunity to learn and begin to master fine motor skills that can be used in combination with other skills. In most cases what is learned or not learned in this stage will have a very significant effect on the level of play that is achieved later on. Players should be able to begin to transfer skills and concepts from practices to games. Group interaction, team building and social activities should be emphasized. A balance of practices and games will promote the continued development and mastery of key hockey skills.</p> <p>10 & Under (Squirts): 95 – 100 ice sessions 3 - 4 ice per week, 2 off-ice 60 minutes ice sessions 10-12 skaters & 1 goalie 75 – 80 quality practices 20 – 25 games 12 & Under (Pee-wees): 105 – 120 ice sessions 4 ice per week, 2 off-ice 60+ minutes ice sessions 12 skaters and 2 goalies 80 – 90 quality practices 30 – 35 game days</p>	<p>Ages 11-15 Female Ages 12-16 Male The focus of this stage is to further develop sports specific skills, begin to introduce competition, and start to emphasize support training to continue development of speed, strength and stamina while maintaining flexibility. Players should consolidate sport specific technical skills with an increased emphasis on hockey and a reduction in the number of other sports played. A continued emphasis is also placed on the development of individual and group tactics. Social and emotional considerations are addressed by placing an emphasis on team-building, group interaction and social activities.</p> <p>14 & Under (Bantam) & 16 & Under (Midget): 160 ice sessions 4 – 5 ice per week 80 minute ice sessions Combined and separate practices for team/position 9 month training calendar 15 skaters and 2 goalies 120 – 130 quality practices 40 – 50 games 16 skaters and 2 goalies Appropriate off-ice training for LTAD stage</p>	<p>Ages 15-18 Female Ages 16-18 Male This is the time to prepare athletes for the competitive environment, continue to refine technical skills, ancillary skills and develop the physical attributes. The focus is on optimizing fitness preparation and to begin to specialize in ice hockey. Training should be individualized to the athlete's particular needs in skill development, mental preparation, fitness and recovery. During this stage, training volume will increase, as does training intensity. Competitions become more important and the focus shifts to performance. Training will stress the development of position specific technical and tactical skills under competitive conditions. Mental skills that contribute to performance are also emphasized.</p> <p>18 & Under (Midget) & 19 & Under (Female): 200 ice sessions 5 – 6 time per week 80 minute ice sessions Combined and separate practices for team/position 10 month training calendar 130 – 140 quality practices 50 – 60 games 18 skaters and 2 goalies Appropriate off-ice training for LTAD stage</p>	<p>Ages 19-21 Female Ages 19-23 Male The objective of the Train to Compete stage is to transfer from the training environment to a competitive environment. Athletes must consolidate technical skills, and maintain ancillary skills and underlying physical capacities. During this stage training volume remains high while intensity increases with the importance of competitions. The training is usually 10+ months of the year and is disciplined and hockey-specific. Athletes will usually be required to move away from home for training and competition environments that fit this level of athlete development. The training is individualized to the athlete's particular needs in skill development, mental preparation, fitness and recovery.</p> <p>Junior, NCAA: Training calendar that equally supports both training and competition.</p>	<p>Ages 19+ Female Ages 19+ Male The focus of this stage is the stabilization of performance on demand characteristics and excellence within the highest level of performance at the NHL, World Championships and Olympics. This is the final phase of athletic preparation that only a very small minority will achieve. Maturation is complete and all the performance factors should be fully established to optimize performance in national or international competitions. The athletes in this stage will be the performers in the highest level professional league and at the highest international level. It is important to build a winning strategy with these athletes, and to individualize training and recovery programs to prevent over-training.</p> <p>NCAA, Professional: Appropriate training that supports competition calendar.</p>

For complete details go to www.ADMkids.com

Stages of Long Term Athlete Development

Stage 1: Active start stage

Children should be continually active without being sedentary for more than 60 minutes at a time except when sleeping. Growth and development should be enhanced through playful exploration of risks and limits within safe environments. There is no introduction to coaching in this stage. Ideally children begin to be exposed and focus on proper basic fundamental skills such as running, jumping, wheeling (for children in wheelchairs), twisting, kicking, throwing and catching. Some organized physical activity is desirable to help provide an active movement environment combined with an introduction to well-structured gymnastics and swimming programs.

Stage 2:

Fundamental stage

Chronological age:

- Males 6-9 and
- Females 6-8

Objectives:

- a) To begin teaching agility, balance, coordination and speed (ABC's)
- b) To continue to instill the importance of daily play and physical activity.

The fundamental motor skills of running, jumping, throwing (RJT) wheeling (for children in wheelchairs), twisting, kicking, throwing and catching need to be taught through active movement combined with well-structured gymnastics and swimming programs to develop agility, balance, coordination and speed for athleticism. An emphasis on flexibility to develop and/or maintain an optimal range of motion in combination with the introduction of whole body strength development begins in this Stage. Efficient technique and individual postural components of the movements performed through activities is vital for future success. Ideally these sessions are supervised to minimize injuries and the evolution of bad habits. Equipment such as "Swiss" balls and medicine balls can be incorporated with whole body weight exercises. This first window of trainability for speed development (girls: 6-8; boys: 7-9) should focus on agility, quickness and segmental speed in a multidirectional manner with movements lasting less than 5 seconds.

Stage 3

Learning to train stage

Objectives:

- To continue to enhance ABC's to develop overall sports skills
- To begin to integrate physical, mental, cognitive and emotional components within a well-structured program
- To develop physical literacy

Flexibility becomes increasingly important towards the end of this Stage as the individuals approach their period of most rapid growth and development. Sessions continue to require supervision to minimize injury and prevent bad habits. Good postural balance, coordination and alignment have a positive influence on biomechanical efficiency and therefore performance. Speed development should continue to focus on agility, quickness and segmental speed in a multidirectional manner with movements lasting less than 5 seconds. General aerobic development should continue to be through fun and games, complementing speed development.

The introduction of the ancillary capacities (warm up, cool down, mobility, nutrition and mental skills) for successful performance needs to begin during this Stage. A total of 11 hours per week of physical activity is desirable near the end of this Stage, as are 2-3 sessions per week of general athletics event group skills.

Stage 4**Training to train stage(Building the Engine)****Chronological age:**

- Males 16-18 plus, and
- Females 15-17 plus

Objectives:

- To develop endurance, strength and speed
- To develop athletics-specific skills and fitness.

This is the period where individuals tend to change physically at faster rates than when they are younger. When Peak Height Velocity (PHV) occurs the bones grow first, sometimes rapidly which puts increased stress on connective tissues. Flexibility, posture and technique become very important. At this time of accelerated growth, these elements can be compromised through a reduced range of motion, which can create abnormal movement patterns. Supervision and monitoring becomes critical as these changes occur. Physiological, psychological and medical monitoring of growth and development will target the deceleration of growth in late maturers.

Regular musculoskeletal screening is essential and anthropometric measurements are introduced where appropriate. Training needs should be identified during this Stage through regular monitoring of PHV. Speed development (girls: 11-13; and boys: 13-16) will have an increased emphasis on anaerobic alactic power and capacity training during this Stage. Aerobic training should begin to focus on capacity at the onset of PHV and formal aerobic power training begins at PHV (deceleration of growth). Formal weight training is introduced to develop general strength for girls at the onset of menarche and boys 12-18 months after PHV. Ongoing development of the ancillary capacities should progress with the intention of further integrating the physical, mental, cognitive and emotional aspects, which support performance. Planned training and competition modeling is introduced towards the end of this stage.

Stage 5**Learning to compete(challenge of Competition)****Objectives:**

- To develop event specific area physical preparation
- To introduce event specific protocols to identify strengths and weaknesses
- To implement event area specialization
- To integrate physical, mental, cognitive and emotional development

This is a stage of more specialization and competition. Single or double periodization is typically used. Coaches should however evaluate and modify as needed. Streaming of athletes into one event group area (throws, jumps, sprints, endurance) or specific event, should be done as advanced motor skills become evident. Speed, strength, aerobic capacity and power are optimized as required; however, in the case of specific speed endurance, further development should be based on event specific requirements. The number of athletics sessions per week will increase to 5-9 as participation in other sports declines to 2 or less sessions per week.

The practice to competition ratio is 90/10 and the length of the Athletics season can be anywhere from 8 weeks to 10 months. The number of competitive opportunities in the season becomes event-specific and dependant upon the type of periodization. If single periodization is used the number of competitions should be 10-15. If double periodization is used the number would be 12-18. The athlete is introduced to the concept of the Performance Enhancement Team towards the end of this stage.

Stage 6

Winning for a living (performing when it count)

Chronological age:

- Males 23+/-; and
- Females 23 +/-

Objectives:

- To maximize event specific preparation for results at the Olympic and World level
- To maximize of training, competition and recovery activities in support of a professional athletics career
- To attain competitive repeatability, when it counts
- To work with a professional support team
- To plan for retirement from athletics competition

It is at this Stage that all systems, including physical preparation, testing or monitoring and others which are supportive in nature, are fully maximized and need to ensure excellence at the highest levels (i.e., the Olympic Games and World Championships). The athlete may begin to plan for retirement or begin to prepare for entrance into the “real world” near the end of this Stage.

Stage 7

Active for life(dealing with adversity)

Chronological age:

- Males any age
- Females any age

Objectives:

- To make preparations for their integration into society

This Stage relates to when athletes have fully withdrawn from main stream competitive sport. It is a critical stage to consider as high-level performers adjust to life without the high-level competitions that have provided a focus and structure for so much of their lives. Without this structure and the attention associated with success, it is easy to see how some athletes experience difficulties adjusting to this Stage of their lives.

There are many opportunities to stay in sport and their expertise and knowledge, as a former athlete, can be used in many fields such as coaching, mentoring, administration or officiating. It is a time to consider whether to compete at the Masters level or an opportunity to take up new sport and hobbies that they may not had the opportunity or time to try when competing. This is a stage that is not addressed in great detail by coaches or others although it is a critical stage for the athlete if they are to consider lifelong participation in sport.

Stage 8

Learning to win (consistent performance)

This is the Stage where the athlete becomes a “fulltime athlete” and all energy and resources are directed at supporting the athlete to excel at the highest levels. The enhancement of all tactical, technical, physical and mental capabilities is maximized as required. All testing and monitoring systems are in place and maximized to the fullest with the intention of preparing the athlete physiologically, psychologically and medically for the highest possible results at the international level. The full integration of the Performance Enhancement Team is absolutely critical. The athlete is learning to become a full-time athlete.

Conclusion

Sports scientists have reported that there are critical periods in the life of a young person in which the effects of training can be maximized. They have also concluded that it can take anything from eight to twelve years of training for a talented athlete to achieve elite status. This has led to the development of athletic models, which identify appropriate training aims at each stage of the athlete's physical development.

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GENDER INEQUALITY IN PROFESSIONAL SPORTS: A COMPREHENSIVE ANALYSIS

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Abstract

The society has changed, now it argues towards equality among men and women but when it comes to equality in sports silence prevails. Women's sports are less broadcasted than male sports events by the media. Women face various constraints in sports in comparison to men. To name some, meager payment, lack of female coaches, biasness in awards, lack of family support. It's high time that they should be given equal opportunity in this arena. This paper highlights the challenges and possible measures which can be implemented for better participation of women in sports.

Keywords: *Role of media, Biasness, women's sport, Sexual harassment*

Introduction

Gender discrimination in the athletics industry has long been a controversial topic—even the founder of the modern Olympics, Baron Pierre de Coubertin, said in 1896, "No matter how toughened a sportswoman may be, her organism is not cut out to sustain certain shocks." Since then, gender equality in sports has come a long way, including UNESCO recognizing sports and physical activity as a human right in 1978. Despite the obstacles women face in athletics, many women have led and are leading the way to gender equity. This paper profiles women athletes and administrators who have paved the way, and offers "Strategies for Change" that women and girl athletes, coaches, administrators, and parents can take to make school and college athletics more equitable. Participation in sports benefits women just as it does men, helping to develop leadership skills, boosting self-esteem and grades, and promoting physical fitness and health. Women and girls who participate in sports and fitness programs are healthier and more academically successful. Unsurprisingly, sports, which house the careers of the most passionate and the aspiring, are also a major concern when it comes to the issue of gender discrimination. Male dominance in sports has become a nightmare for female athletes, who in the hope of pursuing their careers in the field of sports, have been deprived of self-esteem among a plethora of gender discrimination instances. This in turn can lead to increased violence against women by these male athletes. We need to create a climate in which sports and fitness are for everyone, not just a few, and in which everyone's abilities are tested and respected.

Sport is one area where gender inequality is strongly evident. The problem is more sociopsychological than anything else. Today, as we stand at the start of a new millennium it is deplorable that men and women are treated so differently, especially in sport. Women make up 50% of the world's population but they are not given equal opportunities. Men are still considered the better sex and this is one of the reasons why the world is yet to produce a female Michael Schumacher, Tiger Woods, Mike Tyson or a Sachin Tendulkar. Sport in India is yet to reach its peak. The Mughals ruled India for centuries, the Britishers for another one and a half-century. It was only after 1947, when we achieved independence

that we started developing as a modern nation, with special rights to half of its citizens namely women. Indian women are still trying to establish their own identity. Women in India are still unable to take a stand for themselves. Times have changed and are improving but there is still a lot to be achieved. Men have an upper hand in all spheres of life. Gender inequality is a deep-rooted issue and in order to change the situation, drastic steps/measures need to be taken. The worst thing to happen is the female feticide. Latest technology is being blatantly misused for killing the girl child. Far from giving her good education and a happy life we Indians are trying to eliminate women from this earth. Dogmatic principles govern much of our thinking.

As is mentioned above, gender inequality is one of the many issues because of which India is not being able to progress at a faster rate. In India we seem to be deifying our great leaders but never pay attention to what they are trying to tell us. Pandit Nehru has said that to awaken the people, it is the woman who must be awakened, once she is on the move the family moves, the nation moves. A society, which does not allow a girl to do something simple as primary education, is unlikely to let her participate in sport without any hurdles. Even before taking part in 400meter hurdles the girl has to pass so many more social hurdles. This project is an attempt to analyse the problems that a girl, who wants to shape her life as a sports woman.

Gender inequalities in professional sports have been a persistent and long-standing issue. For decades female soccer players have been subjected to inferior treatment compared to their male counterparts, including significantly lower pay and limited public interest and support. Not only are there many notable disparities between the male and female players but also in high-level leadership positions. Evans and Pfister (2021) noted that there is overwhelming evidence of a gendered and unequal balance of power between men and women in sports governance and many men and women are aware of these issues. Despite discussions about gender equity among male board members in sports governance, actual affirmative action to address the issue is often limited. This is referred to as 'gender passivity,' which means accepting the current gendered practices, representation, and recruitment policies without questioning or taking active steps to promote gender equity.

This year FIFA President Gianni Infantino said in March that the association was embarking on a "*historic journey for women's football and for equality*," adding that the aim was equality in payments for the men's and women's World Cups in 2026 and 2027 respectively. Adding to the theme of gender equality a promotional [video](#) posted by the French team has gone viral. The video cleverly employs AI to showcase the French men's soccer team performing at their peak, only to unveil that the footage is, in fact, from the French women's soccer team. By doing so, the video challenges the common assumption that the perceived lower interest in women's soccer is solely due to the players' inferior technical skills or abilities.

A recent experiment (Gomez-Gonzalez et., 2023) conducted by the university of Zurich highlighted the very issues alluded to in the ad produced by advertising agency Marcel. Participants were shown videos of elite female and male soccer players. In one group, the gender of the players was concealed with blurring, and in the other, it was not. When the players' gender was hidden, there was no



significant difference in the ratings for women’s and men’s videos. However, when participants knew the players’ gender, men’s videos were rated higher. Such biases can contribute to an overall lack of recognition, support, and resources for female athletes, inhibiting the growth and development of women’s soccer as a whole.

Unfortunately, the issue of gender bias and stereotypes is not limited to the soccer industry but extends to various other sectors and industries. In many areas of society, there are deeply ingrained gendered stereotypes that perpetuate the notion that women are less skilled, competent, and capable compared with their male counterparts. For example, in business leadership positions, women may encounter the “glass ceiling” phenomenon, where they face barriers in reaching top-level positions due to gender bias. In Ireland the latest figures reveal only three in 36 CEOs across Irish listed companies are women, having fallen from 11.1 % to 8.3 % in March this year (Balance for Better Business Review Group, 2023).



Efforts to address gender disparities in these sectors are crucial, and some positive steps have been seen, such as FIFA’s commitment to achieving equality in payments for the men’s and women’s World Cups in the coming years. The viral video of the French women’s soccer team, which challenges assumptions about women’s abilities, showcases the importance of opposing gender biases and stereotypes in promoting women’s sports. However, it is clear that much work remains to be done to dismantle ingrained gendered stereotypes and biases that hinder women’s potential in various fields, including sports, business, and leadership. To achieve true gender equality, society must actively question and challenge current policies, practices, representation, and recruitment policies. Encouraging initiatives, promoting female leadership, and providing equal opportunities and resources for women are essential steps towards breaking down the barriers that persistently hinder women’s advancement in all areas of society.

Gender Equality in Sports Media

Sports coverage is hugely powerful in shaping norms and stereotypes about gender. Media has the ability to challenge these norms, promoting a balanced coverage of men’s and women’s sports and a fair portrayal of sportspeople – irrespective of gender.

- **Portrayal of Women in Sports Media**

Media representations of sports and athletes can contribute to the construction of harmful gender stereotypes. Media tend to represent women athletes as women first and athletes second. Coverage of women in sports is often dominated by references to appearance, age or family life, whereas men are depicted as powerful, independent, dominating, and valued as athletes.

- **Number of Women Broadcasters**

In recent times, sports broadcasting has become more accessible to women. However, numbers show that there is still a noticeable gap. Currently, a low % of sports broadcasters are women, and including weekday hosts on sports radio stations are female. The number of women who enter into sports journalism is still relatively low, and this particular area of reporting remains a predominantly male-dominated specialty in countries all over the world.

- **Coverage of Women's Competitions and Practice**

There continues to be an imbalance in the quality and quantity of sports coverage of sports women compared to that of men. Two weeks of Olympic coverage are a rare time when sustained coverage of women sports stars hits the headlines. Yet outside the period of major sporting festivals, statistics claim that 40% of all sports participants are women, yet

women's sports receive only around 4% of all sports media coverage. And, of that limited coverage, women are often objectified or demeaned.

- **Get Involved**

Instal Her Headline: Using a database of pre-determined words, the UNESCO extension scans sports articles and highlights gender-biased words and phrases that are used in sports media, and explains why they may be problematic.

Host Special 'Gender and Sports' Program: Invite local sports stars to have a lively discussion on how women and men are portrayed in sports coverage. Involve listeners.

Hand the Mic to Women: Put women sports broadcasters' front and center to show that gender is irrelevant to quality commentary, and conduct a longer term review of your workplace gender policies.

Bring Women's Sports to the Fore: Report on women's sports events and training in your country or region, as the first step to more balanced coverage of these sports

Gauge Gender-Sensitivity in your operations and content: Apply UNESCO's Gender-Sensitive Indicators for Media.

Historically, girls, women, and femininity have been defined in relation and contrast to men and masculinity. Sports and the sports world have been tied with the masculine domain, and there has been a legacy of bias against the female athlete. In the past few decades, this trend has been confronted and challenged.



Girls and women have “tackled” narrow, negative, and limiting concepts and ideas that they should not participate in sports, sweat, show aggression, or compete, and begun to include physical strength and athletic prowess in the definition of femininity. As a result, traditional stereotypes for females have slowly been changing and evolving. This will likely continue once girls and women quit feeling that they need to choose between sports and femininity. While there is still a long way to go, females can obviously break free of traditional stereotypes.

Sports are one area where gender inequality is highly evident. It is deplorable that even today, women are treated so differently, especially in sports. Women in India are still seen as home-making and child-rearing machines. The situation has not changed much till now, but I think we are headed towards betterment with so many talented sports women in India reaching the peaks. We're all rooting for Mary Kom, Saina Nehwal, amongst many others. All we probably need is need to recognize that differences exist and a will to push towards equal opportunities. Like many things in life, the change begins with us. It may seem as if sports have a lot we can complain about, but the truth to why we play sports is simply beautiful. Sports have changed and helps change humanity. It teaches us mental toughness, how to overcome challenges, introduces us to team work and how effective it is, responsibility, and keeps us mentally and physically in shape. Sport creates amazing character and teaches true attributes to be a good person.

Conclusion

Sports is one area where gender parity has not been properly nurtured in India. There had always been rare talents who would break through the surface catching everyone's eye—but never did we see planning for sports dedicated to girl child or gender roadmap on how to build women talent in sports. According to the latest research by BBC, the statistics shows that approximately 75% of the Indian population believe sports is significant in their day-to-day

lives, however, only 36% of the population engage in any sort of sport or physical activity. Of these 42% of men and only 29% of women engage in sports.

The millennium however is seeing a steady shift, where more girls are encouraged to join sports in every field. The number of girls coming forward may not be large, but the names like Karnam Malleswari, Mary Kom, Saina Nehwal, PV Sindhu, Sakshi Malik, Mirabai Chanu are slowly becoming recognizable, enforcing the slow revolution. Performance is bigger than any policy while motivating these girls aspiring to be sports personalities—however, the government and academies need to take cognizance of the situation and push Sports education as a curriculum for girl child and create an ecosystem that can encourage more girls to get professionally trained.

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A STUDY ON INDIAN MACRO ECONOMICS ANALYSIS AND RESEARCH POLICY

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Abstract

The macroeconomic policy response in India after the North Atlantic financial crisis (NAFC) was rapid. The overshooting of the stimulus and its gradual withdrawal sowed seeds for inflationary and BoP pressures and growth slowdown, then exacerbated by domestic policy bottlenecks and volatility in international financial markets during mid-2013. Appropriate domestic oil prices and fiscal consolidation will contribute to the recovery of private sector investment. Fiscal consolidation would also facilitate a reduction in inflation, which would moderate gold imports and favorably impact real exchange rate and current account deficit.

Keywords : Current Account, Capital Flows, Exchange Rate, Exports, Fiscal Policy, Gold, Growth, India, Monetary Policy, Oil Demand, Savings.

Introduction

Macroeconomics (from the Greek prefix makro- meaning "large" and economics) is a branch of economics dealing with the performance, structure, behavior, and decision-making of an economy as a whole rather than individual markets. This includes national, regional, and global economies. Along with microeconomics, macroeconomics is one of the two most general fields in economics.

Macroeconomists study aggregated indicators such as GDP, unemployment rates, national income, price indices, and the interrelations among the different sectors of the economy to better understand how the whole economy functions. Macroeconomists develop models that explain the relationship between such factors as national income, output, consumption, unemployment, inflation, savings, investment, international trade and international finance. In contrast, microeconomics is primarily focused on the actions of individual agents, such as firms and consumers, and how their behavior determines prices and quantities in specific markets.

While macroeconomics is a broad field of study, there are two areas of research that are emblematic of the discipline: the attempt to understand the causes and consequences of short-run fluctuations in national income (the business cycle), and the attempt to understand the determinants of long-run economic growth (increases in national income). Macroeconomic models and their forecasts are used by governments to assist in the development and evaluation of economic policy.

Basic macroeconomic concepts

Macroeconomics encompasses a variety of concepts and variables, but there are three central topics for macroeconomic research. Macroeconomic theories usually relate the phenomena of output, unemployment, and inflation. Outside of macroeconomic theory, these topics are also important to all economic agents including workers, consumers, and producers.

Output and income

National output is the total amount of everything a country produces in a given time period. Everything that is produced and sold generates an equal amount of income. Therefore, output and income are usually considered equivalent and the two terms are often used interchangeably. Output can be measured as total income, or it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy.

Macroeconomic output is usually measured by Gross Domestic Product (GDP) or one of the other national accounts. Economists interested in long-run increases in output study economic growth. Advances in technology, accumulation of machinery and other capital, and better education and human capital all lead to increased economic output over time. However, output does not always increase consistently. Business cycles can cause short-term drops in output called recessions. Economists look for macroeconomic policies that prevent economies from slipping into recessions and that lead to faster long-term growth.

Unemployment

The amount of unemployment in an economy is measured by the unemployment rate, i.e. the percentage of workers without jobs in the labor force. The unemployment rate in the labor force only includes workers actively looking for jobs. People who are retired, pursuing education, or discouraged from seeking work by a lack of job prospects are excluded.

Unemployment can be generally broken down into several types that are related to different causes.

- (a) Classical unemployment theory suggests that unemployment occurs when wages are too high for employers to be willing to hire more workers. Other more modern economic theories suggest that increased wages actually decrease unemployment by creating more consumer demand. According to these more recent theories, unemployment results from reduced demand for the goods and services produced through labor and suggest that only in markets where profit margins are very low, and in which the market will not bear a price increase of product or service, will higher wages result in unemployment.
- (b) Consistent with classical unemployment theory, frictional unemployment occurs when appropriate job vacancies exist for a worker, but the length of time needed to search for and find the job leads to a period of unemployment.
- (c) Structural unemployment covers a variety of possible causes of unemployment including a mismatch between workers' skills and the skills required for open jobs. Large amounts of structural unemployment can occur when an economy is transitioning industries and workers find their previous set of skills are no longer in demand. Structural unemployment is similar to frictional unemployment as both reflect the problem of matching workers with job vacancies, but structural unemployment also covers the time needed to acquire new skills in addition to the short term search process.
- (d) While some types of unemployment may occur regardless of the condition of the economy, cyclical unemployment occurs when growth stagnates. Okun's law represents the empirical relationship between unemployment and economic growth. The original version of Okun's law states that a 3% increase in output would lead to a 1% decrease in unemployment.

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Inflation and deflation

The ten-year moving averages of changes in price level and growth in money supply (using the measure of M2, the supply of hard currency and money held in most types of bank accounts) in the US from 1875 to 2011. Over the long run, the two series show a close relationship. A general price increase across the entire economy is called inflation. When prices decrease, there is deflation. Economists measure these changes in prices with price indexes. Inflation can occur when an economy becomes overheated and grows too quickly. Similarly, a declining economy can lead to deflation. Central bankers, who manage a country's money supply, try to avoid changes in price level by using monetary policy. Raising interest rates or reducing the supply of money in an economy will reduce inflation. Inflation can lead to increased uncertainty and other negative consequences. Deflation can lower economic output. Central bankers try to stabilize prices to protect economies from the negative consequences of price changes.

Changes in price level may be the result of several factors. The quantity theory of money holds that changes in price level are directly related to changes in the money supply. Most economists believe that this relationship explains long-run changes in the price level.^[10] Short-run fluctuations may also be related to monetary factors, but changes in aggregate demand and aggregate supply can also influence price level. For example, a decrease in demand due to a recession can lead to lower price levels and deflation. A negative supply shock, such as an oil crisis, lowers aggregate supply and can cause inflation

Macroeconomic analysis

Macroeconomic analysis has a long tradition in the Institute and some of the most eminent members of the faculty have undertaken research in this area in the past. Currently, the Development Planning Centre (DPC) and the Reserve Bank of India (RBI) Endowment Unit of the Institute specialize in macroeconomic research. The focus of macroeconomic research at IEG is to carry out in-depth analysis of relevant macro issues for India and other developing countries, and to develop macro-models of the Indian economy.

The Development Planning Centre (DPC) specializes in macro-econometric analysis with special expertise in building macro-models, which are used for the analysis of macroeconomic behaviour and policy and for providing forecasts. This research programme was greatly stimulated after India began to implement the structural adjustment program in 1991. Since then, the research on macroeconomics has widened its scope from domestic closed economy models to open economy macro models. The models and analysis also began to focus more and more on the market-determined behaviour of the exchange rate, interest rate, private investment and foreign trade. The techniques of analysis have also been constantly updated. The simple regression analysis has been extended to structural macro modeling, time series analysis, co-integration, vector auto-regression (VAR) and Bayesian forecasting. The econometric analysis now uses not only annual time series data but also higher frequency data, including quarterly and monthly data. The DPC macro-model, which was initiated in 1996 with technical collaboration from the Indian Planning Commission, the Erasmus University, Rotterdam and the Netherlands Bureau of Economic Analysis and Policy, has reached a certain level of maturity, and is used to analyze a wide range of policy issues as well as provide forecasts for key macro variables.

A special emphasis in the DPC model was to analyse the behaviour of aggregate demand so that it could become complementary to the planning model. Currently, the model disaggregates the economy into three production sectors: agriculture, industry, and services. The model also analyses behaviour separately for the public and private sectors. A major extension of the structural modeling programme has been the construction of state level macro-models. This was initiated by a study assigned by the World Bank to regularly forecast growth and inflation rates for four states, namely, Andhra Pradesh, Karnataka, Tamil Nadu and Uttar Pradesh. Apart from structural macro modeling, the DPC has

developed a time series model to forecast and analyse the monthly behaviour of key macro variables, such as inflation, industrial growth, money growth, interest rates, exports, imports, exchange rate and foreign exchange reserves. Since 1998, this set of forecasts is released in the Monthly Monitor, a monthly publication of the Institute.

The faculty also does research on various macroeconomic issues, such as interest rate behaviour, money supply mechanisms, capital flows, growth dynamics, regional inequality, exchange rate dynamics, financial markets and stock market behaviour, commercial banking, etc. Future research at the Development Planning Centre will continue to focus on econometric exercises and macro-models and that can analyze important macroeconomic issues. These issues may include interactions between government expenditures in social sector services and labour productivity, possibility of synergy between government spending and private spending on social services such as education and health, interactions between physical infrastructure development and productivity of the various sectors and their impact on sustaining economic growth etc. The inter-relationships governing employment, poverty reduction and income distribution may also be looked into as will be the implications of the 9% GDP growth target during the Eleventh Plan for agricultural demand and the likely agricultural demand-supply scenarios corresponding to a 4% growth in agriculture. Possibility of endogenously determining the rate of poverty and employment levels by relating it with growth and income distribution will be attempted. Effect of major asset generation and wage employment generation programmes, on the income of the lower income groups, on the output of different sectors of the economy, and on government finances will also be studied.

The Reserve Bank of India Endowment (RBI) Unit is funded by an endowment grant from the Reserve bank of India. The unit undertakes analysis of various issues relating to macroeconomics, open economy macroeconomic issues and economic reforms. The unit's emphasis is on applied econometric and causality analysis using the recent time series techniques. Some of the research studies at RBI have been in the following areas

- Savings behaviour in India and other developing countries and direction of causality between savings and growth
- Investment behaviour in India and other developing countries and direction of causality between investment and growth
- Financial liberalization, developments in banking and finance, monetary policy, optimal level of interest rate, etc.
- Financial deepening in Asian countries; financial development in Asian countries and exchange rate behaviour, and causes and consequences of Argentina's crisis.
- Foreign direct investment (FDI), FDI and exports competitiveness, FDI and technology transfer, FDI impact on investment and economic growth.
- Foreign Trade Issues: WTO and Regional trading agreements; China's entry into the WTO: implications for China and India; TRIPS and India's Pharmaceuticals Industry and European Union Enlargement: Impact on India-EU Trade.

The research output on above issues has been published in numerous international and Domestic Research Journals (such as Journal of Development Studies, Journal of Economic Behavior and Organization, Applied Economics, Economics Letters, Journal of Economics, The Economic and Political Weekly, etc)

The macroeconomic research at RBI Unit includes both individually initiated and sponsored policy oriented studies. Faculty members lend their expertise to both national and international organization in carrying out important macroeconomic studies. Over the past 7 years, the RBI Unit has undertaken research studies for the World Bank, USA; International Development Research Centre (IDRC), Canada; Department for International Development, U.K.; Swiss International Development Agency, Geneva, Shastri Indo Canadian Institute, South Asia Network of Research Institutes (SANEI) Ministry of Finance,

Government of India; and others. In recent years, Indian Economy has experienced high growth rate of more than 8 percent and seems poised to achieve double-digit growth rates. This high growth rate of Indian economy with structural changes poses lot of challenges for macroeconomic management. In this context, macroeconomic research at RBI Unit is likely to involve research on following issues in future

1. Determinants of poverty, employment and wages in India; role of expenditure on health, education and social welfare on poverty.
2. Infrastructure development in India and South Asia; the role of private sector and private-public partnership for infrastructure development.
3. FDI in South Asia: Policy, trends, determinants and impact.
4. Analysis of determinants of market (or index) prices, price equity ratio in share market and impact of foreign institutional investments.
5. Modeling foreign exchange reserves to find optimal level of foreign exchange reserves for India.
6. Econometric estimation of the determinants of exports in India and South Asia.

Conclusion

Conventional monetary policy can be ineffective in situations such as a liquidity trap. When interest rates and inflation are near zero, the central bank cannot loosen monetary policy through conventional means. Central banks can use unconventional monetary policy such as quantitative easing to help increase output. Instead of buying government bonds, central banks implement quantitative easing by buying other assets such as corporate bonds, stocks, and other securities. This allows lower interest rates for a broader class of assets beyond government bonds. In another example of unconventional monetary policy, the United States Federal Reserve recently made an attempt at such a policy with Operation Twist. Unable to lower current interest rates, the Federal Reserve lowered long-term interest rates by buying long-term bonds and selling short-term bonds to create a flat yield curve.

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THE POWER AND CHALLENGES OF COLLABORATION FOR ACADEMIC LIBRARIES IN DIGITAL ERA- AN OVERVIEW

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Abstract

Now days it is a basic requirement for any academic libraries to develop e-resource. It is proved from above study that academic libraries should consider various tools and techniques while selecting an e-resource. Selection based on staff recommendation and subject relevance can make an impact on library collection development. Libraries can use different methods and techniques to acquire e-resource depending on their needs and user community to be served. However a consortium is the most common method used to acquire e-resources. One of the most difficult aspects of digital curatorial management is the blurring of customary boundaries the academic libraries provide in house training to the library staff to update their skills. Librarians must develop professional skills and abilities with application of right technology so that e-resources are managed well for effective accessibility and use by majority of users globally.

Keywords: *Academic Libraries, Challenges, Issues and opportunities of Academic Libraries.*

Introduction:

In the 21st Century knowledge management is increasingly becoming a crucial tool. It has already been successfully implemented in academic libraries in India and elsewhere. INFLIBNET, NICNET, INDONET, ERNET, CALIBNET, DELNET, ADINET, MALIBNET, etc. have emerged as the prominent academic libraries in India. The vision and mission of academic libraries are changing in India. Academic libraries are considered to be the nerve centers of academic institutions and must support teaching, research and other academic programmes. The situation in academic libraries of India is the same as that of academic libraries the world over; however, Indian libraries must provide maximum information with limited resources.

Academic libraries are the treasure trove of knowledge which cater to the needs of scholars, scientists, technocrats, researchers, students and others who are directly associated with the mainstream of higher education. In this competitive age, the policy makers have to rise to the occasion and create a new generation of knowledge workers. The information personal of academic libraries are also called upon to equip themselves with the best tools, techniques, procedures and practices. The academic libraries play an important role in the academic community by providing necessary forum and resources for faculty and students to do their research and advance their knowledge.

The major issues and trends of academic libraries are leaderships in the changing nature of higher education. Changing environment of academic libraries has impacted significantly on the knowledge, skills requirement and role of the library leaders, and how organization can maintain and manage the changing nature of academic libraries as well as

leadership while effective leadership is extremely required for the library leaders and organizations are concerned about future scenarios.

The primary objective is to identify the key challenges in libraries, leadership skills, and approaches of the leaders, their effective leadership, traits and future perceptions are discussed.

What issues do librarians face?

- *Budget:* Librarians require money to maintain the resources in their hands and to get more resources. The competition for funding is stiff, and more often than not, librarians end up losing out on the allocated money.
- *Library changes:* It is necessary that any changes made to the library get to the ears of stake holders; otherwise, things will fall apart. Librarians sometimes, lack the support required for such communication, which in turn, makes management quite a hefty task.
- *Declining requests:* The need for validation of all library purchases as well as the strict budget on which they operate makes it hard for them to accept applications for books from their patrons.
- *Career advancement:* With the fast pace at which technology is taking over the world, librarians need to get equipped with the right education. However, this on the job training is not a forthcoming and it makes library administration hard. However, librarians are on the demand nowadays.
- *Technical requirements:* Librarians need help to come up with the digital libraries to make books more accessible. Such training is not easy to find. They also require understanding the current trends in research so that they can help others out in that sector.
- *Policy changes:* Many changes occur in the scholarly world regarding the way education materials should get handled and librarians need to stay on top of things to ensure that they are not in violation of any regulations.
- *Tracking performance:* Librarians handle some people working under them and they need to keep track of their progress to ensure that things run smoothly. It is clear that more work requires going into aiding librarians better manage the assets in their possession.

Challenges for LIS Profession:

LIS Professionals are facing various Challenges in Libraries. Some of them listed below;

- Acquiring access rights to e-books and e-journals with proper licensing Agreements
- Building and maintaining the campus-wide network facilities with faster access
- Consortia arrangements for Journal subscriptions or e-journal access
- Creating and maintaining large storage facilities and multi-processing systems
- Database creation and critical maintenance and authorization issue
- Demand for web based products and services
- E-mail, Internet browsing and access to online resources apart from OPAC
- Emergence of library networking and networks
- Hardware raid for data security and auto back up facilities
- Impact of ICT on library practices
- Improving the bandwidth for internet access facilities
- Maintaining online real time library transactions with 24/7 access facilities to all the resources
- Need for effective and efficient users interface
- New electronic information environment
- Philosophy of information at door
- Resource sharing and shrinking budgetary provisions to the libraries
- Responsiveness and dynamism in special library systems and services
- Shift from acquisition to accessing the resources anywhere, anyone and anytime

- Shift from paper based resources to electronic resources
- Timely delivery of information materials to end-users
- User demands for access facilities at their desk tops
- Web page designing and electronic publishing issues
- Wider and multi user access to CD/DVDs using the NAS model
- Working with RFID with self check out facilities

How to Meet the Challenges?

Resource sharing

Keisler says, “the social efforts of computer networks may be far greater and more important than you imagine,” and modern technology will enable libraries to cooperate and create networks with speed and ease. New technology provides opportunities for delivery of services in which the role of the librarian will be that of entrepreneur, marketing information without waiting for users to come to the institution. Now we have a technology that will allow us to move from a holdings-oriented environment to that of an access-oriented one.

Networks

Some of the important data networks are India’s National Informatics Centre’s NICNET (home.nic.in/htm/bnicnet.htm), INDONET (www.indonet.net/ -- “a directory of India-related sites on the Internet”), and ERNET (www.eis.ernet.in/ -- the “largest nationwide terrestrial and satellite network ... located at the premiere educational and research institutions in major cities in [India]”). The library networks are CALIBNET (www.calibnet.org/ -- the Calcutta Library Network), DELNET (<http://delnet.nic.in/>) -- India’s Developing Library Network, and INFLIBNET (www.inflibnet.ac.in/ -- the Information and Library Network Centre-- “an autonomous Inter-University Centre (IUC) of University Grants Commission [UGC-- www.ugc.ac.in/] involved in creating infrastructure for sharing information among academic and R&D Institutions”).

Associations

Associations are seen as ways of getting and sharing information, as well as a way to make contacts with others. Information professionals recognize that they need relevant information to be effective in their positions and that practical up-to-date information is shared at association conferences and in association publications and websites.

In addition to hearing about the best and worst practices, the external environment, the activities of vendors and the movement of people within the profession, librarians in India, like their colleagues in other countries, are looking to make contact with those who are working in similar settings and have successfully worked though similar problems. It is through association activities that librarians can enlarge their network of contacts ensuring that they get the most current and practical information.

For new members of the profession in particular, these contacts allow them to be exposed to a variety of viewpoints, encouraging them to think creatively and look beyond the routines of their institutions. Through associations, librarians can also contribute to the profession’s body of learning by publishing in association journals, newsletters, and monographs and by presenting programs at conferences and continuing education courses.

For those looking for upward career movement, associations provide the opportunity to develop leadership skills by serving as leaders in committees, interest groups, divisions, and executive councils. Such positions give the professional a chance to enhance his or her leadership, planning and organizational skills and to demonstrate these skills to others.

Software

The last few years have seen some important and useful initiatives in the development of library automation software. Some special libraries, notably at BHEL (66.39.99.160/bhel/ -- Bharat Heavy Electricals Limited), SAIL (www.sail.co.in/ --Steel Authority of India Limited), ICRISAT (www.icrisat.org/ -- the International Crops Research Institute for Semi- Arid Tropics), the Indian National Scientific Documentation Centre

INSDOC (www.insdoc.org/), the National Informatics Centre (“NIC”-- home.nic.in/), DESIDOC (www.drdo.org/labs/compsci/desidoc/index.shtml)--the Defence Scientific Information and Documentation Centre, the Indian Institute of Technology, IIT Kanpur (www.iitk.ac.in/), have successfully developed software for library automation. Book and serial acquisitions, computer assisted cataloguing, union-listing, and current awareness services are some of the applications developed. LIBSYS (www.libsys.co.in/home.html) and TULIPS among the better-known commercial packages that have been developed for both DOS and UNIX and are therefore available not only on microcomputers but also on minicomputers and mainframes and in LAN environments. Solving four common Academic Library Challenges.

Academic library challenges can affect both the library staff and their students. Solving these challenges will help bring the staff’s workflow and research path of their students to the next level.

Sometimes what troubles the academic library doesn’t necessarily trouble the library user – and vice – versa. However, there are times when academic library challenges arise that affect both the library and the user.

Starting with the digital “door” of your academic library- also known as your library website. One challenge for end-users when it comes to your library’s website can often be achieving a positive user experience. Today’s challenge students have a sophisticated UX expectation and expect your academic library website to follow suit.

Elements like response design, a search box front and centre, organised paths to content like databases, e-book, etc., and an intuitive layout will help them start researching on the right foot. On the other side of this challenge is building and maintaining a library website with a web platform that is not only easy to use, but allows for proper and seamless integration of your other library-centric platforms, such as LIS or Discovery.

One of the most common academic library challenges revolves around authentication. For your library users, logging into access the library’s resources and services is critically important. But having to re-authenticate again and again is a small task that can grow into a tiresome obstacle. Your users’ workflows are changing with a rise in remote students, no longer are users reliably connected to the institution’s network when accessing resources. On the flip side, this type of “off-site” access requires your library staff to have deeper technical knowledge of how to address remote students’ information needs.

The power and challenges of collaboration for academic libraries.

In recent years, considerable change affected universities and their academic libraries, and this pace of change is likely to continue. Recent and current changes affecting academic libraries include:

- Increasing client expectations, with the consequent need to maintain and enhance the student experience, including student success and attainment, student retention and progression, and employability.
- Disintermediation and the danger of library support in the digital age becoming invisible.
- Current and future generations of students and researchers considering themselves self-sufficient in information skills.
- A decline in the importance of the library as a physical entity.
- Changing user needs and working styles.
- The availability of alternative sources of information for learners and researchers, with other providers as well libraries in the digital environment.
- The changing nature of universities, with new ways of working, changes in pedagogy, and increasing inline delivery.
- Changes in scholarly publication methods (such as open access) and the research environment.

- Changing technologies, such as social media and mobile technologies.
- Financial uncertainties, institutional cut backs and an increasing pressure for accountability.

In an editorial for a special journal issue on shared and collaborative services, Rose (2016) comments that “no librarian is an island.” Given the current environment and the kinds of changes outlined above, academic libraries can no longer afford to develop their services independently. Many of the changes taking place are large in scale, complex and difficult to navigate.

Partnerships are crucial for an academic library to successfully meet the needs of its clients and support the aims and objectives of its university.

The library needs to work closely with client groups so that services are relevant, forge partnerships with other university professionals to provide seamless services, and develop innovative services with other local, regional or national organizations and universities to help deliver effective services and institutional efficiencies’.

Required Skills for LIS Professionals

In the Indian context, the scope of the subjects taught varies from university to university and the students who come out of these universities with degrees mostly fail to perform in a technical or a research library. The electronic environment of the 21st century demands a range of skills from library and information science (LIS) professionals, which include technical skills, IT skills and managerial skills.

Library users are turning towards the LIS Professionals for help and advice on search techniques, database development, quality of online databases, and choice of databases that are available. As a result, LIS professionals need organized training programs, which can be in the form of workshops, conferences, seminars, symposia, and so forth.

Information and Communication Technology (ICT) in Libraries

LIS professionals are at present at the crossroads. Information professionals have started facing the challenges, which are accompanied with the new information resources. The librarians, who are using computers and those who are not using computers but intend to use computers; both require rigorous training on new use of the information technology.

Most LIS professionals are beginning to use e-mails, CD-ROMs, LAN, and Machine Readable Catalogue for resource sharing. But in the colleges, schools and libraries in the rural areas, the librarians lack of computer knowledge and they are not using computers in the libraries.

In the present scenario application of information and communication technologies has revolutionized the whole concept of libraries, the system of information storage and retrieval and ways to access the information. Therefore, the objectives of LIS education have been revolutionized with the E Concept.

LIS students are presently given more practical oriented computer knowledge equipped with intensive and extensive use of IT in libraries. Application of technology has opened up new vistas and thus, all LIS schools should think seriously in terms of the changing context.

Students are given adequate knowledge of computers (including the hardware), computer and communication technologies, networks and networking, operating systems, Internet concepts, database management systems, along with adequate practical exposure to handle these technological devices. Online resources, online databases, library management software, e-books/journals practical exposure is given to the students.

In India most of the libraries are switching themselves from the traditional type of services such as documentation services, reference services, inter-library loan, catalogue based services, current awareness services (CAS) and selective dissemination of information (SDI) to online services and E-generated library services. The situation is changing rapidly

with the application of IT in the libraries. Networking of computers at the local, national and international level has made this possible.

Collection development poses to be another challenge for the information professionals. The main job of the LIS professionals is to provide relevant information to users as fast as possible. Speedy retrieval of information is very important for information professionals. Presently, LIS professionals talk of computer-based information retrieval, use of computer networks for accessing databases and organising library services on networks. The LIS professionals are concerned with the speed, cost and the reliability of information transfer.

Role of the Government, UGC, Professional Bodies and LIS Professionals

India's LIS education system requires a strategic planning, in order to develop a comprehensive LIS curriculum at the national level. The Government of India has encouraged the application of computers and use of telecommunication through various policy decisions. But the role of the Government in LIS education is not satisfactory. The Government should play a leading role in promoting LIS education in India, in creating more job opportunities for LIS professionals and removing disparity in pay scales among LIS professionals. LIS professionals' pay is low in India and they should be paid more in the present scenario.

The role of University Grants Commission (UGC) is very important in designing the curricula and in providing guidelines for developing LIS education in the country. The role of UGC is becoming more challenging in the context of growing information society and fast growing information technology.

The professional bodies like Indian Library Association (ILA) and State Library Associations should organize useful courses, seminars and conferences so that the library professionals may increase their knowledge and efficiency in the application of ICT in their work.

The library professionals should also put pressure on the Government of India to form a National Commission on Libraries and Information Science. In this context, the role of LIS schools and faculties is extremely important to improve LIS education. Similarly, University Grants Commission (UGC), the National Information System for Science and Technology (NISSAT) (www.dsr.nic.in/vsdsir/division/nissat/nissat.html), the National Social Science Documentation Centre (NASSDOC), NISCAIR (National Institute of Science communication and Information Resources) earlier known as Indian National Scientific Documentation Centre (INSDOC) (www.insdoc.org), the Defence Scientific Information & Documentation Centre (DESIDOC) (www.drdo.org/labs/compsci/desidoc/index.shtml), university libraries, library associations, library and information science departments should play a pivotal role in this direction.

INFLIBNET

It connects the Indian libraries through a nation-wide high-speed data network. It promotes automation of libraries, develops standards, Creates union catalogues of serials, theses, books, monographs and non-book materials; provides access to bibliographic information sources; creates database of projects, institutions, specialists; provides training, etc. Almost all academic libraries, especially university libraries, are members of INFLIBNET. It has also developed library automation software called SOUL (Software for University Libraries) which is distributed free of cost to its member libraries.

Other Networks

Besides INFLIBNET, a number of other national networks and various library networks have also been developed including NICNET (National Informatics Centre's network), INDONET, ERNET (Education and Research Network), CALIBNET (Calcutta Library Network), DELNET (Developing Library Network), etc. ADINET is associated with INFLIBNET, DELNET with NIC and MALIBNET with CFTRI. A good number of higher educational institutions are members of these networks. In particular, DELNET has 752

member libraries including 742 from India and 10 from outside which are engaged in compiling union catalogues, creating various databases of experts, providing training to library staff, ILL, online facilities, reference service, assistance in retrospective conversion, etc.

Library Consortia

The libraries are forming consortia in order to facilitate knowledge sharing at a much cheaper rate. Some special libraries and organizations like the Indian Institute of Astrophysics (IIA) Library, Inter-university Centre for Astronomy and Astrophysics (IUCAA) Library, National Centre for Radio Astrophysics (NCRA) Library, Physical Research Laboratory (PRL) Library, Raman Research Institute (RRI) Library, Tata Institute of Fundamental Research (TIFR) Library, Council of Scientific and Industrial Research, Department of Atomic Energy, etc., have established consortia to share electronic access to journal literature. NISCAIR is developing a consortium for CSIR labs for accessing e-journals.

Consortia in India are still a new concept that requires proper guidelines and methodologies. The UGC conducted a survey and found that about 142 university libraries had computer and Internet facilities which were interlinked to INFLIBNET. UGC has also launched a major initiative called UGCINFONET which provides high speed Internet connections in order to facilitate electronic access to professional literature including research journals, abstracts, review publications, and databases from all areas in science, technology, social sciences and humanities, and so on. Today, a number of professional journals are available over UGC-INFONET to all universities. The subscription initiative under UGC Infonet is an important portal for sharing print as well as electronic resources amongst university libraries.

INDEST Consortium

The Indian National Digital Library in Science and Technology (INDEST) Consortium was established by the Ministry of Human Resource Development (MHRD). The ministry provides funds required for the subscription to electronic resources for 38 academic institutions, including the Indian Institute of Sciences,

Indian Institute of Technology, Regional Engineering Colleges, Indian Institute of Managements, and about 60 centrally-funded/aided government institutions through the consortium. The INDEST consortium is the most ambitious initiative so far in the area of engineering and technology disciplines. The primary objective of libraries is to organize and provide access to information, and it remains the same although the format and methods have changed drastically.

Challenges and Opportunities

The vision and mission of academic libraries are changing in India. These academic libraries now take on the key role of providing the competitive advantage to various universities, research and development organizations which play a pivotal role in the process of nation building. Academic libraries are positioning themselves to be the torchbearers and path makers of educational advancement by way of integrating knowledge systems and resources.

These academic libraries are required to do serious introspection on their roles, responsibilities and contributions. Comments and observations are noted very frequently on their strengths and limitations in various national and international forums.

The vast literature gleaned from IFLA, ACRL and allied publications on academic libraries aptly reveal the changing roles and responsibilities of information professionals in the modern society. The academic libraries are also called upon to exploit all forms of digital and telecommunication technologies and explore new avenues and possibilities for the enhancement of knowledge resources which are available in different forms and places.

The builders and managers of academic libraries are also required to enrich computer security and authentication techniques which promote information diffusion. The

information personnel are also required to enrich their professional competence and leadership qualities which would facilitate meaningful identification, location and evaluation of information resources in order to promote professional excellence among the user community.

The “user-centred” paradigm has been adopted in the developed countries to create customizable interfaces and enrich the process of collection development in the academic libraries. The academic libraries really demand a well conceived, designed and maintained systems, practices and operations which would effectively meet the needs of different constituent groups and individual users.

The administrators are mainly responsible for creating and sustaining software, hardware, human resources and data bases which would go a long way in promoting research and development in India. “The proficiency of library information science (LIS) and information skills must be complemented by hardware and software skills for working in an information technology (IT) intensive environment” as rightly suggested by Foo, S. and other scholars.

The power and the challenges of collaboration for academic libraries

In recent years, considerable change has affected universities and their academic libraries, and this pace of change is likely to continue. Recent and current changes affecting academic libraries include :

- Increasing client expectations, with the consequent need to maintain and enhance the student experience, including student success and attainment, student retention and progression, and employability.
- Disintermediation and the danger of library support in the digital age becoming invisible.
- Current and future generations of students and researchers considering themselves self – sufficient in information skills.
- A decline in the importance of the library as a physical entity.
- Changing user needs and working styles.
- The availability of alternative sources of information for learners and researchers, with other providers as well as libraries in the digital environment.
- The changing nature of universities, with new ways of working, changes in pedagogy, and increasing online delivery.
- Changes in scholarly publication methods (such as open access) and the research environment.
- Changing technologies, such as social media and mobile technologies.
- Financial uncertainties, institutional cut backs and an increasing pressure for accountability.

An academic library is the arm of a university that is traditionally charged with the responsibility to acquire, organize and disseminate resources and services to the teaching, research and recreational needs of the academic community.

Conclusion

Academic libraries are the treasure house of knowledge which caters to the needs of scholars, scientists, technocrats, researchers, students and others who are in the mainstream of higher education. Academic libraries are positioning themselves to be the torch bearers and path makers of educational advancement by way of integrating knowledge systems and resources. The academic libraries have to be managed on the basis of constant introspection at the individual level and scientific evaluation at the institutional level in this age of knowledge management.

The academic libraries have to be managed on the basis of constant introspection at the individual level and scientific evaluation at the institutional level in this age of knowledge management. Academic libraries in India are called upon to play a crucial and

leading role over other types of libraries by transforming their information management skills, techniques, practices and resources. Redefining roles and responsibilities, constructive intervention of the organization leaders in institution building endeavours, positive involvement of information personnel in delivery system and constant evaluation of goods and services will make the Indian academic libraries highly appropriate and resourceful in future.

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INVESTMENT STRATEGIES IN BANK NIFTY OPTIONS: A PERCEPTUAL STUDY

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Abstract

Bank NIFTY is an index of the 12 highest cap and most liquid stocks from the banking sector. Launched in 2009, this index is now heavily traded on the stock market, with a lot of traders making a living off exclusively specializing in Bank NIFTY. Over the years, many traders who have focused on the trading of Bank NIFTY options have devised a plethora of bank option trading strategies and the market is now littered with Bank NIFTY tips and tutorials on how to trade in Bank NIFTY.

This article will provide a concise summary of two Bank NIFTY option trading strategies as well as provide many Bank NIFTY tips and Bank NIFTY option tips that can potentially help you understand how to make better trades in the future.

Keywords: *Buy and Sell Trades, Candlestick Chart for 5 minutes, Bull Call Spread*

Introduction

There are several pros and cons to Bank NIFTY. On one hand, due to its high volatility, Bank NIFTY is exceptionally attractive to traders who are looking to generate a quick profit, as price jumps are more likely. This characteristic also makes it more appealing to intraday traders, as any profit margin over 2-3% per day constitutes a good day's trade. However, it is this same volatility that causes Bank NIFTY to be extremely risky. Simply put, the price is likely to fluctuate, and if you are unable to keep up, the chances of loss are amplified, along with the amount of loss you could incur.

The Bank Nifty is a stock market index that tracks the banking industry. In order to allow for free movement of the capital market performance of one of India's most important service industries, banking, Bank Nifty was established by the National Stock Exchange (NSE) in September 2003. It consists of the stocks with large market capitalization and liquidity. The index includes stocks from the public and private banking sectors.

The Bank Nifty Index uses January 2000 as the base year. weightage is given to each Bank Nifty stock based on the free-float market capitalisation technique. In this index, single stock doesn't have a weightage of more than 34%.



Keeping this in mind, let's take a look at how to trade in Bank NIFTY and Bank NIFTY options as well as some tips to trade.

1. Strategy #1

This Bank NIFTY option strategy applies only to intraday trading.

Firstly, chart a 5-minute Candle Chart in your charting software. Pick the point at which you will commence your strategy. You must pick a point where the first two candles are either both bullish or both bearish. If your first two candles are bullish, you must place the buy order at the high of the second candle.

Once this is triggered, the stop loss order must be set at the low of that same candle. Alternatively, if the two candles are bearish, you do the exact opposite and place your buy order at the low of the candle, with the stop-loss order placed as a buy order at the high of the candle.

You can also employ a bracket order to carry out this strategy. In this situation, your stop-loss order is set at 40% of the height of your candle. Here, we are chasing a 1:2 ratio and therefore, the target is placed at double the height of the candle. For instance, if the height of the candle is 40 points, you place the target order at 80 points. It is important to note that if both candles are bullish you must focus on placing sell orders only, and vice versa for bearish candles.

2. Strategy #2

Top Trading Strategies for Bank Nifty Options

The following are some trading methods and pointers for Bank Nifty Options. Learn about each strategy for bank nifty options. Understanding about different strategies can help you in multiple ways.

1. Buy and Sell Trades

This two-part technique uses trade orders for both buying and selling.

- Sell Trades
- Buy Trades

This strategy is split into two parts: sell trades and buy trades:

a. Sell trade

If the market opens at a gap down (a jump to a lower price from last day's close), you must wait for the chart to fill that gap. When a candle fills this gap, you place a sell order at that point. Analysis and trend studies predict that the price is likely to drop from this point. The sell order, therefore, protects you from this fall in price.

According to analysts, there are strong odds of a further price decline when the markets begin with a gap down. This happens when the initial asset value is less than the previous day's closing price. In such cases, you must employ a candlestick chart as you watch for the gap to close. Place a sell order next to limit losses in case the price falls much lower.

b. Buy Trade

This Bank NIFTY options trading strategy is designed for when the market opens at a gap up. When you notice the market opening at a gap up, you once again wait for a candle to fill that gap and then proceed to place a buy order at that point. Contrary to the 'sell trade' section of this strategy, the price is predicted to rise, allowing you to possibly turn a profit. While the gap is usually filled within a day, another one of the Bank NIFTY tips states that if this is not the case, you simply wait for the gap to be filled in the coming days and place your orders then.

Setting your targets and stop-losses is an integral step of these Bank NIFTY option tips. To gauge where the stop loss and targets must be placed, chart a horizontal line from the high of the closing candle. This is also the point at which you place your buy order, and once the market corrects to cover this gap, your buy order will be completed. The stop loss should be placed at the low of the closing candle. Similar to the previous Bank NIFTY options trading strategy, another tip is to place the target at twice the height of the candle. For example, if the candle is 50 units, your target should be set at 100.

If it is below 100, you wait for the next gap. You can use a 15-minute time frame chart for this.

The two most traded indexes for options trading are the Nifty and Bank Nifty. Trading the Nifty Bank options has become more popular because of the numerous opportunities for profit it presents. This article shall throw light on bank nifty options tips. The Bank Nifty Index is useful for a variety of things. Examples include benchmarking fund portfolios, the release of new ETFs, index funds, and other structured products. However, let's first take a glance at what bank nifty options are.



In contrast, experts foresee chances of further price appreciation when the market begins with a gap up. This occurs when the beginning price is higher than yesterday's closing value.

2. Candlestick Chart for 5 minutes

For intraday traders, the 5-minute Candlestick Chart approach is appropriate. You will utilise a candlestick chart in the 5-minute timeframe, as the name implies. You must choose a position when the first two candles are either displaying a bullish trend or a bearish trend in order to execute it.

When both candles exhibit a bullish trend, you must place your purchase order when the price of your target asset reaches the peak of the second candle. You can set a stop-loss order at its low once it activates.

- **Example**

Let's consider an example to understand this strategy better. Your stop-loss order in this case is 0% of the candle's height. The target is set at the height of the double candle since we are chasing a ratio of 1:2 here. For instance, you might set the target order to be 60 if the candle height is 30. It's vital to remember that you should only concentrate on placing sell orders if both candles are bullish, and vice versa if only one candle is bullish.

3. Bull Call Spread

Traders can use A bull call spread if they think the market will increase. When you anticipate a substantial increase in the index, this method might be helpful. This method involves buying and selling call options to produce a spread with a small potential loss and respectable rewards. That is a successful tactic since you will profit when the index increases. The maximum loss in this strategy is known beforehand.



4. Short Straddle

A short straddle is an effective trading technique when you anticipate the market to be in a specific range. Using this approach, you sell call and put options that have the same strike price and expiration date. You obtain the maximum defined profit when the bank nifty option does not deviate much from the defined range. The losses, however, are limitless once the index rises past the breakeven threshold.

5. Long Straddle

A long straddle might be a very good strategy if you anticipate a lot of market volatility. You must purchase a call option and a put option with the identical strike price and expiration date in order to use it. In this case, the total of the call option's premium and strikes will represent

your higher break even point. On the other hand, you may get a lower break even point by multiplying the put option strike price by the premium paid.

You have the choice to exercise any of the options based on changes in asset prices. The potential for profit is limitless on both sides. If both options are not exercised, the maximum loss in this instance is equal to the total of the premiums.

6. Bear Call Spread

A bear call spread may be a successful trading technique when the market displays only a slight pessimistic emotion. You must sell an In The Money (ITM) call option and purchase an Out Of The Money (OTM) call option to execute it. The latter will protect you from an unanticipated increase in asset value.

The net premium you received for selling the call option will be deducted from your earnings. Your loss, however, will be the net premium less the difference in strike prices.

7. Bear Put Spread

The use of a bull put spread may be quite efficient in situations when you anticipate a little increase in the index value. You must buy one OTM put option and sell one ITM put option in order to execute this strategy.

Maximum earnings will be constrained, just like with the bull call spread method. The maximum loss in this situation shall be the difference between the put strike prices upon deducting the net premiums you have already received.



Bank Nifty Options Tips

Here are some useful Bank Nifty Options tips. They shall help you whenever you are finding the bank nifty option tips for tomorrow.

Stay Updated On Market And Economic Trends

To make wise trading decisions, traders must keep up with current happenings in the economy and market movements. The market may be heavily impacted by news releases, economic statistics, and company announcements.

Use Technical Analysis To Spot Trends and Patterns

Traders should use technical analysis to effectively spot patterns and trends in the Bank Nifty Index. In order to spot probable price swings, previous price and volume data must be analysed. Technical indicators, such as moving averages, trend lines, and chart patterns, can help traders spot the entry and exit points.

Create A Trading Strategy And Follow It

You should have a solid trading strategy. Set your Trading goals, risk tolerance, and entry and exit tactics. Traders must adhere to their trading strategy, and reduce their risk exposure by creating a trading plan.

Establish Sensible Goals And Use Stop Losses

To control their risk exposure, traders need to set reasonable objectives and stop losses. By establishing acceptable profit objectives and applying stops on losses, traders may both reduce and increase their losses.

Self-consciousness is the most dominating personality trait among the survey respondents and it is influenced by all the proposed variables such as gender, age marital status, discipline, occupation income, time spent for analysis of trades per month etc. Rajagopalan, Guruswamy



(2014).three likely independent variables, namely, investors' perception of information asymmetry,market perceptions and over confidence that may predict investor's risk attitude. Hilu (2015)

Chennai respondents have exhibited risk element which is the an important personality and influenced by income, gender, time spent for analysis and rate of return on equity. Diligence is the next important personality trait shown by the respondents and it is influenced by time spent for analysis, number of trades performed per month and rate of return on equity. Among the psychological biases, Illusion of control and socio conformity bias are the most biases which are influenced by the proposed independent variables viz.,gender, income etc. Rajgopalan (2014). Implied volatility indices include information about future volatility beyond that contained in past volatility. The study further reveals that there is a statistically significant negative and asymmetric contemporaneous relationship between implied volatility changes and the corresponding underlying equity index returns. Dhaniyah (2011).Awareness about financial market experience in derivatives trading workplace activity and return expectation are significantly associated with Derivatives Awareness level of respondents. Gakhar (2016).Derivatives market is dominated by male investor with age group 31-40. Derivations are use as Hedging tool and trend of spot market affects F&O trading. Manrai (2015).The attitude of investors is changing towards derivatives market in India for the last few years. There has been increasing awareness about derivatives trading among investors in India. Rashid, Nishat (2009)Market structure Dhaka stock exchange Bangladesh 300 retail investors. Random sampling. Factor analysis descriptive & reliability statistics regression analysis. Investment analysis, ease of conducting transaction,information and risk all affect the satisfaction level of stock investors in Bangladesh. Kumar, Pani (2016).

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Conclusion

Bank NIFTY is an attractive script for investors looking to make a quick profit. However, its volatility makes investments riskier. There are many options for how to trade Bank NIFTY options. By using the right Bank NIFTY tips and Bank NIFTY trading strategies, often with the assistance of a stock market app, you can gradually start making more successful trades.

Bank Nifty Options are an attractive avenue to investors seeking quick profits. The volatility of the index, however, makes it riskier to invest in. They can be traded in a variety of ways. Bank Nifty Options trading strategies and tips can help you make more successful trades over time. There are various strategies to trade this market segment. Short and long call straddle, bull and bear call spreads and the butter call are a few prominent ones. Remember to trade bank nifty options efficiently, stay updated on economic and political current events and employ technical analysis techniques. In addition, using trading tools like stop loss can help to minimise your trading risk & improve your control on trade.

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IMPACT OF MOBILE TECHNOLOGY ON LIBRARIES : AN OVERVIEW

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Abstract

Mobile technologies are technological products and, nowadays, a very representative number of so-called "digital generation" own and use them in our day-to-day, in recreational and educational activities. In this way, the mobile technologies contribute to a teaching/learning process more motivating and personalized. Libraries have always adopted new technologies to assist in their objective of providing clients with effective and efficient services, as well as timely access to needed information. Implementation of Information and Communication Technologies (ICTs) has changed the way people access and communicate information. Users want easy and instant access to relevant information, putting pressure on Library and Information Science (LIS) professionals to think out of the box for meeting their information needs. Application of mobile phones to provide library and information services are a significant step in this direction. The development of mobile technology has resulted in shifting the academic environment from traditional to mobile learning settings. This paper describes mobile technology applications in library & Information services. Finally it conceives the future of mobile library technology.

Keywords: *Mobile technology, Mobile library services, Library Applications, Mobile library websites, Skills required*

Introduction

Mobile devices today can run increasingly complex software, interact with cloud services, play rich multimedia content, and allow for advanced user interactivity. New hardware and technologies such as Bluetooth, accelerometers, and multi touch screens, as well as text messaging, smart phone software applications, mobile websites, global positioning systems (GPS), wi-fi, and media creation and capture tools, are all part of the mobile environment. Many of today's mobile devices are increasingly "always on", that is, by default meant to be connected to a wireless network. The students' motivation increases when this technology is used, leading to greater participation, and, consequently, better and faster acquisition of concepts/skills. Collaborative actions and cooperation between student/student, student/teacher and student/class are increased when mobile devices are used in the classroom context.

The use of mobile technologies and their implications for the teaching/learning process are some of the challenges that teachers face today as promoters and "drivers" in this process. To use the tools effectively an understanding is essential and therefore there are implications in teacher training for not only the use and application of technology, but for the underlying concepts and support.

Mobile Devices used in Libraries:

- PDAs (Personal Digital Assistant)
- Smart Phones Cell Phones
- iPods and MP3 players
- Tablets

The design of mobile devices and services is important to accessibility. As reading becomes more inclusive of diverse communities, libraries will need to address the ongoing accessibility challenges of the mobile world.

Five Ways To Use Mobile technology In The Classroom

Technology is powerful and it can be used in several great ways to make teaching and learning powerful. What can be done and what cannot be done is limited, basically by the creativity of the user. So, the more creative and innovative we get, the more results we'll see with using technology in class. However, I will provide a few examples just to help you get an idea of what an effective use will look like.

1. Use Of Audio Recording Feature

Students often require personal and quality feedback on the work they turn in. Lecturers can make use of the audio recording feature built into most smartphones to provide these personal and yet quality feedback to all students. Research has proven that students not just liked feedback given this way, but even preferred it.

2. Live Polling Tools

Live digital polling/quizzing tools can be used both as welcome and exit tickets in the classroom for formative assessment. Lecturers can use these tools (many of which are free) to determine what students already know and what should be concentrated upon. This can also provide insight into individual student strength and weakness and help give personalized instruction when needed.

3. Creating Of Videos

Rather than have students write a 2000 word essay after researching on a topic, where several of them would simply copy and paste paragraphs without necessarily understanding the content, lecturers could ask students to research and create a 5 minutes or less video or audio recording of what they had researched about.

4. Chat And Online Discussion Forums

Lecturers can exploit the group chat features of mobile devices to create an online discussion forum to encourage class participation on content topics, even outside the classroom. Students can chat and discuss (with or without the lecturer) while at home or over the weekend on a subject in class to increase understanding of concepts.

5. Use Of QR Codes

Quick response (QR) codes are another great way to use mobile technology in the classroom. Links to further resources, complex diagrams and images, solutions to tasks could be coded and made available to students.

MOBILE LEARNING - ANYTIME, ANYWHERE... ANYTHING

The physical boundaries of the classroom and time for learning no longer prevail because the content is ubiquitous (can be accessed from anywhere), students can communicate with teachers, other students and anyone else to satisfy their need for knowledge using the new generation of mobile devices – digital media players (including iPods and iPod Touches), smartphones (including iPhones, Android phones, BlackBerrys and Windows phones), personal digital assistants (PDAs), and tablet computers (including iPads).

Vavoula and Sharples state that mobile Learning is a social rather than technical phenomenon of people on the move, constructing spontaneous learning contexts and advancing through everyday life by negotiating knowledge and meanings through interactions with settings, people and technology. Mobile Learning is perhaps the fastest

growth area in the whole field of ICTs in education. It covers any form of learning that is mediated through a mobile or, more precisely, mobile handheld, device.

Many HEIs are implementing mobile Learning to provide flexibility in learning . Using mobile devices to reach students will benefit higher education by increasing enrolment and having a broader student population, since students in different age groups will be able to access course materials anywhere and anytime.

**Library services that can be provided to patrons via Mobile Technology are;
SMS notification services**

Libraries may provide the alerts on latest news, events and notices via SMS and MMS to users wherever they might be go. The users can get notified instantly with notice alerts such as- alerts on bringing new books to the notice of users for suggestion, intimation of arrival of indented documents by users, informing availability of reserved documents for collection, appraising about overdue books, outstanding fines, reminders to return library items, renew books, library circulars, e-journals subscribed, change in timings, information about important events, loan request etc.

My library

My library is a personal library space where users can find information and resources of their choosing. Users can read alerts, check records, renew resources, request items, track interlibrary loans and document delivery requests, set up email notices of new books and journal articles, set up preferences for catalogue searching, etc.

E-resources

With Mobile Interfaces Some publishers are already delivering e-books (both text and audio) that are accessible via mobile phones. It offers access to a variety of databases and digital resources such as e-Books, eJournals, Web databases, dissertations, audio books, streaming music, films, images and article databases which can be used on mobile. These collections can either be downloaded from the library websites on user's own mobile devices or libraries lend mobile devices with the collections already on them. A large collection of audio books both free-and subscription based services are available for download and also transferable to mobile devices.

Mobile document supply

The mobile environment and technology present new opportunities for sending document requests and scanned images and monitoring the use of collections as well as the automation of administrative operations. It can support electronic funds transfer, supply chain management, marketing, online marketing, online transaction processing, electronic data interchange, and automated inventory management systems.

Text reference service

If the library receives a high volume of enquiries that require brief responses, such as dictionary definitions, facts or service information then Librarians can provide instant answers, and links to articles/references in real time.

21st century learning experience

For older students, flexible, accessible mobile learning supports the development of their independence, ownership of their progress and time management of their studies. Students expect a 21st-century learning experience ¾ one that is convenient, is tailored to their needs and saves them time, which is exactly what mobile learning does. Not providing such an experience can become a barrier to successful learning.

Mobile can also help parents connect with teachers and stay up to date with their child's progress at school. Digital portfolios, enabled through a virtual Learning Environment and accessible at home on mobile devices, help bridge the school-home divide, giving parents insight into schoolwork, class activity, pending assignments and their child's progress. It also ensures they are aware of topics being discussed in the classroom, giving them the opportunity to bring the conversation into the home.

Mobile Technology V/s Libraries

Mobile technology has now come up with “Libraries in hand” trend. Our librarians are in move to determine these devices are affecting information access and ensure that they are communicating with patrons and providing web content in the most appropriate and effective ways. Our librarians must be prepared to take this challenge to increase the market and demand for mobile access to personalized facts and information anytime, anywhere on ones one’s own handheld device.

Since mobile handled devices are truly personal devices, search histories and physical locations can be harnessed to produce more accurate, individualized information and services. Users are don’t want to wait for list of web results, libraries today are covering most of the technologies given by mobile industry like PDAs, Blackberry, iPod, cell phones, UM PCs(Ultra Mobile PC) and mobilizing library contents in a portable from suitable for small screen and delivering short services in the form of contents/information which devices multiple searching features. Librarians will need to become proficient in using these devices to enable users to access them anywhere from anywhere.

LIMITATIONS / BARRIERS

Although mobile Technology holds great promise for library services, there are some limitations or barriers in providing library services such as

- content ownership and licensing,
- usually expensive and resource intensive
- limited memory of mobile devices
- digital rights management,
- Access to information in the digital age.
- Reach of an external vendor into the digital collections and technologies –sustained access will be an extremely important issue for libraries if they adopt mobile Library technology and services that offer content from providers outside of the library.
- Lack of appropriate mobile-friendly academic content to meet learners’ needs.
- difficulty in supplying content to an increasingly mobile student body
- problems in finding and accessing the content needed for mobile learners from the Library perspective

Potential of Mobile Applications in Libraries

More and more changes are expected within four to five years in the field of mobile technology and its application to libraries. The technology is now available to use phones to read barcodes of RFIDs (radio frequency identifications) in the library, and OPACs are developing GIS (Geographical information systems) sensitive and the ability to communicate with users through their mobiles for reservations, fines, late notices, alerts, etc. Mobile web 2.00 and 3.0 applications for social networking for the library community are available, thus enabling discussions, blogs, wikis and other features beneficial for all library developments. Some issues that the library may wish to examine in hours are the libraries role in

- Preserving new content types and formats.
- Providing space for new equipment and works styles.
- Licensing information products for mobile devices. * Providing instruction on the device themselves, not just access to content.
- Hosting or pointing to institutional content intended for mobile devices, e.g. podcasts.

Mobile Web Sites

In addition to or in place of mobile applications, some companies and organizations also develop mobile versions of their website that are better optimized for viewing on mobile devices.

- Encyclopedia Britannica mobile. Offers a search box and a list of suggested searches. Results include full text entries with enlargeable images.

- Medline plus mobile. Produced by the U.S. National Library of Medicine, Medline plus mobile provides information about specific diseases, conditions and wellness issues. The site also contains prescription drug information, medical dictionary and current health news.
- World cat mobile. Search the world cat catalog for books, movies, music games and more. Results include items available at local libraries

Skills required to the library staff

Librarians should acquire and apply the following skills if they wish to provide mobile based services

- a. Sills relating to training and user orientation to market these services to users
- b. Skills for interacting with users via smart phone applications, mobile friendly web pages and third party intermediary clients
- c. Knowledge of hardware and software of mobile devices
- d. Develop expertise in protecting privacy and security levels as more personalized information is involved in using for library services.
- e. Familiarity with internet/intranet services like using e mail, SMS and spam preventing etc.
- f. Create/tailor mobile optimized content including interactive and participative library homepage, OPAC, virtual tours, and databases.

APPLICATIONS OF MOBILE PHONES-

The wireless technology and mobile phones are becoming an integral part of everyday life and are changing the way one connects and interacts with the world. Mobile phones have wide variety of applications. Already mobile devices have made significant impact on banking, tourism (Web GIS), and health services. An innovative application of mobile phones in agriculture is made where Indian farmers are using low-cost water pump activation system called 'Nano Ganesh' developed by Tata Teleservices. A cell phone application with modem allows farmers to remotely access their irrigation pumps and to check availability of power to their irrigation systems and turn on/off the pumps.

Doctors are also using mobile to access electronic medical record, view medical images, access drug information, and take notes. Latest is mobile real-time remote patient monitoring and an iPhone application, iStethoscope to monitor heart rates of patients on the go. Already mobile phones are no longer a luxury, but a necessity not only for simple voice or text communication, but also for accessing the internet. Such connectivity seems to be the wave of the future.

Mobile technology

Mobile technology is exactly what the name indicates – technology that is portable; it refers to any device that you can carry with you to perform a wide variety of “tasks”. It is technology that allows those tasks to be performed via cellular phone, PDA, vehicles, laptops, etc. A standard mobile device has gone from being no more than a simple two-way pager to being a cellular phone, a GPS navigation system, a web browser, and instant messenger system, a video gaming system, and much more. It includes the use of a variety of transmission media such as: radio wave, microwave, infra-red, GPS and Bluetooth to allow for the transfer of data via voice, text, video, 2- dimensional barcodes and more. (Examples of Mobile IT devices include:

- ❖ Laptop and netbook computers
- ❖ Pal top computers or personal digital assistants
- ❖ Mobile Phones and “Smart Phones”
- ❖ Global positioning system (GPS) devices
- ❖ Wireless debit/credit card payment terminals
- ❖ Mobile devices can be enabled to use a variety of communications technologies such as:
 - ❖ Wireless fidelity (Wi-Fi)- a type of wireless local area network technology

- ❖ Bluetooth- Connects mobile devices wirelessly
- ❖ 'Third generation' (3G), global system for mobile communications (GSM) and general packet radio service (GPRS) data services- data networking services for mobile phones
- ❖ Dial-up services- data networking services using modems and telephone lines.

Conclusion

The evolution of mobile technology originated in the last decade, and consequently the emergence of Mobile Learning has given rise to new forms of learning in different contexts. With the development of wireless networks the mobile Learning presents itself as a new milestone in e-learning, and allows access to any type of information (anything), at any time (anytime) and anywhere (anywhere).

Due to the advancement of ICT, new technologies and tools are emerging day by day to fulfill the demand of the users. Mobile phones are inevitable tools of ICT. Application of mobile phones to provide library and information services will open new pathway towards this trend. This can be an astonishing means to outreach the users, enabling them to access library resources and services from anywhere any time even when they are on move. For this purpose the use of technology is very essential. Mobile technology has become boon to the libraries. A library may reach the remote users effectively by adopting of mobile technology in its services.

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ROLE OF YOGA AND MEDITATION ON STRESS

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INTRODUCTION

In this modern world most of the people are leading the busy and mechanical life. Environment is fighting for survival and we humans suffer from more and more physical and psychological stress, we cannot always control them but can learn how to face them and in this end, yoga and meditation is as good invention, it has ever been. The aim of yoga and meditation is attainment of physical, mental and spiritual health. The main credit of systematizing yoga goes to Patanjali Maharshi who wrote the “Yoga Sutra”.

Stress in this millennium is not something new not anything unknown. Stress is not just a creation of the mind. Often, it is created by lifestyle changes: a sedentary job, excessive dependence on gadgets, continuous exposure to electromagnetic radiation and artificial lighting, awkward meal timing, late or irregular hours of work, excessive travelling or commuting, and even from one’s inability to allot time for exercising. All or any of these factors can wreak havoc on our health”.

Not only the nature of work and its challenges cause the stress. Lack of sleep, sitting for long hours, bad ergonomics, these are all also the main causes of stress.

Today’s life is full of stress, which further influences our day-to-day activities. Stress disturbs the functions of various organs of body like, heart, kidneys, nerves etc. It also increases the high blood pressure which may cause strokes or heart attacks.

Yoga is a positive way of maintaining physical and mental alertness and spiritual attainment. Yoga is a complete system of therapy which includes work on developing awareness and control of body emotions mind and inter personal relations.

Yoga encourages mental and physical relaxation, which helps to reduce stress and anxiety. Practicing of asanas promotes flexibility and relieves tension. Yoga poses may help to release physical blockages like muscle knots. They also release mood boosting endorphins, which are the feel-good hormones that can positively affect to handle stress

Meditation helps in reducing stress by affecting the nervous system. Meditation reduces the production of stress related hormones like cortisol and increase the production of good chemicals like serotonin.

Meditation is extreme form of concentration. It allows your mind to focus on one thing and detaches from all worldly things. Meditation is one the 8 limbs of yoga. It is believed that all divine powers live in the heart and meditation is the only route to dive deep into the heart. Though meditation is not an answer to all the problems which comes in life., but it sure results in a harmony between body and soul. To reap full benefits of meditation, regular practice is required.

WHO (world Health Organization) conducted a study and found that the heart disease and depression are worst killer over the world. These are just because of over stress, and stress loads to some psychiatric diseases. E.g.: - depression, inferiority complex, anxiety, phobia etc., and also some other diseases like diabetes, asthma, insomnia, ulcer, hypertension etc. The major reason for these diseases is stress. In relating to this yoga is one of the strongest curatives means of these entire ailments. Yoga helps to reduce the psychiatric disease like depression, anxiety by controlling the mind. By the regular practice

of yoga, it acts on the body system-a very prominent role and gradually helps to control the hypertension, heart problem, diabetes etc.

Meaning of Yoga, Meditation and Stress:

Yoga:

The word yoga means ‘to join’ or ‘unite’. In the yoga sutras Patanjali described yoga as the means by which our mind can be made still quite and free from all distractions.

“Yoga is the true union of our will with the will of God”.

Yoga means the experience of oneness or unity with one’s inner being. “Asana” means the state or posture in which one can remain steady, calm, quiet and comfortable, both physically and mentally. Patanjali, in his “Yoga Sutras” has defined as Yogasana as “Sthiram Sukham Asanam”, meaning “that posture which is steady and comfortable”.

Meditation:

Meditation is practice that involves focusing or clearing the mind using a combination of mental and physical techniques. “Meditation is constant observation of the mind” and also “Meditation is a totally relaxed state of consciousness”.

Meditation is the state achieved from intense concentration on a single object until all other thoughts vanish and all that is left in an intense awareness of the object. Meditation is one of the eight limbs of yoga outlined in Patanjali yoga sutra called “Dhyana”. Meditation means sense withdrawal (Prathyahara) and concentration (Dharana) sustained into contemplation (Dhyana) with the aim of triggering a super conscious state (Samadhi) which is one of intuitive realization of the identity of the individual soul or spirit and the cosmic soul of spirit.

Stress:

Stress is part of life. Australian Dr. Hans Selye considered as the father of stress awareness and defined it as the “Rate of wear and tear within the body”.

There are two types of stress, Eustress or good stress is the stress that benefits our health and creates an opportunity to grow more (e.g.: Physical exercises, getting promotions in workplace). Distress or bad stress, it harms the health and mind will loss control, which often results from imbalances between needs and resources for dealing with those needs.

Stress is a normal part of our lives. Stress has been defined in numerous and often in consistent to mean hardship, strains, adversity or affliction, later in pressure, strain or strong effort with reference to an object or a person.

Stress is the emotional and physical strain caused by our response to pressure from the outside world. Common stress includes tension, irritability, inability, to concentrate and a variety of physical symptoms that include headache and fast heartbeat. It’s an unavoidable part of life. The challenges caused by stress help to develop new skills and behaviour patterns.

Stress And Health: -

Stress causes the illness. Illness can also cause stress. Stress creates physical pain, missed activities feeling of isolation etc., so to improve overall health and longevity exercise can help and its great deal of stress in the long run and short run.

Nutrition and Stress:

In stress management proper dietary habit also plays an important role. Food is the basic necessity of all living individuals. Food habit will differ from individual to individual. Mainly we need food for the following body functions like – Growth, Repair of body organs, and Energy.

Balanced diet is one which is suitable in all respects, sufficient in food value as well as adequate in quality and quantity according to the needs of a body. Balanced diet is must to keep the body healthy and fit. Balanced diet reduces the stress level very effectively.

Factors Affecting Stress: -

1. External Factors: - loneliness, joblessness, family problems, stress in work, financial ups and down etc.,

2. Internal Factors: - worries, anger, intolerance, ego, jealousy, fear, lust etc.,

Physical Responses to Stress: - Increased perspiration, increased heart beat and pulse rate, Tense in arm and legs

Psychological Responses of Stress: - Inability to concentrate, loss of self-confidence, irritability or frequent anger, worry and anxiety, irrational fear, unable to taking simple decisions

Behavioural Responses of Stress: Smoking, absent mindedness, hair pulling, nail biting, Increased or decreased sleep, over use of drugs and alcohol.

Other Common Symptoms of Stress: Loss of sense of humour, dizziness & Nervousness, chest pain& Head ache, migraine, lack of interest in sex

Yoga and Stress:

Yoga has long been known as a great antidote to stress. Yoga encourages mental and physical relaxation. Regular yoga practice can lead to better sleep quality, promoting overall well-being and it enhances the physical fitness.

Yoga is a positive way of maintaining physical upkeep, mental alertness and spiritual attainment. It teaches us how to control one's sense resulting on integrated personality, freedom, stress, conflict, and the like. It stabilizes one's behavioural pattern and develops will power and ultimately helps one to lead happy and balanced life.

Yoga has a universal appeal and proposition it can be practiced by every human being irrespective of age and sex, which provides total fitness for every individual. Yoga is one which is concerned with physical and mental wellbeing. It improves the mood and allows to focus on the present moment, an encouraging self-compassion, yoga effectively reduces stress.

The practice of yoga purifies the body and also provides the physical strength and stamina. Yoga is universally benefitting to all people of all ages. The regular practice of yoga is not only to feel physically better but it also gives happiness and peace to the mind. It is the experience of oneself with one's inner being.

Yoga relieves stress through stretching. When body and mind is over stressed, tension will be stored in different places of the body. This will lead to feel tight and cause pain. The stretching in yoga releases the tension.

Yogic practice creates mental clarity and calmness, increases body awareness, relieves stress patterns, relaxes the minds and sharpens concentration.

The main psychological benefits of yoga are, it improves concentration, memory, attention, learning subjective wellbeing, self-acceptance and self-realization.

Yoga and breathing exercises are very good way to control anxiety and stress. Yoga is unique combination of gentle physical movements, breathing practices; relaxation and meditation are designed to harmonize the working of the nervous system and to relax the physical body.

Meditation and Stress:

Meditation has been practiced for thousands of years. Meditation originally was meant to help deepen understanding of the sacred and mystical forces of life. These days, meditation is commonly used for relaxation and stress reduction.

Meditation is considered a type of mind-body complimentary medicine. Meditation produces a deep state of relaxation and a tranquil mind. It improves the attention and self-awareness.

During meditation focussing attention, the stream of jumbled thoughts that may be crowding the mind and causing stress can be eliminated. This process may result in enhanced physical and emotional well-being.

A mind-body practice in which a person focuses his or her attention on something such as an object, word, phrase or breathing in order to minimize distracting or stressful thoughts or feelings. Meditation may help to relax the body and mind and improve overall health and well-being. It may be used to help relieve stress, pain, anxiety and depression

and to help with symptoms related to disease. Meditation is type of complementary and alternative medicine.

Meditation helps to get rid of our emotional conflicts, inner discord, and mental or psychological strings. It completely purifies the mind and relieves it from unconscious obstructions. Meditation enables the inner light to manifest itself. This is responsible for the awakening of self-awareness; hence one can penetrate to the very center of life's higher values.

Conclusion:

Yogic practices the meditation is the priceless technique that provide the ways and means to come out from their worries and be relaxed in both body and mind. Meditation acts as a powerful tonic. It is a mental and nerving tonic as well. The holy vibrations penetrate all the cells of the body and cure the disease of the body.

Regular practice of yoga and meditation, focussing on present moment enhances awareness, boots concentration and centres the mind. It also cultivates the feelings such as love, joy, and serenity. Yogasanas will helps to reduce stress and calms the body and mind. Meditation and breathing techniques enhance the sleep quality and encourage mindfulness.

Yoga, meditation and breathing exercise are wonderful ways to reduce stress, replenish the energy and enhance the overall well-being.

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ROLES AND SERVICES OF DIGITAL LIBRARIES COMPARED WITH TRADITIONAL LIBRARIES IN 21ST CENTURY- AN OVERVIEW

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Abstract

Digital libraries will not only change our reading and information use habits, they are also going to bring major changes in the economic models of information generation, distribution and management functions. Digitization in library services seems to have arrived and put to use before educating its operators and users. Advantages of digitization in library services are much, hence the need to intensify digital library education in more developed and less developed countries of the world. Education is a common denominator and also much sought after in all countries of the world. Educational institutions cannot survive without the library; and if library services have gone digital, digital education must develop faster. Many LIS schools should introduce digital library education in their curricular and other less developed countries

Keywords: *Education, Digital, Library Information Science (LIS), Digital Library Education.*

Introduction

Digital libraries require digital librarians as they are required to select, acquire, organize, make accessible, and preserve digital collections, as well as plan, implement and suggest digital services. The services rendered by traditional library are those of collection, selection, acquisition, organizing, storage, dissemination, conservation, preservation, etc of library collections or materials. Much physical space is required for the traditional library services to offer meaningful services to its customers. Much man-power is needed to run the different units of the traditional library. Its operations are manually based and a few aspects are electronic based. Digital library services are similar to those of traditional libraries. The difference is that, digital collections are in digital forms.

The most important changes digital libraries bring may be in advancing information learning to the learner. It may have its own promises for the now and future and also its challenges. The services are technologically driven. Less space is required for the users to occupy and access it services. Digital library materials can be access from anywhere on the globe provided electricity and network are available. Computers are the means to deliver digital services to its users unlike in the traditional library services where human labour is vital in its operations.

LIS has always been a field concerned with the education of future librarians and information professionals. With increasing amount of information available in digital format, preparing LIS students to work in digital library environment has become an important agenda within LIS schools nowadays.

Advantages of Digital Librarians

- ❖ The resources will never be out on loan and will be available at anytime, anyplace, and anywhere.
- ❖ Access is provided to more complete set of journals than, in many instances, now exist on many library shelves.
- ❖ The cost of tracking the arrival of each journal issue, claiming, and periodical binding will be eliminated.
- ❖ The need for added library space may decline.
- ❖ Cost of retrieving and re shelving materials will be reduced.

Services of Digital Libraries Compared with Traditional Libraries

The advancement of information technology, digital telecommunication technology, CD-ROMs, multimedia, computer networks, internet etc. have paved the way towards electronic publishing and changed the traditional libraries to digital library. ICT have transformed the way of information generated, disseminated, preserved and made accessible with technology providing such incomparable access to digital resources and information services, digital libraries and information repositories are now worldwide accessible. The idea of converting traditional library into digital formats by using computer and web applications are emerging out as an important era in the library services.

Thus, the process is leading to the concept of a virtual or a library without walls. It allows flexible learning and distant education accessing online available to the users readily. With the availability of computers capable of computing at very high speed and having large disc storage space it will be possible to digitize and store information in the form of high quality, graphics, colour images and video clips. WWW tech based on HTML and advance web browsers have provided a very easy to use interface to the users.

Digital library have tremendous capacity to store huge data, which promote universal accessibility, protects rare books that are rapidly deteriorating due to over use and poor storage conditions, a tool for preservation of heritage.

Digital libraries and digital learning environments

Digital libraries are already available 24 / 7 from anywhere in the world, offering flexible arrangements for students / knowledge workers. Much work done over the past decade in developing digital libraries will have an important pay-off for educational innovation. The main issue, of course, is whether more active learning styles will become the norm, since many of today's courses are of a rather "self contained" nature in which educators present students with texts to work through in a linear way and assessment is too often based on whether or not a student is able to reproduce the texts prescribed by the teacher.

Two approaches in this respect can be identified.

- ❖ The first one, which takes the needs of specific courses as point of departure, can be seen mainly in the UK in projects like INSPIRAL and ResIDE [INSPIRAL and ResIDE]. INSPIRAL is a research project in England that investigates issues involved in linking virtual (or digital or managed) learning environments with digital libraries. It looks at technical, institutional and end-user challenges, with an emphasis on the last two aspects, and analyzes stakeholders' and learners' needs. Its point of departure seems to be how teaching staff can best be supported when designing digital learning environments and enriching these environments with resources available in digital libraries.
- ❖ Another approach, apparently more popular in the United States, has a different, more macro way of looking at digital library support for learning environments and concentrates on learning resources in general. An example of this approach is the National Science Foundation (NSF) national science, mathematics, engineering, and technology education digital library (NSDL) program, . This program seeks to bring together a vast, centralized collection of learning resources supporting all possible

kinds of education, ranging from K-12 to graduate and lifelong learning, into one big library for the nation -- and even beyond. As such, the NSDL approach is consistent with the large scale of many of the other NSF digital libraries projects.

Software for Digital Libraries

(i). LOCKSS

LOCKSS (Lots of Copies Keep Stuff Safe) is an opensource system under the auspices of the Stanford University. LOCKSS is a distributed, peer-to-peer preservation system that is able to manage multiple copies at remote data repositories. The system was released in 2004 and had been tested at more than 50 libraries worldwide.

(ii). Eprints

EPrints is free software developed by the University of Southampton, England. ePrints@IISc repository collects preserves and disseminates in digital format the research output created by the IISc research community. It enables the Institute community to deposit their preprints; post prints and other scholarly publications using a web interface, and organizes.

(iii). D-Space

D-Space is a digital library system to capture, store, index, preserve and re-distribute the intellectual output of a university's research faculty in digital formats. D-space has been developed jointly by MIT Libraries and HewlettPackard (HP). It is now freely available to research institutions world-wide as an open source system.

(iv). Depot

E-Depot (E. Oltmans and H. V. Wijngaarden 2004) is a longterm preservation system developed by the National Library of Netherlands. The core part of e-Depot is the DIAS that was developed by IBM. The objective of e-Depot is to maintain the integrity of stored digital objects so that these objects are accessible.

(v). Fedora

FEDORA (Flexible Extensible Digital Object Repository Architecture) is constructed under an open-source digital preservation infrastructure. FEDORA began in 1997, headed by the Cornell University and University of Virginia. In the latest version, FEDORA provides not only the basic functions of preservation systems, but also a model using semantic techniques, i.e., the Resource Description Framework (RDF) maintaining relations between digital objects.

(g). Greenstone

Greenstone is a tool for creating and managing digital library collections. Running on Windows as well as various flavors of UNIX, it provides the means to easily create searchable and browseable interfaces to digital library collections via the Web. It also enables implementers to save their collections to CDs. Thus the digital library collections can be distributed to people with poor or no Internet access. Greenstone knows how to create collections from "standard" file formats such as HTML files, email messages, PDF documents, JPEG and GIF images, Word documents, as well as plain text files. It has been developed and distributed in cooperation with UNESCO and the Human Info NGO in Belgium.

Challenges and Professional Status

Education and continuing education is what produces experts and professionals. Information centres should have educated persons who are technology-driven who are professionals in their own rights, leveraging knowledge from all possible sources, be able to qualitatively filter information, gather and put ideas from different streams of information, repackage them into value-added products. LIS and digital education should take care of emerging trends in technology- such as advances in ICT and knowledge management. Knowledge workers and LIS information professionals must equip themselves educationally so as to remain relevant. Information market is gearing rapidly towards digitization, providers therefore, must obtain education and skills in digital tools and services.

Solving Challenges in Digital Library

Education Revamp facilities, revisit curricula to educate and train professionals competent enough to meet and surpass the market demands. Training should focus on skills, talents, knowledge resourcefulness and dissemination of information. The education :

- i. Should be professional type.
- ii. That meets the present challenges and developments and trends in ICT.
- iii. That is very useful to the society.
- iv. That transforms the professional.
- v. To make one to continue to stay in service.
- vi. Programme that is competitive and relevant to the needs of the work place and market place.
- vii. That plays practical role in preparing human resources for managing knowledge resources for the society.
- viii. That educate and train students for managing information and knowledge resources in other sectors of economy other than the library.

Major Digital Initiatives

(1): The British Library's Digital Libraries Programme: The Digital Libraries Research Programme at British Library Research and Innovation Centre (BLRIC) is establishing a digital library information service based on the British library collections.

(2). THOMAS : Library of Congress Digital Library The Library of Congress Digital Library, Thomas was launched in January 1995, at the inception of the 104th Congress to make federal legislative information freely available to the public.

(3). California Digital Library : The California Digital Library was established in 1997 at the University of California. It supports the University of California libraries in their mission of providing access to the world's knowledge for the UC campuses and the communities they serve. The CDL also maintains its own distinctive programs emphasizing the development and management of digital collections, innovation in scholarly publishing, and the long-term preservation of digital information.

(4). International Children's Digital Library(ICDL) : The ICDL was created by an interdisciplinary research team at the University of Maryland in cooperation with the Internet Archives. This was established to create a collection of more than 10,000 books in at least 100 languages that is freely available to children, teachers, librarians, parents, and scholars throughout the world via the Internet.

(5). Digital Library of the Commons : The Digital Library of the Commons (DLC) is running on Eprints2, which provides free access to an archive of international literature on the commons, commonpool resources and common property. Features for authors and readers include advanced searching; browsing by region, sector, and author name; an author submission portal for uploading a variety of document formats; and a service that uses email to alert subscribers to new documents in their area of interest.

(6). The German Digital Library Programme GLOBAL INFO: The German Digital Library Programme GLOBAL INFO is funded by the federal ministry for education and research from 1998. The main objective of this initiative is to provide optimal access to the world-wide electronic and multimedia information on full texts, literature references, factual databases and software.

(7). The Bradman Digital Library, Australia : This digital library was created to give world wide access to collection of memorabilia devoted to Sir Don Bradman and held by the Mortlock State Library of South Australia. It contains biographical information about Bradman, a digital exhibition of artifacts, and a series of scrapbooks covering the years 1925-26 to 1948-49, containing press cuttings, notes and photographs.

Problems of Digital Library

In spite of the enthusiasm generated by the new thrust in digital libraries and a myriad of information technologies available, overall problems that may impede proper implementation of digital in India abound. These problem include:

(a). Lack of Technological Infrastructure: Building and sustaining a virtual library requires the proper technological infrastructure which include telecommunication, servers, application platforms and software applications. Sophisticated information and communication technology is essential to make information resources accessible globally. The requires provision of virtual library service, which require extensive computerization, networking and digitization. This adversely limits creating and running a digital library.

(b). Digitization of Analog Materials: In order to build a comprehensive resource, library materials in analog form (e.g. books, journals, sound recording, manuscripts, photographs) must be converted. The technology for digital conversion is, at best, emergent and often forces a library to choose between risking damage to precious originals or producing the highest quality reproduction. The quality of digital materials is often reduced after digitization. There is a need for more sophisticated support equipment for capturing exact quality of materials.

(c). Inadequate Founding: The success of any project is dependent on the involvement of the stakeholders and sponsorship of funding agencies, such as the government, NUC and so on. The creation and maintenance of digital libraries is very expensive. Costs are incurred for production, for ongoing provision of access, and for preservation of the digital information. Adequate funding, planning and management expertise coupled with good maintenance culture are imperative towards the successful implementation and operation of the digital library in India.

(d). Interoperability: Libraries distributed across the country are supposed to be assembled into a virtual unity. This will enable information to be shared. For this to be achieved, standards and protocols are required. The type of standards need to be determined.

(e). Copyright Issue/Access Restriction: Copyright is a major issue in digital libraries. Information placed on the digital libraries is not considered to be public simply because it is available worldwide; so it is not free for anyone to download, copy or use. There are restrictions, which vary from vendor to vendor, on how the information can be used. This constraints accessibility to information in digital libraries

(f). Lack of Suitable Personnel/Technical Support: Running a digital library requires the knowledge, skills, and abilities of people well versed in difference disciplines. Building a successful library require first and foremost a librarian for selecting, organizing and managing information in the library. In setting up a virtual library, a network expert or computer engineer is needed to set up the network.

Conclusion

Libraries have always played a significant role in society, and digital libraries with the promise of breaking the barriers of geographical distance, language and culture, have a potentially even more significant social role. A tremendous amount of research and development activity has gone into the study of digital libraries. Many issues have been addressed and problems have been partly or fully resolved. Researchers from a variety of disciplines, such as library and information science, computer science and engineering, social sciences and humanities are working closely together to look into the myriad of unresolved issues.

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ADAPTING TEACHING AND LEARNING SKILLS IN ENGLISH – A PRESCRIPTION FOR A LIFETIME OF SUCCESS

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Abstract

English being a foreign language needs full efforts and co-operation of the teachers and the taught for its success in the country. Nobody can deny the fact that we apply double the labour on this language as compared to other languages, but even then its condition remains paralysed. For clamouring success, we need not only work hard, done by the teachers alone but also full co-operation of the taught, improved prevailing conditions all around and above all good techniques and procedures to be followed by the teachers of English. From the realities of life all around, we notice very clearly that there are overcrowding classes. In such situations we need special techniques to provide results. There are number methods for teaching and adapting LSRW skills with drills and practices prepare the students for a bright future. Today the language-testing field has mushroomed into a highly developed and sophisticated field with numerous facets. One of these facets is the increased emphasis on assessing students' performance in the course. Following a method in teaching is very important, although traces of the principle ingredients of the old methods still find their way into our array of pedagogical options; our profession has emerged into an era of understanding. A vast number of language teachings contexts and purposes and even larger number of student need learning styles, and affective traits. As teacher and trainees develop and carry out classroom techniques, they can benefit by grounding everything they do in the well-established principles of language learning and teaching.

Introduction

The role of English in India is especially crucial as according to the Indian constitution it is an Associate official language and is the medium of communication. It is the gateway to upward social and economic mobility, especially so to the disadvantaged sections of the society. The growth and development of the country largely depends on the quality of its human resource along with other social, economic and scientific factors. Education plays a major role in developing human resources capable of meeting the challenges of a fast changing globalised world. A teacher's performance constitutes the most crucial inputs in the field of education.

English has achieved today the status of a global language. Educational policies in many countries are intensifying and teaching of English has become an essential part of the school curriculum to meet the challenges of globalisation and internalisation. In the recent past, India has made commendable progress in terms of increasing primary education enrolment, retention, and regular attendance rate and expanding literacy to population of India.

English education in India is the result of British stepping on to the soils of India. Though the East India Company first came for trade, it set its firm hand in politics and gained upper hold and new impetus was given for education by the missionaries in teaching English to the interested. It was later that importance of the English education was realized and eagerness to learn began. Now almost all the people in India spend a lot of money to get their wards educated in a convent, even in the government schools English is taught from the first level itself. The teachers are trained in courses to develop their English skills thereby helping the students.

There are teachers who teach English successfully without any professional training but they are less in number, we must realise that by training and experience they can prove useful with their insights and influence teaching. Every teacher holds some beliefs about their students, and base their teaching on some principles that would govern their teaching method for the session. Language teaching requires the teacher to decide which part of the syllabus he/she must teach at a particular point of time, in what order and how often. Many of these decisions are usually taken by the syllabus designers and textbook committee. However the teachers enjoy the freedom of teaching the textbook in different way to suit the classroom need.

Among the four skills in a language, listening is one of the most frequently used and writing is the skill most neglected or given least importance. Listening like other skills should be understood as a process. It is ultimately the teacher who creates opportunities for students to practice listening by engaging them into activities. It is the same with speaking which is best developed through activities, pronunciation aims at helping the students gain confidence and helps the learner speak fluently. In a foreign language teaching and learning, reading involves understanding the written text. Reading is an active process in which the reader gets the message, what may be called as decoding that the writer has written in the text. We know that writing is not a natural process in the same way as speech. The difference between speech and writing cannot be ignored, every one learns their mother tongue but not all learn to read and write it. Writing skills need to be developed. Good writers formulate plans and then proceed. In our educational institutions though all teachers stress the importance of writing skill development, no serious efforts are made to teach this important skill. It is important that this skill is practised and becomes a part of the curriculum.

Teaching is a complex multifaceted activity, often requiring the instructor to juggle multiple tasks and goals simultaneously and flexibly by following a set of principles which can make the teaching more effective and more efficient. To implement these principles requires more commitment of time and effort to bring in the required change. Learning results from what the student does and thinks and only from this the teacher can advance learning by influencing what the student does to learn. Teachers are decisions makers in managing classroom processes and whatever our educational setting, whatever its potential and its problems, our working lives are defined by the same issues.

Initially there was a shift from grammar translation method to direct method in India, this resulted in a situation where grammar ceased to be taught to the students, and also the oral drills which were devised to replace the teaching of formal grammar and habituate the learner to correct usage through actual practice were not widely adopted. This led to deterioration in teaching of English, to reform teaching it was recommended that teaching will have to centre round either the restoration of the grammar translation method or the paper implementation of the structural syllabus by means of oral approach. It was also realised that in higher classes most of the books on methodology of teaching English which were used in this country made no distinction between the methods of teaching to speaking.

Herbert Simon said that effective teaching involves acquiring relevant knowledge about students and using that knowledge to inform our course design and classroom

teaching. Teaching is a complex multifaceted activity which often requires the teachers to juggle with multiple tasks and achieve goals simultaneously and maintain flexibility by following a set of principles that make teaching more effective and efficient to implement. These principles require strong commitment of time and effort to bring in the required change.

Effective teaching and learning requires relevant knowledge about mainly because the students come from different backgrounds which is not helpful in their way of learning and how they see the world. Gathering the information and taking adequate measures helps in understanding their backgrounds and an answer to their problems.

Teaching is more effective and the learning is more enhanced when the teacher has a clear idea of a set of instructions with a learning objective. The instructions and the objectives with assessment provides opportunities for the students to demonstrate and practice their knowledge and the feedback offers guide for further teaching and learning and assessing oneself. Alignment of the three major factors thus proves invincible that is the learning objectives ---assessment -----instructional activities.

Effective teaching involves articulating explicit expectations regarding learning objectives and policies being explicit about course policies example semester, internal assessment, technical realities in the syllabus and in class allows us to resolve differences early and tends to reduce conflicts and tensions. One course is different from others like Bcom, BSc, BCA, BBM, and BA; therefore student's expectations may not match ours. Thus being clear in communicating them clearly helps them learn and perform better.

Effective teaching involves prioritizing the knowledge and skills we choose to focus on. Recognising the class, size, student's background, experience, course position in the curriculum sequence number of units to be taught setting priorities for the student learning determination of goals help in attaining the objectives.

Effective teaching involves progressively refining our courses based on reflection and feedback teachers should make themselves adaptable. Teachers should always be on the mainstream to upgrade and accept the change offered from the changing society and adapt themselves to the new changing methods. Feedback helps in focusing our priorities which are to be manageable and effective.

Health education and literary development are two other topics in the teaching and learning cluster. Both these topic are about the content and delivery of instructions. Cultural diversity and education shows how racial and ethnic diversity is incorporated into curriculum and instructional materials and the effect these materials have on the students. Abstracts dealing with the topic of assessment are about issues related to measuring what students learn from the curriculum and instructional material.

Consideration of learners as individuals will highlight such issues as the need to relate age to interest in topic based syllabus, how materials can be made challenging, or whether teacher-dependent attitudes suggest a need for learner independence as a goal. Consideration of learners as members of a class group will inform decisions about target levels of communicative ability or appropriateness of the methodology to class size. Reflection on learners as members of a particular educational system will pinpoint such issues as the relationship of course objectives to the examination system or the appropriateness of grading to a selective or comprehensive system. Finally, perceiving learners as members of a social group will bring into focus the relevance of course objectives to the role of English in society or the amount of exposure to English that learners receive.

Learning a Language does not mean it is only for knowledge alone; it is a skill which is to be developed with all its diversities in an integrative way involving all the four skills- listening, speaking, reading and writing. Learners learning in class room can be categorized into Social context factors which can have positive aspect towards the language learning and student developments also parental support career and travel needs for learning English. Educational factors like manageable class sizes, resources provided well In

advance. Positive motivation and appreciation helps in strong learning factor. Teacher factors like qualified through courses and in-service training help in teaching. A good teacher always runs after a good method. Always remains in search of the most effective method of teaching. A method tells the teacher how the matter should be taught. It is a tool in the hands of a teacher. A good teacher tries to take out the best from the method adopted. Selection of the right method ensures the success of the teacher.

Perhaps the most vital element in learning is confidence which only comes through practice and with achieving success from an early stage. The role of a teacher is to provide as much positive practice as possible by talking to the learners in English by exposing them to a range of LSRW skills materials in the classroom, and by encouraging them to use whatever resources are available in their institution or community in a variety of different methods. Good teachers have always taken a positively critical approach to appraising their work, using their insights from experience and from possible implication of research, especially from studies which are based in the language classroom. It is one of the ways in which we create our own continuing professional development.

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PSYCHO-PHYSICAL BENEFITS AMONG UNDERGRADUATES BY REGULAR INVOLVEMENT IN MARTIAL ARTS

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Abstract

Introduction : Karate is claimed to be originated from the island of Okinawa. But it was influenced and highly related to ancient form of Martial arts bearing roots from India. It is stated that when the descendants of Buddha understood that the monks in order to protect themselves from the attacks of thugs and others. They had to be equipped with certain self defense skills and knowledge, Hence Bodhi Dharma taught the art of Karate to his disciples which was intrinsically practiced and nourished in countries like India, China, Thailand, Japan and others. In modern days it has taken many forms of combative sports and skills such as Taekwondo, Judo, Mau-Thai and others. That term 'karate' basically means "Empty hands" Thus karate though means defensive techniques by empty hands, in reality it also involves being trained not only with empty hand techniques but with formatted fighting techniques, Gymnastics and using various weapons such as Nan- chak, Sai, Tanfa, Stick, Sword and others. Gichin Funakoshi is termed as father of modern Karate.

The objective of presenting this paper is to bring out the benefits that can be reaped by involvement in karate by the under graduate students.

Methodology: 40 male students who were persuading under graduates courses were selected as subject who underwent 3 sessions of karate training in a week for a period of 24 weeks. Their physical fitness and emotional intelligence were analyzed both before and after the 24 weeks karate training.

Conclusion: it can be concluded that there existed significant difference across the selected physical fitness variables and parameters of emotional intelligence among the undergraduates when data of before and after involvement in 24 weeks of karate training were compared as per the student T-test and the significant difference were establish at 0.05 level of significance.

INTRODUCTION

Karate is claimed to be originated from the island of Okinawa. But it was influenced and highly related to ancient form of Martial arts bearing roots from India. It is stated that when the descendants of Buddha understood that the monks in order to protect themselves from the attacks of thugs and others. They had to be equipped with certain self defense skills and knowledge, Hence Bodhi Dharma taught the art of Karate to his disciples which was intrinsically practiced and nourished in countries like India, China, Thailand, Japan and others. In modern days it has taken many forms of combative sports and skills such as Taekwondo, Judo, Mau-Thai and others. That term 'karate' basically means "Empty hands" Thus karate though means defensive techniques by empty hands, in reality it also involves

being trained not only with empty hand techniques but with formatted fighting techniques, Gymnastics and using various weapons such as Nan- chak, Sai, Tanfa, Stick, Sword and others. Gichin Funakoshi is termed as father of modern Karate.

OBJECTIVE OF THE STUDY

The objective of this research paper is to bring out the benefits that can be reaped by involvement in karate by the under graduate students.

METHODOLOGY

1. 40 male students who were persuading under graduate courses were selected as subjects for the present study,
2. Selected 40 students were divided into two groups of 20 students. First group was the experimental group comprising 20 students, who underwent 5 sessions of karate training in a week for a period of 24 weeks and the second group comprised 20 students belonging to the control group who did not participate in any of the sports or physical fitness events.
3. Physical fitness tests were administered as per the Canadian standardized test of fitness operations manual 1986.
4. Mangal's Emotional intelligence test was administered to assess the emotional intelligence of both experimental and the control group.
5. Data obtained were standardized as per norms, and significant difference was established between control group and experimental group as per the students T-test at 0.05 level of significance.
6. The critical value for 0.05 level of significance for the sample group of 20 is 2.09*.

ANALYSIS OF THE DATA COLLECTED

Table-01 : Physical fitness scores of experimental group and the control group before administering the 24 weeks training program on the experimental group:

Particulars	Experimental group (Participants in 24 Weeks karate training sessions)		Control group (Non participants in physical fitness activities)		T-test value
	mean	S.D	mean	S.D	
1 mn timed bent knee sit-ups	23.70	1.49	24.75	1.89	1.75
Push ups	28.90	1.68	29.10	2.32	0.38
Sit and reach	20.75	3.31	22.30	2.72	1.49

Table-02 : Physical fitness scores of experimental group and the control group after administering the 24 weeks training program on the experimental group:

Particulars	Experimental group (Participants in 24 Weeks karate training sessions)		Control group (Non participants in physical fitness activities)		T-test value
	mean	S.D	mean	S.D	
1 mn timed bent knee situps	47.2	2.84	24.2	2.42	25.22*
Push ups	37.8	3.98	25.7	2.47	14.15*
Sit and reach	37.25	2.65	17.65	4.95	13.16*

The mean scores of experimental group and the control group students in physical fitness variable 1 mn timed bent knee sit ups before 24 weeks training in Karate were 23.70 and 24.75, the standard deviation scores were 1.49 and 1.89 respectively. The T value at 0.05 level of significance was 1.75.

The mean scores of experimental group and the control group students in physical fitness variable Pushups before 24 weeks training in Karate were 28.90 and 29.10, the standard deviation scores were 1.68 and 2.32 respectively. The T value at 0.05 level of significance was 0.38.

The mean scores of experimental group and the control group students in physical fitness variable Sit and reach before 24 weeks training in Karate were 20.75 and 22.30, the standard deviation scores were 3.31 and 2.72 respectively. The T value at 0.05 level of significance was 1.49.

When we observe the scores mentioned in the table above, we can state that across all three selected components of physical fitness before 24 weeks of training in Karate there existed no significant difference between the experimental group and the control group.

The mean scores of experimental group and the control group students in physical fitness variable 1 mn timed bent knee sit ups after 24 weeks training in Karate were 47.2 and 24.2, the standard deviation scores were 2.84 and 2.42 respectively. The T value at 0.05 level of significance was 25.22*.

The mean scores of experimental group and the control group students in physical fitness variable Pushups after 24 weeks training in Karate were 37.8 and 25.7, the standard deviation scores were 3.98 and 2.47 respectively. The T value at 0.05 level of significance was 14.15*.

The mean scores of experimental group and the control group students in physical fitness variable Sit and reach after 24 weeks training in Karate were 37.25 and 17.65, the standard deviation scores were 2.65 and 4.95 respectively. The T value at 0.05 level of significance was 13.16*.

When we observe the scores mentioned in the table above, we can state that across all three selected components of physical fitness before 24 weeks of training in Karate there existed no significant difference between the experimental group and the control group.

But the administration of 24 weeks training in karate on the experimental group and 24 weeks of sedentary life by the control group had resulted in significant improvement in the fitness components of the experimental group. It was observed that there was significant difference across all three components of physical fitness 1 mn timed bent knee sit ups, Pushups and Sit and reach at 0.05 level of significance.

Undergraduate students practicing karate regularly had significantly higher physical fitness than undergraduate students who did not take part in any physical fitness activities.

Table-03 : Emotional intelligence scores of experimental group and the control group before administering the 24 weeks training program on the experimental group:

Particulars	Experimental group (Participants in 24 Weeks karate training sessions)		Control group (Non participants in physical fitness activities)		T-test value
	mean	S.D	mean	S.D	
Inter personal awareness (own emotions)	18.95	2.11	19.85	1.73	1.38
Inter personal awareness (others emotions)	17.00	1.49	17.40	1.42	0.97
Inter personal management (own emotions)	18.45	1.76	18.10	1.48	0.76
Inter personal management (others emotions)	17.41	1.67	17.60	1.64	0.39

Emotional Intelligence scores of experimental group and the control group after administering the 24 weeks training program on the experimental group:

Particulars	Experimental group (Participants in 24 Weeks karate training sessions)		Control group (Non participants in physical fitness activities)		T-test value
	mean	S.D	mean	S.D	
Inter personal awareness (own emotions)	22.8	2.09	19.4	1.73	6.29*
Inter personal awareness (others emotions)	19.90	1.41	18.25	1.45	3.24*
Inter personal management (own emotions)	21.65	1.46	18.55	1.90	5.67*
Inter personal management (others emotions)	20.85	1.73	19.70	2.62	2.41*

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal awareness (own emotions) before 24 weeks training in Karate were 18.95 and 19.85, the standard deviation scores were 2.11 and 1.89 respectively. The T value at 0.05 level of significance was 1.38.

The mean scores of experimental group and the control group students in physical fitness variable Inter personal awareness (others emotions) before 24 weeks training in Karate were 17.00 and 17.40, the standard deviation scores were 1.49 and 1.42 respectively. The T value at 0.05 level of significance was 0.97.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal management (own emotions) before 24 weeks training in Karate were 18.45 and 18.10, the standard deviation scores were 1.76 and 1.48 respectively. The T value at 0.05 level of significance was 0.76.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal management (others emotions) before 24 weeks training in Karate were 17.41 and 17.60, the standard deviation scores were 1.67 and 1.64 respectively. The T value at 0.05 level of significance was 0.39.

When we observe the scores mentioned in the table above, we can state that across all four selected components of Emotional intelligence there existed no significant difference between the experimental group and the control group before 24 weeks of training in Karate.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal awareness (own emotions) before 24 weeks training in Karate were 22.8 and 19.40, the standard deviation scores were 2.09 and 1.73 respectively. The T value at 0.05 level of significance was 6.29*.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal awareness (others emotions) before 24 weeks training in Karate were 19.90 and 18.25, the standard deviation scores were 1.41 and 1.45 respectively. The T value at 0.05 level of significance was 3.24*.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal management (own emotions) before 24 weeks training in Karate were 21.65 and 18.55, the standard deviation scores were 1.46 and 1.90 respectively. The T value at 0.05 level of significance was 5.67*.

The mean scores of experimental group and the control group students in Emotional Intelligence variable Inter personal management (others emotions) before 24 weeks training in Karate were 20.85 and 19.70, the standard deviation scores were 1.73 and 2.62 respectively. The T value at 0.05 level of significance was 2.41*.

When we observe the scores mentioned in the table above, we can state that across all four selected components of Emotional Intelligence before 24 weeks of training in Karate, there existed significant difference between the experimental group and the control group.

But the administration of 24 weeks training in karate by the experimental group and 24 weeks of sedentary life by the control group had resulted in significant improvement in the Emotional Intelligence of the experimental group. It was observed that there was significant difference across all four components of Emotional Intelligence- Inter personal awareness (own emotions), Inter personal awareness (others emotions), Inter personal management (own emotions) and Inter personal management (others emotions) at 0.05 level of significance.

Undergraduate students practicing karate regularly had significantly higher Emotional Intelligence than undergraduate students who did not take part in any form of physical fitness activities.

When we observe the scores mentioned in the table above we can state that across all four components of Emotional intelligence, students participating in karate had better average scores when compared to the students not participating in any physical fitness activities. There was also significant difference among the scores of the selected groups across all variables of emotional intelligence at 0.05 level of significance as per the t-test. Thus students practicing karate regularly had significantly higher emotional intelligence than students who did not take part in any form of physical fitness activities.

CONCLUSION:

It can be concluded that regular practice of karate by the Undergraduates results in improved

- Physical fitness.
- Fitness components such as core strength, arm strength, flexibility can all be significantly improved by regular practice of Karate.
- Undergraduates practicing regular karate had significantly higher interpersonal awareness about their own emotions.
- Undergraduates practicing regular karate had significantly higher interpersonal awareness about others emotions.
- Undergraduates practicing regular karate had significantly higher interpersonal management of their emotions.
- Undergraduates practicing regular karate had significantly higher interpersonal management of others emotions.

With reference to these conclusions it can be recommended that regular practice of martial arts can significantly contribute for physical fitness and psychological wellbeing of undergraduate students.

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