Chapter 5

PROFESSIONAL LIBRARY MANPOWER:
ELEMENTS AND FACTORS OF MANPOWER DEVELOPMENT

5.1 Introduction

The challenges facing modern library and information services demand learning, information systems and services, and their speed, responsiveness and capability. The demands can be fulfilled only by persons with good academic background, knowledge, professional skills, expertise, leadership for accomplishment of the library activities and operations. The united efforts of the workforce/human resource/manpower can fulfill the objectives of the library and achieve the goals of the organization. The library personnel are heterogeneous consisting of individuals of varying ages, levels of education, areas of expertise, differing motivation, personal characteristics, aspirations, needs and personalities. The library management shall understand how these factors interact in the work environment.

The productive abilities of a nation or a firm are based upon the integration of the abilities of its members with physical resources and technology available to it. The human abilities consist of the capabilities of all the individuals, as modified by environmental factors (Tiwari, 2004). This chapter identifies the elements of professional library manpower and discusses the factors of manpower development.

5.2 Manpower/Human resource

The term manpower is generally used in two senses. In an aggregative sense, it denotes the total labour force of a country, that is, all the workers and the unemployed. In a restrictive sense it denotes selected categories of
personnel who require several years of education and/or training eg. doctors, engineers, scientists, teachers and librarians.

"In a broad sense, manpower is identical with human resources. In a restricted sense, it refers to the component of human resources that is distinguished by the characteristic of skill resulting from education and training. In a latter sense it includes categories such as engineering technical, scientific and medical personnel" (Dhar, 1977).

Generally speaking, manpower is a micro-concept referring to an aggregate of categories of skilled personnel; distinct and separate categories of manpower are identifiable on the basis of the level and type of their skills; and these skills are generated by means of education and training, both within the formal education system and outside it.

5.2.1 Usage of terms

In current popular usage the terms 'manpower', 'labour force', 'work force' and 'human resources' are all being employed as though they are conceptually identical or as mere variants in expression. In the modern context the term 'human resources' is more popular in usage than 'manpower'.

The term 'manpower' in its real and noble sense came to be used in the first industrial revolution, which brought about a revolution not only in technology but also in human relations. The nomenclature signified 'man' having potential sources of physical power. With the passage of time and the gradual growth and advancement of science and technology, there came about vast changes with greater rapidly in human life and their livings, which had a deep impact on work and 'manpower' that came to achieve significant importance in almost every area of their activity, more particularly in industry, commerce and business with which we are primarily concerned.
5.2.2 Definitions

The concept "Manpower" has been defined differently by different experts. Some of the definitions are given below.

According to Hanson (1988) "Manpower consists of the amount of labour, both male and female available in a country at a particular time."

The human resources have also been designated as human factors. According to Jucius (1973) "the human factor refers to a whole consisting of inter-related, inter-dependent and inter-acting physiological, psychological, sociological and ethical components. As regards physiological components, it requires several inputs like food, rest and environmental conditions to satisfy the physiological needs. It also requires protection against harmful and destructive conditions and attempts to avoid less of income as a measure to have physiological security. Psychologically it is characterized by emotions and impulses."

For a purely manpower planner, manpower is a skill concept. In this sense, the term manpower includes only those technical and professional personnel crucial to economic growth. These are the people with specific educational qualifications and training necessary for the better performance of the job. The term "manpower" is best interpreted to mean an aggregate of skilled categories, non-homogenous and therefore non-substitutable, broadly speaking specific and technical manpower categories constituting as it were the case of human capital (Prakash Rao and Shashikumar, 1973).

Manpower is also defined in terms of its contributions to economic growth and development. In general terms, manpower means the labour force available in the country. But labour in treated as homogenous, and the manpower as heterogeneous. As such the term manpower may be defined as the part of the total human resources, which bears more significant correlation with the economic growth than the homogenous labour input. It is largely due to
the integration of factors like education, training and acquisition of skills, technical innovation and increasing productivity. In this sense, manpower is a comprehensive term including all the types of human beings entering into the production process.

The quality of manpower is determined by various factors, which includes socio-economic assets as well. But education and experience are the most important aspects besides overall good standards of living and work. It is recognized that the manpower has unlimited potential and need to be tapped fully. Manpower is therefore "the total qualitative and quantitative human asset or people in a society or a given profession or occupation. In this sense one can literally, interpret the word to mean 'power of man' both in size, talents and educational level" (Kumar, 1988).

5.3 Library Manpower

The qualified personnel in libraries constitute the library manpower. Service is the motto of libraries. In order to achieve this aim, it should have the appropriate manpower. "The fullest exploitation of the book resources of a library will be possible only if it is manned by a team of qualified, competent and motivated staff in adequate strength. Without such a staff however good the book collection may be it will remain practically unutilized"(Isaac, 1987). Library manpower can be categorized into three groups. They are generally referred to as professional, semi-professional or para-professional and non-professional staff. While the professional staff should have high academic and professional qualifications, the semi-professional staff are generally undergraduates possessing a Diploma or Certificate in Library Science. For the non-professional staff who work in the administrative sections of the library or on jobs which do not call for specialized skills, no professional qualifications are required. The productive utilization of a library's collection and services can be attained only through a fruitful allocation of manpower resources. Library
manpower planning helps the information centres to provide need-based services to users.

Library manpower is the vital component for operating and managing library and information centres in particular and for achieving the objectives of the organization in general. There is a need for constant and continuous development of human resources in libraries and information centres all over the world to meet the drastic changes that are taking place especially in the technological fields. As rightly pointed out by Harward Williams that "we are living in an exciting profession, where changes can motivate us to future change and where we to a large degree can control its direction, provided we are aware of the world development in education, communication and information dominated society" (Williams, 1981).

Library manpower refers to both the qualitative and quantitative components for the smooth functioning and efficient management of library and information centres. They form the vital component in achieving the objectives of the organization. In fact, library manpower is the total workforce available for work or service in a library at a given time.

As a working definition 'library manpower' can be defined as the total knowledge, skills, creative ability, talents and aptitudes of library's workforce as well as the values, attitudes, and beliefs of the individuals involved in the affairs of the library. It is sum total or aggregate of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the employed personnel in a library.

Adequate manpower is the basic pre-requisite for managing libraries effectively. Educational institutions imparting courses in library and information science have a vital role in providing appropriate manpower in tune with changing environment.
5.4 Professional Library Manpower

Professionals are those having the professional degree in library and information science that is, B.Lib.Sc. / B.L.I.Sc. and above. In other words, qualified workforce involved in discharging the duties and responsibilities in the library profession constitute the professional library manpower. According to Asheim (1968) the term 'Librarian' (is used) to designate those who are qualified by background and training to go beyond the level of application of established rules and techniques to the analysis of library problems and the formulation of original and creative solutions for them.

A statement of policy adopted by the Council of the American Library Association recommends categories of library personnel, including library clerks and technical assistants, and the level of training and education appropriate to each of these categories. The nature of suitable job responsibilities is listed against each level. This statement further clarifies the use of job titles to make clear the level of the employees’ qualifications, and defines the title of 'librarian' as one carrying with it the connotation of 'professional' in the sense that professional tasks are those that require special background and education in order to identify, analyze, plan, formulate, communicate and administer successful library programmes of service to users (Casteleyn and Webb, 1993) (p.23). From the guidelines of ALA it is clear that a professional must require special academic qualification in order to perform the library activities in a most efficient way to the users.

5.4.1 Importance of Professional Library Manpower.

The ultimate objective of library is to provide maximum satisfaction to its users. The library having a good collection of books and an attractive building, but if it lacks by the highly qualified, competent, motivated and trained staff, cannot function properly. The Kothari Commission (1964-66) observed the
situation in the following words, "A collection of books, even a collection of good books, does not constitute a library. Given enthusiastic teachers, who teach with books and librarians who can cooperate with them in converting the library into an intellectual workshop, even a comparatively small collection of sensitively chosen books may work wonders in the life of students. Without such a staff the most luxurious building or extensive book collection, may have no effect at all". Though this is the age of machines and mechanism, yet the human factor and manpower cannot be ignored. Thus there is a trinity of personnel, books and building. Among all these three components, the library personnel / library manpower is the most important.

While discussing the importance of manpower in the context of IT application Verma (2001) emphasizes that the most important components for automation and networking are Hardware, Software and Humanware. Whatever best hardware and software is purchased for library, it is only with the help of humanware that automation can be done. The hardware and software can be purchased as per requirement, but humanware cannot be purchased, they have to be produced and trained. It is certain that the day is not far off when all the library services will be computerized, hence it is high time to think about the manpower.

5.5 Elements of professional library manpower

According to Megginson (1967) 'Manpower' is the totality of knowledge, skills, abilities (creative or innate), talents and aptitudes of any organization's workforce as well as the values, attitudes and beliefs of the individuals involved. i.e. persons employed in the organization. 'Knowledge', 'Skills', 'Ability', 'Talent', 'Aptitude', 'Value'. 'Attitude' and 'Belief' are considered as the elements of manpower. Two more elements such as 'Involvement' and 'Interest' are also included in the study which are considered as important aspects for the implementation of innovative programmes i.e. information technology application in libraries. A diagrammatic representation of the elements of

![Manpower wheel](image)

5.5.1 Knowledge

Knowledge is considered as the most important element of professional manpower. Knowledge is the awareness of what one knows through study, reasoning, experience or association, or through various other types of learning (McInerney, 2002). It is "acquaintance with or understanding of a science, art or technique" (Merriam Webster’s Collegiate Dictionary, 2002).

The expression of 'knowledge' is often synonymously with information. But knowledge is more than that. Unlike information say Nonaka and Takeuchi (1995) that, "knowledge is about beliefs, and commitment - it has perspective or intention. Next, knowledge is about action - for some purpose. Thirdly, knowledge is about meaning- context- specific". In general, it can be said that
Knowledge embodies technical experience, lessons learnt and conveys insights, general truths, best practices, new ideas and the like.

Knowledge is enriched information with insights into its context showing how information and knowledge are closely associated and how they are used to define each other (Broadbent, 1998). Looking at knowledge from a managerial viewpoint, Broadbent views knowledge as that which someone knows, and she says that it becomes organizational knowledge. Brooks says that knowledge is a sum of many bits of information and when more information is added to the existing knowledge structure, it gets modified. His views are expressed by the following equation:

\[ K(S) + I = K(S + \Delta S) \]

When information \( \Delta I \) is added to the existing body of knowledge \( K(S) \) is results in modified knowledge \( K(S + \Delta S) \) which means the addition of information add to multiplication of the knowledge (Goyal and Purwar, 1989).

Only when information is combined with experience and judgement, it becomes knowledge. Knowledge can be highly subjective and hard to codify. It includes the insight and wisdom of employees. It may be shared through e-mail, best practices, momos or even sticky notes on a cubicle wall. And once we have the knowledge, we can put it to work and apply it to decision making (Singh and Singh, 2005).

The concept of knowledge is quite divergent in nature, it varies from the man to man, subject to subject, period to period and still more from region to region; with the passage of time, it took various phases and thus a number of definitions of knowledge are now available in literature.

According to J.H. Shera (1966) "knowledge is the consequence of a filterized process through intellectual system" The Oxford English Dictionary (1989) defines knowledge as follows:
(a) "Intellectual acquaintance with perception of fact or truth; clear and certain mental apprehension; the fact, state or condition of understanding" (b) "acquaintance with a branch of learning, a language, or the life; theoretical or practical understanding of an art, science, industry etc." (Vol. VIII, p.517).

Lektorsky (1984) says, "Knowledge is taken to mean a product of human activity which characteristics a certain state of affairs in reality". He also points out undoubtedly, every scientist knows that the knowledge he obtained pertained to real objects existing outside this knowledge and independent to it.

According to Petrovsky (1986), "Knowledge reflects experiences that systematize the general properties of reality consolidated in words that are essential for practical and cognitive of the human race".

These definitions drive the point that knowledge acquisition has three different components such as external objects (stimulie), the structure of its own self (knowledge structure) and the process on the external object (the functional part of knowledge).

The most pragmatic definition is made by Davenport and Prusak (1998). They define knowledge as "... a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, process, practices and norms".

This definition of knowledge brings together the activity of knowing as well as the artifacts that represent knowledge, and it emphasizes the dynamics of routines, process and practices, further reinforcing the notion that knowledge is by its nature a force in motion. Knowledge is dynamic, not only in individuals but also in organizational knowledge where there must be movement for knowledge to be transferred or shared. Prabhu (2000) is of the view that
knowledge is the ability to answer questions; hence, if a system answers a question, this is an indicator of its processing knowledge. This is the so called empirical definition of knowledge.

Knowledge may be classified in many ways for a variety of purposes. A popular framework for thinking about knowledge proposes two main types of knowledge: Explicit Knowledge and Tacit Knowledge (Fig. 5.2) (Koulopoulos and Frappaolo, 1999). Explicit knowledge is documented information that can facilitate action. It can be expressed in formal, shared language. Examples include formulas, equations, rules, policies, procedures, software, documents and best practices. Explicit knowledge is

- Packaged
- Easily codified
- Communicatable
- Transferable

Tacit knowledge is know-how and learning embedded within the mind of the people in the organization. It involves perceptions, insights, experiences and craftsmanship. Tacit knowledge is

- Personal
- Context-specific
- Difficult to formulize
- Difficult to communicate
- More difficult to transfer

Most business actions require the guidance of both explicit and tacit knowledge.
Michael Polanyi a Hungarian physical chemist turned philosopher was the first to introduce the concept of tacit knowledge. According to Polanyi (1974), all knowledge is either tacit or rooted in tacit knowledge and is involved in each activity at two different levels or dimensions, which are, mutually exclusive. Firstly 'Focal knowledge', which is the knowledge about the object or phenomenon that is in focus, and secondly, 'Tacit knowledge' which uses to handle or improve what is in focus.
Tacit knowledge is present in hunches, intuition, emotions, value and belief (Rober, 1995). At the individual level, tacit knowledge forms a mental grid - a unique set of beliefs and assumptions through which one filters and interprets what is seen and done. These non-intellectual qualities form the basis of how one behaves and the filter through which one sees the world. Tacit knowledge is subjective, cognitive and experimental in nature, whereas explicit knowledge is more objective, rational and technical. All the fuzzy information that goes unrecorded like the values, insights and judgements stored within an individual also falls in the category of tacit knowledge (Wiig, 1993). Stenmark (2001) called the tacit knowledge as a valuable asset and it is often related to power.

Although Nonaka and Takeuchi (1995) state that a total tacit - explicit split is an imperfect division of knowledge, it is a useful way to understand how the knowledge moves from the personal to the organizational. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values or emotions he or she contains. Our day-to-day activities are briefed and acquired with our tacit knowledge but we never realize it as knowledge.

Machlup's distinctions of knowledge according to function, or as he would say, "the subjective meaning of the known to the knower is the most useful for present purposes". According to him knowledge can be classified into five categories.

1. Practical knowledge - that which is useful in one's work, in the making of decisions, and in the determination of action. It is of six kinds.

   (a) Professional knowledge.

   (b) Business knowledge.

   (c) Workmen's knowledge

   (d) Political knowledge


(e) Household knowledge

(f) Other practical knowledge

2. Intellectual knowledge- that which satisfies intellectual curiosity.

3. Past time knowledge- satisfies non-intellectual curiosity and desire for light entertainment and emotional stimulation.

4. Spiritual knowledge- related to religious belief.

5. Unwanted or useless knowledge (Machlup, 1962).

Knowledge is captured in three ways. The first is to purchase/buy it. The second one is to rent knowledge. The third alternative is to develop it. Daniel Tobin has suggested many ways as how to buy, rent and develop knowledge.

1. "Buying knowledge"

(a) To hire new employees with knowledge and skills.

(b) To develop a partnership with other organization

(c) To outsource a function to another organization on permanent basis

2. Renting Knowledge

(a) To hire a consultant

(b) To obtain help from customers, suppliers, academic or professional associations.

(c) To subcontract a work to another organization.

3. Developing Knowledge

(a) To send employees to training outside of the organization

(b) To impart in-house education and training by developing their own programs
(c) To do in-house training by hiring outside experts.

(d) To develop train-the-trainer programs" (Binwal, 2001).

The present study focuses on the third way of capturing knowledge i.e. developing knowledge.

As an 'element' contributing to the performance of the organization, knowledge was a familiar and a natural part of people's view of their work. Despite this, it was seen as quite complex, and people were very ready to explore the many features of it. They also approach it from many difficult angles (Southon, et al. 2002).

"The librarian uses the term knowledge in his or her professional activities and this usage normally refers to the recording of human knowledge in books, journals and other media" says, Mc Garry (1981). There is a wide application of knowledge in many fields. Gopinath (1992) divided the professional knowledge and skills necessary for library and information services, into two categories:

i) Essential for many posts in libraries

ii) Essential for specialist positions in libraries

In the category, essential for many posts, he included, the knowledge of library philosophy, library history and the socio-economic context, general reference materials, methods of organizing information, general bibliography, programming and foreign languages. Besides these, he mentions the skills related to human relations, management and statistics. For specialist positions these involve, knowledge of specialized reference materials, collection development theories and practices, library automation theories and practices, policy making aspects, cost effective and cost efficient techniques, document reproduction technologies, binding policies (methods and issues), conservation methods of library materials, information consolidation techniques and the skills related to teaching, research, on-line retrieval, supervision and analytical skills.
Bhattacharyya (1979) stated that the following competencies are needed to provide information service:

i) Knowledge pertaining to the resources of information and user needs. He characterized this knowledge as the specialized knowledge of the essential facts of the subject regarding which service is to be provided;

ii) Knowledge and skills of the information service activities. It involves knowledge of the principles and the methodologies of information service activities and the skills of applying this knowledge;

iii) Knowledge and skills of technology to be applied in libraries and information systems;

iv) Knowledge of scientific management and skills in applying it for planning, establishing and maintaining the system; and

v) Knowledge of tool subjects for management of the information service systems.

The areas of knowledge correctly being possessed by the library professionals to carry out Information Technology (IT) services in libraries are depicted here.

The knowledge of IT application means that a library and information science professional is supposed to aim himself with state-of-the-art information technology to manage the information. The IT mainly comprises of Computer Technology, Communication Technology, Reprography, Micrography and Printing Technology. Among these technologies C&C constitute core of IT and combination of both has revolutionized the whole information scenario.

Ten important areas of knowledge are identified by the investigator for formulating the Professional Library Manpower Measurement Scale (PLMM Scale) (AppendixII) for measuring knowledge towards IT application. The areas identified are as follows.
1.1 Professional knowledge for effective library management

1.2 Knowledge of library trends and issues and applies this knowledge to professional practice.

1.3 Knowledge related to the use of IT

1.4 Knowledge in handling electronic information

1.5 Knowledge of information systems and network

1.6 Knowledge of software packages

1.7 Knowledge of data maintenance and searching

1.8 Knowledge in the area of information resources in all formats

1.9 Knowledge of delivery mechanisms and means of disseminating information

1.10 Knowledge of management techniques

5.5.2 Skill

Mere possession of knowledge would not be sufficient, but one should possess the "skill" or "skills" to apply knowledge gained fruitfully. Skill may be taken to mean the ability to do a thing with efficiency. Skill also implies that the man performing the task does it with cleverness. This can further be elaborated by saying that the various components of skill include a little thinking, a commonsense, a little extra care, a little attention to the objective with which the task is being performed - all contributing to perfection - or it at least near perfection. "Skill enable a person to plan and execute an action designed to achieve a goal, compare results, with intension and make adjustments in the plan of action" (Ratwani and Yusuf, 2002).

The Oxford English Dictionary (1989) defines skill as "capacity of accomplishing something with precision and certainty; practical knowledge in
combination with ability; cleverness, expertness. Also, an ability to perform a function, acquired or learnt with practice" (Vol.XV, p. 603).

According to the Websters Illustrated Contemporary Dictionary (1978): A skill is defined "as (i) Ability or performing in execution or performance (ii) specific art, craft, trade, or job also such as an art, craft etc, in which one has a learned competence".

Concise Encyclopedia of Psychology (1997) defines skill as "coordinated series of actions that serve to attain goal or accomplish a particular task. The goal or task may be academic, social or a self-help or independent living task".

It is clear from these definitions that skill means a person has an ability to perform any task successfully. A skilled person has following attributes i.e. purposiveness, efficiency, precision, flexible behaviour and effectiveness, etc. In short, skill is an acquired ability to perform a task efficiently and effectively. While discussing the importance of human capital and application of new technology, Dhesi (1979, p. 45) says that "the use of high quality human skills is an important factor in determining the efficiency and speed of transformation of inventions into innovations".

Experts in the field of library and information science profession surveyed and listed a number of skills applicable to library professionals. Veaner (1985) proposed that LIS students should be provided with management expertise in view of the technical and production work being taken by support staff in the age of computerization. The skills he suggested included:

(i) Analytical skills to understand and suggest solutions to problems;
(ii) Financial skills to plan cost effective utilization of resources;
(iii) Interpersonal skills to interact and convey the plans to staff;
(iv) Promotional skills to convince the management to librarian's ideas;
Supervisory skills to manage daily operations;

Leadership skills to direct and bring about changes; and

Labour relations expertise to deal with unions.

Abell (1979) has also suggested skills for academic librarians on the same lines. They should be able to analyze the environment; conduct research; manipulate data; interpret needs of users; implement technology; interact effectively with their colleagues and have an understanding of the sociology, politics and economics of higher education.

Ratwani and Yusuf (2002) in their study summarized the following types of skills which are required by LIS professionals.

(i) Management skills: Supervisory, counselling, planning, decision making, financial, technology management skills;

(ii) Technological skills: Computer operation, telecommunication medias, repackage of information, on-line search, access to digital collection, use of reprographics and micrographics, design of Word Wide Web, etc;

(iii) Communication skills: Written, oral, interpersonal, human/ public relation and user orientation, etc;

(iv) Traditional skills: Acquisition, organization, dissemination of information;

(v) Research & statistical skills: Analysis, synthesis, interpretation, consolidation, evaluation and assessment, etc; and

(vi) Other skills: (Advocacy/Navigation/Innovation etc). Skills to understand social, economic, political developments, the ability to
adjust themselves, keeping in view needs, in relation to professional work.

Ojala (1993) enumerates a list of seven skills, which are considered as the core of the competencies the managers of special libraries have to acquire. Moore (1996) outlines skills and roles for three complementary groups of 'new information professionals'.

- **Creators**, who design and develop products and services, exemplified by web authors.
- **Communicators**, who identify and interpret information illustrated by subject specialists.
- **Consolidators**, who select and synthesize information, typified by management researchers.

The present study examines the technological skills of library professionals for IT application. Garrod (1998) discusses about an Electronic Libraries (e Lib) Programme research project: SKIP- Skills for new Information Professionals, based at the University of Plymouth. The project set out to evaluate the impact of information technology on the skills and roles of staff working in library and information services. The project has designed a transformation model of Information technology and skills for information professionals (Fig 5.3)
Figure 5.3 shows how this model might be loosely applied to information services using four stages of technological development: 'evolutionary', 'transitional', 'integrated/embedded' and 'innovative'. The basic skills requirements for staff have then been mapped onto these four stages.

Phase one, depicted in the bottom left segment of the model represents the initial phase which is characterized by the introduction of automated library management systems to replace paper-based systems. In this phase staff need basic IT skills, such as keyboarding, use of bar-code scanners and familiarity with OPACs (On-line Public Access Catalogues), but they still need the
traditional skills which are associated with the provision of a mainly holdings based service.

Phase two is a traditional phase in which staff have to develop skills in managing a limited range of electronic and networked information resources, whilst continuing to manage printed resources.

The other phases require staff to acquire more advanced networking skills. The emphasis will be increasingly on supporting independent learning in a networked environment, and will feature more team working, with services being tailored, perhaps in partnership with other service providers, to meet the needs of a growing and demanding user population.

Malwad (1996) highlights the rapid technological changes that brought about by digital libraries. According to him all such changes have brought the changes in librarian's skills. Librarians have responded to the changes by adjusting or enhancing their skills. The changes and as a response to them the skills development of librarians are summarized in Figure-5.4.
The changes and as a response to the skills development of librarians

**Figure 5.4**

**SKILLS FOR A STORE HOUSE**
**SKILLS AS A CUSTODIAN**

**PUBLISHING**
**EDUCATION**
**FRANCHISE**

**SKILLS TO COPE WITH OPEN ACCESS**

**USERS AND THEIR DEMANDS**

**DEVELOPED SKILLS AND TECHNIQUES OF**
**PROCESSING**
**CLASSIFICATION**
**CATALOGUING**
**INDEXING, ETC.**

**TECHNOLOGY**
**COMPUTER**
**COMMUNICATION**
**REPROGRAPHY**

**SERVICE**
**CAS**
**SDI**
**ONLINE RETRIEVAL**
**NETWORKS**

**CD-ROMs**
**ELECTRONIC PUBLISHING**
**DIGITIZATION OF INFORMATION**
**WWW, INTERNET**

**DEVELOPMENT OF SKILLS FOR SELECTING**
**APPROPRIATE DATABASES**
**FILTERING, AVOIDING Duplication**
**CREATING HOME PAGE**
**NAVIGATING THROUGH NETWORKS AND DATABASES**
**E-MAIL, TELECONFERENCEING, ETC.**
The IT related skills required by new LIS professionals in the electric world have been categorized by Sridhar (1999) in three different levels. Firstly, LIS professionals should have skills required for handling IT products, particularly, keyboard, operating system, softwares, physical handling of gadgets, telecommunication products, DBMS, data and file management, DTP, word processing, generation of reports, etc. The next level skills include skills required to apply IT for service management in general and information processing, search and retrieval in particular. This involves collection and organisation of data in electronic form, indexing techniques, selection and evaluation of sources, searching techniques, updation techniques, etc. Information retrieved skills include on-line searching as well as searching CD-ROM databases. This level should incorporate skills required for query formulations as well as query interpretation. The advanced level skills include internet skills and skills required for accessing networked resources as well as marketing of electronic information.

While discussing the development of information professional's need for Internet and IT skills, Biddiscombe (2001) opines that "Information professionals will also need to remain aware of the potential opportunities that the Web offers for the development of learning in educational institutions and as part of life-long learning. There are still many opportunities to develop gateways and, more particularly, portals to information sources". Further stresses that, certainly librarians as information professionals, should have the skills to create and update web resource pages in support of local curricular activities.

Casteleyn and Webb (1993, p.116) stress the importance of developing 'negotiation skills'. According to them negotiation is about coming to a mutually suitable agreement; it involves the ability to compromise, to give as well as take, in order to bring about a solution to a problem. The objectives of negotiation are discussed by Pratt and Bennet (1989) who state that successful negotiation
require skill, preparation and a great deal of experience. Most important is the time spent in preparing for negotiation and is deciding on our strategy.

"Visionary skill has got importance because it will help the professionals to get adjusted with changing world", say Vairagare and Deshpande (1999). The world today is changing very fast and the librarian will need to develop the skills to look to tomorrow.

Among the skills discussed here communication skill, i.e. skill to communicate orally and in written from has a vital role. Communication skill is one of the basic components of Personal Transferable Skills (PTS). PTS are some of the general skills. These have been defined as "essential work skills which are not subject specific and which once learned may be transferred to an applied in many different contexts" (Gash and Reardon, 1988). In his paper Sharma (1999) has made a detailed discussion about the role of PTS in the library and information profession.

Line (1983) has stressed the importance of communication and social skills which are important for proper handling of the skills and understanding the needs of users, both in general and at individual levels. Powell and Creth (1986), while surveying academic librarians to know the knowledge bases important for their working, reported oral communication skills as the most important followed by writing skills. Muirhead (1994) also stresses the importance of communication skill in the IT environment in the following words: "... in the ongoing routine administration of a library management system, technical skill such as hardware maintenance, programming and the physical operation of the computer centre were considerably less important than those duties which cast the systems librarian in the role of mediator and which therefore required highly developed communication skills liaising with system suppliers, providing support for system users, documenting the system and training staff, etc."
While discussing the IT related skills Corrall and Brewerton (1999, p.270) also emphasize the need for communication skill. According to them communication increasingly means electronic communication and in particular electronic-mail (e-mail).

The important skills related to IT are listed below for the formulation of a PLMM Scale towards IT application. They are as follows:

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<tbody>
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<td>2.1</td>
<td>Skills pertaining to library automation</td>
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<td>2.2</td>
<td>Technical skill to develop local in-house data bases</td>
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<td>2.3</td>
<td>Skills of database maintenance and searching</td>
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<td>2.4</td>
<td>Skills in hardware and software selection</td>
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<td>2.5</td>
<td>Skills in electronic communication systems (eg: E-mail, fax)</td>
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<td>2.6</td>
<td>Skills in network access (Internet/intranet, web browsers)</td>
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<td>2.7</td>
<td>Skills in reprography</td>
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<tr>
<td>2.8</td>
<td>Skills in effective communication (oral and written)</td>
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<tr>
<td>2.9</td>
<td>Planning and evaluation skill</td>
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<td>2.10</td>
<td>Skills in writing and publication</td>
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<tr>
<td>2.11</td>
<td>Skills in collection development and management</td>
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<tr>
<td>2.12</td>
<td>Skills in technical organization and preservation</td>
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</table>

5.5.3 Ability

Ability is the worthiness to perform any activity. It comes from knowledge, experience, command over the processes or method in doing the jobs. It is intangible quality and characteristics that are necessary for performance of particular activity. It refers to personal characteristics to work
with group dynamics, sense of co-operation, attitude to service, leadership and personal quality to work within a group and make others to perform the jobs.

Man's productive activity depends upon his "ability" to acquire and produce knowledge and put it to economic use as knowledge can produce income only when understood and applied by man (Dhesi, 1979, p.122).

Dwivedi (1982) is of the view that productivity is markedly determined by ability factors including knowledge and skill. Training and development, are needed to increase the ability of human resources to enhance their productivity.

Ability may be of 'innate' or 'creative.' Fraser's interpretation of 'innate abilities' seems to be those rather, indefinable qualities which stem from a person's education and experience, but go beyond these, to give 'a general quickness in uptake' and 'special aptitudes' (Jones and Jordan, 1982). A survey conducted at Mumbai, showed that qualities valued by employers in young graduates were ability for practical application of knowledge, confidence, willingness to learn, exposure to information, ability to learn new tasks with fewer instructions and wider perspective of life (Gnanam, 2000).

Jurow (2002) is of the opinion that the greatest challenge that faces academic and research libraries, librarians and staff is the ability to function effectively in changing environment. Most people understand this to mean controlling change.

It is clear from the above discussion that as an element of professional manpower ability is also very important. The important areas of ability identified and due weightage is given in the PLMM Scale. They are as follows:
3.1 Ability in planning, organizing & controlling the activities
3.2 Ability to use IT for value addition process
3.3 Ability to organize and store information for effective retrieval
3.4 Ability to analyze, interpret, synthesize and evaluate information
3.5 Problem solving and decision making abilities
3.6 Leadership ability

5.5.4 Talent

Talent refers to an ability or skill, usually innate, which is valued in a particular culture (Csikszentmihalyi, 2000). Other related concepts include that of genius, which is used to describe very rare individuals whose abilities are such that they astonish even experts in the field, and creativity, which denotes individuals who produce ideas or objects that are new and subsequently adopted by the culture. Talent is presumably a pre-requisite for being a genius or for being creative, but a talented person is not necessarily either. Although people must show actual achievement to be recognized as geniuses or as creative, talent is often just a potential that may or may not be fulfilled. Csikszentmihalyi (2002) further adds that talent is thought to be based on genetically inherited neurological differences, although very little known about what, these are. Cerebral liberalization research suggests that children born with left-hemisphere dominance will have a greater facility with analytic tasks; by extension, other skills might similarly depend on the relative development of specific neural mechanisms. Gardner's (1983) analysis of seven basic intelligences also supports the conclusion that talent in music, dance, literature and other areas of human excellence might be in part, genetically determined.
From these definitions and explanations it is clear that talent is usually an innate ability or generically inherited capacity of an individual. Though talent might be based on innate sensory or intellectual superiority, but it only remains a promise unless it is cultivated or developed throughout a lifetime.

In order to become a highly efficient and potential individual or professional one should develop talent also, because it is one of the elements of professional manpower.

The important areas of talent identified for including in the PLMM Scale are as follows:

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<tbody>
<tr>
<td>4.1</td>
<td>Talents in library and information service</td>
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<tr>
<td>4.2</td>
<td>Talents in IT oriented information service</td>
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<tr>
<td>4.3</td>
<td>Talents in writing, publishing and presentation</td>
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### 5.5.5 Aptitude

Aptitude is referred for relative levels of achievement. If individuals given comparable opportunities to acquire a skill differ in the case of acquiring it or in the level of proficiency attained, we say they differ in their aptitude for a particular work. In each instance, we see a marked contrast between persons with a high degree of aptitude, and also those with a low degree. Aptitude is more or less specific. An individual may have a high degree of aptitude for one line of work and not for certain others (Chandrakandan, 2001). Often, we find people who have some special abilities or potentialities which enable them to do well in certain fields of activity. Such people have special types of aptitude and therefore, they are able to learn and acquire the necessary skills in a specialized field.

According to Singh (1987) aptitude is a person’s ability, acquired or innate, to learn or develop knowledge or a skill in some specific area.
Freeman (2001) defines aptitude as “a combination of characteristics indicative of an individual’s capacity to acquire some specific knowledge, skill or set of organized responses such as the ability to speak of language, to become a musician, to do mechanical work.”

Freeman thus says that when we speak of an individual’s aptitude for a given type of activity, we mean the capacity to acquire proficiency under appropriate conditions.

Aptitude can be innate or acquired. Aptitudes generally remain constant. Aptitudes are not usually unitary but also pluralistic. When we say that aptitudes are pluralistic, it means that an individual can have aptitudes in a wide variety of subjects in farming, in business, in music and so on.

Rodger’s category of ‘special aptitude’ includes mechanical aptitude, manual dexterity, facility in written or verbal expression, facility with figures and creative talent in, say designing or graphics (Jones and Jordan, 1982).

In the IT environment, aptitude of a library professional refers to his capacity to learn, acquire and develop knowledge or skills in the areas of IT application in libraries.

The areas of aptitude identified for the formation of a PLMM Scale are as follows:

| 5.1 | Aptitude in use of IT services |
| 5.2 | Aptitude in writing and publishing |
| 5.3 | Aptitude in presentation |

5.5.6 Value

Value is a psychological element of professional manpower. Values are linked to attitudes (Meddin, 1975). Values are desirable end states or conditions that one would like to see prevail above all others (Rokeach,
Consequently, values form the basis for an individual view of the world and provide a sense of coherence and unity to living.

Allport (1960) a psychologist, defines value in simplest possible words, "a value is a belief upon which a man acts by preferences".

According to Henry (1963) value can be defined as "something desirable such as love, kindness, quietness, contentment, fun, honesty, decency, relaxation and simplicity".

Rokeach (1973) defines value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode or conduct or end-state of existence". He further adds that values are determinants of virtually all kinds of behaviour that could be called social behaviour. Value is conceived of as a 'sensitizing' factor. Distinguishing 'value' from 'attitude' Rokeach, maintains that an attitude refers to an organization of several beliefs around a specific object or situation whereas a value refers to a single belief of a very specific kind.

According to Cooper and McGaugh (1966) the value concept in contemporary psychology is quite broad and often loosely used. The fact that it is used so much should suggest, however, that it does have substance. They propose two uses. First, a value is an attitude which is dominated by the individual's interpretation of the stimulus objects worth to him in the light of his goals. Second, a value system is an individual's over-all life aspiration (what he really wants to achieve) which on the one hand gives direction to his behaviour, and on the other hand is a frame of reference by while the worth of stimulus objects may be judged. In the value system sense, it is an elaborate and articulated organization of attitudes.

Dwivedi (1982, p. 41) is of the view that values relate to philosophical orientations and preferences of individuals and affect goals and policies. Indeed, policies represent a means to attain goals.
From the above definitions it is clear that value is an enduring belief which guides actions, attitudes, judgement, etc. beyond immediate goals to more ultimate goals. In one word it is at the core of one's personality.

The basic values have been categorized under six dimensions. These values are based on Edward Spranger's classification of the six types of human nature. Spranger regards value as a primary organizing fact of personality (Allport, et al. 1960). Brief description of the six values are given below.

1. T- Theoretical: Interest in the discovery of truth, in observing, reasoning, 'cognitude' attitude, empirical, critical, rational, intellectualist, frequently a scientist or philosopher and chief aim in life is to order and systemize knowledge.

2. E-Economic: Interested in what is 'useful' (originally in self-preservation), production, marketing and consumption of goods accumulation of wealth, practical, business minded and utilitarian.

3. A- Aesthetic: Values form and harmony, evaluations in terms of grace, symmetry and fitness, concerned with the identities of experience, appreciative, self-sufficient, individualistic, and beauty for its own sake.

4. S-Social: Love of people, kind, sympathetic, unselfish and humanitarian (The test emphasizes the altruistic or philanthropic aspect).

5. P-Political: Interest in power and leadership, competitive and desire for personal power, influence and renown.

6. R-Religious: Values unity, is mystical, seeks to comprehend the cosmos as a whole, seeks the highest and absolutely satisfying experience and finding religious expression either in activity participating in life or in withdrawal from it.
Among the six values in the measuring instrument developed by Allport, et al., three important values which are identified as relevant for the inclusion in the scale are as follows:

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<tr>
<td>6.1</td>
<td>Social value- Likeness to users</td>
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<tr>
<td>6.2</td>
<td>Political value- Interest in power and leadership</td>
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<tr>
<td>6.3</td>
<td>Theoretical value- Interest in new developments</td>
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### 5.5.7 Attitude

Attitude is one of the important elements of professional manpower next to knowledge and skill. The term attitude is being used to refer solely to a person's location on a bipolar evaluative or affective dimension with respect to some object, action, or event. (Fishbein and Ajzen, 1975). An attitude represents a person's general feeling of favourableness or unfavourableness toward some stimulus object.

According to Thurstone (1931)" attitude is the effect, for or against a psychological object". By psychological object he means any symbol, phrase, slogan, person, institution, ideal or idea toward which people can differ in their affect.

In the words of Bogardus (1931), an attitude denotes an adjustment of an individual towards a selected aspects of his environment or of his conduct.

Allport (1935) critically views attitude as "a mental and neural state of readiness organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects or situations with which it is related". In this definition, he emphasizes the mental and neural readiness to react to particular situations, objects or classes of these.
Dictionary of psychology (1947) defines an attitude as "a mental set of respond to a situation with a prepared reaction." Attitudes denotes bias, preconceptions, convictions, feelings and emotions, hopes and fears.

According to Droba (1933) " an attitude is a mental disposition of the human individual to act for or against a definite object."

Newcomb (1943) hold a different view on the concept 'attitude'. According to him, attitudes are the results of motivation. Hence attitudes have been defined as" Predispositions to motive arousal."

Another commonly accepted definition has been proposed by Katz (1960). In his view " attitude is the predisposition of the individual to evaluate some symbol or object or aspect of his world in a favourable or unfavourable manner. . . Attitudes include the affective or feeling core of liking or disliking, and the cognitive, or belief, elements which describe the effect of the attitude, its characteristics and its relations to other objects".

A more comprehensive definition expressed by Guilford (1954) is that, attitude is a personal disposition common to individuals, but possessed to different degrees, which impels them to react to objects, situations or propositions in ways that can be called favourable or unfavourable. The underlying basis in motivation is responsible for the bipolar nature of an attitude continuum. Motivation manifests itself in terms of appetites and aversions, and through experience favourable and unfavourable inclinations are developed toward various objects and classes of objects.

In simple terms attitude is normally defined as a generalized pattern in perception or action towards an object or things as in integration of various experiences.

Allport (1935) identified three main features of attitude as : (a) preparation of readiness for favourable or unfavourable response, (b) which is organized through experience, and (c) which is activated in the
presence of all objects and situations with which the attitude is related. Again, Fishbein and Ajzen (1975) also provide three essential features of attitude. According to them, "attitude is learned . . . it pre-disposes action, and such actions are consistently favourable or unfavourable towards the object". These two attempts clearly help to understand what attitude is.

According to Secord and Carl (1964) attitudes are regulations of an individual's feelings, thoughts, and predisposition to act toward some aspect of his or her environment. From this definition, it is apparent that an attitude has three components or elements. One is the cognitive component or the thoughts, ideas, and beliefs that a person has. Another is the affective or feeling component. The third is the behavioral component, that is, the tendency to act consistently with attitude. Consequently, an attitude may be considered as a way of thinking, feeling or behaving.

Figure-5.5 (Milton, 1981) summarizes in graphic from what has been said about attitudes. Note that attitudes are affixed to attitude objects—persons, concepts, things, and situations. Such objects may evoke feelings, thoughts and a tendency to act.
"Additional insights into attitude is possible if we examine their characteristics or dimensions that can vary" says Katz (1960). He further elaborates that attitudes vary in their intensity or strength of the feeling component. For example, the feeling that we have about information technology application may be very strong or very weak. The belief or cognitive component has two characteristics: (1) it can be specific or general and (2) it can vary in complexity. A belief component is specific if one thinks that he or she is an expert in IT application but general if all professionals are thought to be experts. Complexity refers to the number of beliefs or cognitive elements contained in an attitude. It is generally assumed that the fewer the belief elements, the easier it is to change an attitude.

Finally, attitude has the characteristics of centrality. Centrality refers to an attitude's role as part of a value system that is closely related to one's self-concept or how one sees one's self. The importance or centrality of an attitude will affect one's readiness to respond or change.

Katz discusses the four functions that attitudes perform for the individual:

(a) instrumental, adjective or utilitarian

(b) ego-defensive

(c) value-expressive

(d) knowledge function

The adjustment function is derived from the tendency to maximize the rewards in the external environment and to minimize the penalties. Attitudes acquired in the service of the adjustment function are either the means for reaching the desired goal or avoiding the undesirable one, or are affective associations based upon experiences in attaining motive satisfactions.
Ego-defensive functions are served by attitudes that allow the individual to protect himself from acknowledging uncomplimentary basic truths about himself. The formation of such defensive attitudes proceed from within the person, and the objects and situations to which they are attached are merely convenient outlets for their expression.

Value-expressive functions are involved when the expression of the attitude give pleasure to the person, became the attitudes reveal some of the basic values he holds dear. Value-expressive attitudes not only give clarity to the self-image but also mould that self-image closer to the heart's desire.

Knowledge functions are based on the individual's need to give structure to his universe, to understand it, to predict events etc.

In a study on attitudes to change in organizations, Bowley (1980) found that different types of organizational structure lead to different capacities for adapting to change. Change is more difficult and more stressful where staff see the organization as 'essentially hierarchical, with rules and procedures to be conformed with, and with authority vested in senior position', compared with staff who see the organization as 'an interdependent system of parts, all making their essential contribution to the development and survival of the organization and its environment.

A library professional is expected to have the right attitudes to perform his job and fulfill his duties. Sharma (2001) categorized the attitudes expected a professional is as follows:

(i) Attitude towards users - User is the main focus around whom revolves the design and scope of services in a library and information centre. Therefore, attitude towards users play a very important role. These include service attitude/ motto of serving users, sensitiveness to others, needs and politeness.
(ii) Attitude towards colleagues - Team work, co-ordination and cooperation are the secrets of successful organization. A professional should be able to dedicate his maximum while working as a member of a group. He should possess attitudes, e.g., inclination to work effectively with others as a team, tact and diplomacy in dealing with others, tolerance towards their mistakes and willingness to draw upon and share knowledge and experience with others.

(iii) Attitude towards job - While on the job, a professional should have: willingness to take initiatives; take heavy work loads and failure in stride; desire to work to the best of ability, maintain accuracy, and quality of work, maintain punctuality and should be responsive to time constraints on the job.

(iv) Attitude towards work - A professional should consider his work above all other engagements, for which he should possess the following attributes: willingness to take/ accept responsibility, responsiveness to authority, ability to adapt well to change, ability to perform duties of job well even when under pressure and have a positive attitude towards jobs.

(v) Attitude towards organization - Involve the following attributes: ability to view library as part of a larger environment, willingness to promote library and its services, and willingness to sacrifice short term gains for long term goals.

In the IT environment the professionals should posses a favourable attitude towards IT application. Somanathan Nair (1997) in his doctoral study found that the percentage of librarians in Kerala showing favourable attitude towards the use of information technology in library and information activities was significantly high. This may be one of the reasons for the spread of IT in the libraries of Kerala.
The important categories of attitude expected of a professional are identified for the purpose of the formation of a PLMM Scale are as follows:

| 7.1 | Professional attitude with consistent sensitively to user needs. |
| 7.2 | Attitude towards IT |
| 7.3 | Attitude towards users |
| 7.4 | Attitude towards colleagues |
| 7.5 | Attitude towards organization |
| 7.6 | Attitude towards job |
| 7.7 | Attitude towards work |

### 5.5.8 Belief

Belief signifies mental acceptance of or assent to something offered us true, with or without certainty. It is synonymous to 'Faith'. Faith applies to full and certain assent, often on grounds other than those offered by the senses and reason, and after with a complete trust or confidence.

According to the Webster's third new International Dictionary (1966) the term 'Belief' means "a state or habit of mind in which trust, confidence, or reliance is placed in some person or thing".

According to Quinton belief is an inner state of mind, directly accessible to introspection and distinct from through casually related to the believer's behaviour (Gupta, 1987).

In their paper Fishbein and Raven (1967) suggest a definition of belief that is analogous to the definition of attitude. According to these investigators, an individual may not only evaluate a concept (i.e., view it as "good" or "bad", "clean" or "dirty", etc.) but also he may believe or dis-believe in the existence of the concept (i.e., view it as "existent" or "non-existent", "probable" or
"improbable", etc.). As we have seen above, the first type of judgement has been viewed as a measure of the evaluative dimension of a concept, or more specifically, as an "attitude." The latter type of judgement may be viewed as a measure of the probability dimension of a concept, or more specifically, as a "belief".

Beliefs are the fundamental blocks in our conceptual structure. On the basis of direct observation or information received from outside sources or by way of various inference processes, a person learns or forms a number of beliefs about an object. That is, he associates the object with various attributes. In this manner, he forms beliefs about himself, about the people, about institutions, behaviors, events, etc. The totality of a person's beliefs serves as the informational base that ultimately determines his attitudes, intentions and behaviors (Fishbein and Ajzen, 1975).

According to Krech and Crutchfield (1948) "A belief is an attitude which incorporates a large amount of cognitive structuring. Operationally one has an attitude toward and a belief in or about a stimulus object". One believes in another person, a political concept, or a theory. The stimulus object of a belief is relatively complex even though this may mean that the subject has differentiated the object into smaller and smaller sub-regions. Belief connotes an attitude, which involves or identifies the subject deeply with the object. "The individual uses his belief as a basis for predicting what will happen in the future" (Cooper and McGaugh, 1966).

From the above discussions it is clear that attitude and belief are closely related. A person's attitude is determined by his salient beliefs about the attitude object. So, as an element of manpower belief has an important role. Professionals should have belief about certain objects (i.e. their work, professional activities, innovations, new technology, etc.). Important belief, library professionals should possess are listed for including in the PLMM Scale are given below.
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<tr>
<th>8.1</th>
<th>Belief in work</th>
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<td>8.2</td>
<td>Belief in professional activities</td>
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<td>8.3</td>
<td>Belief in new technology developments</td>
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<td>8.4</td>
<td>Belief in exploitation of IT developments</td>
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<td>8.5</td>
<td>Belief in the success of new technology</td>
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<tr>
<td>8.6</td>
<td>Belief in the ability of IT to solve problems</td>
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### 5.5.9 Involvement

As an element of professional manpower "Involvement" has an important role to carry out the duties effectively and efficiently. It has been widely studied mostly by industrial psychologists. The concept of involvement especially involvement in job/work has gained much importance in recent years, because of its pivotal role providing a link between performance on one hand and employees' needs quality of working life on the other.

Lewin and Franklin (1944) demonstrated that individuals became involved in their work even in the artificial context of a laboratory.

In the present study involvement mainly refers to job involvement. Job involvement has been used to explain ego-involvement, occupational involvement, work involvement, intrinsic motivation, morale, ego-involved performance, central life interest, etc. The early studies on job involvement used the term "ego - involvement", though the implications of both the terms are somewhat similar. Singh (1998) conducted a study on job motivation and organizational climate in libraries. He has treated job involvement as an important factor.

Saleh and Hosek (1976) define job involvement as " the degree to which the person identifies with the job, actively participates in it, and considers his performance important to his self-worth."
Kanungo (1982) has described the concept of job involvement in motivational language. According to him job involvement can be defined as "a generalized cognitive state of psychological identification with work in so far as work is perceived to have the potentiality to satisfy one's salient needs and expectations. The degree of involvement should be measured in terms of an individual's cognition about his identification with his work".

Saleh (1981) has identified job involvement as a "self-involving attitudes". He extend that job involvement is a multi-dimensional attitudinal concept and its basic dimensions are cognitive, conative (behavioural) and evaluative.

Job involvement has been best defined as "the merging of a person's ego identity with his or her job" (Lodahl and Kajner, 1965). It thus, concerns the degree to which employees take their identity from their jobs, the extent to which individuals seek some expression and actualization of the self in their work and the degree to which people are identified psychologically with their work and the importance of work in the individual's self image. In other words, job involvement can be considered as indicative of an individual's work commitment.

Katz and Khan (1966) observed three characteristics of the phenomenon of job involvement. Firstly, that job involvement is a necessary condition if the individual is to accept fully the organizational demands placed upon him by his membership in an organization; secondly, that the degree of job involvement is related to the level of aspiration and to the degree of internalization of the organizational goals, and thirdly that job involvement is a moderator variable in relationship between job satisfaction and performance.

Job involved professionals differ from their lesser involved colleagues in several significant ways. They are more likely to describe their jobs as more stimulating or higher in range of job characteristics, including variety, autonomy, task identity and feedback (Elloy, et. al.
Similarly, they are more likely to feel that their talents are being fully utilized in jobs they are doing and to see themselves as having greater opportunities to interact with other people. Person's involvement in his job contributes to job satisfaction and fulfill intrinsic needs. It is found to be positively correlated with satisfaction of intrinsic needs. Employees' needs of personal growth and self-actualization are fulfilled to a great extent through job involvement. Consequently, they feel satisfied and derive intrinsic pleasure from their work. The people who are more involved in their jobs are more likely to show better performance, ready to take up new responsibilities, get variety into the jobs, and attain excellence. In other words, higher the job involvement level, more performance the person shows.

Important levels of involvement a library professional should have are identified for the preparation of the PLMM Scale are as follows:

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<th>Involvement in job</th>
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<td>9.1</td>
<td>Involvement in job</td>
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<td>9.2</td>
<td>Involvement in decision making in implementing new technology</td>
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<td>9.3</td>
<td>Involvement with users</td>
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<td>9.4</td>
<td>Involvement in research activities</td>
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<td>9.5</td>
<td>Involvement in professional activities</td>
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<td>9.6</td>
<td>Involvement in professional associations</td>
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5.5.10 Interest

Among the ten elements of professional library manpower identified, "Interest" has a prominent role to bring innovative services to the library and information centres. Unless the professionals are interested in the application of information technology and IT services become difficult. Lack of interest among the professionals adversely affects their professional development that ultimately results in the under development of the organization.
Izard (2000) opines that interest plays a significant role in the well-being, constructive behaviour, and the development of a healthy personality. A loss of interest dramatizes its critical role in well-being and positive mental health. A transient loss of interest may be no more serious than a state of boredom, but long-term loss of interest in the social and physical environment characterizes depression.

Silvan Tomkins was the first contemporary psychologist to identify interest as an emotion and a key factor in the human motivation system. He argues that the motivational power of interest enables the individual to sustain attention to complex objects and maintain focus on long-term goals. He viewed this positive notion as critical in sustaining effort on any endeavor that requires work over a long period (Tomkins, 1962).

In short, interest is a positive emotion that directs and sustains attention, cognitive processes, and motor activity. Novelty and change activate interest and interest, in turn, motivates learning, exploration, work, and creative endeavor. It can sustain extended mental and physical effort. Interest in anticipated events propels us toward the future. Whereas extensive loss of interest may signal depression, interest in things that promise the joy of achievement fosters hopefulness.

Cowely (1982) is of the view that, the interested librarian wishing to improve his knowledge and understanding in the field. The librarian may be interested in greater productively, that is in more efficient ways of doing things, but improvements may please the library users and provide a feeling of satisfaction for other staff involved without necessarily bringing any other rewards.

The important fields of interest for library professionals, identified for the purpose of formulation of the Scale are as follows.
10.1 Interest in the introduction of innovative services.

10.2 Interest in use of IT

10.3 Interest in self development/training

10.4 Interest in writing and publishing.

5.6 Competency

Studies in the area show that the terms 'competence' and 'competency' are used in different contexts. Competences refer to outcome-based occupational competences defining expectations of performance at work in output terms. Competencies refer to inputs which help to achieve successful performance at work (Fletcher, 1997). So, competences are behaviour based which define the performance expected of a job or function. Competencies define the characteristics of qualities that ultimately are responsible for the competences.

Competencies have been defined as the inputs which help to achieve successful performance at work, where as the successful performance in output terms is defined as competence (Sharma, 1999). Therefore, it is competences possessed by individuals that result in the competences exhibited by them.

A useful definition is that offered by Alan Aspey, who emphasizes that competence involves more than possessing necessary skills and knowledge; it also includes understanding one's role and having the motivation to fulfill it. Aspey (1998) defines a 'competent person' as "someone who has a thorough understanding of the responsibilities of the job and has the motivation, skills and knowledge to consistently carry out those responsibilities to the required standard".

Webster's Third New International Dictionary has defined competence as "the quality or state of being functionally adequate or having sufficient knowledge, judgement, skill or strength (as for a particular
duty or in a particular respect). Jarvis (1983) explains the concept in terms of its components i.e. knowledge, skills and attitudes. He has elaborated on these components as knowledge and understanding of the academic discipline, skills, and the moral values and professionalism. Skills involve the ability to perform the various psycho-motor tasks and interact with others. Professional attitudes comprise the emotive commitment to professionalism and the willingness to perform professionally. Griffiths (1983) has also defined competencies in terms of the three components i.e. knowledge, skills and attitudes.

According to Larsen (2005) competencies are defined as the combined theoretical knowledge and practical experience that makes the individual able and willing to take the right decisions in the daily working environment. This definition is important, because it emphasizes, that competencies are not equal to professional formal qualifications only. The Figure 5.6 shows a general model of the interrelation between human resources and behaviour.

![Fig. 5.6 The interrelation between human resources and behaviour](image-url)
A detailed discussion about the three components of competency, i.e., knowledge, skill, and attitude has been given in the earlier part of this chapter.


**Professional Competencies** relate to the practitioner’s knowledge of information resources, access, technology, and management, and the ability to use this knowledge as a basis for providing the highest quality information services. There are four major competencies, each augmented with specific skills:

A. Major Information Organizations  
B. Managing Information Resources  
C. Managing Information Services  
D. Applying Information Tools and Techniques

**Personal Competencies** represent a set of attitudes, skills, and values that enable practitioners to work effectively and contribute positively to their organizations, clients, and profession. These competencies range from being strong communicators, to demonstrating the value-add of their contributions, to remaining flexible and positive in an ever-changing environment.

These two core competencies are absolutely essential for every information professional. As educated professionals, information professionals understand the value of developing and sharing their knowledge. The competencies outlined in this document are a set of tools for professional growth, recruitment, and assessment. Specific jobs will require specific sets of competencies at various skill levels.
Another type of competence which is relevant in this context is 'emotional competence'. Mariadoss (2000) in his paper discusses the emotional competence and emotional intelligence. According to him emotional competence is the combination of mind and heart. Emotional competences is a learned capacity based on emotional intelligence that results in outstanding performance at work. Damage to the combination or connection or correlation or congruity between the mind and heart or more technically between cognition and emotion leaves people emotionally incompetent. Today emotional incompetence is perceived to be the major hurdle for not attaining the full potential and so the need arises for paying our attention to emotional competence and emotional intelligence.

Daniel Gorman who has elaborately researched on the concept "emotional intelligence" identifies the following five elements as the components of emotional intelligence: self-awareness, self-regulation, motivation, empathy and social skills.

5.7 Evaluation of the Elements of Manpower

Among the ten elements of professional manpower discussed, knowledge, skill and attitude constitute the three major components of equal importance. They form the components of competency. A professional is highly competent in the sense he should satisfy all the manpower elements and has a thorough understanding of the responsibilities of the job and also has the efficiency to carry out those responsibilities to the required quality or level.

Some of the manpower elements are interrelated and some are overlapping. Knowledge and skills are closely related. Knowledge of a subject without relevant skill can be of little use. But skills without appropriate background knowledge can reduce a professional task to the level of an occupation. Two things become obvious from the above analysis. First, the skills acquired by a person can become disinterested routine, after a prolonged practice and also without updating and retaining relevant knowledge. Secondly, assimilation of enough and even excess
knowledge on a subject without field application and practice would make the person a theoretician.

Beliefs and attitudes are interrelated. There is an influence of a person's belief on his attitudes. Also consistent with our general conceptual framework, a person's attitude was found to be related to the totality of his beliefs but not necessarily to any particular belief he holds. Similarly a person's attitude is related to the totality of his intentions but not necessarily to any given intention.

Values are linked to attitudes in the sense that a value can serve as an organizing theme for a number of attitudes (Meddin, 1975). Some attitudes are specific expressions of more general values. The interrelationship of attitudes and values are conceptualized in Figure 5.7 (Rokeach, 1968).

**Figure- 5.7 A Conceptualization of Values, Attitudes and Attitude Objects**

The figure depicts attitudes are focused directly on objects such as ideas, things, persons, and situations. Whereas a value is less situation bound, that is, less directly related to such objects. Values are more general, central, and resistant to change than are attitudes. When a value is internalized, it becomes, consciously or unconsciously, a standard or criterion for developing and maintaining attitudes toward relevant objects and situation.
In a nutshell, knowledge includes awareness of something, acquaintance, or of familiarity with something or someone or how to do something. Skill is the ability to use one's knowledge effectively. Attitude is a mental or emotional approach to something or someone. These three attributes are interrelated and cannot be separated objectively. Ability, talent and aptitude are interrelated. Ability is the worthiness to perform any activity. Talent refers to an ability or capacity or skill. Aptitude is considered as a special ability. Value is a belief. Belief is a state of mind or mental action. Belief and attitude are interrelated. Values are linked to attitudes. Involvement is considered as a self-involving attitude. It is a multidimensional attitudinal concept. Interest is an emotion and a key factor in human motivational system. Here completes the Manpower Wheel.

5.8 Manpower Development

The term Manpower Development /Human Resource Development (HRD) has multifaceted meaning. The definition, interpretation and functions of HRD varies depending upon individual author's specialty. Thus, from the economic point of view, HRD is defined as capital, assets, labour, skill and wages. A psychologist perceive it as attitudes, values, perceptions and intelligence. A sociologist visualize it as the quantum of social relations and value exchange that possible in the development process of society.

HRD or MD is a positive concept in human resource management. It aims at overall development of human resources in order to contribute to the well-being of the employees, organization and the society at large. HRD means developing or tapping hidden qualities in people in order to make them accomplish new functions leading to organizational and individual goals.

The concept of HRD was formally introduced by Leonard Nadler in 1969 in a conference organized by the American Society for Training and Development.
In a broad sense, HRD/Manpower Development may be defined as activities and processes undertaken to promote the intellectual, moral, psychological, cultural, social and economic development of the individual, so as to achieve the highest human potential as a resource for the community.

Nadler (1969) defines HRD as, "an organized learning experience within a given period of time with the objective of producing the possibility of performance change." The term learning experience refers to purposeful or intentional learning and not incidental learning.

Among the Indian authors, T. Venkateswara Rao worked extensively on HRD. He defines HRD in the organizational context as "a process by which the employees of an organization are helped in a continuous, planned way to:

(i) Acquire or sharpen capabilities required to perform various functions associated with their present or expected future roles;

(ii) Develop their general capabilities as individuals and discover and exploit their own inner potentials for their own and/or organizational development process;

(iii) Develop an organizational culture in which superior-subordinate relationship, team work and collaboration among sub-units are strong and contribute to the professional well-being, motivation and pride of employees" (Rao, 1986).

According to Khan and Mukhtar (1987) Human Resource Development "is the process of increasing knowledge, skills, capacities and positive work attitudes and values of all people working at all levels in business undertakings".

Glossary of Human Resource Planning and Development defines Manpower Development as "the process of persons acquiring skills, knowledge and capabilities over a period of time moving towards levels of
higher value. The process also involves the whole amalgam of recruitment, selection, career planning, etc" (Dhar, 1997).

In the strict sense of the study HRD or Manpower Development can be defined as a process in which the employees/professionals of an organization are helped/motivated to acquire and develop technical, managerial and behavioural knowledge, skills, abilities and mould the values, beliefs, attitudes and interests necessary to perform present and future roles by realizing the highest human potential with a view to contribute positively to the organizational, group, individual and social goals.

A comparative analysis of these definitions shows that the definition given just above seems to be comprehensive and elaborate as it deals with the developmental aspects of all the components of human resources. Further it deals with all types of skills, the present and future organizational needs and aspects of contribution not only to organizational but also other goals.

The analysis further shows that there are three aspects, viz: (1) employees/professionals of an organization are helped/motivated; (ii) acquire, develop and mould various elements of human resources/manpower and (iii) contribute to the organizational, group, individual and social goals.

In simple words Manpower Development can be defined as "the development of the total knowledge, skills, creative abilities, talents and aptitudes of any organization's workforce as well as the value, attitude, belief, involvement and interest of the individuals involved.

F.W. Taylor and Mayo Elton gave an academic stature to human resource development considering it as a new area of study. HRD is a technique to transform human resource inputs into outputs. The inputs are employees and the total human organization. The transforming process are the managerial system for acquiring, developing, allocating, conserving, utilizing, evaluating and rewarding. The outputs are the
services rendered by the employees to the organization (Reddy and Ramana, 1996).

A SWAN (Strength, Weakness, Attitudes and Need) theory will help to understand the HRD in a better way (Vijaya Kumar, 1996).

Strength: It is the ability to perform a particular task, job or duty.

Weakness: Deficiency or poor knowledge in a particular field as a result an individual fails to achieve the requisite objectives so also in competing with other co-workers, for their self-future development.

Attitudes: It is a state of mind that predominantly affects the working style of an employee.

Needs: Are the desires or achievement motives of a man.

5.8.1 Human Resources Development at macro level and micro level

HRD, as stated earlier, is mainly concerned with developing the competencies of people. Practically, it is a 'people-oriented' concept. The main objective is to develop the newer capabilities in people so as to enable them to tackle both present and future challenges to the attainment of goals. It applies to both macro (national) as well as micro (institutional / individual) levels.

At macro level, HRD is concerned with the development of people for the nation's well being. It takes wealth, capabilities, skills, attitudes of people which are more useful to the development among them and the nation's overall development as well.

HRD has great concern for grassroot level in the organizations. Generally HRD at micro level talks of the organization's manpower planning, selection, training, performance appraisal, development potential appraisal, organizational development, etc. Its involvement in all these areas is mainly with an objective to develop certain new capabilities in people concerned to equip them perform present job in a better way and
to accept future job challenges. The present study focuses HRD at micro level, i.e., individual and organizational development.

5.8.2 Manpower Development Wheel

A diagrammatic representation of Manpower Development / HRD is given in the form of a wheel called "Manpower Development Wheel" in Figure 5.8. The wheel consists of three tiers. The first tier of the wheel occupies ten manpower elements. The second tier occupies eleven factors of manpower development and the third tier consists of the HRD mechanisms processes i.e., the ways to acquire and develop professional manpower.

Fig. 5.8 Manpower Development Wheel
5.8.3 Concept of Manpower Development / HRD

The concept of HRD could be elucidated in a number of ways. The essence of human resource development is to bring out the best in man at all levels in the jobs they hold. Development of professionals to their maximum potential and the conservation of talent is the gist of the HRD concept.

Rewadikar (1992) summarizes the following as the concept underlying manpower development:

(i) The concept underlying development is that the human resource (i.e. staff) can be trained and re-trained and age is not bar in learning.

(ii) The new technology and techniques help expedite the learning process.

(iii) Distance is not the problem. There are various methods of continuing education and open universities are a strong medium.

(iv) Everyone can learn at his/her own pace and select learning to suit his/her interest.

(v) It is the initiative, character and skill of the individual, which determines, to a large extent, how resources of a nation will be utilized.

(vi) Pre-entrance education in any profession, is not sufficient for the whole career, there is need for updating the knowledge and skills from time to time.

5.8.4 Objectives of Manpower Development/HRD

The main objective of HRD process is to develop the present and future capabilities of professionals in the organization. According to Dey (1982) the HRD represents an intervention strategy with, inter alia the following overall objects namely:
(i) arresting obsolescence, both individual and organizational (preventive);

(ii) bridging pre-active insufficiencies of knowledge and professional skills (curative);

(iii) shaping adjustments with socio-technological, environmental changes (adaptive);

(iv) developing new outlook, an ethological version of quality excellence and accomplishment (promotive); and

(v) making a total man with new cultural attributes (transformative).

Natarajan (2001) in his paper has summarized the broad objectives of HRD for library professionals are as follows:

(i) To develop professionals for assuming responsibility of providing effective transfer of information to users;

(ii) To develop scientific outlook and awareness of their responsibility in tremendous developments in information technology;

(iii) To develop sensitivity to overall background and developments of information users in the concerned organization; and

(iv) To develop knowledge, skills and attitudes for effective information handling and content management techniques.

5.8.5 Scope of HRD

Human Resources Management (HRM) deals with procurement, development, maintenance and utilization of human resources. HRD deals with development of human resources for efficient utilization of these resources in order to achieve the individual and organizational goals. Thus the scope of HRM is wider and HRD is part and parcel of HRM. Infact, HRD helps for the efficient management of human resources. The scope of HRD invades into all the functions of HRM. Subha Rao (2003) summarizes the scope of HRD as follows:
(i) Recruiting the employees within the dimensions and possibilities for developing human resources.

(ii) Selecting those employees having potentialities for development to meet the present and future organizational needs.

(iii) Analyzing, appraising and developing performance of employees as individuals, members of a group and organizations with a view to develop them by identifying the gaps in skills and knowledge.

(iv) Help the employees to learn from their superiors through performance consultations, performance consultancy and performance interviews.

(v) Train all the employees in acquiring new technical skills and knowledge.

(vi) Develop the employee in managerial and behavioural skills and knowledge.

(vii) Planning for employee's career and introducing developmental programmes.

(viii) Planning for succession and develop the employees.

(ix) Changing the employee's behaviour through organization development.

(x) Employee learning through group dynamics, intra and inter team interaction.

(xi) Learning through social and religious interactions and programmes.

(xii) Learning through job rotation, job enrichment and empowerment.

(xiii) Learning through quality circles and the schemes of workers' participation in the management.
5.8.6 Benefits of HRD

Rao (2000) lists the benefits of HRD in the following way:

(i) HRD improves the capabilities of people. They become innovative and enterprising—ever eager to take risk and get ahead. It improves the all round growth of an employee. Feedback and guidance from supervisors help employees grow continuously and show superior performance.

(ii) HRD improves team work. Employees become more open and trust each other. The organizational climate, too improves a lot.

(iii) HRD leads to greater organizational effectiveness. Appropriate employee-centred policies help the organization achieve its goals more efficiently.

(iv) performance related reward help employees realize the importance of utilizing their skills fully in the service of organizational goals. The organization's overall health and self-renewing capabilities, too, improve quite significantly.

5.9 Factors of Manpower Development

Acquisition and development of professionals are not enough to ensure good performance. There are certain factors, which influence change and encourage developmental needs of professionals. A brief discussion of these factors are given here.

5.9.1 Motivation

The vital factor in manpower development /HRD is motivation of the workforce. Human resources/ manpower is the essential and most important resource in the library. If the library personnel are highly motivated, adequately qualified, sincere in their work, serious to achieve the result-oriented targets and sincerely feel a sense of belonging to the organization, they can be regard as the best resource of the library in
comparison to all other physical resources. Only the human resource can overcome the constraints and limitations of other physical resources.

Motivation plays a key role in energizing and activating the people to put in their best effort of the accomplishment of goals. As performance is a multiplicative function of ability and motivation (P = AxM), it is extremely important to ensure motivation of people in tandem with their development for higher performance and productively.

In the words of Mamoria (1980), the "purpose of motivation is to create conditions in which people are willing to work with goal, initiative, interest and enthusiasm, with a high personal and moral satisfaction, with a sense of responsibility, loyalty and discipline and with pride and confidence in a most cohesive manner, so that the goals of an organization are achieved effectively."

Motivation has been variously defined by scholars. As Berelson and Steiner (1964) state: "A motive is an inner state that energizes, activates or moves and directs or channels behaviour towards goals."

Murray (1964) has defined motivation as "an internal factor, which energizes, directs and integrates an individual's behaviour." According to him motivation (or motive) cannot be observed directly but is inferred from behaviour. It is an internal drive which propels an individual to action and which starts from a lack or deficit of something (or need) and ceases with the attainment of goals or a reward (or satisfaction of the need). Obviously, the goal or reward satisfies individual and his drive no longer operates after the satisfaction of his needs.

McKeachie and Doyle (1966) define motive as "an expectancy of pleasantness or unpleasantness." It is the activation of these expectancies by the situation, which moves the organization into action.

As commonly understood, motivation means the willingness and eagerness of a person to perform a task. From the standpoint of behavioural science, it is defined as a process of identifying the needs that create drives in the people to engage in work and deciding on the
incentives and rewards that would give them the highest satisfaction and fulfilment (Luthans, 1989).

In an organizational context, motivation should be viewed as a continuing process. This is because satisfaction of the existing needs will give rise to fresh needs from the existing employees or from the new employees. Moreover, employees will remain with the organization as long as their personal needs and goals are satisfied on a continuing basis by working in that organization (Simon, 1976).

According to Bernad motivation is the general term that we will use to refer to all those inner striving condition variously described as wishes, desires, needs, drives and the like. Motivational relationship can be expressed in the following formula

\[
\text{Motivation} = \text{Value} + \text{Expectancy}
\]

(Chandrakandan, et al., 2001, p.361.)

In simple terms motivation can be defined as a willingness to utilize the full energy to achieve a goal and to perform a job successfully. Motivation is thus a process of mental attitude to understand rightly the job and to perform it yielding result in least possible time frame. According to Mahapatra (2002) the attitude of motivation varies from individual to individual and even in the same person changes over time and environment. Motivation of an individual is influenced by a number of both internal and external factors as well as psychological and environmental factors.

According to Gailbraith (1991), motivational strategies consisting of six factors suggested by experts - attitude (orientation to be experienced in new technology), need (internal force to fill up perceived gap in knowledge and skills), stimulation (charge in perception), affect (value achievement and positive emotional experience in execution of skills), competence (mastering professional task) and reinforcement.
One way of motivating staff is by involving them in the decision-making process (Ifidon, 1979). Thus, such motivation and the librarian's knowledge, skill, interest and abilities will further aid him or her to work in a manner which will facilitate the realization of the library's objectives. Olorunsola (1992) realizes that the aspects employed in motivation include praise, money, pleading, reprimand, punishment, threat, etc. The first three are positive rewards while the last three are negative. By offering positive rewards, a person may want to do something; but no amount of punishment will make him or her do it other than unwillingly; also, positive rewards can lead to resentment.

Corrall and Brewerton (1999, p.164) stress the importance of motivation in the following manner. "Successful performance requires ability (the technical skill to perform a task), clarity of objectives (an understanding of what we as individuals, a team and an organization are aiming to achieve), resources (the people, tools and money to complete a task) and motivation." They further elaborate that no matter how able your staff, how clarity your vision is communicated, and how much money you invest in your activities, without high level motivation you will not get high level performance.

5.9.2 Encouragement

The dictionary meaning of the term encouragement is the act of encouraging, or the state of being encouraged, incitement, stimulation or to inspire with courage sufficient for any undertaking, to emolden, make confident.

For better performance in work the staff should be incited or induced. If there is any weak from the side of the staff they should be advised. Authorities should take keen interest in this respect.

5.9.3. Recognition

Every employee or library professional expects a word of praise from the users as well as the authority. It gives vigour, energy and
confidence to shoulder on a new and little difficult task and deal with it successfully. "Recognition is more important than monetary rewards and can help small men to more mountains" says rightly Dabas (1989).

Flener (1975) is of the opinion that in attempting to combine the needs of staff with user demands for library services, many approaches will need to be examined. Recognition will need to be given to staff expectations while, at the same time, considering the possibility of meeting these expectations within the framework of the academic community.

5.9.4 Environment

As an important factor 'environment' has much influence on manpower development. The professional development of a librarian depends, to a very great extent, on the environment in which he works. He should have a congenial environment that will provide him with the necessary stimulus and encouragement to apply himself to this work creatively. The most important factor in his environment is the clientele making use of the library. In an environment in which there is a demanding clientele, i.e. a clientele who continuously demand different types of service from the library for their academic and research needs, the librarian cannot but respond to the demands. And in the process of organizing and providing the services his professional development takes place. In such an environment, he feels the pressing need for equipping himself adequately in all respects and updating his knowledge that would enable him to provide the services. If, on the other hand, a librarian happens to work in a library where the environment does not put any pressure on him for providing library service, he does not feel the incentive to update his knowledge and, as a consequence, he declines professionally over a period of time. It is observed that librarians working in isolated college libraries, which are not made proper use by their clientele, is declining in their professional competence and librarians working in research libraries and, to some extent, in university libraries developing professionally.
In a situation where a congenial environment does not prevail, the librarians should explore measures of the improvement of the conditions. One step is that they should organize service on their own initiative and do everything possible to demonstrate the effectiveness of such services. The management also should take initiative for creating an environment suitable to carryout all kinds of services including IT oriented services. If the environment is better the services also become better.

5.9.5 Opportunity

An opportunity is any favourable situation in the organisations' external environment. The opportunities offered to the profession by the instantaneous revolutionary changes in IT are enormous and new services and produced could be introduced to serve the information seekers. The introduction and popularization of internet facilities, e-mail service, on-line searching, are only a few examples.

In order to provide efficient IT oriented service, librarians should be provided ample opportunity to update their knowledge and skills.

5.9.6. Facilities

Facilities are opportunities or favourable conditions, for the easier performance of any action, the physical means for doing something.

For performing the duties effectively and efficiently in the changing environment the library staff should be provided facilities for developing their personal and professional competencies by sanctioning leave for study purpose, sponsor them for acquiring higher qualifications, etc. Better infra-structure facilities for library (building, furniture, equipment, etc.) and librarian (convenient seating, toilet facility, etc.) should also be provided.

Finance is an important factor in any developmental activities. So, when allocating funds for library, allocate funds for the development of its staff also. Hence, financial facility is also very important.
5.9.7 Difficulties

Difficulty is an unfavourable condition or state to handle a work. In the practical situation the library professionals feel a lot of difficulties to carryout IT oriented services to the clientele. This is mainly due to the lack of facilities and training.

5.9.8 Responsibility

Responsibility is the person's obligation to himself to accomplish the assigned jobs. Successful managers or librarians are those who are comfortable with the process of delegation of responsibility and authority (Evans, 1983).

The simple dictionary meaning of responsibility is "the obligation to act." However, the meaning of the responsibility in the science of management is, the obligation to perform the work activities. Therefore, the obligatory action to be performed to achieve the goal of organization is the responsibility of a person who performs the job.

"Responsibility is really a created factor within a person, when an assigned task is accepted by him. Someone who is unwilling to accept the responsibility usually refuges the job to perform and someone who accepts responsibility but feels free that no responsibility, because of he knows that somebody will perform that job" opines by Borse (2000).

In short, for the successful performance of the job library professionals should be responsible in the job assigned to them.

5.9.9. Will

'Will' of a professional has a significant role to play in performing his job especially to carryout the services in the new media and means in the changing information technology environment. The 'Will' which is required
in the new library professionals to dedicate themselves to serve the clientele is again an important aspect of manpower development.

The dictionary meaning of the term 'will' is power or faculty of choosing or determining. It is the power of the mind to take up a task without bothering about its difficulty.

Sreedhar (1999) has stressed the importance of will in the following words. "The knowledge and skill are only meeting the necessary conditions of a successful practitioner but the sufficient condition is met only when 'will' of the person motivates him to perform."

5.9.10 Vision

Vision is an important factor as far as a professional is concerned. Vision has got importance because it will help us to get adjusted with the changing world. The library profession today is changing very fast due to the impact of information technology and the library professionals will need to develop 'vision' or 'visionary skill' to look to the changes that will occur in the profession tomorrow.

A library professional must keep one of his eyes at present and another at future. He needs better visualization. Subramaniam (1997) aptly points out that "One must have a vision of what one wants to be. If the vision is clear, the steps that you take to achieve will also be clear."

The factors of manpower development are identified and included in the scale formation are listed as follows.
11. Factors of Manpower Development

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<td>11.1</td>
<td>Motivation in job</td>
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<td>11.2</td>
<td>Encouragement from the authorities for professional growth</td>
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<td>11.3</td>
<td>Recognition from users</td>
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<td>11.4</td>
<td>Environment to carry out work and provide IT services</td>
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<td>11.5</td>
<td>Opportunity to update your knowledge and use your talents in work including IT service</td>
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<td>11.6</td>
<td>Facilities for developing individual competencies</td>
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<td>11.7</td>
<td>Difficulty/problems/limitations to perform your duties and offering IT services</td>
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<td>Responsibility in job</td>
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<td>11.9</td>
<td>‘Will’ to carry out the services in the new media &amp; means</td>
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<td>11.10</td>
<td>Vision and orientation to the future</td>
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5.10 Satisfaction in job/position

On clear analysis, studies have revealed job satisfaction to be of great significance in the functioning of an organization. Job satisfaction is a key element, which provides an insight into the psychology of work-disability as well as an innovative access to numerous management problems.

Job satisfaction is an integral component of the organizational climate and an important element in management employees relationship. It may be described in terms of attitude towards the job like any other attitude it represents a complex assemblage of cognition (belief or knowledge), emotions (feelings, sentiments or evaluations) behaviours and tendencies (Raza and Gupta, 2000).

It is a complex of different attitudes possessed by an individual. These attitudes relate to several aspects of the job such as pay, status,
designation, criteria for promotion, opportunity for advancement, job security, opportunity to use ideas, opportunity to enhance qualifications, opportunity to learn a job, steadiness of employment, supervision, co-workers, working conditions, cleanliness, working hours, ease at work, benefits, communication, recognition and allied factors. As Tiffin and Mc Cormick (1971) point out, the satisfaction which an individual obtain in his job is largely the result of the extent to which different aspects of his work situations are relevant to his job related value systems. In addition to these job related factors, individual adjustment and group relationship outside the job also form major determinants of job satisfaction.

Harrel (1967) on the basis of numerous studies, classifies determinants of job satisfaction in three groups including personal factors, factors inherent in the job and factors controlled by the management. Personal factors relating to job satisfaction are sex, number of dependent, age, time of job, intelligence, education and personality. The job satisfaction factors inherent in the job itself relate to the nature of work, skill required, occupational status, geographical location and size of the organization. The job satisfaction factors controlled by the management include security, pay, fringe benefits, opportunity for advancement, working conditions, co-workers, responsibility, supervision and downward flow of information.

According to Vaughn and Dunn (1974) job satisfaction is the feeling an employee has about his pay, his work, his promotion, opportunities, his co-workers, and his supervisors. An employee's feeling about each of these terms can be indexed; a numerical value can be assigned to each; and a great total can be computed.

While discussing the job anxiety and job satisfaction among professional library employees Prasad (1994) points out that for successful functioning and performance of its manifold duties, libraries require personnel with a high degree of technical skills, intelligence, imagination, initiative, efficiency and understanding. They are, therefore, to be not only
professionally qualified, competent and efficient but also to be lively, active, contended and well satisfied with their jobs.

12. Satisfaction in your job/ position

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<td>Your pay</td>
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<td>12.4</td>
<td>Criteria for promotion</td>
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<td>12.5</td>
<td>Library environment</td>
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<td>12.6</td>
<td>Facilities (such as seating, toilet, resting etc.)</td>
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<td>12.7</td>
<td>Working/ service conditions</td>
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<td>12.8</td>
<td>Opportunities for steady work</td>
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<td>12.9</td>
<td>Opportunities to take part in seminars/ conferences</td>
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<td>12.10</td>
<td>Opportunities to enhance your qualifications</td>
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5.11 Qualities of Library Professional

In addition to the above discussed elements and factors of manpower development a library professional should possess certain personal qualities. These include: alertness, assertiveness, confidence, determination/tenacity, Imagination, inquisitiveness, open-mindedness, analytical mind and critical thinking, need for achievement, desire to grow personally and professionally, desire to remain current in the subject, flair of marketing, organizational ability, leadership, patience, sense of humour, sense of ethics and certain entrepreneurial characteristics such as risk thinking, customer focus, initiative, creativity, desire for success, innovation, self belief, opportunism, ambitious to go for better opportunities, self-confidence, self control, emotional maturity, integrity and ability to tolerate stress.

Among these qualities and characteristics mentioned 'leadership' is of utmost importance because 'strong leadership as the key to the future
success of the LIS profession" as argued by Boaz (1991) in her contribution to IFLA's guidebook on continuing professional education. What is more important today is to 'lead' rather than to 'manage'. People who sense in their leader the ability to help them satisfy their needs will follow him willingly and enthusiastically. “Leadership like rudder is very essential to steer the organization” says, Venugopal (1997). He further describes the traits of good leadership, which are identified by George R. Terry. Terry identifies ten traits of good leadership: Energy, mental and physical; Emotional stability, which enables a leader to act with self-confidence; Knowledge of human relations, which requires an understanding of human behaviour; Empathy, which enables him to look at things objectively and from another's viewpoint; Objectivity, not emotionally involved; Personal motivation, that is, enthusiasm with himself to get the job done; Communication skill, that is, the ability to talk and write clearly and forcefully; Teaching ability, which enables him to inspire his subordinates; Social skill, which enables him to understand people and know their strength and weakness and presents him as a friendly person; and Technical competence, which provides him with an effective working knowledge and insight of the operations under his guidance. These are all not inborn qualities, but are to be acquired with conscious efforts to gain self-esteem.

5.12 Conclusion

From this detailed discussion about the various aspects of professional manpower and manpower development, it is evident that Manpower Development or HRD is essential for any growth oriented and dynamic organization, which wants to succeed in the changing and competitive environment. It is the effort and competency of human resource that make the organization dynamic. Personnel policies can keep the morale and motivation of employees in an organization high but, the HRD system/ mechanisms enable the employees to continuously acquire, sharpen and use their capabilities to create an organizational climate, which ultimately stress the organization to success. Therefore,
development of human resource is essential for any organization, which wants to grow.

The systematic and scientific analysis of the elements and factors of manpower development resulted in the identification of the criteria required for the formulation of a structured questionnaire including all elements for analysis and for designing a Professional Library Manpower Measurement Scale for measuring the elements and factors, which are detailed in the Methodology chapter.
REFERENCES


6.2 Total Population

The study revealed that although there are 657 villages in Kerala as detailed in page 160 of chapter 3 many of them do not have professionally qualified librarians. The target population for this present study is the professionally qualified librarians who are working in various college libraries in Kerala State. The study includes only professionally qualified librarians who possess B.L. or B. Lib. and above. It excludes the semi-professionals or part-time assistants holding a Certificate or Diploma in Library Science. The size of the population is 307 professionally qualified librarians.

4. Sample

An attempt was made to conduct a comprehensive survey by including all members in the population. As it was impossible to contact and many members of the college in such data, the investigators had to take a representative sample from the population. According to the investigators had to make decisions regarding the following aspects as recommended by Bent and Khan (1989).

1. Sample size

2. Sampling technique

3. Factors of which represented in the sample