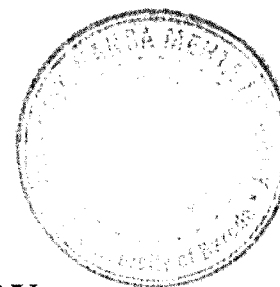# CHAPTER III

METHODOLOGY OF THE STUDY

CHAPTER – III

METHODOLOGY OF THE STUDY

The present study was an attempt to find out the motivation and performance level of library personnel in university libraries of Gujarat state, India. The study tried to explore the factors that motivate the staff, to find out the relation between motivation and performance, to explore how motivation influences performance level of personnel and to suggest strategy for motivation for better performance. Methodology applied to study these aspects scientifically is discussed in this chapter. This chapter presents the details of methods, techniques and procedures followed by the investigator during the study. The chapter is organized in two sections. Section-I deals with the procedure followed in the study viz., data required for the study, sources of data, sampling, tools used for the study, collection of data and analysis of data. In Section-II a brief introduction of the university libraries from where the data for this study was gathered i.e. the setting of the study is presented.

SECTION-I

PROCEDURE OF THE STUDY

1. DATA REQUIRED FOR THE STUDY

Data on various aspects of library personnel's motivation and performance were mainly required for the accomplishment of the study. To meet the objectives 1 and 2 of the study, as mentioned in Chapter I, data was required on motivation level and factors of motivation that motivate library personnel. Motivational level of library personnel was judged by taking a combination of eleven factors that are responsible for motivation. These factors are recognition, monetary gain, job security, job achievement, work it-self, job enrichment, competition, participation, inter-personal relation, working condition and

work ethics. These eleven factors motivate personnel and are additive in nature which showed the motivational level as well as what motivate them. For objective 3 of the study i.e. to find out the relation between motivation and performance, data on motivational level as well as performance level of library personnel were needed. The data regarding performance level was the self- rated data by library personnel about their own performance. The performance level was measured against the six components of job performance viz., productivity, initiative, problem solving and creativity, attendance and punctuality, dependability, and interpersonal skills. For objective 4 of the study, data on performance level of both highly and that of low motivated personnel was required. For objective 5, data on suggestions to develop strategies for raising motivational level of library personnel was needed. Further additional data on background information on library personnel were needed to develop an in-depth understanding of motivation and performance level of library personnel.

2. SOURCES OF DATA

The data for the present investigation were tapped from a variety of sources viz., primary, secondary and tertiary sources. The library personnel were the primary sources from whom most of the data required for the study was extracted. Data regarding background information, motivation level and performance level of them were available from this source. For developing strategy to enhance motivation, library experts namely chief librarians of large university libraries and teachers of library and information science were consulted. Thorough examination of literature in the area of motivation also provided insight about how strategy to be developed. Further information about university libraries, their collection, strength of staff, services provided etc. were available in UGC reports, annual reports of some sample libraries and directories of libraries both in print and on-line sources. Visit to university libraries, meeting library personnel and discussing the research problem with the chief librarians formally also provided some importantly needed data.

Apart from the above sources of data, (1) articles, published in both Indian and foreign journals of reputation, of various kinds such as research paper, conceptual view

point, evaluative, review, survey, etc.; (2) books; (3) conference papers; (4) news article; (5) theses, etc. available in literature either in print or in electronic form related to the research problem were consulted. These information sources were of great help to conceptualize the research problem; to formulate hypotheses; and to design the frame work of methodology of the present study.

3. SAMPLING

The population for the present study comprised of all the library personnel of all the university libraries in India. In India there are a total of 324 universities (UGC, 2003). These 324 universities are scattered in 29 states and 6 union territories of India in length and breadth. Since it was not feasible to cover all the university libraries of India in the study, cluster sampling was followed. The researcher being from Baroda had selected libraries of all the conventional universities of Gujarat from proximity and feasibility point of view. There are a total of 8 universities, out of 13 universities established in Gujarat, where all conventional subjects are taught. These universities have well established libraries in terms of rich collection, wide range of library services and users with diverse information need. Therefore eight university libraries of Gujarat formed the sample of this study. There after the library personnel who were holding different professional positions in the university libraries namely chief librarian, deputy librarian, assistant librarian, and technical assistant or library assistant ware taken in the study. A total of 57 personnel were working in different professional positions and a substantial number of professional positions were lying vacant in the sample university libraries during the study period. Therefore all the 57 personnel were taken as sample in the study. The details of the sample of library personnel from the selected university libraries have been presented in Table no.3.1.

Thus, the library personnel holding different professional positions in the eight university libraries of Gujarat i.e. a total 57 in number were taken in the study and data for the study was collected from them by administering questionnaires.

TABLE -3.1 SAMPLE OF LIBRARY PERSONNEL OF UNIVERSITY LIBRARIES

Sr. No.	Name of the University Libraries	No. of library Personnel
1.	Bhaikaka Library, Vallabh Vidyanagar	10
2.	Bhavnagar University Library, Bhavnagar	4
3.	Gujarat university Library, Ahmedabad	4
4.	Gujarat Vidyapith Library, Ahmedabad	9
5.	Smt. Hansa Mehta Library, Baroda	18
6.	Saurashtra University Library, Rajkot	2
7.	Sivabhai Umedbhai Granthalaya, Patan	3
8.	South Gujarat University Library, Surat	7
	Total	57

Apart from this main sample, to study the objective No. 5 i.e. to suggest a motivational strategy for library personnel, five experts from the field of librarianship namely chief librarians of large university libraries and teachers of library and information science were consulted to get relevant data regarding staff motivation.

4. TOOLS FOR THE STUDY

The research design for this study employed a descriptive survey method. A questionnaire was developed to collect data from the library personnel. The questionnaire was comprised of two tools developed by the researcher for measuring the motivation and performance level of personnel. To develop these tools a thorough literature search was done so that adequate and relevant data could be gathered to solve the research problem at hand. Though the investigator found various motivational scales and performance evaluation instruments for measuring staff motivation and performance respectively in industrial and other job setup, these were of little use for measuring the same in case of library personnel in Indian context. Since library jobs are typical in

nature, these tools could not be used with library personnel. Therefore it was decided to develop instruments exclusively for measuring the motivation and performance of library personnel taken under this study. The scales developed are described in detail below.

4.1. Motivation Scale

A Motivation Scale was prepared to measure the motivation level of the library employees as well as to find out what motivate them most (See Appendix A). The measure of motivation was consisted of eleven factors of motivation. These factors, considered as important motivators, were discerned from the analysis of literature in the area. The scale assessed the motivational level of employees with respect to eleven factors of motivation such as recognition, monetary gain, work it-self, job-enrichment, job-achievement, job-security, competition, participation, interpersonal relation, working condition and work ethics. The operational definitions of these factors are provided in chapter-I and also in Appendix C. The motivation scale was comprised of 62 items under these 11 motivational factors. Each item in the scale was followed by a five point incremental scale i.e. Likert type scale (Stanley and Hopkins, 1972) ranging from 'Strongly disagree' (1) to 'Strongly agree' (5) (see Appendix A). The five point scale indicated the extent to which the personnel agree with each item with reference to their job. One could score a maximum of 310 and a minimum of 62 in the scale. The total score for measuring the motivational level was obtained by summing up the scores obtained in all the items in the scale. This means personnel who scored high in the scale were supposed to be highly motivated and vice versa.

4.2. Self Assessment Performance Rating Scale

A Self Assessment Performance Rating Scale was also prepared to measure the performance level of library personnel. This measure of job performance was consisted of six components of job performance. These six components were the criteria selected for measuring the employees' performance and were derived from analysis of literature in the field. These criteria were namely productivity, initiative, problem solving and creativity, attendance and punctuality, dependability, and interpersonal skills. The

operational definitions of these components or criteria for evaluating job performance are discussed in details in chapter-I and also in Appendix C. The performance rating scale was comprised of 22 items under 6 job performance components (See Appendix A). Each item in the scale was followed by a five point incremental scale ranging from 'True to almost no extent' (1) to 'True to a great extent' (5) (Stanley and Hopkins, 1972). The five point scale intended to measure the staff's perceptions of extent to which he/she is performing at job. One could score a maximum of 110 and a minimum of 22 in the scale. The total score for assessing the performance level was obtained by summing up the responses of the respondent on all items rated against the scale. This means high scores are indicative of very good performance and vice versa.

4.3. Validation of the tools

Since the above tools were developed by the researcher, they were subjected to validation. Content validity for the instruments was established by using eight experts' opinion. These experts were two each from library science and management studies, and four from social sciences having more than 15 years of research experience in the area. All the experts were from the M.S. University of Baroda, Gujarat where the study was conducted. The draft for validation of the tools is attached as Appendix C. The experts were requested to judge the relevance as well as the clarity of the statements and questions considered in the scales. Further they were requested to comment on the suitability of the items in terms of language clarity, content coverage and their logical sequence in these tools. Some of the items and responses were modified on the basis of the suggestions recommended by the experts. Some changes were incorporated in word selection, sequence of items and in some cases clarity in instruction were made to the tools. Experts' feedback on the tools were carefully analysed and it was found that the tools are having the content validity.

The tools were also pilot tested with five library personnel. From the pilot testing it was found that there is a need to develop a Gujarati version of the questionnaire that comprised of the tools. Because some of the respondents selected for pilot study found it difficult to comprehend the statements/items written in English and asked for a translated

version in Gujarati language. Therefore the questionnaire was developed in two versions: English and Gujarati. A copy of the Gujarati version of the questionnaire comprised of two tools is also attached in Appendix B. Further to collect background information about the respondents a personal inventory was prepared and was included in the questionnaire. The final structured questionnaire was thus prepared incorporating the observations and experience gained through the pilot study.

5.   COLLECTION OF DATA

Data required to meet the objectives of the study was collected by the investigator personally by visiting the sample university libraries and meeting library personnel taken under the study. The questionnaires were hand delivered to the respondents by the investigator at their respective libraries i.e. at their workplace. Each questionnaire was accompanied with one covering letter describing the need and purpose of the study and how to provide data or to choose response from the five point scale. One stamped self-addressed envelope was also provided along with it so that they could return the same after filling it. At the time of delivering the questionnaire some staffs were reluctant to part with data regarding a personal and psychological matter like motivation. They were also scared to rate their performance as they were skeptical about how these data could be used and for what purpose. Therefore at that stage the investigator tried to establish good rapport with the respondents to ease out the discomfort and then only it was possible to explain them the need and purpose of collecting data. Whenever it was possible for the investigator she tried to be present at the time of filling the questionnaire so that if the respondents had any confusion regarding any item or statement or rating included in the scales, supplementary and clarificatory explanations could be provided.

However it was a great task to convince some of the personnel to get the authentic and true responses. At the same time the investigator tried her level best to avoid any bias from her side that could influence the data provided by the respondents and objectivity was maintained through out the study.

A total of 57 questionnaires were distributed among the library personnel of eight university libraries. Some questionnaires were collected back then and there personally by the investigator. Some questionnaires were sent back by post. But it was a very tough task to get back a majority of questionnaires. The investigator had to make several trips to the libraries for persuading the staff to fill the same. At last a total of 56, out of 57 administered, questionnaires were received by the investigator. The process of administering the questionnaires started in August 2002. But most of these were received by the investigator in 2003 as there was delay on the respondents' part. Even some of these were received in 2004 after several visits to some of the libraries and by distributing the questionnaires twice.

During the visit to the university libraries for data collection, the investigator also collected a lot of important information regarding staff motivation, performance, etc. from the chief librarians through formal meetings and also by informally discussing the issue of motivation with library staff.

6. ANALYSIS OF DATA

The data collected from the library personnel through the administered questionnaires were analysed as per the objectives and hypotheses of the study. Different statistical techniques were applied to analyse the empirical data collected through the motivation scale and the self assessment performance rating scale.

For objective 1 i.e. to study the motivation level of library personnel the numerical responses in the five point scale were scored and the total score was obtained. The total scores, obtained from the respondents through the motivation scale, showed their motivation level. Mean values and Standard deviation were calculated from the total scores. Details of total score, Mean, and Standard deviation of each factor and over all are provided in Appendix-D. On the basis of Mean and Standard deviation the sample was divided into three groups as the variable 'motivation' is supposed to be distributed normally among the sample.

The three groups were:

(1) moderately motivated group (average) = Mean $\pm$ 1σ;

(2) high motivated group was > Mean + 1σ; and

(3) low motivated group was < Mean − 1σ. Thereby the respondents with different motivation levels were identified.

For objective 2 i.e. to study the motivational factors of library personnel, total scores obtained by all the respondents under each factor of motivation were taken and Mean scores (M) where M = (Total score/No. of respondents) and Standard deviation (SD) of each factor were calculated. To identify the motivators among the 11 factors, scale value of each factor and over all were found out. The scale values of the 11 factors were calculated by dividing the Mean value of each factor with the number of items listed under that factor and over all scale value was found out by dividing the over all Mean score with 62 items listed in the motivation scale. Then the scale value of each factor was compared with the over all scale value as referent point to find out whether it is a motivator or not. Therefore the factors which have scale value more than the over all scale value were found as important or considered as strong motivators and the factors with low scale values were taken as the weak motivators in the study.

For the third objective i.e. to find out relation between motivation and performance, total scores obtained by the library personnel in the motivation scale and self assessment performance rating scale were listed respondent-wise. These scores were treated by applying Product Moment Correlation Co-efficient (Garret and Woodworth, 1974; and Busha and Harter, 1980). In relation to this objective, hypothesis 1, which states that there exists a significant positive relationship between motivation and performance, was tested. This hypothesis on correlation between the two variables viz. motivation and performance was tested at ·05 level of significance.

The fourth objective of this study was to study the performance level of both the groups i.e. highly motivated and low motivated library personnel. Therefore the performance level of both low as well as highly motivated group was subjected to 't' test. Further to test the second hypothesis i.e. highly motivated library personnel would have

high performance level in comparison to that of less motivated library personnel, the significance of 't' value was tested at ·05 level (Garret and Woodworth, 1974).

For the last objective, which was meant for suggesting strategies for raising motivational level, the data collected from library experts was subjected to qualitative analysis. The data was analysed qualitatively so that strategies could be formulated by proper inputs of insight experience, observations and practicability.

SECTION-II

SETTING OF THE STUDY

The present study was conducted on the library personnel of university libraries of Gujarat state in India as mentioned in the scope of the study in Chapter –I. Gujarat is located at 23° N Latitude and 72° E Longitude. Gujarat is one of the technologically, educationally, industrially and culturally advanced states of India. In the field of library science also it is renowned for witnessing the first library movement in India and for having the first library school established by the visionary ruler of Baroda, late Sayajirao Gaikwad in 1911. Since then many libraries have been flourished here to cater to the information need of the people and have become an important feature of the society. Like wise there after various university libraries were established in their respective parent university set up. At present there are 13 university libraries in Gujarat out of which 8 are libraries of general universities where conventional subjects are taught, 3 are libraries of agricultural universities and one each of an Ayurveda university and an Open University. For the present study the personnel of the libraries of these eight conventional universities were undertaken. A brief introduction of these eight university libraries is complied by consulting various sources, namely data gathered from formal discussion with chief librarians of the university libraries, by visiting websites of some of the sample

libraries, and INFLIBNET website (Shah & Bhasker, 2001; INFLIBNET; and Smt Hansa Mehta Library). The information provided here represents the status of the sample university libraries during the study period. The introduction of these university libraries is as follows:

- **Bhaikaka Library**

This is the university library of Sardar Patel University, Vallabh Vidyanagar. It was established in 1955. The library has a rich collection of books and journals in basic sciences, humanities, social sciences, etc. The library currently has 194030 books and subscribing to 168 journals. It has the budget of Rs. 35, 00,000 for books and Rs. 23, 6500 for journals for the last five year plan. Computerization of the library started with CDS/IS/S software but now it has installed SOUL software and digitized with the assistance provided in 10th five year plan (2002-2007). UGC Info-net programme for e-journals consortium is also launched here and internet cervices are also provided in the library. The library has a reading room for accommodating 700 readers at a time. The library has 15 professional positions and 13 others although most of the posts were lying vacant during data collection of this study. The library provides all the conventional services such as circulation, photocopying, reference, educational information, bibliographic, interlibrary loan etc. apart from OPAC and internet services. The library opens from 8:00 am to 22:00 pm.

- **Bhavnagar University Library**

It is the central library of Bhavnagar University, Bhavnagar, established in 1979. It has a collection of 93196 books and currently 123 journals are subscribed. The collection includes documents on language, literature, social science, management studies, computer science, pure science, library and information science, statistics etc. Computerization is going on by installing SOUL software and e-journals consortium is actively launched here by UGC Info-net programme of INFLIBNET. It has book grant of Rs. 3, 75,000 and Rs. 50,000 for journals for Xth five year plan. It provides reading room, reference, photocopying, news paper clipping and many more services. It has got

four professional positions and seven other clerical and administrative staff. Library's working hour is from 10:30 am to 18:10 pm.

- **Gujarat University Library**

This is the university library of Gujarat University and was established in 1950 in Ahmedabad. It has a collection of 3, 34,110 books and 218 currently subscribed journals. The collection includes documents on science and technology, arts, humanities, social sciences, library and information science, generalia, etc. Circulation, reading room, reference, CAS, inter library loan, photocopying, foreign educational information, audio-visual information and user education are the services provided in the library. It has got nine professional positions and 40 other staff. Computerization of the library is in progress by installing SOUL. The library is also receiving e-journals through UGC Info-net consortium. The library opens from 8:00 am to 20:00pm an all working days.

- **Gujarat Vidyapith Library**

It is the university library of Gujarat Vidyapith, Ahmedabad and was established in 1920. It is the oldest library undertaken in the study. It has a collection of 4, 68,400 books and subscribing to 585 journals. One unique feature of this library is that it receives state government grant for being a public library and being a university library it also receives UGC grant. Gujarat Vidyapith is the only university which has a public library that focuses more on academic and research apart from the routine services provided to general public. A yearly grant of Rs. 90,000 from state government for purchasing of books is allotted. UGC provides the major grant i.e. Rs 20, 00,000 for books and for journals it is Rs. 6, 85,000 every year. Computerization of library services was earlier done with in house software developed by the library. Now it has installed SOUL for that purpose. There are a number of terminals (13) for users to browse OPAC. Circulation, bibliography, photocopying, inter library loan, CAS, and on-line search of in house database of book and content page of periodicals are provided. It has 11 professional posts and 17 others. The library's working hour is from 7:30 am to 19:00 pm.

- **Smt. Hansa Mehta Library**

This is the university library of the Maharaja Sayajirao University of Baroda, in Vadodara. Smt. Hansa Mehta Library belongs to the largest university library system established in India in 1950. The library system comprises Smt. Hansa Mehta Library (HML) as the main university library and 13 constituent libraries. HML is one of the richest and largest libraries in terms of document collection in the country. The total holdings comprised of 7, 22,955 documents, 1, 25, 00 bound journals and 1152 subscribing journals. This library has the largest patron base stands at 20365. The library also has the single largest reading room in the country which accommodates 1500 students at a time. Computerization has done to circulation, acquisition, cataloguing and serial control activities through SOUL. Reading room, reference, news paper clippings, CAS, bibliographic, document delivery, OPAC and internet facilities are the services provided in the library. The collection includes documents on science and technology, humanities, social science, etc. which are mainly taught in the university. UGC Info-net e-journals consortium is accessible here not only in the library but also in the university's various institutes, offices, faculties and departments located in the university campus through intranet. The library has got the largest number of staff in comparison to any other university library in Gujarat that is 36 professional posts and 90 others as clerical and administrative positions. The library's opening hour is 8:00 am to 22:00 pm on all working days.

- **Saurashtra University Library**

This university library was established in Saurashtra University, Rajkot in 1967. The library has 1, 48,000 books and subscribing to 170 journals. In an average, 3000 books are added to the collection every year. Apart from the conventional services the library provides electronic services like on-line OPAC, internet access, CD-Rom based services and electronic media facility for users. The library has partially computerized its acquisition, circulation, cataloguing, serials control and OPAC using SOUL software. Rs. 3, 50,000 is for books and Rs. 7, 00,000 for journals were provided in the last annual budget. E- Journal consortium of UGC Info-net is also accessible in the library. The

library has 8 professional staff and 20 other staff. The library's working hour is from 10:30 am to 18:10 pm.

- **Sivabhai Umedbhai Granthalaya**

This library is the university library of North Gujarat University, Patan and established recently in 1988. This library has a collection of 34,539 books and subscribing to 120 journals. The annual budget for books is Rs. 3, 25,000 and for periodicals it is Rs. 75,000. The library provides services like reference, bibliographic, user education, photocopying, audio-visual, cyber café, internet, OPAC , CAS, newspaper clippings etc. The library collection includes documents on management, library and information science, computer science, science and technology, social sciences, language, literature, etc. Computerisation of the library system started with CDS/ISIS software but currently it is using SOUL to develop database of books and journals. The library also receives e-journals through UGC- Info-net programme. The library has 5 professional staff and 6 others. Library's working hours is from 10:30 am to 18:30 pm.

- **South Gujarat University Library**

It is the university library of South Gujarat University, Surat and was established in 1968. It has a collection of 14, 27, 60 books and 141 subscribing journals apart from a rich collection of theses, dissertation, cassettes, film, etc. It has an annual budget of Rs. 5, 00,000 for purchase of reading materials. The services of the library are circulation, reference, photocopying, reading room, etc. The collection has documents on subjects like language and literature, public administration, social sciences, rural studies, science, computer, library and information science, etc. Computerization of the library has started by installing SOUL and e-journal consortium is also accessible in the library. It has got 8 professional positions and 21 other staff. The library opens from 9:00 am to 21:00 pm.

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