Chapter 4

Review of Related Literature
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Review of related literature is very essential for a new research topic. The study of related literature implies locating, reacting and evaluating reports of researches as well as reports of the casual observation and opinion that are directly or indirectly related to the individual planned research project. In any worthwhile study in a field of research, the researcher must have an adequate and updated knowledge of the work that has already been done in the area of his/her research. In brief, this chapter presents an overall review of the important studies conducted across the world. The researcher reviewed only those studies, which were similar to the present study. The research on application of Total Quality Management in Library and Information Science has emerged from practical needs of organizations. However, the literature is mostly conceptual and practitioner-oriented.

The TQM field has yet to develop a theoretical and empirical base and it lacks a systematic analysis of current body of literature to help identify an agenda for future research. Such a literature review helps researchers and practitioners understand the development of the field, and it will guide future development by identifying gaps between the actual and potential needs of the TQM philosophy and its current status. Though much research has been conducted in the field of TQM implementation but no universally accepted TQM tools and technique or elements presently exist for the measurement of quality in Library and Information Center. Actually, researchers have different ideas about TQM concept and elements. However, the widely accepted notion is that TQM is a philosophy or approach to management focusing on continuous improvement, customer focus, systematic process management, and teamwork. The implementation of such a management philosophy requires a set of practices.

As the focus on modern approaches to library management and research grew in the 1940s and 1950s, articles and research studies on aspects of evaluation immediately began appearing. Techniques and frameworks have been adapted from various disciplines outside the library science field: industrial process management, organizational research, institutional research, behavioral dynamics, social programme review, and educational assessment, to name the most heavily used.
Initially, effectiveness and user satisfaction were studied more thoroughly in public libraries and academic libraries, while much of the earlier literature on academic libraries seems to emphasise scientific measurement details more than concepts of quality: studies of catalogue use, operations research for library internal functions, cost/time factors, and the design of information retrieval systems. Taylor (1972)\(^1\) stressed the need for academic libraries to move from measures of quantity to ones of process and user satisfaction, anticipating the ideas of TQM well before its arrival in most U.S. businesses and professions. Dougherty (1972)\(^2\) called for quantification of outputs and their impact, and linked staff participation to library effectiveness in a systems management approach. Orr (1973)\(^3\) suggested a distinction between library quality and value and four areas within which to define measurement variables, i.e., resources, capability, utilization, and beneficial effects. Du Mont and Du Mont (1979)\(^4\) developed criteria and measurement techniques for assessment of library effectiveness based on models of goal attainment, efficiency, user satisfactions and behavioral factors. They also delineate the gaps in the varying approaches taken to library effectiveness and design a taxonomy that attempts to integrate the approaches. The literature of organisational dynamics and behavioral styles of management and interaction also contributed to the evolving notions of a well running library. Thus, leading up to the seemingly recent quality movement, one realizes that there is no dearth of research and writing on how to determine library goodness and how to manage for change and improvement. As the TQM movement began to be adopted in libraries, there have been rushes of practical and theoretical publications outlining the basic concepts and process of application. At the other extreme, TQM does imply some form of benchmarking or process control, more than just participatory management or quality circles. The emphasis on user surveys is not new, but the reorienting of the whole organization toward a focus on customer satisfaction, the broadening of the definition of customer and the evaluation of processes with this in mind goes beyond earlier views of how to solicit and interpret use and user data.

Pilling (1997)\(^5\) stressed that several major features of TQM are highly relevant for libraries, such as, the emphasis on customers, the delegation of work, the involvement of staff at all levels, process rather than function, and the need for continuous improvement. The British Library Document Supply Center (BLDSC) embarked on its TQM program in 1992 as greater awareness of customer needs, budget constraints and increasing competition in the document supply business made
it vital that the centre should reexamine its processes to ensure that it continued to meet customers' requirements for quality and services. Several libraries have claimed considerable success in the application of TQM, although time is needed if full success is to be achieved. Khurshid (1997) also discussed the possible application of various TQM tools in cataloguing operations and focused on the methods which libraries have adopted to identify user needs and to improve services and to meet user needs. The result showed that many of these methods are based on the TQM philosophy. In 1998, a study examined TQM implementation in three community college libraries and learning resource centers in the USA, which concluded that the leadership role is significant in promoting among staff the goal of never-ending improvement and in maintaining the momentum of the quality effort (Byrd, 1998).

According to Adamantidou and Kouri (2000), the implementation of TQM in the central library of the National Technical University of Athens in Greece and pointed that there is no perfect example of the implementation of improvement processing of quality, just as there is no perfect model of reorganisation. The proper approach that will be adopted will be in connection with the internal philosophy, culture and the external environment of the library in which it will be implemented. Some study also reveals that the implementation of TQM in reference services and its features, that addressed that the ability to design reference services that users will continue to value in libraries of the future is limited by current professional reference practices. These limits are related to the failure to incorporate TQM principles into the design and practice of present-day reference services. TQM principles were utilised to discuss the contrasts between TQM principles and current reference practices. Hainan University Library implemented TQM in July 2004. The TQM implementation brought many changes in this library and brought it from being an isolated island into the international arena. The process of implementing TQM in libraries stating that, it involves a conceptual change in library professionals and a cultural transformation in the organizational operations. Teamwork is important for the successful implementation of TQM. Every step of the process depends on the constant support of top management. Their role determines how far the implementation can go. Therefore, once a decision is made to apply TQM, strong leadership is required. TQM provides a model and a benchmark as guidelines in making new strategies in libraries facing today's great changes. In India, the library of the Indian Institute of Management, Lucknow, (IIML) has been conducting innovative continuing
professional development programs for professionals engaged in the library and information sector for many years. More than 30 such programs are employed in the context of library and information systems and services in areas such as: quality management; marketing; information technology applications; human relations; and communication (Raina, 2005).

Institutionalising TQM in a library requires a quality culture among the library team that prompts customer delight through continuous improvement involving participatory and creative problem-solving approaches and a team ethos. Another study among Indian research libraries, Sherikar and Jange, (2006) showed that none of respondents were fully satisfied with the work culture in their library. However, the majority of professional staff were highly satisfied with the librarian’s leadership quality, creating and maintaining cordial relationships amongst library professionals. A key observation was that in services there was a direct interaction between a customer and the library staff and fulfilling their requirements through the service delivery process is both a challenge and an opportunity. A university library adopting total quality management in its activities and services needs to emphasise the importance of quality management to services.

It is however, clear from above discussion that while quality in respect of industries fulfills the ultimate goal of user satisfaction, the same may be adopted in library and information centers. Quality in library services is most effective in user-oriented services.

Fischer and Reel (1992) conducted a study on application of TQM in hospital library at Alliant Health System (AHS) Library, Norton Hospital and Kosair Children's Hospital in Louisville, Kentucky. The main objectives of the study were to establish TQM benchmarks for frequency of library uses and examined the significance of its role in clinical care. He assessed the clinical value of information provided to users and evaluated the performance of library staff and the quality of service. Using a methodology designed to allow both library user and non-user to respond, 2,091 questionnaires were distributed to physicians and nursing and allied health personnel. The areas surveyed included frequency of library use, impact of information received on clinical judgments, cognitive value of the information and satisfaction with library products and services. In their research, they found that the library has a substantial clinical role. Eighty-eight (88%) percent of reporting physicians agreed that information from the library contributed to higher quality care.
Nursing and allied health were less convinced of the importance of the library's clinical role. Sixty-nine percent of nursing personnel and 58% of allied health personnel agreed that the library contributed to higher quality care. Nursing and allied health personnel also used the library less frequently than physicians.

**Lawes (1993)** studied the Quality Management in the Library and Information Service Profession. He tried to establish a contact between a service provider and its customers based upon standards of service and provides the methodology for measuring performance in information services. The study reveals that Quality assurance provides benefits in marketing and public relations, service to the customer, improved organization and efficiency within the department and improved staff morale. He further pointed out that attention to quality management produces proactive library service and the vital link between information services and the administrative sector.

**Brophy (1993)** shared his experience with the implementation of a quality standard ISO 9000 in the library of the University of Central Lancashire. The basic aim of implementing ISO 9000 in the library was to provide highest quality library services to the users. There were three levels in implementation. At the strategic level, an overview of the library's performance and success in meeting strategic aims was done. At the operational level, the quality of service the individual user receives was analyzed. At the third level, monitoring, maintaining and improving quality was ensured. He emphasises that the success of any quality management system can only be judged by the impact of the services received by the libraries users. He suggested that the quality management approach helps to focuses and encourage the library to explicitly priorities its efforts to achieve a range of services that truly meet users needs.

**Butterwick (1993)** described the introduction and operation of a "Quality Improvement Programme" based on the principles of TQM, within the Library at the Queen's University of Belfast. A structure was developed which involved 2 layers - a Quality Improvement Council, composed of staff from all functional areas of the library and a number of quality improvement teams, each of which would typically have 4-8 members looking at topics which directly relate to their work. The quality improvement program introduced a new method of looking at problem solving and service development. The staff have become more aware of the problems which other staff faces and have developed a genuine understanding of the need to satisfy the
requirements of these internal customers. He focuses on the management infrastructure which was put in place prior to starting the programme off and on the changes in organisational culture being brought about by the TQM processes.

**Stuart and Drake (1993)** studied TQM in Georgia Technology Research Library. They pointed out that commitment, ingenuity and employee empowerment are essential ingredients for success. Front line staff is crucial for customer satisfaction and quality improvement. The author’s states that Georgia Technology Research Library computer and communications intensive camp is having sophisticated users, and its library developed its own version of TQM to provide content based and value added information services.

**Webb (1995)** studied quality in special libraries and opined that quality is considered now a days more formally as part of organisational and departmental policy and planning. The research surveyed 110 organizations of differing size and with varying objectives. The aim was to gather and analyse data on a range of quality-related policies and practices. These were seen to cover a broad range of activities, both formal, as in TQM policies or quality assurance procedures and less formal or localized initiatives which nevertheless had the aim of improving quality. It was seen as important to consider these activities at both organizational and departmental level. This has required the setting up of a variety of quality related procedures and performance measures which are now being developed as a result of much more customer or user liaison to ensure that the services provided are appropriate to the users’ needs at a point in time and can adapt promptly as those needs change.

**Doyle (1995)** developed the Perceptions of Library Service Questionnaire (PLSQ), a tool for evaluating the students awareness and use of library services and staff support. PLSQ contains sixteen items for measuring user satisfaction. The study describes the development of a reliable, short questionnaire (PLSQ) to measure student perceptions of and satisfaction with quality of service in an academic library. The objectives of the study were to evaluate student awareness, uses of library services, and staff support. It included the simultaneous development of a 'factual' questionnaire and two small-scale observational studies, backed up with market research-type interviews to evaluate the effectiveness of the 'help desk' and ease of use of the computer catalogue. A triangulation technique was thus used to provide indirect evidence that the questionnaire was validly measuring user satisfaction. The results from the initial trial of the questionnaire are described and compared with
relevant findings from the factual questionnaire and the help desk study. The two samples completed different questionnaires, the frequency results were either in complete agreement or mutually supportive. The help desk study results are also supportive. The statistical analyses of final sixteen-items PLSQ produces internally consistent responses and which appears to measure satisfaction with staff helpfulness and physical conditions in the library and perception of ability to find information and knowledge of CD-ROM and other services.

Clausen (1995) presents a guideline for development of certifiable quality management systems for the library and information sector on the basis of Nordic Information Quality Project. The study begins with an introduction to fundamental ISO 9000 philosophy, concepts and definitions. All 20 main points of ISO 9001 receive a thorough treatment with respect to the library and information sector. The staff members concerned describe experiences from two test sites and analysed the two reports. It also describes the implementation of ISO 9000 in the library and information sector in practice, emphasises the quality requirements of LIS and analyses the process of certification in Nordic counties.

Hernon and Calvert (1996) made an attempt to develop a common tool for measuring service quality in university libraries. They developed a self-reporting data collection instrument containing 61 items for measuring service quality in university libraries in New Zealand. They opined that developing a generic instrument applicable to all libraries in all circumstances were not possible and so it was good to prepare an instrument considering all local requirements and objectives of the library.

Jain and Gupta (1996) made a study under the title “TQM in library and information services”, discusses TQM, as a new management concept where in quality is the driving force of the entire activity cycle from beginning to end. It also discusses various aspects of TQM with particular reference to its implication in library and information service.

Johannsen (1996) highlights the specific library management roles and responsibilities concerning ISO 9000 implementation. It is based on practical experiences from the Nordic quality management project. He explains the purposes of quality management models and evaluates different quality management models. He further identifies key management roles using Mintzberg’s approach and presents an implementation model for an ISO 9000 project emphasising the managerial functions and tasks.

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Vergueiro (1996) conducted a study on quality management in Latin American public libraries. The study focuses on one of the various possibilities of information provision in Latin American public libraries and find out how to improve their effectiveness to bring the best possible benefits to the communities and their information needs. The researcher defends the view that Latin American country uses quality management to improve the services that provide through their public libraries. The author suggests that public librarians in Latin American countries should be aware of the specific characteristics of their institutions and their clienteles. Further, he analyses the possibilities for implementing quality management in Latin American public libraries, as well as the limitations they may eventually face to fulfil this objective.

Herman and Klauta (1996) conducted a study on the organizational map and important aspect of achieving total quality management in a pharmaceutical and medical library at Slovenia. He defined quality by the degree of perfection to which some products satisfy its buyers or service meets the needs of its customer, and TQM as the quality of the function within the information process. It emphasises three important views; customer, library and environment.

Holt (1996) elaborated the agenda for quality in twenty first century public libraries and discussed the importance of partnerships with a wide variety of entities along with the need to ensure the security of library users as well as their right to privacy and also emphasises the need for more effective public relations, marketing strategies and the importance of listening to the customer as keys to building an organization characterised by exemplary quality.

Tompkins (1996) discussed on quality in community college libraries and forcefully highlighted that academic libraries may fit in the new quality paradigm if four conditions are fulfilled. Quality is a campus wide initiative; the convergence of the print based and digital culture; library space are designed as correlative to the classrooms with resource, staff and services for interactive learning; and organic relationship between the classroom and the library’s role in support of independent life long learning.

Pilling (1996) conducted a study on Total Quality and Customer Service at British Library Document Supply Center. He describes the setting up of a Total Quality Management programme in conjunction with a specialist consultancy, and its implementation through a steering group, process improvement groups and a series of
kaizen continuous improvement of process workshops. He concludes that TQM has contributed significantly to improve in speed of service and the quality of relationships with customers. Total quality demands time and persistence. To succeed in an organization there must be support at the very top and commitment at all levels. 

Williamson and Exon (1996) conducted study on Quality Movement in Australian University Libraries. They describe quality process as viewed from the responses to a questionnaire circulated to Australian University Librarians in 1994. The main objectives of study were to discover how deeply embedded libraries were in the university's quality initiatives, which was another way of asking what importance was placed upon libraries by their parent universities in regard to quality processes. The questionnaire was sent to the librarians of thirty-six public universities, out of which thirty were returned. However the response rate was 78.9 percent. The result shows that in many cases, university libraries were ahead of their universities in the introduction of quality assurances processes and management and that a high degree of education in quality was reported within their senior management. The study shows a growing tendency for university librarians to have had training and education in quality management and in many cases to be overtly or otherwise implementing such practices within their own libraries.

Pors (1996) conducted study on students' attitude to the service quality of libraries in Denmark. The main objectives of the study were to compare the expectations and perceptions level of students in Denmark and opined that the attitudes of students about their library services are very low compared to their expectations.

Nitecki (1996) conducted a study on service quality in academic libraries. The objectives of the study to measure the service quality of the reference service offered in academic libraries through SERVQUAL and to see how far SERVQUAL tool was suitable for assessing service quality in academic libraries. The study indicates that reference service providers should concentrate on both showing sincere interest in user problems and willingness to help users for increasing the service quality of reference service. He found SERVQUAL instrument is most suitable for measurement of quality services in library after some modifications.

Pritchard (1996) summarises the attempts to define and measure quality and effectiveness in academic libraries, from traditional evaluative studies to TQM and new research on user-defined criteria. Focusing on the organizational analysis of the library as a whole and the contribution it makes to the university or college. The
article outlines a number of fundamental concepts and tools common to models of evaluation. The particular attention is given for the assessment in higher education as a whole and found ways in which determinants of library quality must be linked to educational outcomes.

**Mistry and Usherwood (2000)** conducted a study on TQM in British academic libraries. They examined the impact of Quality Management System (QMS), particularly with regards to motivation on front line staff in academic of library and information services (LIS). The researchers aimed to identify what type of academic LIS have QMS, and seek to identify any future trends. For the purpose of study, the questionnaires were send to various LIS. The respondents were given approximately ten days to a fortnight to reply and also asked the Chief Librarians to disclose whether they had installed various processes in their library. A few academic LIS stated that the above processes had been installed and may have come to a post hoc rationalisation that they had Quality Assurance. Other LIS also stated that the processes had been installed but denied that they had a QMS. Thus, there is a problem of definition associated with quality management.

**Lozano (1997)** conducted a study on ISO 9000 and TQM models. He focuses on the most outstanding differences between the ISO 9000 norms and TQM as forms or manners of managing quality used in some information services. He compares two models of total quality: European Foundation for Quality Management and Malcolm Baldrige Awards. The study concluded that ISO 9000 and TQM models are very important to the information services.

**Quinn (1997)** made a theoretical study about service quality concepts and its adaptability in academic libraries and he found that the service quality concepts could very well be adapted to reference service, access services, collection development etc. It would give more reputation to the library as well as good satisfaction to the users. He noted that the library researchers consider quality service as what the user expects and finds the best way to meet these expectations.

**Khurshid (1997)** conducted a study on the application of TQM in cataloguing. The main objectives of the study were to find out the possible application of various TQM tools in cataloguing operations. The methods applied by libraries to identify user needs and to improve services to meet user needs in the cataloguing and related areas, which may need to be adapted to conform more closely to TQM principles. It attempts to review various cataloguing trends and practice which are either already
based on TQM principles or it can be changed to conform to those principles. The results showed that many of these methods are either based on the TQM philosophy or can be adapted to it. He suggests that the application of TQM in cataloguing operations is not only possible, but many libraries have already applied a number of its tools successfully. It may also need to be reviewed for their possible application in cataloguing operations.

**Dow (1998)** conducted a research on using assessment criteria to determine library quality, and developed a special tool using educational impact as an alternative measure of library service quality based on Association of Higher Educations Principles of Good Practice for Assessing Student Learning. He reported that it was a good tool for assessing the impact of library services on the teaching and learning activities of students based on a study conducted at River Campus Libraries of the University of Rochester.

**Rajyalakshmi (1998)** conducted the study under the title “Total Quality Management implications for implementation in libraries and information centers”. The study was mainly based on the analysis of the most frequently accepted and proven track of TQM philosophy and its implications and pitfalls. The study discusses the cultural change tactics approach for TQM; creating user information satisfaction; enterprise resource planning, and pitfalls in implementing TQM and the possible solutions.

**Osman and et al. (1998)** conducted a study on quality services, policies and practices in Malaysian libraries and focuses on major need to understands perception of quality from the library professionals. A survey was undertaken to obtain feedback from librarians. Questionnaires were sent to all (10) university librarians, all (13) state public libraries and six selected special libraries. The response rate was 100 per cent from university libraries, 77 per cent from public libraries and 100 per cent from special libraries. In which he find out the perception of librarians, the policy infrastructure available, the obstacles faced by librarians in the implementation, collection development, implementation of ISO 9000. They found that in Malaysia, under the modified Budgeting System libraries are expected to plan in detail what they intend to do for the next two years at least. The details such as specific activities, method of implementation, resources needed, impact, outcomes are required before programmes are approved. The main obstacles in the implementation of quality in libraries have been identified by the respondents, staff problems, lack of time and lack
of funds. They suggested that a more in-depth survey is needed in order to ascertain whether or not their strategies are effective and for this there must be an input from the client's themselves of quality measures and the strategies they employ to ensure quality services.

**Data and Gokhale (1999)** conducted a study on implementation of ISO 9000 in Industrial Libraries in Mumbai. The main objectives of the study were to find out the level of quality services of industrial libraries and to compare the result of ISO certified libraries and non-certified libraries. For this purpose, 13 industrial libraries in Mumbai were selected for survey. Out of these 9 organizations were accredited with ISO certification, 4 organizations had included their libraries within the scope of ISO. Different sets of structured questionnaires were distributed to librarians and users. A separate questionnaire was distributed to ISO Certified Libraries. The data gathered from the survey was analysed using the weight method. The weightage was measured on a five-point scale. They argued that an attempt to implement quality standard in a library itself would improve the quality of library services. It is obvious that quality management concepts and methods have begun to penetrate in the industrial Libraries of Mumbai. However, until now the influence of quality has been mainly superficial and worked upon in the libraries areas crucially akin to the line of business of the parent body. The trends and future plans of libraries studies show a probability of a wider applicability and a more profound impact of quality concepts in the coming future.

**Jayamalini (1999)** discussed the implementation of TQM in library. The main objectives of the study were to find out the evolution, principal stages and relevancy of TQM in library and also explore the evolutionary theory of TQM in library and measured on different stages like inspections, quality control and assurance etc. The study also measured the comparative analysis and actual difference between TQM organization verses traditional organizations. It also investigates the possibilities for implementation of TQM in all areas and its benefits in library and information services. The study indicates the main barriers, potential problems and opponents to the implementation of TQM have been encountered in all types of organizations including libraries.

**Raina and Dayal (1999)** conducted a study on TQM in library acquisitions at Indian Institute of Management, Lucknow. The study analyses the effective and well thought out instrument in the form of "Acquisition policy" and "Budget Allocation Policy"
which can lead to the development of an active collection instead of a passive one. To support the statement, the collection development practice in the library system of IILM have been adequately illustrated.

Thapisa and Gamini (1999) studied on perceptions of quality services at the University of Botswana Library (UBL). The study insinuates to achieve real quality service and concentrating on the expectations and needs of customer in Botswana university library in all areas of services. The main objectives of the study were to measure how far the university of Botswana library has succeeded in delivering services to its clients, and make recommendations on how to improve the level of quality services. The researcher investigates the UBL among the students and staff in all five faculties. A questionnaire was administrated to 60 students and 20 teaching staff in each faculty to make sure that different strata in the population were correctly represented in the random sample. These questionnaires covered three main section of the library, i.e., the physical facilities, technical and computer appreciation and also behavior of staff. The hypothesis were accepted and used for testing. The hypothesis test shows the user information seeking behavior and indicates that the ULB is not lacking quality services. It further provides a comprehensive information programme that is predicated on the needs and activities of the users, curricular requirements and research.

Cook and Thompson (2000) conducted a study on user perception of library service quality and explore the feasibility of SERVQUAL in a research library setting. They found that the original tool containing 22 items and five dimensions that could very well be used to measure research library service quality. The Reliability dimension in SERVQUAL tool was separately studied to see how far it could be used to understand the problem areas in library services.

Chao (2000) studied the service quality of academic libraries on the web aiming to identify suitable criteria and develop an instrument for assessing the service quality of academic library websites. The study resulted in the development of a tool containing 16 criteria namely presentation, speed, heading and titles, search capability, special collections, content, graphic design and services etc. He argued that it was a good tool for measuring the service quality of all library websites accessible on Internet.

Nitecki and Hernon (2000) conducted a study on service quality in Yale University libraries and analysed the SERVQUAL instrument for converting it to an instrument that reflects the expectations of a library and its users. To determine the feasibility of
the change and to compare the results of studies conducted with other tools for measuring service quality, more items were to be added to SERVQUAL instrument to represent all activities and services of the library, but all its determinants are important in service quality measurement of libraries.

Banwet and Datta (2000) studied the effect of service quality on post-visit intentions. They developed a special tool containing service quality scale, service satisfaction scale, and service importance scale to assess the post-visit intentions of users. They reported that reliability of library services, service quality and user satisfaction were very important in post-visit intentions of users.

Adamantidou and Kouri (2000) studied the implementation of TQM in the central library of the National Technical University of Athens in Greece. They emphasised on the requirement of TQM in libraries, its elements such as participating management, the personnel training and the responsible service of customers. They concluded that there is no perfect example of the implementation of improvement processing of quality, just as there is no perfect model of reorganization. The proper approach that would be adopted will be in connection with the internal philosophy, culture and the external environment of the library in which it will be implemented. They further suggested that libraries are up to improve these principles, which already have been valued positively by them and put them partially in practice.

Tam (2000) conducted a study on quality management theory and practice in Australian academic libraries. He elaborated the ideas of theoretical essence of the Demings management method concerns the creations of an organizational system. It is used to compare practices in several academic libraries in Australia. The methodology used to personal observation of theory and practice by investigators at the different university libraries in Australia. In his research, he observed quality management in the university such as teaching and learning process and its awareness in recent years. The value of quality within universities is generally a less structured search for effective mechanism to assure and improve quality. Most of the institutions emphasise consultation, monitoring and integrated processes. The libraries adopted the identified needs and implemented the changes in all procedures of library services to maximize the use of resources.

Dabas and Singh (2000) conducted a study on application of Total Quality Management to the University Libraries in Punjab. They attempted to report the finding of a study conducted to measure TQM application to the university libraries in
Punjab. This study analyses the quantitative statistics of four university libraries of Punjab and concludes that Punjab University Library, Chandigarh, is the highly used library. The per unit cost and processing cost of each book acquired by purchase is lowest in Punjabi University Library, Patiala. The total library cost per user, staff salary cost per user and staff salary cost per book is lowest in Punjab University Library, Chandigarh and highest in Punjabi University, Patiala. The cost of staff salary per book is highest in Punjab Agriculture University Library, Ludhiana. The data was collected through questionnaire. The result of the user survey indicate that Punjab University Library, Chandigarh scored 3.578 points and ranked at first position with regard to quality product in services and consultation, while Guru Nank Dev University Library, Amritsar scored the lowest points.

Abblu and Rao (2001) conducted a study on application of the concept of Total Quality Management in library information service. The objectives of the study were to find out the concept of TQM in library information service. The concept of TQM is a recent development in management science as a quality improvement programme for any organisation. The study reveals that quality is a measure of the achievement of an organisation in term of customer satisfaction. It relates to the quality of production and also to every aspect of service.

Cook and Thompson (2001) studied on psychometric properties of scores from the web-based LibQUAL+ study of perceptions of library service quality. They investigated the psychometric integrity of scores on thirty-four items of the LibQUAL+ evaluation of perceived library quality. Data were collected from the 4407 respondents. The main objectives of the study were investigated LibQUAL+ score structure, score reliability, score correlation and concurrent validity coefficients, scale means and scale standardised norms. Both generic and specialised norms were eventually developed for a large sample of users at ARL institutions, LibQUAL+ norms could then facilitate the ultimate application of LibQUAL+ i.e., identifying areas of potential improvement at library and identifying similar libraries with more favorable profiles whose behavior might then be modeled in pursuit of providing better service to library users.

Bertot (2001) studied the service quality of network based library services offered with the aim of identifying suitable service quality criteria in which they identified technical infrastructure and extensiveness, technical infrastructure and service quality, information content and efficiency, information services and extensiveness,
information services and efficiency, support and extensiveness information services and efficiency, supports and extensiveness as service quality criteria suitable for libraries in a networked environment.

**Cook and et al. (2001)** in their study corroborates that a single second-order factor is associated with the delivery of high-quality library services in a research university environment. However, a hierarchical factor analysis also demonstrated that research library users simultaneously think about library quality at multiple levels. The LibQUAL+ diagnostic tool, a product of the ARL's New Measures Initiative shows that although a single factor dominates user thinking about library service quality, all the items used in the survey suffuse this factor. Nevertheless, several first-order factors contribute important unique information to the notion of service quality. As different types of users place varying degrees of importance on the first-order factor, the utility of the hierarchical model is demonstrated.

**Crossno and Berkins et al (2001)** studied on assessment of customer service in academic health care libraries and measuring customer service, ACSAHL vs SERVQUAL at University of Texas Southwestern Medical Center. The purpose of this study was to test the comparability of the results of SERVQUAL with a revised and shortened instrument modeled on SERVQUAL. The results indicated that more respondents preferred the shorter ACSAHL instrument to the longer and more complex SERVQUAL instrument. ACSAHL appears to measure the same type of data in similar settings, but additional testing is recommended both to confirm the survey's results through data replication and to investigate whether the instrument applies to different service areas.

**Behera and Sahoo (2001)** discussed the application of Quality Assurance System in libraries and obtains feedback from various levels in order to improve the performance of the library and information service (LIS) activities. The study reflects on the benefits from quality system and explains the various steps of TQM and highlights the introduction of TQM in libraries, necessary prerequisites and methods in LIS Activities. They suggested on the future development of total library quality management (TLQM) and also the areas of application in libraries have been made.

**Dutta (2001)** conducted the study under the title, “Quality is personal (QIP)- Test: Quality Consciousness- Test for the library personnel”. The objectives of the study were to find out quality consciousness of the library personnel in Smt. Hansa Mehta Library, Central Library of the University Baroda. The analysis was based on the
Quality is-Personnel Test (QIP Test) that was tailor-made specifically for library personnel. The samples taken were of assistant librarians, sectional heads and technical assistants. The study suggested the strategies to enhance the quality-consciousness of the employees keeping in view the rapidly change scenario of the libraries.

Gupta and Kisan (2001)\(^{57}\) conducted a study on TQM in health libraries. Quality of library services is the area of library activity with rapidly growing importance. The use of quality management system, procedure and techniques is a recent development, which mirrors the sector wide interest in both a customer focused service and definition of what constitutes a quality product. They discuss TQM, step to TQM and ways a library might use principles of TQM to enhance library services. It also deals with the activities for implementing TQM in libraries.

Majid (2001)\(^{58}\) investigated users perceptions of library effectiveness in Malaysian Agriculture Library. In which, he pointed out some factors that contributed passively in shaping user perception of library effectiveness. A questionnaire based survey of five major agricultural libraries in Malaysia were conducted. He found that the adequacy of collections, services and facilities were closely linked to the perceptions of library effectiveness. The questionnaire was pre-tested on eight University of Malaysia academics and five Malaysian Agricultural Research and Development Institute scientists, to ensure reliability and effectiveness of the instrument. Certain other factors contributing positively to the perception of library effectiveness were the adequacy and effectiveness of library promotion, involvement of users in the selection of library materials, convenient library location, participation in user education programmes, and availability of assistance for using library resources and facilities, and subject background of library professionals. He further suggested that for any reliable library effectiveness study, all factors associated with user satisfaction should be investigated together with regard to a wide range of factors covering resources, services, and activities.

Patel (2001)\(^{59}\) conducted a study on TQM technique for Library and Information Services, and find out how library and information centers meet new application challenges and growing qualitative standards. It tries to focus on the areas where Information Technology can be applied to modernize the information science for achieving twin objectives of efficient work culture and conformity to quality requirements.
Ramesh and Bhattacharyya (2001)\textsuperscript{60} conducted study on TQM in Special Libraries with special reference to National Council of Applied Economic Research (NCAER). The main objectives of the study were an attempt to search how for the special libraries and information centers implement TQM principles in their activities and NCAER library is taken as case study in this context. The infrastructure, services and plans were discussed and conclusion was drawn on efficiency in respect of both TQM and ISO-9000 standards. However, quality management principles have successfully been applied only in British school library and information center, but form the case study of NCARE cited in every aspect of its service, plans and policy is evident.

Sharma (2001)\textsuperscript{61} demonstrates how to take effective steps towards the larger goal of total readers satisfaction and elaborates the modern concept of TQM. He defines the meaning of quality control and its evolution, and depicts the relation between quality and user's. He further describes the implementation of TQM in library and information services and examines the benefit of quality management such as efficiency, continual and systematic improvement in the activities of the library as a whole.

Sornam (2001)\textsuperscript{62} analyses the inevitable changes and the driving forces which necessitated library professionals for effective change and discussed in detail the application of TQM in enhancing the capabilities of LIS professionals through personnel performance assessment, personnel skill development, developing team spirit and development of quality culture.

Cullen (2001)\textsuperscript{63} reported that academic libraries are facing two major threats: a global digital environment and increasing competition. They must improve the quality of their services in order to survive. The study explores the relationship between service quality and user satisfaction and examines how user surveys have been employed in a number of previously published data sets. A model, which demonstrates how satisfaction can be seen as both, a micro level response to individual transactions and at the macro-level as an outcome of service quality is proposed. Using an evidence-based approach, gaps between user expectations and perceptions are explored as well as the gap between user expectations and managers' perceptions are described.

Snoj and Petermanec (2001)\textsuperscript{64} conducted a study on quality of faculty library services and developed a special tool for assessing the overall service quality in libraries in Slovenia. It contains 45 items grouped under five quality dimensions, namely physical surroundings, equipment and information technology, collection,
information, library services, and staff. They reported that ‘staff’ is the important
dimension affecting library service quality.

Yang (2001)\textsuperscript{65} surveyed the faculty of Texas A&M University to assess their
perception about the library liaison programme and its impact on library services
offered to them. He found that the liaison programme was necessary for the faculty
members as it was beneficial to them to get quality services and information about
forthcoming changes and developments in the library.

Jayasundara (2001)\textsuperscript{66} studied the student’s and teacher’s perception of service
quality in university libraries of Sri Lanka and measuring user perception of service
quality. He reported that there are eight determinants to be assessed to measure
service quality in academic libraries. The study indicates that qualities of services in
academic libraries are important for the users in the context of satisfaction.

Phipps (2001)\textsuperscript{67} in his research work, measuring service quality through LIBQUAL+
found that Association of Research Libraries (ARL) libraries begin seriously to assess
how well they are anticipating, meeting, delighting students and faculty. The primary
focus should be on understanding customers’ needs, learning quick and clean methods
of data gathering and analysis, improving critical processes and developing internal
capacity to be successful in the future. He further suggested that to transform the
work, libraries must begin listening and acting on the voices of customers, staff, work
processes, and the organization for the purpose of learning new directions and
partnering with customers. He suggested that measuring the performance of processes
and staff is also necessary to improve the services. Special methodologies like
SERVQUAL, Lib QUAL+ etc. can also be used for ascertaining the views of the
users.

Cook et al. (2001)\textsuperscript{68} pointed out that a single second-order factor is associated with
the delivery of high quality library services in a research university environment.
However, a hierarchical factor analysis also demonstrated that research library users
simultaneously think about library quality at multiple levels. The LibQUAL+
diagnostic tool, a product of the Association of Research Libraries (ARL’s) new
measures Initiative shows that although a single factor dominates user thinking about
library service quality all of the items used in the survey use this factor. Nevertheless,
several first-order factors contribute important unique information to the notion of
service quality.
Chin et al. (2001)\textsuperscript{69} elaborates a six-stage Quality Function Development (QFD) approach based on an empirical study of the provision of the library and information services (LIS) in a technical organisation in Hong Kong. They indentified the customer requirements through the focus-group brainstorming and critical incident interviews with users. The study identified 45 critical incidents and translated them into 23 satisfaction items. It points out the key quality dimensions and illustrates how the QFD approach can lead to effective quality deployment in the provision of LIS. The approach provides a practical means that helps organisations to identify customer satisfaction criteria, and integrate improvement strategies and plans into management decision-making processes.

Verma (2002)\textsuperscript{70} conducted a study on the quality management approaches followed in leading libraries in Indian with special reference to ISO 9000 and TQM. The main objectives of the study were to assess the impact of six factors, i.e., status of library; size of LIS units; sector of organization; type of organization; resources; and quality awareness level on Quality Management through a questionnaire from a sample population of special libraries in India. He found that TQM approaches were preferred to ISO 9000 and suggested that use of quality standards required more innovation and initiation or reorganisation process.

Snyder (2002)\textsuperscript{71} measured library service quality with a focus on the LibQUAL+ and to create useful quality assessment tools for libraries. The project is based at the Association of Research Libraries (ARL) in collaboration with the Texas A&M University Libraries. He discussed the current status of library service quality assessment and the LibQUAL+ project, which measures outcomes to show how well an organization serves its users.

Begum (2003)\textsuperscript{72} studied on TQM in the academic library and describe what is quality and how to measure the quality services in academic library. She described key features of managing quality in libraries and developed tools and methods for quality assurance system in academic library. The study also discusses the customer expectation that is to some extent a cost simpler than meeting customer expectations through user survey and simply ask to customers what they find useful. He also describes the internationally accepted certificate ISO 9000 for its quality management system in academic library.

Whitlatch (2003)\textsuperscript{73} presented TQM implementation in reference services and its future. He suggested that TQM principles were utilized to discuss the contrasts
between TQM principles and current reference practices; focus on the customer; quality work the first time; strategic holistic approach to improvement; continuous improvement as a way of life; and mutual respect and teamwork. Finally, he describes the roles that library must fulfill to change the current professional culture.

Jeannette and Crowley (2003)⁷⁴ studied user perception of the reliability of library services at Texas A&M University. They reported that finding of materials on shelf, arrangement of materials, circulation procedure, signage, and experiences of using library catalogue were affecting reliability of services offered to users. They viewed that reliability dimension was an important dimension in library service quality.

Dadzie (2004)⁷⁵ stressed the importance of top management in an organization and examined the possibilities, challenges and constraints posed to librarians in the provision of quality service to the university community in Ghana. Using a case study approach, in the view of highly qualitative nature of the data collected on top management and interviews were used to elicit information from 12 out of the 14 professional librarians working in the library. The collected data was analysed and separated in various response categories, and statically analyzed. The study concluded that top management were fairly committed but were too financially handicapped to fulfill all the strategies and policies outlined.

Adamson (2005)⁷⁶ studied TQM in knowledge management, focuses on analyzing and organization's input, conversion and output activities to increase product quality and improve overall organizational performance. The future of TQM and boundaries of implementation are described in fast moving and competitive global marketplace. He argue that today the knowledge management approach is poised to replace the TQM as a quality approach measurement tool and focused on quality and speed of information proliferating. Therefore, to know effectively, organizations must learn to rationalize the leveraging process. The objectives of the study were to investigate if a sample of UK knowledge professionals would fit and identify with the competencies of earlier Knowledge Management (KM) researchers. Therefore, the focus of this study was on qualitative exploration of the KM role and the role holders. The chosen method of data collection and analysis was structured interview technique to elicit qualitative data to aid the understanding of KM professionals. The question consisted of open-ended question grouped into five categories used to twenty participants for and interview. The findings indicate that they are not well at managing knowledge,
recognizing its potential, and seeing knowledge as a crucial source of competitive advantage.

Tammaro (2005)\textsuperscript{77} explore the ideas about TQM in his article entitled "Recognition and quality assurance in LIS". TQM is the life long learning process continuously developed in LIS education. The main objectives of the study were to confine the need of co-operation in quality assurance and recognition all steps of education, and emergence of themes between quality assurance and individual recognition. This outlined, with learning outcomes focus, from the corporate image, studies recognition and quality assurance started on the basis of European Qualification Framework and Assurance Models. They emphasises on dimensions of quality standards in LIS education and find out how to make possible within the internationalisation framework in Europe in the field of LIS.

Rowley (2005)\textsuperscript{78} conducted a study to review the quality, performance management and impact assessment regimes that currently impact on public and academic libraries in the UK, and to explore the challenges for managers in finding their path through this quality maze and also seeks to urge consideration of the cumulative impact of such initiatives with their different notions of quality on public sector organisations and their quality management process.

Yang and Zhu (2005)\textsuperscript{79} studied on the methods of TQM application in digital library management. The emphasis was given on process control and continual improvement through TQM. They clearly mentioned the TQM theories and measures and the scientific tools used in the experiment in the Wenzhou University Digital Library. The study deals with a very broad range of subjects related to a digital library: system model of TQM for digital library, organization structure, and tasks of Wenzhou University Digital Library, task flow chart of electronic reading room, cause and effect of electronic reading room quality management, systematic model of enhancing electronic information acquisition rate, quality comparison of electronic reading room service etc. They also emphasises the essentiality of the TQM theory from the writer’s viewpoint and shows the necessity and importance of applying the TQM theory in digital library management.

Fontana (2005)\textsuperscript{80} in his study on managing quality in a National Library of Florence, Italy, explore the efforts and other issues associated with the development and implementation of a Quality Management System (QMS). The QMS procedures and products include managing interrelated processes as an entire system. He measured
customer satisfaction through a survey form and acting on the results, i.e., the creation of a Quality Manual, a Procedures Map, and a Services Chart. The analysis of the development of these procedures and results will permit the evaluation of this model for other National libraries.

Valls and Vergueiro (2006) conducted a study on the use of ISO 9000 standards for quality management in information services with a special emphasis on the Brazilian experience, aiming to provide support to information services managers in the use of quality management. He finds the main benefits, the concerns and the difficulties of the use of ISO 9000 mentioned by the analyzed literature. He observes a general predisposition towards the principles defined on the ISO 9000 standard series, which can be used as a parameter to guide and support quality improvement initiatives.

Wilson and Town (2006) investigated the long-term effects of a benchmarking exercise on the quality level of three UK academic libraries. The evidence from the investigation showed that the two libraries which were at stage one on the Quality Maturity Management (QMM) before the benchmarking exercise was remained there; and the library which scored at the penultimate level, level four, before benchmarking, was, four years afterwards, at level five. The tentative conclusion drawn was that benchmarking may only be appropriate for organisations with a existing high level of quality maturity.

Sherikar et al. (2006) studied the Performance Measurement of Quality Services in academic and research libraries in India. The main objectives of the study were to assess the performance of academic and research libraries in rendering their quality services. A total of 1200 questionnaires were distributed to the user community of ten university libraries of Karnataka, India, of which 768 (64%) were duly received from students, research scholars and faculty members. The quality dimensions in the light of SERVQUAL viz., Reliability, Responsiveness, Assurance, Access, Communication, Tangibles, Empathy and Security have been applied and the results indicate that the service quality dimensions of reliability, responsiveness, assurance, access, communication and tangibles applied to university libraries in Karnataka are found to be satisfactory to a little extent based on the scale techniques. The study suggests several areas for future research and for collaboration among library managers, educational administrators, scholars and measurement theorists towards improving the performance of library and information system in India to meet the
high standards of service quality in libraries to serve the users with utmost care and
diligence. A key observation was that in services there was a direct interaction
between a customer and the library staff and fulfilling their requirements through the
service delivery process is both challenge and an opportunity.

Eqbal and Raza ((2006)*84 studied the application of TQM in library and information
services. They suggested that TQM approach in the context of library should not be
misunderstood as a one-time approach but as a continuous process, which may be
useful for the improvement in the library services and also discussed the tool and
 technique of TQM in library services.

Wang (2006)*85 conducted a study on TQM in academic libraries. The main purpose
of the study was to provide a retrospective overview of TQM in the field of library
services. The paper approaches the issue by making a brief study and comprehensive
analysis of TQM under the library context. He explores the current issues barriers,
new challenge facing today’s libraries. The researcher explores the detailed ideas
about TQM principle and their real life applications in various profit and non profit
organizations and given various steps to make a comprehensive themes and analysis
in detail. This study also determined the importance and impact of TQM on academic
libraries. The result indicates that the implementation of TQM in service organization
that every employee is responsible for what he does and also responsive to what is
going on in the whole organization. This requires a continuous training of human
resources and constant support of the top management.

Zhan and Zhang (2006)*86 conducted a study on the implementations of TQM in
Hainan University Library. The study aims to describe how TQM a dandelion seed
from overseas turned an ordinary library into something different. They discussed the
TQM implementation brought many changes in this library and brought it from being
an isolated island into the international arena. They elaborate review of the progress
made in Hainan University Library and passed the authentication of ISO 9000:2000.

Sahu (2007)*87 carried out a research to measure the perception of students and faculty
members of Jawahar Lal Nehru University, New Delhi. The objectives of the study
were to focus on the library for meeting the quality expectations to users. It is also
tries to find out, if there are any differences in the perceptions of quality library
service between student and faculty and recommendation on how to improve the level
of quality services in library. A questionnaire was used as the data gathering
instrument. The instruments for data collection consisted of structured questions. All
the closed ended questions were designed to elicit responses on a five point Likert scale to measure both respondent satisfaction and perception of service quality. The analysis of the collected data made use of the chi-square method. The results indicate that the JNU library is not lacking in quality of service. He further insinuated the need to note that quality information service is about helping users to define and satisfy their information needs, building their confidence in using information retrieval systems, and making the whole activity of working with library staff a pleasurable experience. To achieve total quality in information service the JNU library should provide a comprehensive information programme that is predicated on the needs and activities of the users.

Johri and Žainab (2007) discussed the exploratory attempt to use a modified version of SERVPERF to access user’s satisfaction with the service provided by an ISO 9000:2000 certified library at a private university in Malaysia. The main objective is to measure the performance of services grouped as frontline, core and peripheral. This directly relates to student users at a private university in Malaysia. A total of 300 respondents are randomly chosen from the UG and PG level students of the university, served the questionnaires based on modified version of SERVPERF. This study extends the number of statements to 60 to cover the three categories being measured at all areas of library services after analysis the results which indicate the library performing at average level from 59 service attributes, 2 are perceived as excellent, 20 attributes are consider good, 31 are average and 4 services are measured a poor. A total of 16 services are related below 50%, which from priority list of services given priority in the library proposed action plan. Thus the services are increasingly required to monitor and maintain the quality of their services to fulfill the university main objectives of providing quality environment for teaching learning and research.

Kaushik, et al. (2007) studied on application of six-sigma in library and information services. They emphasised on necessary success factors and key performance indicators to the quality of library services through six sigma. It is now increasingly being applied to a wide range of processes ranging from manufacturing to services and multicolored transactional processes. The objectives of six sigma are to achieve customer’s satisfaction. Doing things right and keeping them consistent are the ideas behind six sigma. They said that applying six sigma to library services is still inadequate. They provides a review and a pilot study to identified a number of
important **CTQs and KPIs** unique to libraries and that it is entirely possible to tailor a range of six sigma tools for various library services.

**Dorairajan, et al. (2008)** studied the application and implementation of SERVQUAL, LIBQUAL and WEBQUAL tools for the measurement and analysis of quality in Library. They elaborate the perceptions of the library users is most important as the quality of a library and defined as the gap between the expectations and perceptions of users about the library. They emphasis that SERVQUAL methodology is an invaluable tool for organisations to better understanding what customers value and how well their current organisation are meeting the needs and expectorations of customers.

**Moghaddam and Moballeghi (2008)** presented an overview of TQM in the library and information sectors. They focussed on TQM implementation in the library and information sectors. The methods were also reviewed through libraries a experience which was adopted. They found that TQM was initially applied as a management philosophy in the manufacturing sector and after the enormous success this philosophy is increasingly being applied in the service sector including libraries.

**Nejati and Nejati (2008)** conducted a study on service quality at university of Tehran central library. They explore the importance of service quality aspect from the perspective of university of Tehran Central Library users. The purpose of the study was to determine how successful the library has been in meeting user’s needs by providing reliable and good services and focused on SERVQUAL theory for the quality measurement in library according to library users. The results were also investigated as how far the library has succeeded in delivering quality service to its users. For this study questions were designed to elicit responses on a five point Likert scale to measure both respondent satisfaction and perception of service quality for analyzing service quality in university of Tehran central library. The study had a total sample of 100 questionnaires issued among library users. The analyses of collected data, shows a relatively average perception among users of University of Tehran Central Library. The finding indicates that university of Tehran Central Library has conducted several program for improving its services because of the lack of identifying the most important aspects of service quality in their customer’s ideas, the efforts for providing customer satisfaction has failed to a great extent.

**Tab & Osman, et.al. (2008)** studied the effectiveness ISO 9000 quality management practices of academic library in Malaysia. The exploratory research in
this study focuses on the link between ISO 9000 practices and an area of customer satisfaction, namely, MUDI (Accessibility); KESE (suitable); SEAD (availability); KEBE (effectiveness); KECE (efficiency); BODI (reliability); KESA (validity) that has received limited attention in prior studies. The study supports the idea that ISO 9000 standards are a guideline for the implementation of quality management in any organisations and library services.

Einasto (2009)\textsuperscript{94} demonstrated the use of service quality monitoring as the starting point for service development in academic libraries. The proposed approach to quality research allows gathering essential information to focus strategic planning on the services that are important for users and efficiently allocate the library's resources. He proposed a model of quality for academic library services based on the focus group research. He presented library service quality assessment instrument UTLibQual, based on the Zone of Tolerance concept and an importance performance mapping method. The possibilities of using the instrument in support of library management decisions were analysed by a case study on the Tartu University Library, Estonia.

Meher (2009)\textsuperscript{95} studied on Quality in library services and discussed the quality approach services in the field of library and information services. It describes various principles of TQM to study the quality in library services. This study also describes various principles and characteristics of quality service in libraries. It discussed the term SERVQUAL, being able to view services from the customer's point of view and meeting the customer's expectation for services into seven determinants. The study opines the nature of library services and users is regarded as a service organization the service offering documents and services to its users compared to the services of other service organizations.

Ramadas (2009)\textsuperscript{96} elucidates the concepts, methods and implementation of parameters of NAAC and LIBQUAL in improving the quality of LIS in higher academic institutions. He suggested that the Quality enhancement in higher education is a deliberate process of chance, which leads to improvement. He also discussed the guidelines on quality indicators in LIS, which is given by NAAC in 2007 and highlighted the criteria of quality assessment in library and information center of college and university.

Rao and Kanjilal (2009)\textsuperscript{97} measured the library service quality of Siva Sivani Institute of management and discusses with the development of LIBQUAL\textsuperscript{TM} survey instrument. Siva Sivani Institute of Management student were offered a tool, which
helps to measure the user satisfaction with reference to the “Library as Place”. The
study explains gap theory of service quality and currently testing tool for measuring
library user’s perceptions of service quality library and identified gaps between
minimum desired and perceived expectation of service. The survey was conducted
first time which measures on annual basis selected students on systematic random
sampling technique. The questionnaires were distributed to 100 students from all the
courses of this institute after the collection of data. The researcher analysed and found
that services offered to the students are perceived adequate but not superior. He found
that the service superiority is in the negative, which means the user’s wants are not
realized by the library.

Conclusion

Application of TQM appears to be somewhat neglected area in foreign as well
as in Indian library literature. However, the scant literature available in foreign library
literature is mostly theoretical in the form of a few books, journal articles, reports and
case studies of research and academic libraries. The problems, the objectives, the
methodologies and the findings of these studies will be taken into consideration
cautiously, however, five laws of library science, 32nd ILA conference on quality in
libraries (1987) and 43rd ILA conference on sustainable library and information
Services (1997), the first international conference on TQM and academic libraries
(1994) at Washington. The 46th ILA conference on QUEST FOR quality strategic and
application in library and information Services (2001) and few more articles provide a
ground for the study of TQM in University Libraries in India. Thus the present study
is an attempt to minimize the wide gap in Indian library literature. The researcher
therefore tried to covers almost all the published literature, spanning the last three
decades for the review and it has as certain that no such study has been under taken so
far.

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