Chapter 2

REVIEW OF LITERATURE
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1.1. INTRODUCTION

The first chapter concluded with the need to assess the quality of services provided to international students by higher education institutes in India. As measurement of international students’ satisfaction with the quality of services provided by higher education institutes is the significant theme of the research, this chapter is primarily devoted to addressing the research question of how to measure service quality of higher education institutions.

For this, a review of existing literature is required to understand the construct “service quality” and related terms like quality, services, customer satisfaction, student satisfaction and customer loyalty, with particular emphasis on its applicability in the higher education sector. This chapter seeks to identify the various dimensions or attributes by which service quality in higher education can be measured and theoretical models to measure the construct. The chapter concludes by comparing the various theoretical models and their suitability in the context of measuring quality of higher education institutions serving international students studying in India.

1.2. QUALITY

Although it is difficult to assign any single definition to the term “quality”, the pursuit of quality is essentially driven by three main forces; consumer demands for increased standards and performance, the need for organisational excellence and efficiency and accountability to stakeholders (Peters & Waterman Jr., 1986). There are essentially two main schools of thoughts or approaches on quality:
i. Supply-side managerial approach - also called product-based view to quality

ii. Demand-side consumer approach – also called user-based view to quality

2.1.1 Supply-side Managerial Approach to Quality

According to the supply-side managerial approach, also called the product-based view, it is the responsibility of the respective supply organisations to define, state, measure, evaluate and monitor quality standards. The principles of the managerial model are based on William Edwards Deming’s (1986) and Joseph Moses Juran’s (1989) philosophy. Born in the U.S., both Deming and Juran are considered the evangelist of the quality movement in Japan after the Second World War. They later returned to the U.S. to assist American industry establish the principles of quality controls. The product-based view argues that quality is found in the components and attributes of a product. It implies that the higher the amount of the product’s characteristics, the higher is its quality. According to the manufacturing-based view, if the product conforms to design specifications, it has good quality. Quality then is defined as the desirable outcome of engineering and manufacturing practice, or conformance to specifications. Both Deming and Juran’s philosophies were focused on reducing defects in the product and considered appropriate for manufactured goods. Deming’s famous “14 Points for management” (Deming, 1982) serves as a management guideline urging for a commitment to a process of continual improvement which prevents stagnation and arms the organization for the uncertain future.

2.1.2 Demand-side Consumer Approach to Quality

The second approach to understanding quality is that it is defined by consumers on the demand-side. This user-based view says that if the customer is satisfied, the product has good quality. It is based on the presumption that quality is determined by what a customer wants. This leads to a definition of quality which is fitness for intended use or how well the product performs its intended function. Most researchers from the services marketing discipline take the consumer determined
perspective of quality. These scholars include Lewis and Blooms (1983); Gronroos (1984); Parasuraman et al.(1985) and Smith (1995). According to the demand-side consumer approach, quality has been defined as “the fitness for use, the ability of a product or service to continue meeting the requirements of the stakeholders based on current and future stakeholders’ needs” (Oakland, Total Quality Management: Text with Cases, 2003). Even W.E. Deming’s managerial philosophy acknowledged quality as being “customer-and market-focussed” and varying according to values, cultures and traditions of the customer.

In the 1990’s, Harvey and Green categorised quality into five related, but different aspects: “Quality as exception, quality as consistency, quality as fitness for purpose, quality as value for money, and as transformative (Harvey & Green, 1993)”. They argue that different stakeholders are likely to accord different levels of priority to these different dimensions of quality, according to their interests. In service management it is important to understand how clients assess the quality of the service provided, that is, how quality is perceived by the client (Otavio & Euriane, 2009). Joseph Moses Juran (1989), although an evangelist of the managerial approach philosophy also referred to quality as ‘fitness for use’ and added that higher education institutes have to develop programmes of study and services that meet or exceed the requirements of the stakeholders as their primary mission. After the late 1980’s, more and more organizations have come to embrace a more customer-driven definition of quality (Evans and Lindsay, 1999). Quality has come to be defined from the customer satisfaction perspective. According to Grönroos (2005), quality is determined "by the gap between expected quality and experienced quality", that is, it is the difference between client perceptions and expectations. As higher education institutions are also in search of improvements in service quality in order to satisfy their students, it is important to first understand both the concept of “services” and “service quality” in order to proceed forward.
1.3. SERVICES

Although services marketing emerged as a separate research discipline in the late 1970s but in the last few decades, services have become the major contributor to economic activity of many nations (Firdaus A., Measuring service quality in higher education: HEdPERF versus SERVPERF, 2006). There appears to be a positive relationship between economic development of a country and its service sector; developed economies are increasingly more service orientated (Palmer, Principles of Services Marketing, 2011). For instance, in the United Kingdom approximately 77% of workers are employed in the service sector, in comparison to only 38% of workers in Thailand – a less developed country compared to the United Kingdom (International Labour Organization, 2009, cited in Palmer, 2011).

2.3.1 Definitions of Services

There are numerous definitions of services by various authors. The American Marketing Association in 1960 defined services as a set of processes for identifying or creating, communicating, and delivering value to customers benefiting both the organisation and its stake-holders. Services are usually intangible economic activities, often time-based and meant to bring desired results to the recipients, object or asset. In exchange for money, time, and effort, service customers expect value from access to goods, labour, professional skills, facilities, networks, and systems; but they do not normally take ownership of any of the physical elements involved (American Marketing Association, 1960).

Services are a continuous process of on-going interactions between customers and service providers comprising a number of intangible activities provided as premium solutions to the problems of customers and including the physical and financial resources and any other useful elements of the system involved in providing these services (Grönroos, 2004). Premium service quality gives a competitive advantage in the services industry. The satisfaction level of customers is dependent on their perception of service quality and the trust in the service provider (Ismail, Haron, Ibrahim, & Isa, 2006).
According to Lovelock, services deliver value due to the benefits the client derives from the activity at specific time and place. (Lovelock C. S., 2001). In the words of Meirelles “a service is an intangible benefit, the production and consumption of which occurs simultaneously where production starts when the service is ordered and ends when demand is met.” (Meirelles, 2006). Palmer defines a service as: “an intangible benefit exchanged by the producer in order to satisfy an identified need of the consumer. (Palmer, Principles of Services Marketing, 2011)”. “Services are deeds, processes, and performances provided or co-produced by one entity or person for another entity or person (Zeithaml & Bitner, 2000).”

2.3.2 Characteristics of Services

Services have unique characteristics and service literature highlights differences in the nature of services versus products. Although for the first time in 1963, Reagan recognized some of these characteristics which create special challenges in services (Regan, 1963), it was Zeithmal et al. and American Marketing Association which popularized the service characteristics as the “five I’s of services”, a term widely used in most marketing services texts. The five I’s of service characteristics are (Verma, 2012):

1. Intangibility – Unlike physical products, services cannot be heard, smelt, tasted and felt. Service delivery is highly dependent on human factors and therefore, customers often judge quality based on people, place, price, equipment, symbol, communication material, references etc.

2. Inventory (Perishability) - Services are produced and consumed simultaneously and therefore cannot be stored in order to be utilized in future. Resources, processes and systems are assigned for service delivery for a limited period in time. Once the service has been rendered to the customer, it simply ceases to exist.
3. Inseparability – As the production and consumption of services are simultaneous, the service provider and service consumer cannot be separated during service delivery and consumption.

4. Inconsistency (Variability) - The human factor is often the key factor in service delivery and therefore, each service is unique, heterogeneous and cannot be standardized. Each service is distinct because it is rendered and consumed only once and very often the same service delivery cannot be guaranteed because of the strong human factor involved. Owing to the heterogeneity of services, the only thing companies can standardize are the service performance processes within their organization.

5. Involvement - Since the customer is part of the service delivery process, the customer has the liberty of demanding a modified services specific to his/her requirement. Mass generation and same service delivery is very difficult and can often be interpreted as inconsistent service quality. While rendering services, both inputs and outputs to the processes as well as the relationships between these processes involved remain highly variable, thus making it difficult to maintain the same service quality each time. A customer can only compare or evaluate services after having experienced the service delivery.

1.4. SERVICE QUALITY

Quality is especially difficult to define, describe, and measure in services. While quality and quality control measures have long existed for tangible goods, few measures have traditionally existed for services. Intangibility has contributed to this difficulty in a major way. The term is ambiguous and subjective: quality is like beauty, it is in the eye of the beholder (Edvardsson, Thomasson, & Ovretveitt, 1994). In essence, quality is determined by imprecise individual factors: perception, expectation, and experience of customers and providers, and, in some cases, additional parties such as public officials (Brown, Gummesson, Gummesson, & Gustavsson, 1992).
2.4.1 Definitions of Service Quality

The International Standardization Organization (ISO) defines quality as “the totality of features and characteristics of a product or a service that bear on its ability to satisfy stated and implied needs.” (ISO, 1990). However, this definition does not convey with the complexity of the quality phenomenon. User-based quality definitions say that quality is what gives satisfaction to the customer in the customer's eyes, (Gummesson, 1992), which is an approach that most researchers have agreed upon.

Every customer has an ideal expectation of the service they want to receive. Service quality measures how well a service is delivered compared to customer expectations. Businesses that meet or exceed expectations are considered to have high service quality. However, the earliest meaningful research on service quality was undertaken in a research and published in a paper titled “A Conceptual Model of Service Quality and its Implications on future Research” (Parasuraman, Zeithaml, & Berry, 1985) in which it was concluded that service providers can enhance their image and thereby succeed only if the service expectations of their customer are exceeded.

Service quality can be defined differently by various researchers. Broadly stated, it is an assessment of how well a delivered service conforms to the client's expectations and therefore, service business operators often assess the service quality provided to their customers in order to improve their service, to quickly identify problems, and to better assess client satisfaction (BusinessDictionary.com). Quality is satisfying or exceeding customer requirements and expectations and it is usually the customer who eventually judges the quality of a product (Shen, Tan, & Xie, 2000). In service management, the most important assessment of the quality of the service is the client’s perception of quality; the key to attaining success and higher market share among competing service providers is by creating service quality differentiation (Otavio & Euriane, 2009). Accordingly, they described “service quality as the ability to perform and deliver service levels which are comparable and match the expectation of customers”. Parsuraman, Zeithaml, and Berry (1985) had similarly argued that
customers judge service quality by comparing their expectations i.e. what they feel service firms should offer with their perceptions of the actual performance provided. They, therefore, propagated that perceived service quality can be considered as the degree and direction of difference between the consumers’ perceptions and expectations (Parsuraman, A., Valarie Zeithaml, and Leonard Berry, 1985). Expectations are in fact customer’s desires which they feel should be offered by the service provider. Service quality can thus be defined as the difference between customer expectations of service and perceived service by the customer. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs. Aside from Parasuraman et al., 1985, many other researchers (Lewis & Mitchell, Defining and measuring the quality of customer service, 1990) (Bolton & Drew, 1991) too have also defined service quality in terms of meeting and exceeding customer expectation. They have distinguish service quality into four types: 1) Expected service, 2) Desired service, 3) Adequate service and 4) Predicted service (Ramaiyah, 2007). Expected service refers to the services that a customer intend to receive from the service provider. Desired service is the level of service that the customer wishes to obtain. Adequate service is the minimum level of services that the customer expects from the service provider; Predicted service is what the customer thinks the company will perform. Very similar to the definition by Zeithaml et al. (1990), service quality in higher education has been defined as “the difference between what a student expects to receive and his/her perceptions of actual delivery” (O’Neill & Palmer, 2004).

2.4.2 Measuring Service Quality

It is important to measure service quality in order to identify quality related problems, set clear standards of service quality and compare before and after situations. The starting point in developing quality in services is analysis and measurement (Edvardsen, Tomasson, & Ovretveit, 1994). Basic parameters of measuring quality are grouped into three areas: (i) Quality of design (ii) Quality of conformance, and (iii) Quality of performance (Widrick, Mergen, & Grant, 2002).
It can be interpreted that while the first two parameters “design” and “conformance” reflects the supply-side managerial approach to measuring quality, the third parameter “performance” is more inclined towards the demand-side consumer approach to measuring quality.

One service quality measurement model that has been extensively applied is the SERVQUAL model developed by Parasuraman et al. (1985) and Zeithaml et al. (1990). The research on measuring service quality has focused primarily on how to meet or exceed the external customers’ expectations, and has viewed service quality as a measure of how the delivered service level matches consumers’ expectations (Kang, James, & Alexandris, 2002). According to Parasuraman et al. (1985) model, there are seven major gaps in service quality. According to the following explanation (ASI Quality Systems, 1992); (Curry, 1999); (Luk & Layton, 2002), out of these seven gaps, three important gaps (1, 5 & 6) have a direct relationship with customers:

Gap1: Customers expectations versus management perceptions – gap as a result of the lack of a marketing research orientation, inadequate upward communication and too many layers of management.

Gap2: Management perceptions versus service specifications – gap as a result of inadequate commitment to service quality, a perception of unfeasibility, inadequate task standardisation and an absence of goal setting.

Gap3: Service specifications versus service delivery – gap as a result of role ambiguity and conflict, poor employee-job fit and poor technology-job fit, inappropriate supervisory control systems, lack of perceived control and lack of teamwork.

Gap4: Service delivery versus external communication - gap as a result of inadequate horizontal communications and propensity to over-promise.
Gap 5: Customer expectations versus customer perceptions – gap as a result of the influences exerted from the customer side and the shortfalls on the part of the service provider. In this case, customer expectations are influenced by the extent of personal needs, word of mouth recommendation and past service experiences.

Gap 6: Customer expectations versus employee perceptions – gap as a result of the differences in the understanding of customer expectations by front-line service providers.

Gap 7: Employee perceptions versus management perceptions – gap as a result of the differences in the understanding of customer expectations between managers and service providers.

Despite the on-going debate on the measurement approach to service quality, student satisfaction has been found to have a importance influence on student enrolments and post enrolment word-of-mouth communication (Parasuraman et al, 1988; Angela, 2006; Ben, 2007; Berry, 2006; Cronin and Taylor, 1994). The major theoretical models used to measure service quality have been discussed separately in this chapter.

1.5. CUSTOMER SATISFACTION
There exists a strong relationship between customer satisfaction and service quality. In today's highly competitive business world, organizations can only maximize profits through customer satisfaction (Seth, Deshmukh, & Vrat, 2005).

2.5.1 Service Quality and Customer Satisfaction
Service quality is of great importance as it is the main driver of an organization’s marketing and financial performance. Service quality has a profound impact on business performance, costs, profitability, customer satisfaction and customer loyalty; improved service quality can help organizations in attracting, satisfying and retaining
customers (Heskett & Sasser, 2010). The authors state that firms that fail to provide quality services lose customers to competitors, have declining profit and are eventually forced to withdraw from competition.

It is very common to use the terms service quality and customer satisfaction interchangeably because service quality is the most important dimension on which customer satisfaction is based (Rust & Oliver, 1992). In fact, service quality is considered as antecedent to satisfaction. Service quality has been defined as “the degree to which any service fulfills customer requirements or hopes (Lewis & Mitchell, Defining and Measuring the Quality of Customer Service, 1990)”. It is also considered as “the thinking of the customer about inadequacy or supremacy of services (Zeithaml, Berry, & Parasuraman, 1990). To augment the same, Zeithaml at el. (1996) stated that customers’ relationship with the firm is strengthened, when that customer has favorable attitude towards a firm's service quality and the relationship is weakened when customers’ attitude represent his dissatisfaction with firm's services quality. They further stated that positive attitude towards firm's service quality will lead customers to develop favorable behavioural intentions such as preferring the provider over its competitors, making repeat purchases and recommending the firm's service to others. Customer satisfaction is defined through different perspectives. It is considered as “the feeling of welfare resulted from experience of use” (Levy, 2009). Alternatively, customer satisfaction is the response of the completion of consumer needs. It is considered as service characteristics which give a happy fulfillment of consumption (Zeithaml & Bitner, 2000). According to ACSI (American Customer Satisfaction Index) “customer satisfaction is greater quality pull than price-pull and value-pull.” The terms customer satisfaction and perception of quality are labels we use to summarize a set of observable actions related to a product or service (Hayes, 2008).

The most comprehensive definition of satisfaction has been offered by Kotler and Keller who define satisfaction as “person’s feeling of pleasure or disappointment which resulted from comparing a product’s perceived performance or outcome against
his/ her expectations” (Kotler & Keller, 2006). “Perception is defined as consumer’s belief, concerning the service received or experienced” (Rai, 2008). Perceived quality is the consumer’s judgment about an entity’s overall excellence or superiority (Zeithaml 1987).

**2.5.2 Service Quality and Student Satisfaction in Higher Education**

Universities rendering services to their stakeholders, in order to differentiate themselves, need to measure service quality. In education, quality is defined as the ability to satisfy internal and external expectations through a combination of inputs, processes, and output of the education system, thereby meeting customer’s explicit and implicit expectations (Cheng, Siu, & T.K., 1995). Education quality has been equated with success of an institution to provide the educational environment which enables students to achieve worthwhile learning goals and high academic standards. (Gordon & Partigon, 1993)

According to Lovelock, education is an intangible service which is offered by an institution through a process of high personal interaction, yet with low customization and is perceived in the mind of their customer through a process of continuous delivery (Lovelock C. S., 2001). The pursuit for quality is endless because consumers will continuously demand more and better, organizations will continue to endeavor to excel and improve efficiency and organizations need to remain accountable to their stakeholders (Peters, T. J. & Waterman Jr., R. H., 1986). The student being the ultimate stakeholder and end product of an institution, service quality in higher education institutes is reflected by the satisfaction of its students.

**2.5.3 Customer Satisfaction and Loyalty**

It is well recognized that offering quality services gives a sustainable competitive advantage to any business. It enables them to fulfil not only the present needs of its customers satisfactorily but also to anticipate their future needs. This ability to anticipate the future needs of customers allows it to delight
its customers through quality services on consistent basis. Subsequently it enhances customer satisfaction and customer loyalty level towards these organizations (Naik, Gantasala, & Prabhakar, 2015).

Marketing theory propagates that organization can succeed only if they are able to create and deliver value to their customers which in turn leads to customer satisfaction and loyalty. “High service quality leads to higher customer satisfaction and therefore, satisfaction of the customer is an index of the quality of a service” (Otavio & Euriane, 2009). Perceived customer satisfaction is the most appropriate criteria by which service quality is measured or judged (Grönroos, 2004).

Service quality is a perception or evaluation which is formed by a customer over a period of time about overall performance of a service based on the customer expectations (Hoffman K.D., Bateson J.E.G, 2007). Therefore, service quality means the delivery of repeated service satisfaction each and every time. Closely linked to service quality and customer satisfaction is loyalty which comes from customer's repurchasing behavior. Just like satisfaction, loyalty also comes from high service quality. It is satisfaction with the services that construct brand loyalty and encourages customer for repeat purchases (Zeithaml, Berry, & Parasuraman, 1996). The authors suggested that loyalty is the main determinant that service organization use to measure their long term success and by maintaining superior service quality, firms are able to retain and expand their loyal customer base. According to Zeithaml et al. customer satisfaction can be viewed as the mediator that link service quality with service loyalty. Since an organization’s service quality has a strong impact on customer loyalty, therefore in order to measure, control, and improve service quality from customer perspective, management should identify what factors of service quality influence customer loyalty (Johneston, 1997). According to Boulding, Kalra and Zeithaml, (1993) a student who receives a good service and is satisfied with it and is more likely to be loyal to that institution through recommending it to others.
2.5.4 Dimensions of Service Quality and Student Satisfaction in Higher Education

Dimensions of service quality are the attributes, aspects or instruments used for measuring service quality as perceived by customers. A literature review of the dimensions used by various researchers was undertaken to have a better understanding of which dimensions or aspects measure service quality in higher education. Two approaches to determine service quality can be taken - the supply-side approach and the demand-side approach (Gatfield, Barker, & Graham, 1999). Majority of the researchers used the demand-side or student’s perspective to assess service quality. High student satisfaction helps in attracting and retaining students who in turn increase the reputation and standing of the institution (Santhi & Ganesh, 2015). Therefore, more and more institutions around the world are keenly looking at how to improve student satisfaction.

Researchers like Sangeeta et al identified dimensions like competence, attitude, reliability, content and delivery (Sangeeta, S., Banwet, D. K., & Karunes, S., 2004) to assess service quality in higher education. The SERVQUAL model (Parasuraman, A.; Zeithaml, V.A; Berry, L., 1988) and the SERVPERF model (Cronin & Taylor, 1992), both principal instruments in the services marketing literature are most widely used by managers and academicians for assessing service quality. Both the models are based on five dimensions of service quality: (i) Tangibles, (ii) Reliability, (iii) Assurance, (iv) Responsiveness, and (v) Empathy.

Quality Indicators for Learning and Teaching (QILT) is a website funded by the Australian Govt.’s Department of Education & Training (Social Research Centre; Australian Govt.). It provides prospective students with relevant and transparent information about Australian higher education institutions based on student feedback. Their Student Experience Survey (SES) surveyed around 145,000 higher education students in Australia in 2016. They consider six indicators or dimensions to gauge student satisfaction with various aspects of the higher education experience: (i) Overall quality of educational experience (ii) Teaching quality (iii) Learner engagement (iv) Learning resources (iv) Student support (vi) Skills development.
Cultural backgrounds affect the perception of service quality (Owlia & Aspinwall). Since culture is rather hard to understand and define, considering that it is an extremely abstract concept that is programmed in individuals’ mind, nationality of the student and the country in which the institution is located plays an important role in determining which dimensions are more suitable to measure service quality. Student satisfaction is an attitude based on students’ evaluation of their experience with the education services supplied (Elliot & Healy, 2001). Since customer satisfaction is created by the interaction experiences of products with service, students overall satisfaction with the higher educational institution is a multi-dimensional function of the service experiences with different components of services like interactions with the contact personnel (e.g., lecturers, tutors, and general staff), physical environment (e.g., buildings and equipment, classrooms, campus, hostel, canteen), service systems (e.g., application, enrolment, lectures), and other service customers (e.g., other classmates). In all, customer satisfaction is a function of the satisfaction with different components of the service concept (Anderson, Pearo, & Widener, 2008). Various authors have used various dimensions to measure service quality in higher education across various countries and cultures, some of which have been summarized in Table 2.1.
Table 2.1 - Service quality dimensions in higher education across various countries and cultures

<table>
<thead>
<tr>
<th>Author, Date</th>
<th>No. of Items</th>
<th>Dimensions</th>
<th>Country/University</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Sultan and Wong, 2010)</td>
<td>67 Items</td>
<td>Dependability, effectiveness, capability, efficiency, competencies, assurance, unusual situation management &amp; semester–syllabus</td>
<td>Japan</td>
</tr>
<tr>
<td>(Stodnick and Rogers, 2008)</td>
<td>18 Items</td>
<td>Reliability, Assurance, Tangibles, Empathy and Responsiveness</td>
<td>One course, Southwestern University, USA</td>
</tr>
<tr>
<td>(Angell, et al., 2008)</td>
<td>18 Items</td>
<td>Academic, leisure, industry links &amp; cost</td>
<td>One university, UK</td>
</tr>
<tr>
<td>(Smith, et al., 1998)</td>
<td>22 Items</td>
<td>Reliability, Assurance, Tangibles, Empathy and Responsiveness</td>
<td>IT Department, one university, UK</td>
</tr>
<tr>
<td>(Abdullah, 2006)</td>
<td>41 Items</td>
<td>Non–academic, academic, reputation, access, program and understanding</td>
<td>Malaysia</td>
</tr>
<tr>
<td>(Abdullah, 2005, 2006a, 2006b)</td>
<td>35 Items</td>
<td>Non–academic, academic, reliability and empathy</td>
<td>Malaysia</td>
</tr>
<tr>
<td>(Gatfield, et al., 1999)</td>
<td>26 Items</td>
<td>Academic instruction, campus life, guidance, recognition</td>
<td>One Australian University</td>
</tr>
<tr>
<td>(Kwan and Ng, 1999)</td>
<td>31 Items</td>
<td>Course content, concern for students, facilities, assessment, medium of instruction, social activities &amp; people.</td>
<td>China and Hong Kong</td>
</tr>
<tr>
<td>(Li and Kaye, 1998)</td>
<td>27 Items</td>
<td>Reliability, Assurance, Tangibles, Empathy and Responsiveness</td>
<td>One university, UK</td>
</tr>
<tr>
<td>(Joseph and Joseph, 1997)</td>
<td>—</td>
<td>Program, academic reputation, physical aspects, career opportunities, location, time and other</td>
<td>New Zealand</td>
</tr>
<tr>
<td>(LeBlanc and Nguyen, 1997)</td>
<td>38 Items</td>
<td>Contact personnel/faculty, contact personnel/administration, responsiveness, reputation, curriculum, physical evidence and access to facilities</td>
<td>Business School, one university, Canada</td>
</tr>
</tbody>
</table>

Source: Cross-cultural interaction: concepts, methodologies, tools, and applications by Information Resources Management Association; Publisher-IIG Global. (Information Resources Management Association, 2014)
Based on the literature review summary in Table 2.1, although dimensions used by various researchers may vary across countries and cultures, a list of some commonly used dimensions used to assess service quality in higher education has been compiled and summarized in Table 2.2.

**Table 2.2 – Dimension used to assess service quality in higher education studies**

<table>
<thead>
<tr>
<th>Dependability</th>
<th>Reliability</th>
<th>Campus life</th>
<th>Relevance of curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Assurance</td>
<td>Understanding</td>
<td>Contact/access to teachers</td>
</tr>
<tr>
<td>Capability</td>
<td>Tangibles</td>
<td>Leisure</td>
<td>Contact/access to administrative staff</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Empathy</td>
<td>Industry links</td>
<td>Adequate &amp; appropriate classrooms</td>
</tr>
<tr>
<td>Competencies</td>
<td>Responsiveness</td>
<td>Cost</td>
<td>Overall higher education experience</td>
</tr>
<tr>
<td>Course content</td>
<td>Academic aspects</td>
<td>Faculty</td>
<td>Administration support</td>
</tr>
<tr>
<td>Syllabus</td>
<td>Non–academic aspects</td>
<td>Curriculum</td>
<td>Career opportunities</td>
</tr>
<tr>
<td>Academic instruction</td>
<td>Teaching quality</td>
<td>Infrastructure</td>
<td>Contact personnel</td>
</tr>
<tr>
<td>Campus life</td>
<td>Guidance</td>
<td>Contact Physical</td>
<td>Facilities</td>
</tr>
<tr>
<td>Guidance</td>
<td>Reputation</td>
<td>Attitude</td>
<td>Social activities</td>
</tr>
<tr>
<td>Recognition</td>
<td>Location</td>
<td>Access</td>
<td>Concern for students</td>
</tr>
</tbody>
</table>
1.6. THEORITICAL MODELS FOR MEASURING SERVICE QUALITY IN HIGHER EDUCATION

Similarity between many service industries in the business sector and higher education suggests that the business world's research on the assessment of service quality may be applicable to higher education (Delene & Bunda, 1991). Service marketing concepts borrowed from the business and industry sector may be useful (Uperaft, 1994). In an attempt to identify and implement the most appropriate method for measuring service quality, three most frequent used scales to measure service quality in higher education were identified: SERVQUAL, SERVPERF and HEdPERF.

2.6.1 SERVQUAL

On the basis of the proposition that service quality is the gap between customer expectations and performance perceptions, the earliest and most popular model is SERVQUAL (Parasuraman, A., Zeithaml, V.A. and Berry, L., 1988). SERVQUAL is a multidimensional research instrument in which 44 questions are used in total to assess service quality wherein expectations are measured using 22 questions and performance is rated using 22 parallel questions, thus totaling 44 questions. The SERVQUAL scale measures the gap between customers expectation from a service and the perception of the actual service performed (Parasuraman et al., 1988). The authors named this the disconfirmation paradigm, and operationalized it as:

\[
\text{Service Quality (Q)} = \text{Perception (P)} - \text{Expectation (E)}
\]

The SERVQUAL scale has two parts with 22 items divided into five dimensions: (1) Tangibles, (2) Reliability, (3) Responsiveness, (4) Assurance and (5) Empathy. (Parasuraman, A., Zeithaml, V.A. and Berry, L., 1988). SERVQUAL has been used extensively in measuring service quality in higher education by many researchers (Kwan and Ng, 1999; O’Neil and Wright, 2002; Sohail and Shaikh, 2004; Sahney et al, 2004; Snipes et al, 2006; Smith et al, 2007; Yeo, 2008).
SERVQUAL defines five dimensions for service quality as follows:

(1) Tangibles - embodied the appearance of buildings, equipment, and staff

(2) Reliability - embodied the degree to which the knowledge, skills learned and services are offered accurately and on timely manner

(3) Responsiveness - refers to the willingness to help customers and provide prompt service. In difficult situations, it is also the ability to respond effectively

(4) Assurance - embodied the knowledge and courtesy of employees and their ability to convey trust and confidence.

(5) Empathy - refers to the attention and care that the institution may offer to customers as well as convenient operating hours

The SERVQUAL questionnaire consists of 44 questions in total. Both the expectations component and the perceptions component of the questionnaire consist a total of 22 items, comprising 4 items to capture tangibles, 5 items to capture reliability, 4 items for responsiveness, 5 items for assurance and, 5 items to capture empathy.

Although the SERQUAL instrument has been widely applied, several scholars have criticized the SERVQUAL model for various reasons (Cronin & Taylor, 1992; Brown, Churchill Jr. and Peter, 1993; Teas, 1993; Buttle, 1996). Other critics felt, SERVQUAL didn’t attract the movements of changing hopes (Buttle, 1996). Many authors concur that customers’ assessment of quality may depend solely on performance and that a performance-based measures explain more of the variance in service quality.
Several researchers have tried to develop an enhanced SERVQUAL specifically for higher education. Kay & Sei (Kay C. Tan, Sei W. Kek, 2010) used SERVQUAL and developed a survey instrument consisting of 76 attributes classified into eight factors: course organisation, workload and assessment, learning, teaching and advising, university facilities, social activities, library facilities, and computing facilities. Betz et al. (1970) also designed a survey to measure service quality in education. The authors focused on educational services and student encounters. Hampton (1993) refined and condensed Betz et al.’s survey.

2.6.2 SERVPERF

The SERVQUAL (Service Performance) instrument was criticised by various authors for lacking in stability of expectations and wording of some scale items (Anderson & Gerbing, 1991). Cronin Jr. and Taylor criticized the SERVQUAL model and felt that the expectation disconfirmation model i.e. expectations vs. perception of customer was not a true evaluation of service quality (Cronin & Taylor, 1992). Expressing concerns on the ambiguity of the expectations construct and the length of the questionnaire, among other criticism, Cronin and Taylor eliminated expectations and retained only the performance questions as a measure of service quality and developed the SERVPERF model. The SERVPERF questionnaire uses only 22 statements (performance related) as compared to 44 statements (22 expectations and 22 performance related) of SERVQUAL. Overcoming the practical problem of administering a 44 questionnaire, SERVPERF scale could be considered more efficient as it reduces the number of items to be measured by 50% and being able to explain greater variance in the overall service quality measured through the use of single-item scale’ (Jain & Gupta, 2004). SERVPERF scale has been used by many researchers (Oldfield & Baron, 2000) (Faganel, 2010) for measuring service quality in higher education.
2.6.3 HEdPERF

While comparing and testing the efficacy of measuring instruments of service quality, Dr. Firdaus Abdullah, an Malaysian academician, regarded the SERVPERF scale developed by Cronin and Taylor and the SERVQUAL scale developed by Zeithaml and Berry as a generic measure of service quality meant to measure the service quality for sectors other than education (Firdaus A. , 2005). Although Abdullah preferred the SERVPERF scale over SERVQUAL, he concluded that both were inadequate instruments by which to assess perceived quality in higher education. Therefore, in order to capture authentic factors specific to higher education, he constructed the HEdPERF (Higher Education Performance) scale. Abdullah proposed HEdPERF as a new and more comprehensive performance-based measuring scale that attempted to capture the authentic determinants of service quality within the higher education sector.

The HEdPERF scale consists of 41 items - 13 adopted from SERVPERF scale and 28 items derived by literature research and pilot studies conducted by Abdullah (Abdullah, The development of HEdPERF: a new measuring instrument of service quality for the higher education sector, 2006). This 41 item instrument aimed to consider not only the academic components, but also aspects of the total service environment as experienced by the student. The framework defines student satisfaction as a short-term attitude that students derive from their evaluation of academic and non-academic related services that are offered by the institutions. Such attitudes are significantly influenced by the dependent factors. The author identified six dimensions of the service quality concept:

(i) Non-academic aspects: items that are essential to enable students to fulfill their study obligations, and related to duties carried out by non-academic staff.

(ii) Academic aspects: refer to teaching staff, responsibilities of academics, attitude and relation that exist between students and staff, good
communication skills, enough consultation and regular feedback between students and educators.

(iii) *Reputation*: importance of higher learning institutions in projecting a professional image.

(iv) *Access*: includes issues as approachability, ease of contact, availability and convenience.

(v) *Programme issues*: importance of offering a wide ranging and reputable academic programs/specializations with flexible structure and health services.

(vi) *Understanding*: items related to understanding students’ specific need in terms of counseling and health services.

2.6.4 Comparison between SERVQUAL, SERVPERF and HEdPERF

SERVQUAL is often referred to as the difference between expectations and perception of service by the customer. SERVQUAL is a multidimensional research instrument in which 44 questions are used in total to assess service quality wherein expectations are measured using 22 questions and performance is rated using 22 parallel questions, thus totaling 44 questions. Both the expectations component and the perceptions component of the questionnaire consist a total of 22 items each, comprising 4 items to capture tangibles, 5 items to capture reliability, 4 items for responsiveness, 5 items for assurance, and 5 items to capture empathy. Although the SERVQUAL instrument has been widely applied, several scholars have criticized the SERVQUAL models for various reasons (Cronin & Taylor, 1992; Brown, Churchill Jr. and Peter, 1993; Teas, 1993; Buttle, 1996). Critics like Cronin Jr. and Taylor felt that the SERVQUAL expectation disconfirmation model i.e. expectations vs. perception of customer was not a true evaluation of service quality (Cronin & Taylor, 1992). Expressing concerns on the ambiguity of the expectations construct
and the length of the questionnaire, among other criticism, Cronin and Taylor eliminated expectations and retained only the performance questions as a measure of service quality and developed the SERVPERF model. Their questionnaire uses only 22 statements (performance related) as compared to 44 statements (22 expectations and 22 performance related) of SERVQUAL. Other critics felt, SERVQUAL didn’t attract the movements of changing hopes (Buttle, 1996). Many authors concur that customers assessment of quality may depend solely on performance and that a performance-based measure explains more of the variance in service quality.

In what may be the first of its kind within higher education setting, Abdullah compared the three scales so as to determine how well they predicted service quality level. The six-factor structure of HEdPERF clearly outperformed the SERVPERF and SERVQUAL model in terms of explaining the variances in service quality level (Abdullah, The development of HEdPERF: a new measuring instrument of service quality for the higher education sector, 2006). Brochado compared the performance of alternative measures of service quality in the higher education sector and concluded that SERVPERF and HEdPERF presented the best measurement capability but presented inconclusive results with respect to reliability and consistency (Brochado, 2009). In conclusion HEdPERF and SERVPERF are considered as an appropriate scale for measuring service quality in the context of higher education.

1.7. ISSUES OF INTERNATIONAL STUDENTS IN HIGHER EDUCATION

There is a plethora of research conducted on international students in higher education institutes in English speaking countries like U.K., Australia, U.S.A. in particular and to some extent in Malaysia, Singapore, and China, where international students are an increasingly large proportion of the student population. However, not much work exists on international students in India because of several reasons,
including among others, the relatively low priority accorded to and the low population of international students in the country.

A comparative study on support issues relating to international students in U.K. and Netherland explored associations between student characteristics (including age, ethnicity, nationality and aspects of personality) and perceived support requirements and concluded that support priorities differ in different countries (Bartram, 2008). In a research reviewing theoretical concepts of adaptation and variables to enhance the quality of the overall experience of international students, the authors emphasised on the importance of “Culture synergy and pedagogical adaptation” (Zhou, Jindal, Topping, & Todman, 2008). They found the concept of culture synergy has clear advantages as many learning-related problems in intercultural classrooms result from mismatched expectations between teachers and students. The focus on the match/mismatch of pedagogical expectations led them to conclude that pre- and post-departure preparation of both teachers and students may lead to more fruitful adaptations by each. It follows that institution-wide policies for awareness-raising, guiding and supporting international students and their teachers should be comprehensive, easily accessible and actually put into practice.

International students in U.K. were found to bring additional issues and complications for the staff supporting them (McDonald, 2014). This study examined the additional complications involved in supporting international students, with a specific focus on cultural issues. Key recommendations included the introduction of greater support for faculty teaching and staff supporting international students and the expansion of orientation programmes for international students to include topics related to the educational culture in the UK.

In Australia, while the large growth in the number of international students enrolled in universities has brought a number of benefits to the institutions, the students themselves report varying levels of satisfaction with their experience (Roberts & Dunworth, 2012). The study found one area which can contribute to satisfaction
levels is provision of student support services. International students and support
service providers, while sharing perspectives in some respects, had differing views
about student service delivery. The paper argues that providers of services for
international students need to be more aligned to students’ expectations of service
provision, and more centred on students' actual needs, if they are to increase students'
levels of satisfaction with their international experience.

1.8. SUMMARY

The concept of competitive advantage, once unknown and alien to the higher
education sector in India has gained momentum with the increasing role of private
institutions. Higher educational institutions, particularly in the private sector, compete
aggressively with each other to sustain. Differentiation based on competitive
advantage and service quality can lead to larger market share and financial success of
a higher educational institution (Poole, Harman, Snell, Deden, & Murray, 2000). Higher
education institutions, therefore, strategize to improve the delivery of their
service quality in order to attain competitive advantage. In today's highly competitive
business world, organizations can only maximize profits through customer satisfaction
(Seth, Deshmukh, & Vrat, 2005). Thus, we can conclude there is a strong relationship
between customer satisfaction and service quality.

The terms “service quality” and “customer satisfaction” are often used
interchangeably. A review of literature highlighted that service quality is the most
important dimension on which customer satisfaction is based (Rust & Oliver, 1992).
Since students are the customer, ultimate consumer and end-product, student
satisfaction is the most significant measure of the quality of services provided by
higher education institutes. Literature review helped in identifying the dimensions
used by various researchers to measure service quality in higher education. Three
theoretical service quality models SERVQUAL, SERVPERF and HEdPERF were
compared for their suitability in measuring international students’ satisfaction in
higher education institutes in India. It was concluded that the HEdPERF and
SERVPERF models are more appropriate for the purpose of measuring service quality.
in higher education. While the theoretical approach to the research question of how to measure service quality has been addressed in this chapter, the next chapter will address how the instrument for measuring service quality was actually designed.