

AN INTEGRATED MODEL OF PERCEIVED QUALITY IN  
THE BRAND PERFORMANCE OF HIGHER EDUCATION  
INSTITUTION

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An Integrated Model of Perceived Quality in the Brand  
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- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
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## **Abstract**

There is a greater focus on the quality of education being offered by educational institutions worldwide, all in the pursuit of academic excellence. This is due to a significant number of choices now being made available at institutions of higher learning as compared to previous years. More institutions are now offering a broad range of qualifications, at different levels and quality, resulting in a vast number of students graduating in a diverse range of academic qualifications. Hence, in order to be competitive, institutions of higher learning needs to strive for excellence to provide the quality expected from students. It is vital for these institutions to understand the students' needs and expectations of their institutions to satisfy their demands.

This research aims to study relationship between perceived service quality, students' satisfaction, students' trust and students' loyalty towards UniBrand performance. Perceived service quality as the antecedent of students' satisfaction and students' loyalty is also included in this study.

This study has adopted the work of Parasuraman et al.'s (1985) SERVQUAL variables. The data was collected from a sample of 227 students studying at public and private universities in Klang Valley, Malaysia in the first quarter of 2016. The items included in the survey measured the variables of the study as well as demographic characteristics of the sample. Structural equation model (SEM) was used to evaluate the hypotheses regarding the relationships among the model's constructs.

All the hypotheses developed in the study were positively supported, except for 3, namely perceived service quality with UniBrand performance (hypothesis 1), perceived service quality with students' loyalty (hypothesis 3), and students' loyalty and UniBrand performance (hypothesis 9). This study reveals interesting implications in service quality, satisfaction, trust, loyalty, and UniBrand performance, beneficial for both academicians and higher education institutions' decision makers.

## **CHAPTER 1: INTRODUCTION**

### **1.0 Introduction**

This chapter proposes a research that aims to study relationships between perceived service quality, students' satisfaction, students' trust, students' loyalty and UniBrand performance; hypothesizing positive relationships between perceived service quality and UniBrand performance, students' satisfaction and UniBrand performance, students' trust and UniBrand performance, and between students' loyalty and UniBrand performance. Perceived service quality as the antecedent of students' satisfaction and students' loyalty is also included in this study. The eight main areas which will be discussed in this chapter will be: the research background, the problem statement, the research objectives, the research questions, the hypotheses of the study, the significance of the study, the chapter layout and finally a short conclusion of the introduction.

### **1.1 Research Background**

In Malaysia, higher education is facing dynamic changes due to the government's focus in making Malaysia as a leading education hub in the region. As all programmes are under the purview of the Malaysian Qualifications Agency (MQA), the syllabuses across institutions are required to adhere to the standards outlined by MQA strictly. Having similar programmes offered by various universities make it difficult to differentiate one from the other. Thus UniBrand performance has become an important strategy for universities.

Higher education plays a major role in achieving economic development as the current economic climate shifts towards knowledge economies, where the role of higher education is becoming more emphasized. There are three important functions of higher education in the knowledge economy, which consists of knowledge creation, knowledge diffusion and knowledge transfer.

The first function of higher education in a knowledge economy discusses higher education institutions that should provide skilled knowledge workers with all the necessary technical, managerial, professional and other skills. The second function, knowledge diffusion is to encourage more research activities to be conducted by the higher education institutions and to strengthen ties with the real sector to enhance competitiveness and innovation of enterprises. Lastly, the third function of higher educational establishments is to take place primarily through teaching activities. Many researches have confirmed the relevance of higher education for economic development (Donlagic and Fazlic, 2015).

In every part of the world, the higher education industry has experienced a significant change and reforms due to globalization. As a result of the increasing demand for knowledge and the revolution of information communication and technology, there have been numerous challenges for higher education. One of the driving forces for globalization is competition. Thus higher education institutions must compete to attract more students to study in their higher level education institution (Arambewela and Hall, 2006). Other than that, higher education institutions should consistently improve their service quality in order to achieve students' satisfactions. Universities are the places where professional people are trained, hence the quality of higher education should be considered as one of the factors that play a part on the country's development. Higher education institutions should identify and meet the needs of its customers (referring to students), as higher education has increasingly been identified as a service industry nowadays. Higher education institutions should strive to meet the standards of service which would meet students' expectation (De Oliveira and Ferreira, 2009).

There have been a few recent studies exploring the factors affecting students' satisfaction, students' trust, students' loyalty and brand performance in higher education institutions. This review supports the relationship of the proposed framework.

Parasuraman et al. (1985) explored ten specific dimensions of service quality including reliability, tangibles, competence, responsiveness, access, communication, courtesy, credibility, security, and understanding the customer, while trying to develop the conceptual model of service quality. However, there was a limitation regarding the construct's validity and reliability

after the research was conducted through the interview technique. Subsequently another model named SERVQUAL was developed by Parasuraman et al. (1988) focusing on five specific dimensions of service quality which can be applied across a variety of service contexts to assess customer perceptions of service quality. The five dimensions are assurance, empathy, reliability, responsiveness, and tangibility.

The SERVQUAL model is one of the most commonly used analytical methodology to study the strengths and weaknesses of a company in terms of their service quality. According to Jordaan and Prinsloo (2004), the SERVQUAL model manages to measure the difference between the customer's expectation on a particular service and the perceived service quality provided by the institution using the measurement instrument. Brochado (2009) has stated that SERVQUAL measurement instrument is the most commonly used methodology to measure the service quality provided by institutions.

In the field of higher education, service quality is of particular importance and is highly essential. According to Alves and Raposo (2010), positive perception of service quality has a significant influence on students' satisfaction. Based on a definition provided by Cheng and Tam (1997), "education quality is a rather vague and controversial concept". The definition of higher education quality is highly dependent on the stakeholders who experience services provided by higher education institutions. Since the main stakeholders of any higher education institution are the students, service quality usually comprise from their experience in engaging with different services provided during their student years.

For the current study, the main focus is on the students' perception on the service quality provided by higher education institutions and not on their expectation. The reason for this is to understand the students' perception on service quality provided by the higher education institution, so that the higher education institution can provide the service based on students' perception in order to attract more potential students in the future.

## 1.2 Problem Statement

Branding is a process that has been in used for thousands of years. Artisans put identifying marks on their products to demonstrate quality and pride in their product. As mentioned in the introduction, branding has helped institutions of higher education seek to negotiate a unique niche in the educational landscape. As educational rankings become increasingly relied upon and used as a competitive tool for funding, recruiting top students and scholars, the institutional images become increasingly important. Today, the “mark” or brand is the tool by which institutions create and maintain their niche. Today’s institutions make others aware of their services and other areas of prestige by licensing and trademarking their images and products. This practice helps promote and promulgate images of institutions to a broader audience but it also impacts the college experience for those attending the institution. The brand can also help an institution become more differentiated at the cost of misleading or not adhering to the university’s core mission.

In many countries, the higher education industry is facing a rapidly changing and diverse international market, changing regulations, emerging technologies, and more demanding international students. In order to remain competitive, many universities are being urged to develop a market orientation towards global markets. Marketing higher education in a student-centred/customer-led context is particularly relevant to countries such as the United States of America (USA), UK and Australia as a number of universities in these countries are increasingly incorporated into the global markets and global marketing systems (Sultan and Wong, 2012).

A number of recent studies have argued that a successful branding effort in the context of the higher education sector, operating in a competitive market, could improve university service functions, and attract and retain students (Casidy, 2013; Sultan and Wong, 2012, 2013a). Although the current research finds that quality and brand are two important sources for achieving the competitive advantage (Sultan and Wong, 2010, 2011, 2012, 2013), the current literature is inadequate as it does not demonstrate how perceived service quality affects UniBrand, and attracts and retains students.



## **1.3 Research Objectives**

With the above problem statement in mind, the objectives of this research are as below:

### **1.3.1 The General Objective**

The purpose of this research is to identify and analyze how factors such as perceived service quality, students' satisfaction, students' trust and students' loyalty contribute towards brand performance of higher education institutions.

### **1.3.2 The Specific Objectives**

The specific objectives are derived from the general objective above. As such, the specific objectives of the study are as follows:

- (a) To examine perceived service quality in relation with the development towards UniBrand performance.
- (b) To examine perceived service quality in relation with the development towards students' satisfaction.
- (c) To examine perceived service quality in relation with the development towards students' loyalty.
- (d) To examine students' satisfaction in relation with the development towards students' loyalty.
- (e) To examine students' satisfaction in relation with the development towards students' trust.
- (f) To examine students' trust in relation with the development towards students' loyalty.
- (g) To examine students' satisfaction in relation with the development towards UniBrand performance.
- (h) To examine students' trust in relation with the development towards UniBrand performance.

- (i) To examine students' loyalty in relation with the development towards UniBrand performance.

## **1.4 Research Question**

After identifying the research objectives mentioned previously, the research questions to be answered in the research project are:

- (a) Does perceived service quality positively affect UniBrand performance.
- (b) Does perceived service quality positively affect students' satisfaction.
- (c) Does perceived service quality positively affect students' loyalty.
- (d) Does students' satisfaction positively affect students' loyalty.
- (e) Does students' satisfaction positively affect students' trust.
- (f) Does students' trust positively affect students' loyalty.
- (g) Does students' satisfaction positively affect UniBrand performance.
- (h) Does students' trust positively affect UniBrand performance.
- (i) Does students' loyalty positively affect UniBrand performance.

## **1.5 Hypotheses of the Study**

The hypotheses that correspond to the research questions are developed as follows:

- H<sub>1</sub>: Perceived service quality is positively correlated with UniBrand performance.
- H<sub>2</sub>: Perceived service quality is positively correlated with students' satisfaction.
- H<sub>3</sub>: Perceived service quality is positively correlated with students' loyalty.
- H<sub>4</sub>: Students' satisfaction is positively correlated with students' loyalty.
- H<sub>5</sub>: Students' satisfaction is positively correlated with students' trust.
- H<sub>6</sub>: Students' trust is positively correlated with students' loyalty.
- H<sub>7</sub>: Students' satisfaction is positively correlated with UniBrand performance.
- H<sub>8</sub>: Students' trust is positively correlated with UniBrand performance.
- H<sub>9</sub>: Students' loyalty is positively correlated with UniBrand performance.

## **1.6 Significance of the Study**

The results of the study will provide valuable insight for future researchers, universities or the government to improve service quality of higher education institutions. There are five factors which will be examined in this study namely: perceived service quality, students' satisfaction, students' trust, students' loyalty, and UniBrand performance. It helps to identify whether perceived service quality affects UniBrand performance.

This study can assist the university in depth to understand the students' perception toward service quality provided by higher education institutions. It helps the university to identify the factors that contribute to brand performance of universities so they will be able to take appropriate action to combat issues on developing sustainability in the universities. These research findings also provide a useful reference to both the top management and educational authorities for their decision-making process to improve service quality provided by the higher education institutions. Moreover, this study also provides the valuable information to government to understand the relationship between perceived service quality, students' satisfaction, students' trust, students' loyalty and UniBrand performance.

## **1.7 Chapter Layout**

### **Chapter 1: Introduction**

This chapter is an introductory chapter that presents an overview of service quality in higher education institutions. It also outlines the research objectives to be achieved, the research questions to be answered, as well as the hypotheses that have to be tested. The significance of the study and the overall chapter layout of the research project are included too.

### **Chapter 2: Literature Review**

Chapter two includes the review of literature, review of relevant theoretical models, proposed conceptual framework to identify the network of relationship and hypotheses development. This

chapter will define the independent variable and dependent variable of the research project. In-depth explanation about the variables with the supported studies from other researchers will be inserted as well.

### **Chapter 3: Methodology**

This chapter illustrates the research design, data collection, sampling design, research instrument, constructs measurement, data processing, and method of data analysis.

### **Chapter 4: Data Analysis**

This chapter basically presents the patterns of the results and analyses of the results by counting the frequencies and calculating means.

### **Chapter 5: Discussions, Conclusion, and Implications**

The last chapter presents the research project summary of statistical analyses, discussions of major findings and implications and limitations of the study, and recommendations for the researcher in future research.

## **1.8 Conclusion**

Chapter one outlined the foundation for the research project. It also acts as an introductory chapter that presents the research project's background, describes the problem statement that will be solved in the research project, addresses the research project's objectives as well as the research questions, and establishes the hypotheses of the study. Finally, the importance of this study and the outlines of each chapter will be presented in the research project.

Chapter two will review the associated literature relevant to the themes of the research project.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

Retailers are continually seeking strategies to insulate and increase profits in response to the increasingly competitive market place. These strategies often focus on service quality improvement, customers' satisfaction and trust increment, and stimulate customers' loyalty. Customers' satisfaction, customers' loyalty, business performance, profitability and service quality have gained a lot attention from academics and managers due to the considerable influence on cost reduction (Gummesson, 1998; Sureshchander et al., 2002).

According to Lai and Cheng (2005), quality is a strategic driver and a key business performance indicator which leads to increased customers' loyalty and higher profits (Backman and Veldkamp, 1995; Dagger and Sweeney, 2006; Rust et al., 2000; Verhoef, 2003; Zeithaml and Bitner, 2000). Herstein and Gamliel (2006) stated that service quality refers to the extent to which the level of the delivered service matches with customers' expectations. Various studies showed that positive service quality perceptions will lead to higher levels of satisfaction. This will subsequently foster the customers' loyalty with the organizations and their services (Burton et al., 2003; Keillor et al., 2007; Lee et al., 2007; Olorunniwo et al., 2006; Spreng and Chiou, 2002). Hence, delivering a high service quality has become an important strategy to generate customers' satisfaction and customers' retention (Cronin and Taylor, 1992; Ennew and Binks, 1996; Ting, 2004; Venetis and Ghauri, 2004; Akroush, 2008).

Another desired target for business is satisfaction, because when the customer is satisfied, they will be more likely to return to the store to buy more and assist to spread through positive word-of-mouth to other customers (Anderson et al., 1994). Hence, customers' satisfaction can help to lead to higher customers' loyalty (Bolton and Drew, 1991), cost reduction for future transactions (Reichheld and Sasser, 1990), and creates positive impacts on firm's profitability (Bolton, 1998).

Trust involves one's expectations that another party will behave in a certain manner (Deutsch, 1958; Schurr and Ozanne, 1985). For instance, the other party will experience poor outcome if one party does not behave as expected, compared to if the other does behave as expected (Deutsch, 1958). Trust is considered to be an essential component of customer perceptions regarding brands and corporations (Aaker, 1997). Trust is beneficial for both corporations and customers. For corporations, they can profit through reduced costs, increased sales, staff retention and even positive word-of-mouth. While customers are benefited via social benefits derived from a trusted service supplier and a reduced perception of risk toward service supplier (Moorman et al., 1993; Schurr and Ozanne, 1985).

Customers' loyalty is also considered as a crucial key to organizational profit and fulfillment. Firms have been proven to own massive market share, and higher rates of return on investment if they have massive teams of loyal customers (Raj, 1985; Reichheld and Sasser, 1990). Dick and Basu (1994) endorsed that brand loyalty makes loyal customers more resistant towards competitive strategies and is able to stimulate positive word-of-mouth.

Service quality is regarded as a way to create a competitive advantage that may help higher education institutions to differentiate themselves from others within the higher education sector (Kassim and Zain, 2010). In other words, provision of quality services is one of the foremost important priorities of education institutes round the world within the higher education context (Trivellas and Geraki, 2008). The higher education sector is playing an increasingly vital role in developing the economy of many countries, which included Malaysia. Past studies have provided empirical evidence to support the positive impact of service quality on students' satisfaction (Athiyaman, 1997; Petruzzellis et al., 2006), loyalty (Rojas-Mendez et al., 2009), and post-enrollment communication behavior (Bruce and Edgington, 2008; Carter, 2009).

Branding in higher education is an area that may be debatable, but has up to now received limited scrutiny among academics (Chapleo, 2011). A brand establishes marketable functions or service provisions beneath the circumstances of intense competition over resources (e.g., investment, renowned academics), and consumers (e.g., students) (Drori et al., 2013). Although the fact that competition amongst universities is not a brand new phenomenon, branding is a

recent advertising and marketing tool for universities to position themselves within the field of higher education (Aspara et al., 2014, Drori et al., 2013; Sultan and Wong, 2012, 2013a). In recent years, many universities in the United Kingdom have gone through stigmatization processes (Chapleo, 2010, 2011; Aspara et al., 2014). A number of recent studies have argued that in stigmatization effort within the context of the higher education sector, operating in a competitive market, could improve university service capabilities, and attract and retain students (Casidy, 2013; Sultan and Wong, 2012, 2013; Watkins and Gonzenbach, 2013). Although the current analysis reveals that quality and brand are two essential resources for achieving competitive advantage (Sultan and Wong, 2010, 2011, 2012, 2013; Cubillo et al., 2006), but the present day literature is insufficient because it does not demonstrate how perceived quality is formed over time, how it affects UniBrand, and attracts and retains students.

## **2.1 Review of the Literature**

### **2.1.1 Service Quality in the Higher Education Sector**

Research in service quality within the higher education sector has been considerably popular over the past twenty years. As competition in the education sector becomes more intensive, many providers focus on “customer orientation” by presenting great service quality (Wright, 2000). The model most often used to measure students' satisfaction has been the SERVQUAL model (Parasuraman et al., 1985), which has been tailored to the academic context (Chong and Pervaiz, 2011; Javadi et al., 2011; Mostafa, 2006; Vaughan and Woodruffe-Burton, 2011) and some of the empirical studies have additionally been performed to look at the antecedents of SERVQUAL within the higher education sector.

The literature has suggested that it is significant to have a robust brand orientation for organizations to continue delivering high quality service (Gromark and Melina, 2011; Wong and Merrilees, 2008). Brands have been thought to be an indicator of quality within the education sector (Judson et al., 2009; Lee et al., 2008). A strong university brand will result in perception

of fantastic quality (Palacio et al., 2002), enabling the university to regard itself as a prime, leading, or global-magnificence university (Belanger et al., 2002).

Service quality in the field of higher education is specifically crucial. It is an established and incontrovertible fact that positive perceptions of service quality have an impact on student satisfaction (Alves and Raposo, 2010). However, the debate remains on the most effective way to outline service quality within the context of higher education (Becket and Brookes, 2006). According to Cheng and Tam (1997), “[...] education quality is a rather vague and debatable concept”. The definition of higher education quality relies on numerous stakeholders who experience various services provided by the higher education institution. Since students are key stakeholders of any education institution, their experiences in engaging with the different services provided throughout their scholar years comprise service quality (Jancey and Burns, 2013).

Numerous studies have tried to develop and examine service quality models in the context of higher education. For example, Abdullah (2005) proposed HEdPERF, a scale to measure perceived service quality within the Malaysian education sector with the use of five dimensions, that is, academic aspects, non-academic aspects, program issues, reputation and access. The preliminary scale was developed and validated using a sample of 409 students from six Malaysian universities in July-August 2003. The outcome of this study showed that students perceived only “access” to be a vital determinant of service quality. As a result, further validation of this scale was recommended by Abdullah (2005). Furthermore, another scale called “The Performance-based Higher Education” was also developed, which enclosed a 67-item instrument for evaluating the perceived service quality of Japanese universities (Sultan and Wong, 2010). This instrument covered eight dimensions, namely, dependability, effectiveness, capability, efficiency, competencies, assurance, unusual scenario management and semester-syllabus. Another study was carried out by LeBlanc and Nguyen (1997b) who examined the dimensions of service quality and their relative importance to service quality as perceived by business students. This study developed a 38-item instrument primarily based on seven dimensions, that is, personnel or faculty, contact personnel or administration, responsiveness, reputation, curriculum, physical evidence and access to facilities.



LeBlanc and Nguyen (1997a) adapted the SERVQUAL instruments in business education. The authors found seven factors that have an impact on student evaluations of service quality, namely: reputation, administration staff, academic staff, curriculum, responsiveness, physical evidence, and access to facilities. Kwan and Ng (1999) found that Hong Kong students who are more pragmatic put less significance on “campus life”, however they place more emphasis on “assessment.” Oldfield and Baron (2000) found that UK students’ perceived service quality as comprising of three dimensions: “requisite elements,” which can be crucial for students to complete their study tasks, “acceptable elements,” which are fascinating, however, now not a demand for students, and “functional elements,” which are more realistic in nature. O’Neill and Palmer (2004) targeted on university students’ perception of the quality of administrative support network. The authors determined that students place different weightings of significance to numerous aspects of administrative elements and recommended that quality improvement ought to be centered solely to those attributes that are considered to be of greater importance to students.

### **2.1.2 Perceived Service Quality**

Perceived service quality (PSQ) supports customers' satisfaction and motivates to increase aim of customers to return (Nadiri and Hussain, 2005a). Consequently, customers' satisfaction result in rise in profitability, return of investment and market share (Legohérel, 1998; Stevens et al., 1995). No wonder, PSQ has been one among the new topics of discussion within the service literature (Ooi et al., 2011). PSQ is usually outlined as the delivered service that is in a position to fulfill customers' expectations, necessities and satisfaction. It is additionally outlined as customers' general impression of the relative inferiority or superiority of the organization and its services (Bitner and Hubbert, 1994). Parasuraman et al., (1985) outlined SQ as the inconsistency between customers' perceptions of services given by a specific company and their expectations concerning firms providing such services.

Literature printed within the late Seventies and early Eighties provided a better understanding of service quality and its measurement. For instance, Shostack (1977) and Lovelock (2000) recognized that the intangible characteristic of services, covered performance and experiences

rendered, in contrast to merchandise that are tangible objects to be possessed. Bowen and Cummings (1990) recommend that “an organization's overall climate of service, the atmosphere or feel of the setting, is incredibly vital in shaping both customers' and front-line employees' attitude concerning the method and outcome of service delivery”.

Carmen and Langeard (1980) and Grönroos (1983) have mentioned another characteristic of services that makes service quality definition and measurement difficult due to synchronic production and consumption. Notably in labor-intensive services like restaurants or merchandising, quality is formed throughout the process of service delivery, and in encounters between workers and patrons. This then suggests that an instrument to quantify service quality should have adequate means of assessing patrons' perceptions of service quality throughout these service encounters. A third characteristic of service is its heterogeneous nature, particularly in those services with high labor content. This suggests that service performance can vary from producer to producer, from patron to patron and additionally from one encounter to next. Zeithaml (1981) has suggested that the heterogeneous nature of service obstructs the consistency of service delivery and also, assessment of service quality. What the institution had meant to deliver could be quite completely different from what the patrons received. An understanding of the characteristics of service is critical within the choice of an applicable instrument to measure service quality. Such an instrument has to accommodate the difficulties raised above and acknowledge that the standard of services is harder for purchasers to gauge than the standard of products. Quality assessments are created not solely on the service outcome, but on the process of service distribution (Parasuraman et al., 1985).

The most widely taken statement of service quality was based on Parasuraman et al., (1988) who outlined it as the perception of the prevalence of the service offered by the provider. They developed the well-known service-quality measuring system known as SERVQUAL whereby service quality could be an operation of the distinction in scores or the gaps between client expectations and perceptions in terms of five dimensions (reliability, assurance, tangibles, empathy and responsiveness). Grönroos (2000) outlined service as, 'a process consisting of a series of more or less intangible activities that normally, but not essentially invariable, happens in interactions between the client and service employees and/or physical resources or

merchandise and/or systems of the service provider, which are provided as solutions to client problems'. As per Fogli (2006), service quality is 'an international judgment or attitude relating to a specific service; the customer's overall impression of the relative inferiority or superiority of the organization and its services. Service quality could be a cognitive decision-making'.

Grönroos (1983), Parasuraman et al. (1985) suggested that Service Quality is fundamentally comprised of two segments —technical quality (the core service provided) and functional quality (how the service is provided). Garvin (1983) outlined quality as one thing that involves wiping out 'internal failures' (defects before the merchandise leaves the manufacturing factory) and 'external failures' (deformities after product use); whereas for Crosby (1979), quality is 'conformance to standards'. While these product-based definitions of quality may be applicable to the merchandise-producing sector "knowledge concerning goods quality ... is inadequate to understand service quality" (Parasuraman et al., 1985). Lovelock (1996) opined that technical quality is the core element and actual outcome of the service as perceived by the client. Sharma and Patterson (1999) expressed that 'technical quality refers to the competency of the consultant in achieving the most effective outcome on investment for his or her customer, at adequate levels of risk, therefore helping the customers to attain their financial goals' and considering technical element of quality to be the core factor in budgetary planning. Grönroos (1978) posited that functional quality is said to be the interaction between the service provider with the client. Sharma and Patterson (1999) declared that functional quality covers the processes that handle delivering the technical service. Gummesson (1991) stated that for assessment of quality of a service, technical and functional, both segments ought to be utilized.

The American Society for Quality defines quality as "the totality of components and characteristics of a product or service that bears on its ability to fulfill given needs" (Haksever et al., 2000). An early conceptualization of service quality was bestowed by Juran (1988), describing it as meeting user's expectations, whereas Zeithaml (1988) outlined service quality as prevalence or perfection in service delivery. Crosby (1979) set another conceptualization of service quality touching on it as conforming to desires and needs. In this context, Sharif and Kassim (2012) expressed that service quality is sometimes client driven, making it troublesome for service suppliers to comprehend and apply "service quality" and characterize it in a

standardized manner (Zeithaml, 1981). This problem in deciding service quality is also repeated in the measurement of service quality, as there's no broad or generally accepted framework that may be operationalized to create an exact assessment of service quality (Seth et al., 2005).

Some researchers have created alternate ideas for service quality. From the two globally recognized schools of service management, the Nordic school view (Grönroos, 1984) and also the American school view; the Nordic school clarifies the service quality on two measurements as functional and technical quality. Ever then, the American school characterized service quality on five measurements: (1) Tangibles (Physical facilities, equipment, and looks of personnels); (2) Reliability (Ability to perform the guaranteed service constantly and precisely); (3) Responsiveness (Willingness to assist client and provide prompt service); (4) Assurance (Knowledge and courtesy of staff and their ability to inspire trust and confidence); (5) Empathy (Caring, individualized consideration the firm gives its clients).

SERVQUAL framework was proposed to assess perceived service quality in different sectors. Several applications of SERVQUAL have been accounted for while it has been tested and used to quantify service quality in different contexts, like banking sector (Ehigie, 2006; Karatepe et al., 2005; Mels et al., 1997; Poolthong and Mandhachitara, 2009; Jabnoun and Al-Tamimi, 2003; Zhou et al., 2002), hospitality industry (Nadiri and Hussain, 2005b; Butler et al., 1996; Mei et al., 1999; O'Neill et al., 1994), insurance (Tsoukatos and Rand, 2006), restaurant (Qin et al., 2010) and internet marketing (Long and McMellon, 2004).

### **2.1.3 Satisfaction**

As being one of the mostly studied principles in marketing literature (Phillips et al., 2011), there are varied attempts to outline the clients' satisfaction concept (Yang and Peterson, 2004), however, a generally agreed definition has not been exposed yet (Tsiotsou, 2006). In view of previous studies, a client satisfaction definition is done as:

"As a construct, clients' satisfaction has been noted as a special form of clients' attitude; what proportion the buyer likes or dislikes the service once experiencing it" (Woodside et al., 1989).

Customer's satisfaction (CS) could also be outlined as an individual's perception either discontent or delight looking at the perceived performance of a product with respect to one's expectations (Lin et al., 2010). Anderson et al. (1994) outlined CS as the overall analysis based on the entire purchase and consumption experience with a service over time.

Customers' satisfaction has been recognized as promoting thought and to be applied as a vital goal of all business activities (Wang and Lo, 2002). Besides having significance for businesses taking into consideration its impact on repurchase intention and word-of-mouth communication, customer's satisfaction is also tagged as the most cost-effective promotion tool (Pizam and Ellis, 1999). Combining the acquisition and consumption processes with the development of post-purchase (Kandampully and Suhartanto, 2000), customer satisfaction could also be a guide for following and developing the present and potential performance of companies (Zairi, 2000).

There has been some confusion relating to the connection of perceived service quality and customers' satisfaction. However, service quality is taken into account as a transactional-level construct and customers' satisfaction as a global-level construct (Oliver, 1980; Bolton and Drew, 1991) by most researchers. Service quality (SQ) and satisfaction are distinct constructs, and SQ is the antecedent of satisfaction (Dabholkar, 1995; Cronin et al., 2000b). Satisfaction is viewed as a vital determinant of customer's loyalty (Cronin and Taylor, 1992; Caruana et al., 2000), and contains a tempering result on the connection of service quality with behavioral outcomes (Durvasula et al., 2004; Cronin et al., 2000b). Bloemer et al. (1999) found that both customer's satisfaction and client perceptions of service quality were vital predictors of loyalty in retail banking services. They additionally found that quality has direct and indirect (through satisfaction) impact on loyalty.

Jones and Sasser (1995) indicate that the link between satisfaction and loyalty is non-linear. They measured loyalty as the customer's state of intent to repurchase; they found that moving customers to a better level of satisfaction helps to develop long haul loyalty. Olsen and Johnson (2003) found a positive relationship between satisfaction and loyalty, they outlined loyalty as behavioural intentions construct. Studies by Anderson et al. (1994), and Rust and Zahorik (1993)

observed satisfaction to be a main variable in deciding loyalty. Shamdasani and Balakrishnan (2000) examined the determinants of quality and loyalty of customized services. They found that trust and satisfaction considerably influence loyalty to specific service providers. McAlexander et al. (2003) investigated the impact of satisfaction on customer's loyalty. Their empirical survey results indicate that satisfaction may be a key driver of loyalty. Soderlund and Ohman (2003) by trial and error studied the satisfaction-intention link concerning completely different intention constructs. They recommend that the choice of one specific intention indicator over another can generate completely different conclusions concerning the role of satisfaction as a determinant of intentions.

Olsen and Johnson (2003) found a positive relationship between satisfaction and loyalty. Gustafsson and Johnson (2002) measured the satisfaction-loyalty-performance link at Volvo. They concluded that Volvo maintains an extensive number of loyal customers who have repeat purchases with the corporate. Ranaweera and Prabhu (2003a) examined the combined effects of client satisfaction and trust on client retention and positive word of mouth (one component of loyalty). Their information from this expansive scale survey confirmed that both satisfaction and trust have a robust positive relationship with client retention and word of mouth communication.

Numerous researchers (e.g., Mao and Zhang, 2012; Zeithaml et al., 1996; Zeithaml et al., 2003) have recommended that the supply of high-quality services is essential for the profit of a company, since it enhances customer satisfaction. Satisfied customers tend to be loyal to the service provider, resulting in client retention and expanded revenue generation. Service quality should meet or exceed customers' expectations in order to satisfy customers to encourage repeat purchasing (Anderson and Sullivan, 1993).

Furthermore, the second concept to be determined is students' satisfaction that is closely associated with customers' satisfaction. In line with Naik et.al. (2010), it is mediated impact from service quality to behavioral intention. Hence, during this study, the researchers need to envision the impact all over again in education sectors. Satisfaction concept is an incomprehensible clarification which is expressed by the comparison between expectation and what is gained by the customers (Schiffman and Kanuk, 2010).

#### **2.1.4 Trust**

Moorman et al. (1993), Morgan and Hunt (1994) exhibited trust as a significant component of relationships. Flavian et al. (2005), Dimitriadis et al. (2011) considered trust to be an element and multi-faceted conception. Iqbal and Mirakhor (2007) highlighted the importance of trust in Islamic context by suggesting that trust may be an extremely stressed upon identity attribute.

Moorman et al. (1993), Ganesan (1994), Morgan and Hunt (1994), Garbarino and Johnson (1999), Sirdeshmukh et al. (2002), Grayson et al. (2008) conceptualized and measured trust uniquely in contrast to one another. They set forth particular dimensions of trust like credibility, confidence, reliability, honesty or benevolence. Kantsperger and Kunz (2010) noted that the concept of trust lacks an unambiguous definition despite its universally accepted importance within the marketing literature because the construct has been conceptualized and measured in many ways.

Mayer et al. (1995) outlined trust as 'the eagerness of the party to be at risk against the actions of another party taking into account the desire that the other will perform a specific activity imperative to the trust or, regardless of the ability to monitor or control that other party'. Kumra and Mittal (2004) recommended that trust in honesty indicates confidence in partner's openness and honesty in business communication.

Lim and Razzaque (1997), Garbarino and Johnson (1999), Sirdeshmukh and Singh (2000), Chaudhuri and Holbrook (2001), Sirdeshmukh et al. (2002) underlined the importance of trust in explaining loyalty. Garbarino and Johnson (1999), Chaudhuri and Holbrook (2001) found how brand trust in influencing loyalty, whereas Sirdeshmukh and Singh (2000), Sirdeshmukh et al. (2002) projected benevolence as an element of trust that explains loyalty. Ball et al. (2004) contended that absence of trust obstructs loyalty formation in a very competitive market. Kassim and Abdullah (2010) studied the relationship between trust and client loyalty in two cultural contexts i.e. Malaysia and Qatar and observed it to be critical. Nguyen and Leclerc (2011) posited that customers in service industry tend to carry positive behavioral state of mind towards the brand they trust. Zeithaml et al. (1996) perceived trust as an important marker of client

loyalty. Dimitriadis et al. (2011) additionally contended that trust is capable to transform customer's satisfaction into customer's loyalty.

Trust is one of the focal elements of buyer-seller relationships. The role of trust in social exchange relations has been the topic of researchers' interests (Wu et al., 2010). Trust refers to a positive belief concerning the unwavering quality and reliability of an individual or an object (Everard and Galletta, 2006). Trust builds once the client has confidence in a service provider's responsibility and integrity (Kim et al, 2009). Consumers' trust in the service provider will facilitate reducing their cognitive risk and insecurity and therefore change the upkeep of the long haul relationship (Gefen, 2000). Customers, develop trust based on positive beliefs with respect to their expectation for the conduct of the organization and also the performance of product a brand represents (Ashley and Leonard, 2009). Trust reflects additive impacts over time on loyalty in high-involvement, high-service product markets (Chiou and Shen, 2006).

### **2.1.5 Loyalty**

Customers' loyalty (CL) includes re-purchase intention, willingness to recommend to others a product or service and hesitation to change to a different provider (Cronin and Taylor, 1992). It can be shown in behaviors like re-purchase intention (Cronin and Taylor, 1992; Fornell, 1992; Parasuraman et al., 1991) or in word-of-mouth (Cronin and Taylor, 1992; Selnes, 1993).

Loyalty is an essential objective of relationship marketing and generally even equated with the relationship marketing concept itself (Sheth and Parvatiyar, 1999). Jacoby and Chestnut (1978) clarify that loyalty is not simply a behavior; it is an element of underlying psychological factors similarly. They propose the definition of brand loyalty as " ... the biased (i.e., non-random) behavioral response (i.e. purchase) expressed over time by some decision-making unit in relation to one or more alternate brands out of a group of such brands and is a component of psychological (decision making, evaluative) process".

Zeithaml et al. (1996) suggested that loyalty is gauged by the quantity of consumers who repeatedly purchase from the organization as a result of their positive attitude towards its



merchandise. Fornell et al. (1996), Caruana (2002) mirrored that customers' attitude towards buying behavior is usually based mostly upon their past experience.

Uncles et al. (2003) projected that there are three famous conceptualizations of loyalty:

1. As an attitude that ends up in the relationship with the brand,
2. Favorable behavior and
3. Purchasing moderated by individual attributes, circumstances and/or the acquisition scenario.

Rai and Srivastava (2012) noted that loyalty has principally been seen as a 'two-fold concept' indicating the repeat purchase intentions and positive attitude of the customers and proposed that each of those aspects of loyalty need to be consistent over time.

Referring to Walsh et al. (2008), who outlined loyalty as a 'profoundly held commitment to repurchase or re-patronize a favored product or service consistently in the future, that resulted in repetitive same-brand or same-brand set buying, despite any situational influences and promoting efforts that may cause switching behavior'. Baumann et al. (2011) expressed loyalty as a state of the mind and conduct. Ladhari et al. (2011) conceptualized loyalty as a customer's continued patronage of a selected bank. Underlining the role of satisfaction, Amin et al. (2011) proposed that customers retort unfavorably and switch to alternative service suppliers after encountering disappointment, thereby, influencing client loyalty adversely. Rai and Srivastava (2013) bestowed their understanding of client loyalty as follows:

'Customer loyalty may be a psychological character shaped by sustained satisfaction of the client plus emotional attachment shaped with the service provider that leads to a state of willingly and consistently being in the relationship with preference, patronage and premium'.

In marketing literature the term loyalty has usually been used interchangeably with its operational (measurement) definition to refer to: repeat purchase, preference, commitment and allegiance. Additionally, loyalty has been remarked in a variety of market-specific contexts, as an example, service, store and vendor loyalty, and contexts that replicate the unit of measurement; customer and brand loyalty (Algesheimer et al., 2005).

There is no agreement in the marketing literature on how loyalty ought to be measured (Bennett and Rundle-Thiele, 2002). Keller (1993) proposes that loyalty is present once favorable attitudes towards the brand are manifested in repeat purchasing behavior. Gremler and Brown (1998) state that each attitudinal behavioural dimension ought to be incorporated into measurements of loyalty. Evolving out of, and contradictory to, early definitions that were solely activity, customer's loyalty these days is typically viewed as comprising both behavioral and attitudinal elements (Gremler and Brown, 1998).

Attitudinal measurements, as a result of the actual fact that they replicate the psychological and emotional attachment to loyalty, are utilized in order to know the psychological feature components that underlie buying motives and future actions (Bowen and Chen, 2001; Fathollahzadeh et al., 2011). They are viewed to increase the value of the merchandise or service (Wu, 2011). Reichheld (1993) opined that attitudinal loyalty refers to the emotional and mental state of the client under which he repurchases and recommends the merchandise. Gremler and Brown (1998) determine three attitudinal measures of loyalty, that are: (1) the chance of continuing to do business or re-purchasing, (2) the chance of increasing the business or buying, and (3) the disposition to recommend or function as a reference. Behavioral measurements, on the opposite hand, concentrate on the customer's purchasing history (Vesel and Zabkar, 2009; Fathollahzadeh et al., 2011) and are measured by the repetitive purchasing behavior that a client shows towards a product or service (Wu, 2011).

Another distinction of customer loyalty is between active loyalty and passive loyalty. Active loyalty refers to the word-of-mouth publicizing and therefore the customer's aim to utilize a product or service, whereas passive loyalty involves the customer's choice to stay with the corporate, even when he or she is not absolutely satisfied with the merchandise or services delivered (Fathollahzadeh et al., 2011; Akhtar et al., 2011). It is said that true loyalty is shown when people opt to remain customers of a corporation even when they are not offered the best quality of merchandise and services (Ahluwalia et al., 2000). The sort of loyalty that is defined by commitment is termed premium quality (Gounaris and Stathakopoulos, 2004).

There's a growing body of research which indicates that loyalty is developed in ways that are more dynamic and sophisticated than reflected in the common "satisfaction builds loyalty" models (Fournier et al., 1998; Oliver, 1999). Oliver (1999) presents a transformative model in which satisfaction makes necessary contributions to the choice to repurchase early in the possession cycle. In this model, as customers gain experience, a "convergence of product, individual, and social can prompt the emergence of final loyalty". Loyalty extends beyond straightforward satisfaction. Loyalty intentions are necessary in marketing as they serve as predictions of shopper decision making.

### **2.1.6 Brand performance**

Branding can be a subjective term where "nobody is talking about exactly the same thing" (Kapferer, 2001). However several scholars (De Chernatony and McWilliam, 1990; Caldwell and Freire, 2004; De Chernatony, 2010) proposed brand definitions which supported "emotional" and "rational" factors; so most definitions embrace this approach in some form (Hart and Murphy, 1998). Overall, a brand is multidimensional construct whereby managers increase products or services with values and this facilitates the procedure by which customers confidently recognize and appreciate these values (De Chernatony et al., 1998).

Branding was originally formed as a method to convey the glory of makers. However, this origination has developed into the modern branding paradigm built upon abstraction and cultural engineering, where products embody consumers' goals and are solely tenuously connected to functional advantages (Holt, 2002). Most conceptualizations of brand name are clear once it involves the benefits of branding, but typically relate to a commercial business setting. De Chernatony and McDonald (2005) affirm that a successful brand delivers sustainable competitive advantage and eventually brings in superior profitability and market performance. Holt (2002) argues that brands will be more significant on the off chance if they are offered as cultural resources and helpful ingredients to create the "self" one chooses.

Jevons (2006) believes that branding is a shorthand measure for the entire scope of criteria that make up the standard of the university. Bennett et al. (2007) recommend that universities need strong brands to improve awareness of their presence and course offerings. Reasons for applying

the principles of branding to education are, therefore, evident. However, actually quantifying advantages are somewhat more elusive, and a degree of discussion on desirability continues. As current political and economic processes progressively make competition in education unavoidable, brands can be both a strategic asset and a source of sustainable competitive advantage (Caldwell and Coshall, 2002). However, a cautionary perspective is that branding in non-commercial organizations, like universities, could produce a spirit of unhealthy competition, prompting an expenditure that is of dubious advantage (Sargeant, 2005).

Blumenthal and Bergstrom (2003) offer a more generous perspective of branding, recommending that it can offer something "of substance" to make the consumers' selection procedure more practical. The perfect conceptualization of a brand as a transparent shorthand for a corporation that customers trust to deliver on their wants may fairly be argued to be fascinating for universities as much as all organizations. The investigation of challenges to brand building in universities serves a genuine purpose: to clarify not solely underpinning conceptual assumptions but sensible implementation in a sector that may struggle to implement overtly business approaches.

Factors like exaggerated competition, a trend to differentiation and student fees driving "marketisation", have driven United Kingdom universities to adopt branding ideas and practices. But in 2001, Johnson argued that they had an extended way to go in terms of incorporating the branding thought, and some thirteen years later, only fractional advancement has been created towards a culture and infrastructure among universities that really understands and embraces effective branding. Branding has additionally created little mark on the higher education marketing literature till recent times (Hemsley-Brown and Oplatka, 2006; Bennett et al., 2007), although the previous couple of years have seen a gradual increase in papers. The hesitance to embrace the topic is also partial because the debate on the desirability of a marketing culture among higher education continues (Jevons, 2006), and it is therefore appropriate to start with some discussion of the reason for adopting branding in the world, and to follow this with exploration of conceptualizations of branding that have a degree of connection to higher education. This analysis encompasses a UK context, however convergence in international higher education has created the discussion fairly generalizable (Becher and Trowler, 2001).

As universities around the world are increasing their marketing campaigns, prospective students undertake a complex client decision-making method when it involves choosing a university to attend, and branding becomes a way to alter their choice selection. A study by Sevier (1994) found that "image" is the most imperative variable that affects prospective students' choice to attend a university. Similarly, Berger and Wallingford (1996) found "reputation" as the most vital university choice criteria. Gutman and Miaoulis (2003) found that, "a positive brand image will be a robust influence in the choice to attend a school or university." For this reason, universities expend a significant amount of resources on their brand campaign to set themselves up to be in the elicited set of prospective students. Several higher education organizations have established branch campuses overseas so as to expand their international brand name and reputation (Hemsley-Brown and Oplatka, 2006).

Overall, examination of the literature reveals that numerous areas of branding theory have some relevance for higher education, however the sector's specific cultural, management and organizational issues imply that viable application is not easy or essentially fascinating. Academic writing has apparently not reliably kept pace with the fast changes in higher education marketing practice (Waeraas and Solbakk, 2009; Iqbal et al., 2012). The call to better comprehend higher education branding is so clear.

Despite a growing interest in the study of higher education marketing, the literature on education branding looks to be restricted (Hemsley- Brown and Oplatka, 2006). Studies in the past have inspected the brand design of universities (Hemsley-Brown and Goonawardana, 2007), development of brand name identities (Lowrie, 2007), the role of internet sites in university branding (Opoku et al., 2006), and the applicability of commercial branding in education settings (Jevons, 2006). Apparently, there is a desire for more analysis on the topic of branding in general, and brand introduction specifically, within the higher education sector (Chapleo, 2007).

## **2.2 Hypotheses Development**

### **2.2.1 Perceived service quality with UniBrand performance**

Boulding, et al. (1993) stated that there was positive impact of perceived service quality on customer behavior after purchasing. In other words, customers will be more likely to recommend the products or services to others when they feel that the perceived service quality is good. In a university setting, continuous improvement of quality management contributes to improved service quality (Lagrosen and Lagrosen, 2005). A good perceived service quality will lead to positive word of mouth communication, which will result in positive customers' purchasing intentions. Based on a study done by Yavas et al. (2004), there was relationship between service quality and behavioral outcomes. In the higher education context, it is believed that a good perceived service quality has a positive effect on UniBrand performance, as good perceived service quality results in good word of mouth communication. Students tend to recommend the university to others which indirectly improves the university's brand performance. Therefore:

**H<sub>1</sub>: Perceived service quality is positively correlated with UniBrand performance.**

### **2.2.2 Perceived service quality with students' satisfaction**

The concept of satisfaction plays a vital role in marketing thought and practice. Many literature suggest that perceived quality is the critical determinant of perceived satisfaction (Cronin et al., 2000a; Fornell et al., 1996). Perceived quality is the overall evaluation in the long run while satisfaction is the outcome of this overall evaluation. Alves and Raposo (2007) stated that service quality directly affects satisfaction, while Brown and Mazzarol (2009) stated that perceived value affects satisfaction indirectly in the higher education context. Satisfaction within the context of higher education is known as "a short-term attitude resulting from an evaluation of the students' educational experience" (Elliot and Healy, 2001). According to previous studies, there was direct and indirect relationship found

between service quality and satisfaction (Ledden et al., 2011; Wu, 2013; Ying and Cheng Lu, 2006; Zaibaf et al., 2013). In accordance with the literature, this suggests that the students are satisfied if the service attributes perform well.

**H<sub>2</sub>: Perceived service quality is positively correlated with students' satisfaction.**

### **2.2.3 Perceived service quality with students' loyalty**

The definition for loyalty is "a deeply held commitment to re-patronize or re-buy a preferred product or service consistently in the future, despite marketing efforts or situational influences having the potential to cause switching behavior" (Oliver, 1997). In higher education context, student loyalty is related to the period from student enrolment to the university until post completion of a program (Helgesen and Nettet, 2007b). Higher education institutions should aim to encourage students to be loyal not just during enrolment for their current course, but also by choosing to enroll in the university for further study. There is direct and indirect relationship between students' perceived service quality and loyalty (Helgesen and Nettet, 2007a; Rojas-Mendez et al., 2009). The conceptual model hypothesized a positive relationship between service quality and loyalty.

**H<sub>3</sub>: Perceived service quality is positively correlated with students' loyalty.**

### **2.2.4 Students' satisfaction and students' loyalty**

Literature shows that the central determinant of loyalty is consumer satisfaction in the context of relationship marketing (Law et al., 2004), while relationship marketing is mainly aimed at attracting, establishing, enhancing and maintaining consumer relationship (Sheth and Parvatiyar, 1995), rather than identifying and acquiring new customers (Guenzi and Pelloni, 2004). The most vital requirement for service organizations success nowadays is consumer loyalty and retention (Jones and Sasser, 1995). According to Hong and Goo (2004), the necessary prerequisite for loyalty is satisfaction. As per explanation provided by

Helgesen and Nettet (2011), consumer loyalty is often perceived as the main consequence of consumer satisfaction. Other than that, researchers have also confirmed a significant and positive influence of consumers' satisfaction on loyalty (Athiyaman, 1997). The relationship between students' satisfaction and students' loyalty within the context of higher education has also been confirmed (Arif and Ilyas, 2013; Helgesen and Nettet, 2011; Palacio et al., 2002). Therefore, this study proposes the relationship between students' satisfaction and students' loyalty as follows:

**H<sub>4</sub>: Students' satisfaction is positively correlated with students' loyalty.**

#### **2.2.5 Students' satisfaction and students' trust**

Satisfaction is transaction specific (Cronin and Taylor, 1992) while trust is often affected by consumers' trial and usage evaluation (Delgado–Ballester and Munuera–Aleman, 2001). Students' cumulative satisfaction with the service quality provided makes them believe that the service attributes have consistent capacity to satisfy their needs in the future. Once trust is developed, it becomes more enduring than satisfaction. In the higher education context, it is believed that students' satisfaction plays a role in developing students' trust towards the higher education institution.

**H<sub>5</sub>: Students' satisfaction is positively correlated with students' trust.**

#### **2.2.6 Students' trust and students' loyalty**

According to Bitner (1995), when consumers have perceptions of trust in the service provider, the loyalty to the firm increases. Bowen and Shoemaker (2003) emphasized that the major element of loyalty is trust because trust cannot be easily copied by the competitors. In higher education context, when students trust the higher education institution, they will tend to be more loyal to the institution.



**H<sub>6</sub>: Students' trust is positively correlated with students' loyalty.**

### **2.2.7 Students' satisfaction on UniBrand performance**

Brand performance is defined by the success of a brand in a defined market. In the context of the hotel industry, research found that consumer satisfaction affects brand outcome due to the reason that satisfaction affects sales performance and eventually allows the hotel to increase price premiums (O'Neill et al., 2006). In the context of higher education, students' satisfaction will affect UniBrand performance because satisfaction results in improved brand perception, increased market share and low switching intention. In short, students' satisfaction affects UniBrand performance.

**H<sub>7</sub>: Students' satisfaction is positively correlated with UniBrand performance.**

### **2.2.8 Students' trust on UniBrand performance**

According to Jøsang et al., (2007), when consumers trust the brand, the brand reputation increases. Brand reputation can be defined as a close representation of brand performance (Harris and de Chernatony, 2001). Students' trust summarizes their knowledge and experience which will directly affect UniBrand's performance in the higher education context. Hence, students' trust plays an important role in university branding and the marketability of the programmes (Sultan and Wong, 2012).

**H<sub>8</sub>: Students' trust is positively correlated with UniBrand performance.**

### **2.2.9 Students' loyalty on UniBrand performance**

Customer loyalty can be differentiated by active loyalty and passive loyalty. Active loyalty can be referred to as the customer's intention to use a product or service and word of mouth advertising, while passive loyalty refers to the decision of the customer to remain with the

company although they are not fully satisfied with the delivered product or service (Fathollahzadeh et al., 2011; Akhtar et al., 2011). It is said that when individuals choose to remain as a company's customers when they are not being offered the best service quality or product quality means true loyalty is being demonstrated (Ahluwalia et al., 2000). Premium quality is the type of loyalty that is characterized by commitment (Gounaris and Stathakopoulos, 2004). According to Tucker (1964), brand loyalty is a biased outcome of a combination of characteristics, which do not contribute equally to user's choice.

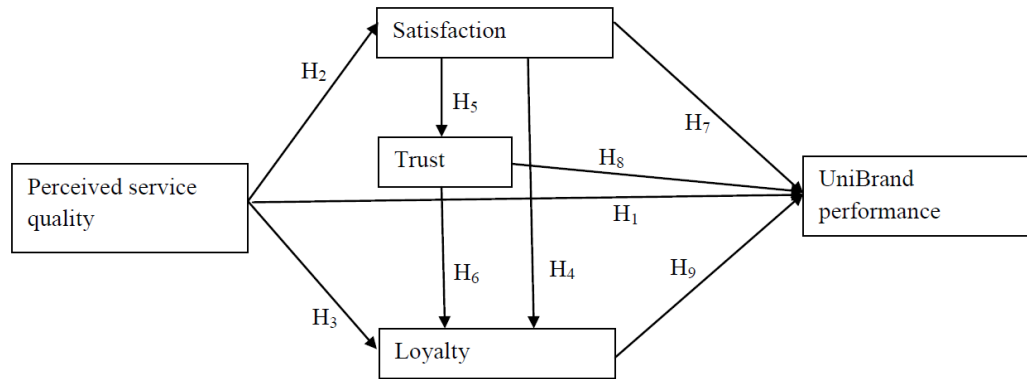
Based on research done by Hallowell (1996), loyalty increases company's performance. When customer retention increases five percent, it can lead to between 25 to 85 percent increase in profit (Ladhari et al., 2011; Akhter et al., 2011). In the higher education context, students' loyalty will affect UniBrand performance because the students tend to recommend the university to others, or plan for further study at the same university which eventually will increase its market share. Therefore:

**H<sub>9</sub>: Students' loyalty is positively correlated with UniBrand performance.**

## **2.3 Theoretical Framework**

Figure 1 demonstrates the proposed conceptual framework that presents as a foundation to continue with this research study. This theoretical framework is developed based on the entire research objectives and research questions in this study. In this framework, the UniBrand performance located at the right hand side of the framework is the dependent variable. The perceived service quality, students' satisfaction, students' trust and students' loyalty represent the independent variables located at the left hand side of the model. The conceptual framework is constructed to identify the independent and dependent variables and show each variable's expected relationship. The dependent variable and each of the independent variables were discussed in earlier sections. The hypotheses development is then present in the following section.

Figure 1: Proposed research model



Based on previous research and theoretical review, the following hypotheses were proposed:

Hypothesis 1 (H<sub>1</sub>): Perceived service quality is positively related with UniBrand performance.

Hypothesis 2 (H<sub>2</sub>): Perceived service quality is positively related with students' satisfaction.

Hypothesis 3 (H<sub>3</sub>): Perceived service quality is positively related with students' loyalty.

Hypothesis 4 (H<sub>4</sub>): Students' satisfaction is positively related with students' loyalty.

Hypothesis 5 (H<sub>5</sub>): Students' satisfaction is positively related with students' trust.

Hypothesis 6 (H<sub>6</sub>): Students' trust is positively related with students' loyalty.

Hypothesis 7 (H<sub>7</sub>): Students' satisfaction is positively related with UniBrand performance.

Hypothesis 8 (H<sub>8</sub>): Students' trust is positively related with UniBrand performance.

Hypothesis 9 (H<sub>9</sub>): Students' loyalty is positively related with UniBrand performance.

## 2.4 Conclusion

The information in this chapter provides a concise analytical view and understanding of this study. How the dependent variable correlates with each independent variable is clearly stated in the hypotheses. In the following chapter, all hypotheses will be tested based on the response using the appropriate research method.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

In chapter two, the literature review, conceptual framework as well as hypotheses were highlighted, and they provides the foundation for this chapter. The focus of this chapter is on the detailed methodology used to collect the necessary data in order to test the hypotheses propounded in the previous chapter. Research design, data collection methods, sampling design, operational definitions of constructs, measurement scales, and methods of data analysis are all included in this chapter.

### **3.1 Research Design**

According to Burns and Grove (1997), the design of a study is the end result of a series of decisions made by the researcher concerning how the study will be conducted. The design is closely associated with the conceptual framework and guides the planning for implementation of the study. It is a blueprint that maximizes control over factors that could interfere with the validity of the findings. According to Polit and Hungler (1995), research designs vary with regard to how much structure the researcher imposes on the research situation and how much flexibility is allowed once the study is under way. The research designs of most quantitative studies are highly structured, while the research designs in qualitative studies are more fluid.

In this research, quantitative research will be conducted in order to measure the variables that would contribute to the branding of higher education. The aim of quantitative research is to determine the relationship between an independent variable and a dependent or outcome variable in a population (Hopkins, 2008). The quantitative research here refers to this survey research as it is focussed on which of the factors contribute to branding of higher education, as well as description of students' perception towards perceived service quality provided by universities.

Additionally, descriptive research is conducted to identify the major factors that contribute to branding of higher education. Descriptive research is undertaken to obtain answers to question of who, what, where, when, and how (Burns and Bush, 2006). It is used in this research as descriptive study establishes associations between variables and the estimate of the relationship is less likely to be biased if there is a high participation rate in the sample selected randomly from a population (Hopkins, 2008).

## **3.2 Data Collection Methods**

Data collection is an important aspect of every type of research study. Inaccurate data collection can influence the results of a study and lead to invalid results. Therefore, it is vital to decide which type of data should be used for the study. In this research, primary data are used to test the hypotheses and research questions.

### **3.2.1 Primary Data**

Primary data are information collected by a researcher specifically for a research assignment. In other words, primary data are information that a company must gather because no one has compiled, and published the information in a form accessible to the public. Companies generally take the time to allocate the resources required to gather primary data only when a question, issue or problem presents itself that is sufficiently important or unique that it warrants the expenditure necessary to gather the primary data. Primary data are original in nature and directly related to the issue or problem, and current data. Primary data are the data, the researcher collects through various methods like interviews, surveys, questionnaires etc. The primary data have their own advantages and disadvantages:

#### **(i) Advantages of primary data:**

Advantages of primary data are as follows:

- The primary data are original and relevant to the topic of the research study so the degree of accuracy is very high.
- Primary data can be collected in a number of ways like interviews, telephone surveys, focus groups etc. It can also be collected across national borders through emails and normal mail. It can include a large population and a wide geographical coverage.
- Moreover, primary data are current and they can give a more realistic view to the researcher about the topic under consideration.
- Reliability of primary data is very high because they are collected by a concerned and reliable party (Donald and Pamela, 2007).

**(ii) Disadvantages of primary data:**

Following are the disadvantages of primary data:

- Collection of primary data where interviews are to be conducted, the coverage is often limited, and for wider coverage more interviews are may be required.
- A lot of time and effort are required for data collection. By the time the data are collected, and analyzed, and the report readied the problem of the research either becomes more serious or outdated. Thus the purpose of the research may be defeated.
- There are design problems like how to design the survey. The questions posed must be simple to understand and respond.
- Some respondents do not give timely responses. Sometimes, the respondents may give false, socially acceptable and sweet answers and try to cover up the realities.
- With more people, time and effort, the cost of the data collection becomes high. The importance of the research may go down.
- In some primary data collection methods there is no control over the data collection. Incomplete questionnaires always give a negative impact on research.
- Trained persons are required for data collection. A novice in data collection may obtain inadequate data for the research (Donald and Pamela, 2007).

### **3.3 Sampling design**

Research is a systematic study to examine or investigate an issue or problem and find out the relevant information for determine a solution. The data for the study is collected from the respondents. It is not possible to collect data from everyone in the population. The population is a very large number of persons or objects or items which is not manageable. Thus samples are taken for measurement. For research purpose, a part of the population is to be selected. Sampling is the process in which a representative part of a population for the purpose of determining parameters or characteristics of the whole population is selected. This is called a sample. It is easier to contact a smaller part of the population for data collection. It can be done within a limited time, effort and at minimum cost. For selection of a sample, special care has be taken to ensure that the sample is a proper representation of the whole population. Every segment of the population should be included but the number should not be very large, as it may become difficult to manage within the time and cost limits (Webster, 1985).

#### **3.3.1 Target Population**

Parahoo (1997) defines population as "the total number of units from which data can be collected", such as individuals, artifacts, events or organizations. Burns and Grove (1997) describe population as all the elements that meet the criteria for inclusion in a study. The objective of this study is to explore and understand the responses on how the factors contribute to UniBrand performance. Hence, the target population of this study will be the higher education students in Malaysia without age restriction among the male and female when they are selected for the survey.

#### **3.3.2 Sampling Frame and Sampling Location**

Polit et al (2001) define a sample as "a proportion of a population". A sampling frame is a representation of the elements of the target population, which is a master list of all the sample units for identifying the target population. The sampling location is within Malaysia, the

questionnaire will be distributed to the respondents in the selected areas and also online in order to seek broader groups of respondents.

### **3.3.3 Sampling Elements**

An element is the object (or person) about which or from which the information is desired. This research will be conducted in Malaysia; the target respondents selected is higher education students. They are targeted because the questions concern finding out what are the factors that contribute to UniBrand performance. The students will be targeted because they are one of the major stakeholders of the university, they can provide the relevant opinion based on their knowledge and experience, and their cooperation will provide an important feedback and precise data in this study.

### **3.3.4 Sampling Technique**

There are two sampling techniques that can be used in this study which are probability technique and non-probability technique. Non-probability technique is used in this study because non-probability technique is inexpensive, extensively used and do not require a large population. Hence, it can help to save or reduce the cost of sampling.

A quota sample of 227 respondents was selected. After that, a convenience sample element was selected to distribute the questionnaire to students. Often, respondents were selected because they were present in the right place and right time.

### **3.3.5 Sampling Size**

Sample size refers to the number of elements to be included in the study. Within the time and other resource constraints, 230 sample sizes were prepared for this research. The quantity sample size is fulfills the survey requirement accordingly. Hence, a total of 230 questionnaires will be distributed to students within Malaysia.



### **3.4 Research Instrument**

Survey is used to collect quantitative information about items in a population. Surveys are used in different areas for collecting the data, even in the public and the private sectors. A survey may be conducted in the field by the researcher. The respondents are contacted by the researcher personally, through telephone or mail. This method takes a lot of time, effort and money but the data collected are of high quality, current and relevant to the topic. When questions are administered by a researcher, the survey is called a structured interview or researcher-administered survey. When the questionnaire is administered by the respondent, the survey is referred to as a questionnaire or a self-administered survey. Very large samples are possible. Statistical techniques can be used to determine validity, reliability, and statistical significance. Surveys are flexible in the sense that a wide range of information can be collected. They can be used to study attitudes, values, beliefs, and past behaviors. Because they are standardized, they are relatively free from several types of errors. There is an economy in data collection due to focus provided by standardized questions. Only questions of interest to the researcher are asked, recorded, codified, and analyzed. The research instrument used in this study is a self-administered questionnaire.

The questionnaire was developed based on the literature reviewed with the objective of examining the relationships of perceived service quality, students' satisfaction, students' trust, and students' loyalty with UniBrand performance.

#### **3.4.1 The purpose of using a Questionnaire**

A questionnaire is typically used to create the appropriate questions and obtain feedback from the respondents (Burns and Bush, 1997). According to Burns and Bush, using a questionnaire can have the research objectives translated into specific questions that are asked of the respondents and this provides standardization to all respondents' reaction to the survey. Besides that, a questionnaire can speed up the process of data analysis and quality control by the researcher.

### **3.4.2 Questionnaire Design**

Closed-ended questions or scaled-response questions are used whereby respondents are required to choose from response options or scale points on the questionnaire (Burns and Bush, 1997).

The questionnaire is in English as it is an international language and suitable for communication with the respondents. Generally, the questionnaire is divided into three major sections. The first section is designed to collect demographic information from the respondents. The second section is designed to investigate the relationship between service quality, students' satisfaction, students' trust, students' loyalty and UniBrand performance. Indeed, a questionnaire is an efficient data-collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran, 1992). Survey has been one of the common approaches to investigate students' perspectives on UniBrand performance.

The questions on perceptions were measured using a 5-point Likert scale that ranged from 1 that meant strongly disagree to 5 that meant strongly agree. Students were asked to assign a number from 1 to 5 to indicate the level of their agreement to this statement. The higher the number, the greater is the level of supportive opinion of students towards the statement.

There were 44 questions in the second section, divided into five groups, i.e. service quality, loyalty, satisfaction, trust and UniBrand performance. These categories and items were developed based on the literature review.

### **3.4.3 Pilot test**

Pilot testing is a small scale exploratory research techniques that uses sampling but does not apply the exact standards (Zikmund, 2003). A pilot test of questionnaire was conducted before the actual survey took place. Pilot test is also known as pre-testing. A pilot test is

conducted to detect weaknesses in design and instrumentation and to provide a proxy data for selection of a probability sample (Cooper and Schindler, 2003).

The questionnaire was pilot tested in a small group of students (20) to test the content and detect ambiguities. Pilot testing was carried out to obtain feedback, to minimize error and improve the content of the questionnaire. Furthermore, the identified limitations of the questionnaire could be altered to minimize the unforeseen errors while at the same time improving the quality of the questionnaire. As a result, it can obtain more complete and accurate answers from the respondents. If no problems are identified in the pilot test then only will the questionnaires be distributed to the target respondents.

### 3.5 Construct Management

#### 3.5.1 Origin of construct

The source of the construct measurements used in this research project are adapted from Sultan and Wong (2014), Ali, et al. (2015), and Cheruiyot and Maru (2013).

Table 1: Sample measurement items for service quality construct

Construct	Sample measurement items	Sources
Service Quality	<b>Tangibility</b>	Cheruiyot, T. K., & Maru, L. C. (2013).
	University has appropriate facilities for the teaching programs	
	University provides excellent counseling/student welfare facilities	
	<b>Reliability</b>	

	University employees provide services on time as promised	
	University has effective classroom management	
	There are adequate/appropriate procedures of knowledge delivery at the school	
	There is proper record keeping on performance of students	
	<b>Assurance</b>	
	University employees are knowledgeable about their work	
	University employees have relevant skills to perform their duties	
	University employees are trustworthy in the course of their duties	
	I believe what the employees tell me	
	<b>Empathy</b>	
	University employees do their best to understand us and our needs	
	University employees listen to our complaints	
	University employees are approachable and easy to	

	contact	
	University employees keep us informed on our issues/complaints	
	<b>Responsiveness</b>	
	University staff are always willing to help me	
	University staff are never too busy to respond to my requests.	
	University staff are courteous/polite to me	

Table 1 above indicates the items for service quality construct, which are categorized into five groups such as (1) Tangibility, (2) Reliability, (3) Assurance, (4) Empathy, and (5) Responsiveness. Category (1) **Tangibility** includes two items such as (1) University has appropriate facilities for the teaching programs, and (2) University provides excellent counseling/student welfare facilities. Category (2) **Reliability** includes four items such as (1) University employees provide services on time as promised, (2) University has effective classroom management, (3) There are adequate/appropriate procedures of knowledge delivery at the school, and (4) There is proper record keeping on performance of students. Category (3) **Assurance** includes six items such as (1) University employees are knowledgeable about their work, (2) University employees have relevant skills to perform their duties, (3) University employees are trustworthy in the course of their duties, and (4) I believe what the employees tell me. Category (4) **Empathy** includes four items such as (1) University employees do their best to understand us and our needs, (2) University employees listen to our complaints, (3) University employees are approachable and easy to contact, and (4) University employees keep us informed on our issues/complaints. Category (5) **Responsiveness** includes three items such as (1) University staff are always willing to help me, (2) University staff are never too busy to respond to my requests., and (3) University

staff are courteous/polite to me. The seventeen items are adopted from Cheruiyot and Maru (2013).

Table 2: Sample measurement items for satisfaction construct

<b>Construct</b>	<b>Sample measurement items</b>	<b>Sources</b>
<b>Satisfactory</b>	Overall, I am satisfied with this University	Sultan, P., & Wong, H. Y. (2014).
	Overall, it is a good University	
	Overall, this University fulfils my needs	
	It has been a good decision to select this University	
	Overall, I am satisfied with the service performance	
	Overall, I am satisfied with the quality relative to price	
	Overall, this University provides satisfaction compared to an alternative higher education institution	

Table 2 above indicates the items for satisfactory construct, which includes seven items such as (1) Overall, I am satisfied with this University, (2) Overall, it is a good University, (3) Overall, this University fulfils my needs, (4) It has been a good decision to select this University, (5) Overall, I am satisfied with the service performance, (6) Overall, I am satisfied with the quality relative to price, and (7) Overall, this University provides satisfaction compared to an alternative higher education institution. The seven items are adopted from Sultan and Wong (2014).

Table 3: Sample measurement items for trust construct

Construct	Sample measurement items	Sources
<b>Trust</b>	I trust this University	Sultan, P., & Wong, H. Y. (2014).
	I can depend on this University	
	Overall, this University is honest with me	
	I feel secure at this University	
	This University provides reliable quality of services	
	This University guarantees best value	
	The University staff are trustworthy	
	My emotional relationship with this University is strong	
	I always get help from the staff, if I ask for it	
	I am confident that I will get a good job after graduation	

Table 3 above indicates the items for trust construct, which includes eleven items such as (1) I trust this University, (2) I can depend on this University, (3) Overall, this University is honest with me, (4) I feel secure at this University, (5) This University provides reliable quality of services, (6) This University guarantees best value, (7) The University staff are trustworthy, (8) My emotional relationship with this University is strong, (9) I always get help from the staff, if I ask for it, and (10) I am confident that I will get a good job after graduation. The eleven items are adopted from Sultan and Wong (2014).

Table 4: Sample measurement items for loyalty construct

<b>Construct</b>	<b>Sample measurement items</b>	<b>Sources</b>
<b>Loyalty</b>	I will continue at the same university if I want to start a new course	Ali, F., Yuan, Z., Hussain, K., Nair, P. K., & Ragavan, N. A. (2015)
	I will continue at the same university if I want to further my education	
	I will recommend this university to my friends and family	

Table 4 above indicates the items for loyalty construct, which includes three items such as (1) I will continue at the same university if I want to start a new course, (2) I will continue at the same university if I want to further my education, and (3) I will recommend this university to my friends and family. The three items are adopted from Ali et al. (2015).

Table 5: Sample measurement items for unibrand performance construct

<b>Construct</b>	<b>Sample measurement items</b>	<b>Sources</b>
<b>UniBrand performance</b>	This university as a brand is reliable	Sultan, P., & Wong, H. Y. (2014).
	A degree from this University is worthwhile	
	This university performs well	
	I found that this University has a good reputation	
	I am proud to be a student of this University	
	A degree from this University enhances employability	



	The graduates of this University receive good salaries	
	Employers prefer graduates from this University	

Table 5 above indicates the items for UniBrand performance construct, which includes eight items such as (1) This university as a brand is reliable, (2) A degree from this University is worthwhile, (3) This university performs well, (4) I found that this University has a good reputation, (5) I am proud to be a student of this University, (6) A degree from this University enhances employability, (7) The graduates of this University receive a good salaries, (8) Employers prefer graduates from this University. The eight items are adopted from Sultan and Wong (2014).

### 3.6 Data Processing

Data preparation is defined as converting information from a questionnaire so it can be transferred to a data warehouse (Hair et al., 2006). The entire process of data preparation is guided by the preliminary plan of data analysis that was formulated in the research design phase. The first step is to check for an acceptable questionnaire, followed by editing, coding, transcribing the data and finally the data are cleaned and a treatment for missing responses is prescribed.

It is important to adjust the data to make them representative of the population of interest. Other than that, data preparation should begin as soon as the first batch of questionnaire is received from the field, while the field work is still going on as if any problem is detected, the field work can be modified to incorporate a corrective action.

### **3.6.1 Questionnaire Checking**

The initial step in questionnaire checking, involves a check of all the questionnaires for completeness and interview quality while field work is still underway. Any problem in meeting the sampling requirement should be identified and corrective action before the data are edited.

### **3.6.2 Editing**

Editing is the review of questionnaire with the objective of increasing accuracy and precision. It consists of screening the questionnaire to identify illegible, incomplete, inconsistent, or ambiguous responses.

### **3.6.3 Coding**

Coding means assigning a code, usually a number, to each question's possible response and includes an indication of the column position (field) and data recorded it will occupy.

### **3.6.4 Transcribing**

Transcribing data involves transferring the coded data from the questionnaires or coding sheets onto disk or magnetic tapes or directly into computers by keypunching. In this research project, the SmartPLS software will be used for transcribing data.

### **3.6.5 Data Cleaning**

Data cleaning includes consistent check and treatment of missing responses which are more thorough and extensive. Consistency checks identify data that are out of range, logically inconsistent or have extreme values which are inadmissible and must be corrected.

Conversely, missing responses represent values of a variable that are unknown; either because respondents provided ambiguous answers or their answers were not properly recorded.

### **3.7 Data Analysis**

After the data collection is completed, SmartPLS software is used to analyze the data.

#### **3.7.1 Descriptive Analysis**

The descriptive analysis is used to describe the variables (question responses) in a data matrix (all respondents' answers) (Burns and Bush, 2006). According to Aaker et al. (2007), it is statistics normally associated with frequency analysis that helps to summarize the information presented in the frequency table. Basically, descriptive analysis is calculating the descriptive summary statistics, particularly the mean or percentages. The sample mean is simply the average number, obtained by dividing the sum of the responses to that question by the sample size. The mean, range and percentage are used to measure and describe the statistics of the descriptive summary in this study. Descriptive measures are typically used early in the analysis process and become foundation for subsequent analysis. The aim of descriptive analysis is to provide accurate, simple, and meaningful figures by summarizing the dependent and independent variables in a large set of data.

##### **3.7.1.1 Frequency distribution**

According to Aaker et al. (2007), a frequency distribution reports the number of responses that each question received and it is used to determine the experimental of the variable. According to Burns and Bush (2006), frequencies are raw counts, and normally these frequencies are converted into percentages for straightforward comparison of the variables. The objective is to obtain a count of the number of responses associated with different values of the variable. Hence, the frequency distribution will be used to

summarize the demographic information based on the questionnaires returned by the respondents.

### 3.7.2 Evaluation of Measurement Model

According to Burns and Bush (2006), reliability measure is one for which a respondent responds in the same or in a very similar manner to an identical or near-identical question. A survey instrument (questionnaire) is considered reliable if its repeated application results in consistent scores. Reliability is concerned with the consistency of the research findings. This test is able to verify whether the items in the questionnaire are related to each other or vice versa. Cronbach's Alpha reliability test is used to examine the reliability of the measurement scale. Scales were analyzed in term of their reliability, by means of the internal consistency.

Reliability which is less than 0.6 is consider poor, reliability test value that is in the range of 0.7 is considered acceptable, those more than 0.8 to 0.9 are considered very good and the closer the Cronbach's Alpha is to 1, the higher the internal consistency (Sekaran, 1992). The evaluation of the Cronbach's Alpha coefficient is based on the rule of thumb below:

Table 6: Rules of thumb about Cronbach's Alpha coefficient size

Alpha coefficient range	Strength of association
Less than 0.6	Poor
0.6 to <0.7	Moderate
0.7 to <0.8	Good
0.8 to <0.9	Very Good
0.9 and above	Excellent

Reflective measurement models should be assessed with regard to their reliability and validity. Construct reliability assessment routinely focuses on composite reliability as an estimate of a construct's internal consistency. Unlike Cronbach's alpha, composite reliability does not assume that all indicators are equally reliable, making it more suitable for PLS-SEM, which prioritizes indicators according to their reliability during model estimation. Composite reliability values of 0.60 to 0.70 in exploratory research and values from 0.70 to 0.90 in more advanced stages of research are regarded as satisfactory (Nunnally and Bernstein 1994), whereas values below 0.60 indicate a lack of reliability. Likewise, each indicator's reliability needs to be taken into account, whereby each indicator's absolute standardized loading should be higher than 0.70. Generally, indicators with loadings between 0.40 and 0.70 should only be considered for removal from the scale if deleting this indicator leads to an increase in composite reliability above the suggested threshold value. Another consideration in the decision to delete indicators is the extent to which their removal affects validity. Weaker indicators are sometimes retained on the basis of their contribution to content validity. Indicators that exhibit very low loadings of 0.40 and lower should, however, always be eliminated from the reflective scales.

Reflective measurement models' validity assessment focuses on convergent validity and discriminant validity. For convergent validity, researchers need to examine the average variance extracted (AVE). An AVE value of 0.50 and higher indicates a sufficient degree of convergent validity, meaning that the latent variable explains more than half of its indicators' variance. For the assessment of discriminant validity, two measures have been put forward—the Fornell–Larcker criterion and cross loadings. The Fornell–Larcker criterion (Fornell and Larcker 1981a) postulates that a latent construct shares more variance with its assigned indicators than with another latent variable in the structural model. In statistical terms, the AVE of each latent construct should be greater than the latent construct's highest squared correlation with any other latent construct. The second criterion of discriminant validity is usually a bit more liberal: an indicator's loading with its associated latent construct should be higher than its loadings with all the remaining constructs (i.e., the cross loadings).

The coefficient of determination ( $R^2$  value) is a statistical measure of how close the data are to the fitted regression line. In other words,  $R$  square is the square of the correlation between the response values and the predicted response value. The  $R^2$  value ranges from 0 to 1. The higher the value, closer to 1, indicates higher level of predictive accuracy. According to the rough rule of thumb suggested by Hair et al. (2013),  $R^2$  values of 0.75 is substantial, 0.50 is moderate and 0.25 is weak.

### **3.7.3 Evaluation of the Structural Model**

The primary evaluation criteria for the structural model are the  $R^2$  measures and the level and significance of the path coefficients. Because the goal of the prediction-oriented PLS-SEM approach is to explain the endogenous latent variables' variance, the key target constructs' level of  $R^2$  should be high. The judgment of what  $R^2$  level is high depends, however, on the specific research discipline. Whereas  $R^2$  results of 0.20 are considered high in disciplines such as consumer behavior,  $R^2$  values of 0.75 would be perceived as high in success driver studies. In marketing research studies,  $R^2$  values of 0.75, 0.50, or 0.25 for endogenous latent variables in the structural model can, as a rule of thumb, can be described as substantial, moderate, or weak, respectively.

The individual path coefficients of the PLS structural model can be interpreted as standardized beta coefficients of ordinary least squares regressions. Just as with the indicators' weights and loadings, each path coefficient's significance can be assessed by means of a bootstrapping procedure. Paths that are nonsignificant or show signs contrary to the hypothesized direction do not support a prior hypothesis, whereas significant paths showing the hypothesized direction empirically support the proposed causal relationship.

The rule of thumb for model evaluation includes reflective measurement models and structural models.

For reflective measurement models, it includes:

- Internal consistency reliability: Composite reliability should be higher than 0.70 (in exploratory research, 0.60 to 0.70 is considered acceptable).
- Indicator reliability: Indicator loadings should be higher than 0.70.
- Convergent validity: The average variance extracted (AVE) should be higher than 0.50.
- Discriminant validity:
  - The AVE of each latent construct should be higher than the construct's highest squared correlation with any other latent construct (Fornell–Larcker criterion).
  - An indicator's loadings should be higher than all of its cross loadings.

For structural model, it includes:

- $R^2$  values of 0.75, 0.50, or 0.25 for endogenous latent variables in the structural model can be described as substantial, moderate, or weak, respectively.
- Use bootstrapping to assess the path coefficients' significance. The minimum number of bootstrap samples is 5,000, and the number of cases should be equal to the number of observations in the original sample. Critical  $t$ -values for a two-tailed test are 1.65 (significance level = 10 percent), 1.96 (significance level = 5 percent), and 2.58 (significance level = 1 percent).

### 3.8 Conclusion

This chapter describes research design, data collection methods, sampling designs, research instrument, construct measurement, data processing and methods of data analysis adopted in this study. Chapter 3 provides a linkage to Chapter 4, as they are interrelated. The following chapter will show the patterns of the results and analysis of the results which are relevant to the research questions and hypotheses. Chapter 4 will report on the result of statistical analysis as well as interpretation of results of hypotheses testings.

## **CHAPTER 4 DATA ANALYSIS**

### **4.0 Introduction**

This chapter presents the data analysis results based on the data collected. SmartPLS version 3.2.1 was used to assess the measurement model and to validate the structural model. It consists of six major sections. The presentation of the results in this chapter includes data reliability, internal consistency reliability, convergent validity, and discriminant validity. Finally, the hypotheses will be tested in the structural model.

### **4.1 Data Collection**

The 230 questionnaires were distributed to the students from private universities and public universities in Malaysia. 227 questionnaires were used for data analysis, as 3 questionnaires were not completed so these were excluded from the data. The questionnaires were then subjected to analysis, the results of which are provided below.

### **4.2 Demographic Characteristics**

Two hundred and twenty-seven students participated in this study. Out of the two hundred and twenty-seven participants, sixty four (28.19%) belonged to the age group of 17-20 and 146 (64.32 %) to the age group 21-25. 11 (4.85 %) participants belonged to the age group of 26-30, 4 (1.76 %) respondents belonged to the age group of 31-35, and 2 (0.88%) participants belonged to the age of above 35. 161 were female (70.93 %) and 66 were male (29.07%). The education level of the participants was as follows: 16 (7.05 %) respondents are the students from certificate or foundation level, 32 (14.10 %) participants are diploma students, 164 (72.25 %) are the students from undergraduate level, 13 (5.73 %) participants are master program students, and 2 (0.88%) are students from the professional program. In these studies, 80 (35.24 %) of participants are



from private universities, while 147 (64.76 %) of respondents are from public universities. The private university listings included Brickfields Asia College (0.88 %), First City University College (0.44 %), International Medical University (1.76 %), Tunku Abdul Rahman University College (1.32 %), Multimedia University (1.32 %), Monash University (2.20 %), Segi University (8.37 %), Sunway University (2.20 %), Taylor's University (0.88 %), UCSI University (0.88 %), and Universiti Tunku Abdul Rahman (14.98 %). For public university listings, it included International Islamic University Malaysia (5.73 %), Politeknik Sultan Salahuddin Abdul Aziz Shah (0.44 %), Universiti Teknologi MARA (5.29 %), National University of Malaysia (4.85 %), University of Malaya (12.78 %), Universiti Malaysia Pahang (0.88 %), Universiti Malaysia Perlis (2.64 %), Universiti Malaysia Sarawak (0.88 %), Universiti Selangor (3.08 %), Universiti Putra Malaysia (8.37 %), Universiti Pertahanan Nasional Malaysia (2.20 %), Sultan Idris Education University (11.01 %), Universiti Sains Islam Malaysia (1.76 %), Universiti Sains Malaysia (0.44 %), Universiti Teknologi Malaysia (3.08 %), and Universiti Utara Malaysia (1.32 %).

### 4.3 Assessment on the Measurement Model

The measurement model consists of relationships among the conceptual factors of interests and the measures underlying each construct. The data indicates that the measures are robust in terms of their internal consistency reliability as indexed by the composite reliability (table 7). The composite reliabilities of the different measures ranged from 0.844 to 0.948 which exceed the recommended threshold value of 0.70.

Table 7: Measurement Model

Constructs	Item	Loadings	AVE	CR	R <sup>2</sup>
Assurance	SQ(A1)	0.868	0.742	0.920	0.727
	SQ(A2)	0.899			
	SQ(A3)	0.902			
	SQ(A4)	0.772			
Empathy	SQ(E1)	0.827	0.727	0.914	0.815

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	SQ(E2)	0.872			
	SQ(E3)	0.847			
	SQ(E4)	0.863			
Loyalty	Loy1	0.876	0.785	0.916	0.578
	Loy2	0.914			
	Loy3	0.868			
Perceived Service Quality	SQ(A1)	0.742	0.507	0.945	-
	SQ(A2)	0.778			
	SQ(A3)	0.770			
	SQ(A4)	0.642			
	SQ(E1)	0.788			
	SQ(E2)	0.772			
	SQ(E3)	0.771			
	SQ(E4)	0.744			
	SQ(R6)	0.739			
	SQ(R7)	0.711			
	SQ(R8)	0.628			
	SQ(R9)	0.614			
	SQ(RE1)	0.755			
	SQ(RE2)	0.729			
	SQ(RE3)	0.644			
	SQ(T1)	0.579			
	SQ(T5)	0.641			
Reliability	SQ(R6)	0.768	0.640	0.877	0.716
	SQ(R7)	0.866			
	SQ(R8)	0.803			
	SQ(R9)	0.759			
Responsiveness	SQ(RE1)	0.865	0.758	0.904	0.669
	SQ(RE2)	0.901			
	SQ(RE3)	0.845			
Satisfaction	Sat1	0.852	0.700	0.942	0.551

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	Sat2	0.865			
	Sat3	0.872			
	Sat4	0.853			
	Sat5	0.853			
	Sat6	0.733			
	Sat7	0.819			
Tangibility	SQ(T1)	0.838	0.730	0.844	0.512
	SQ(T5)	0.870			
Trust	Tru1	0.816	0.626	0.943	0.630
	Tru2	0.813			
	Tru3	0.860			
	Tru4	0.758			
	Tru5	0.845			
	Tru6	0.820			
	Tru7	0.796			
	Tru8	0.760			
	Tru9	0.719			
	Tru10	0.710			
UniBrand Performance	UP1	0.806	0.695	0.948	0.627
	UP2	0.833			
	UP3	0.883			
	UP4	0.867			
	UP5	0.846			
	UP6	0.872			
	UP7	0.795			
	UP8	0.758			

Figure 2: Average Variance Extracted (AVE) values

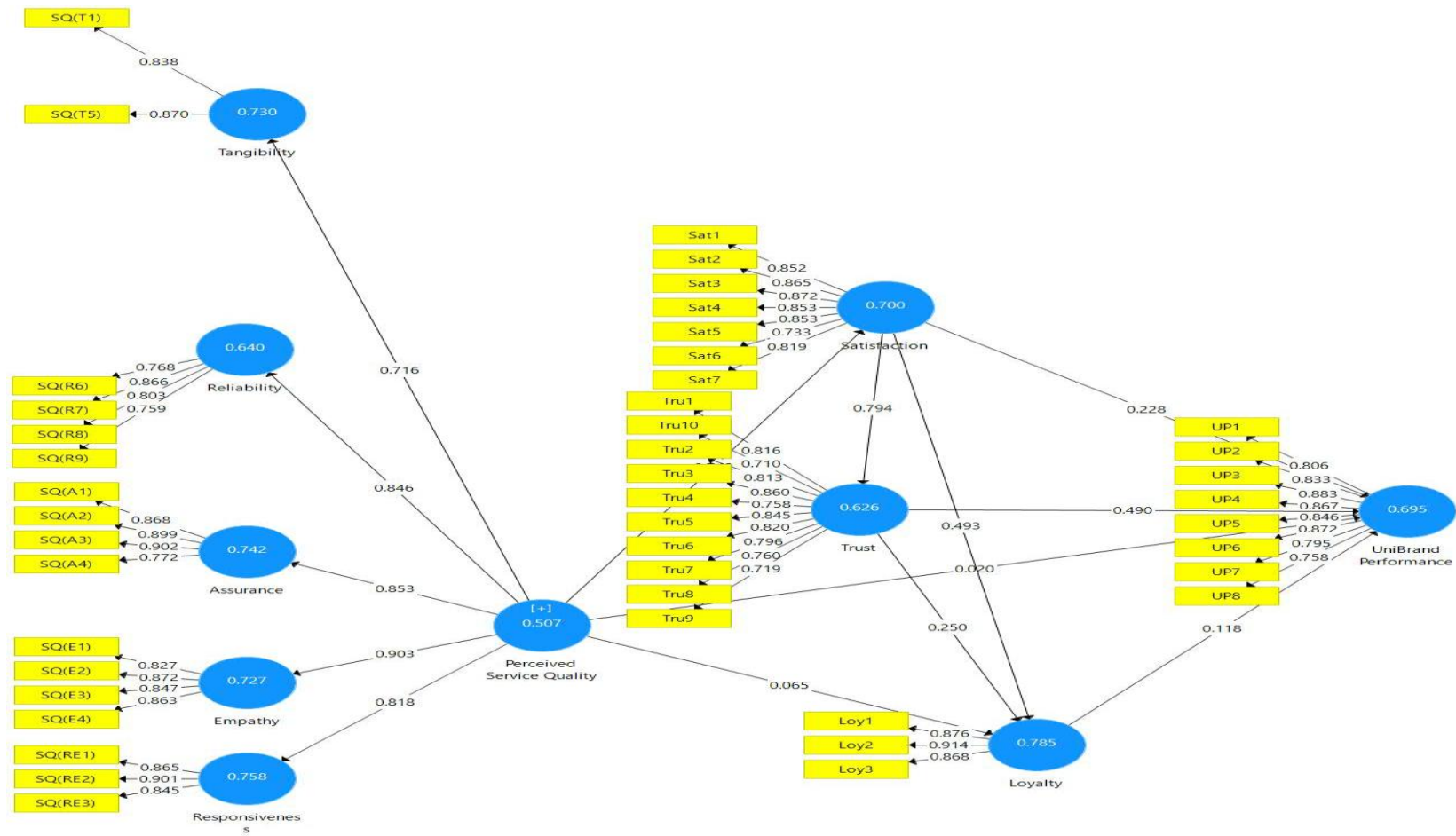


Figure 3: Composite Reliability (CR) values

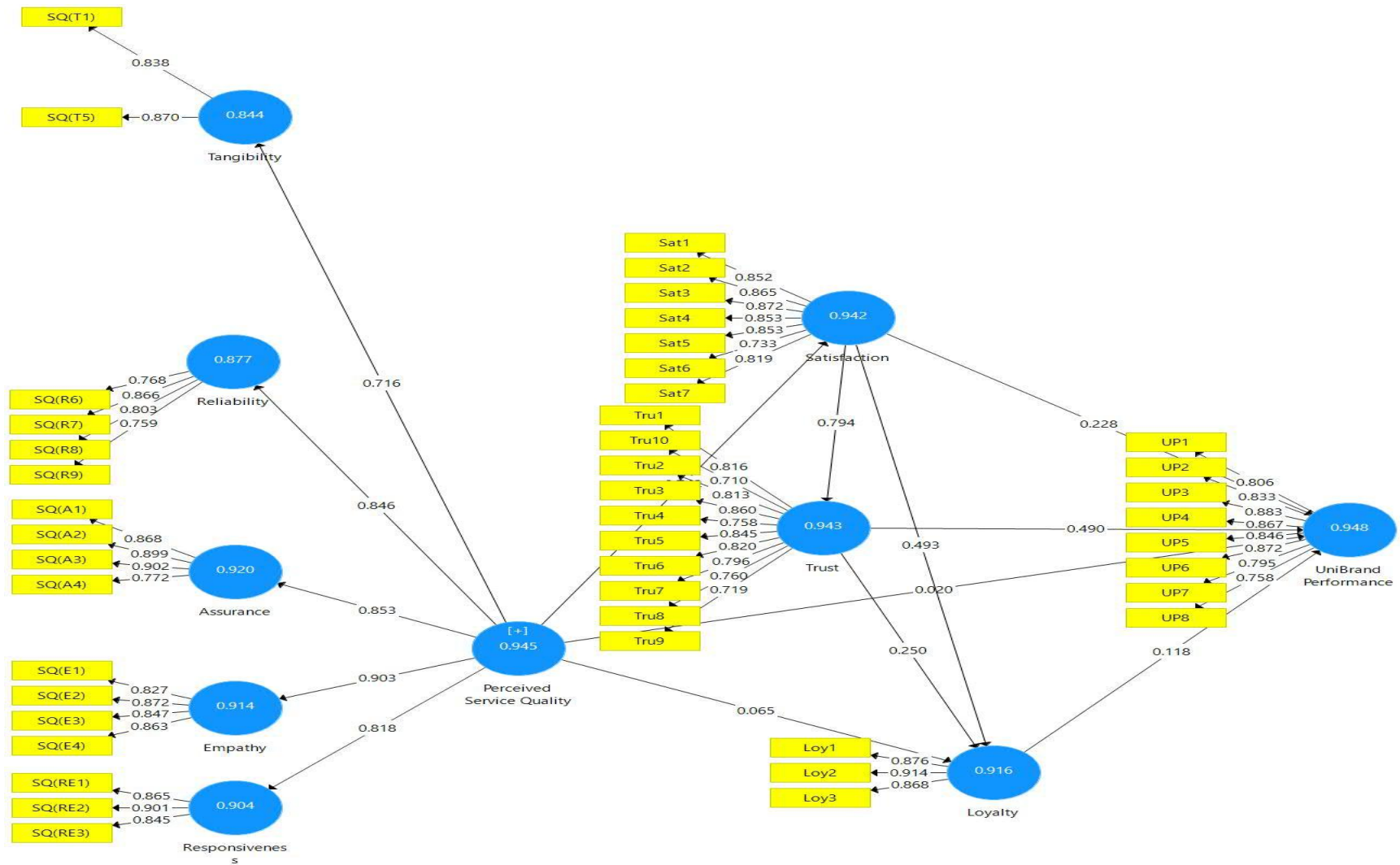
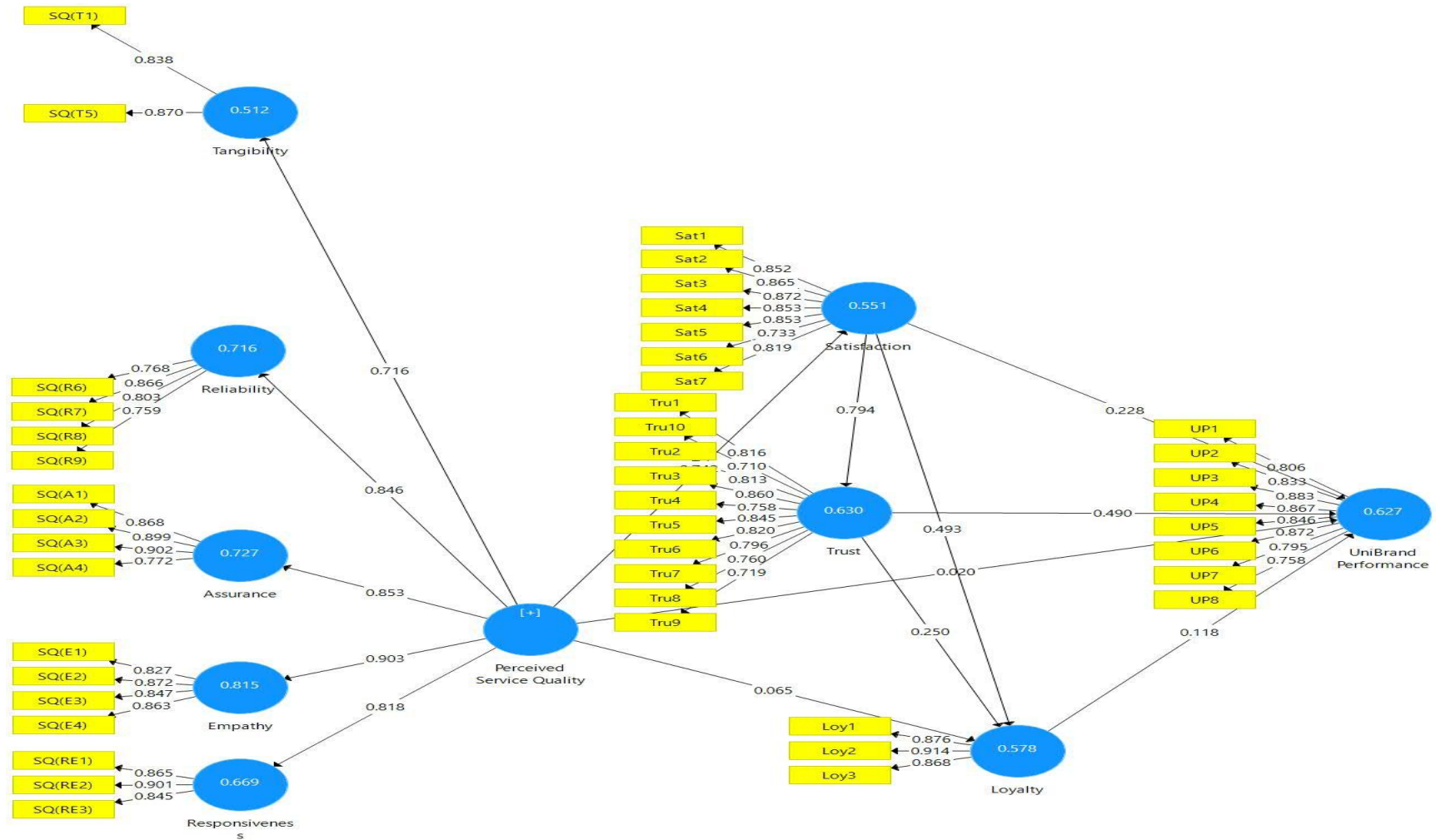


Figure 4: R square ( $R^2$ ) values



Convergent validity measures the degree to which items on a scale are in theory linked. A common rule-of-thumb is a loading greater than 0.7. In the outer model, it is necessary to observe the loading column. In this case, all items loaded on their constructs range from 0.706 to 0.914 indicating convergent validity. Each element in the principal diagonal are always higher than off-diagonal elements in their corresponding row and column (table 8). The pattern supports our scales' discriminant validity, as the components in the main diagonal are constantly higher than the off-diagonal components in their equivalent row and column.

We tested discriminant validity by exploring the average variance shared between a construct and its measures (AVE). Fornell and Larcker recommend values higher than 0.50. In the inner model, we have to observe the AVE index. Each AVE exceeds the 0.5 guideline as suggested (table 7).

Table 8: Discriminant Validity

<b>Constructs</b>	<b>Assurance</b>	<b>Empathy</b>	<b>Loyalty</b>	<b>PSQ</b>	<b>Reliability</b>	<b>Responsibility</b>	<b>Satisfaction</b>	<b>Tangibility</b>	<b>Trust</b>	<b>UniBrand performance</b>
<b>Assurance</b>	0.862									
<b>Empathy</b>	0.684	0.853								
<b>Loyalty</b>	0.506	0.476	0.886							
<b>PSQ</b>	0.853	0.903	0.617	0.712						
<b>Reliability</b>	0.631	0.695	0.577	0.846	0.800					
<b>Responsibility</b>	0.585	0.762	0.475	0.818	0.563	0.870				
<b>Satisfaction</b>	0.600	0.610	0.740	0.742	0.715	0.597	0.837			
<b>Tangibility</b>	0.562	0.529	0.589	0.716	0.607	0.499	0.567	0.854		
<b>Trust</b>	0.662	0.612	0.690	0.742	0.665	0.535	0.794	0.622	0.791	
<b>UniBrand Performance</b>	0.577	0.487	0.637	0.625	0.550	0.451	0.719	0.559	0.767	0.833

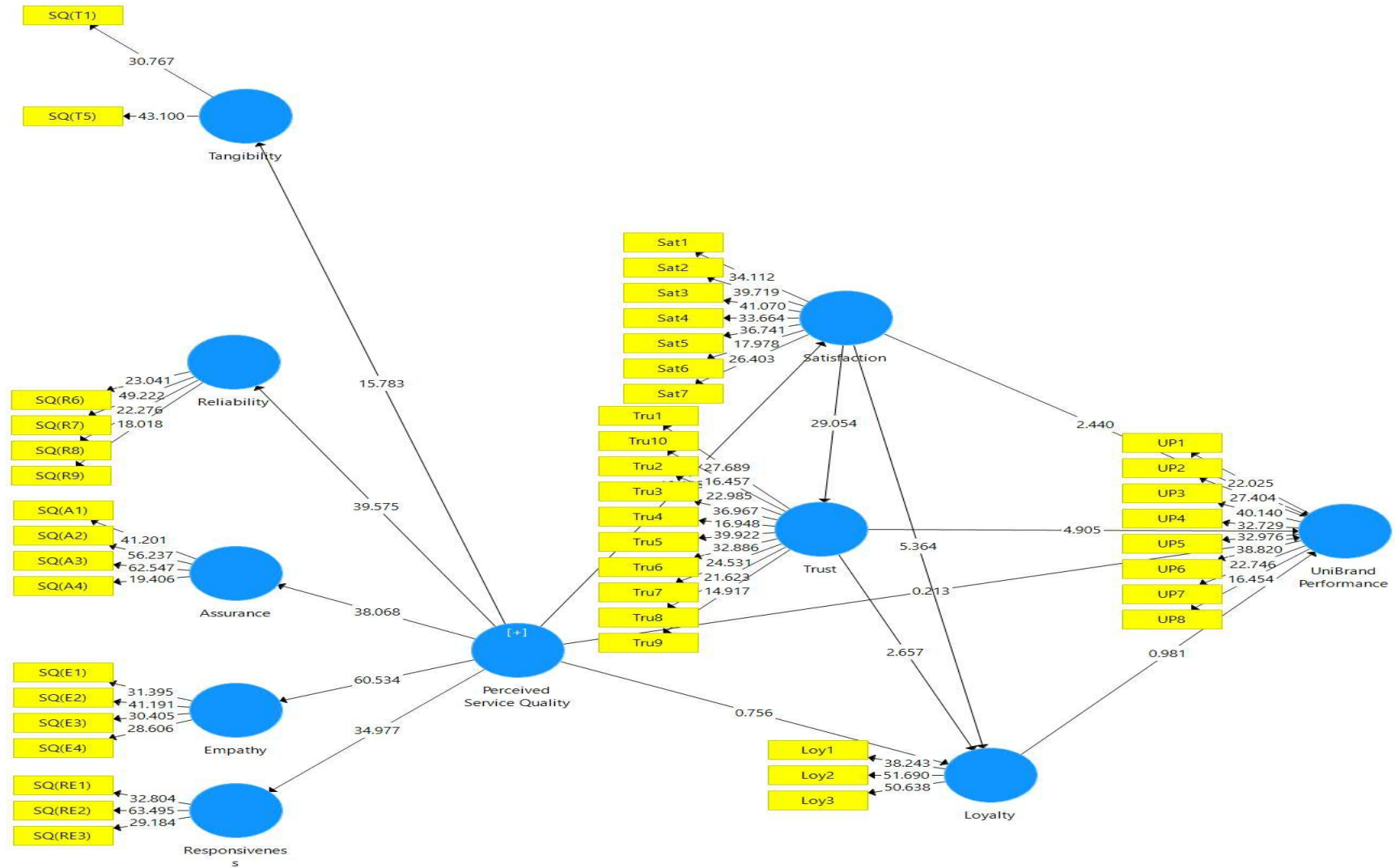


#### 4.4 Research Finding

Table 9: Results of Proposed Research Model

<b>Hypothesis</b>	<b>Relationship</b>	<b>Std. beta</b>	<b>Std. error</b>	<b>t-value</b>	<b>Decision</b>
H1	Perceived Service Quality -> UniBrand Performance	0.020	0.084	0.234	Not supported
H2	Perceived Service Quality -> Satisfaction	0.742	0.043	17.221	Supported
H3	Perceived Service Quality -> Loyalty	0.065	0.090	0.721	Not supported
H4	Satisfaction -> Loyalty	0.493	0.094	5.238	Supported
H5	Satisfaction -> Trust	0.794	0.028	28.408	Supported
H6	Trust -> Loyalty	0.250	0.088	2.832	Supported
H7	Satisfaction -> UniBrand Performance	0.228	0.095	2.401	Supported
H8	Trust -> UniBrand Performance	0.490	0.098	4.974	Supported
H9	Loyalty -> UniBrand Performance	0.118	0.120	0.984	Not supported

Figure 5: Structural model



Based on the results of the hypotheses testing, as shown in Table 4.3 and Figure 4.3, it turns out that H1 (Hypothesis 1): The relationship between perceived service quality and UniBrand Performance is not supported, this is evidenced by the value of the ( $\beta = 0.020$ ,  $t\text{-value} = 0.213$ ), and  $p$  (significance probability) =  $0.831 > 0.05$ . The results of this study contradict the research conducted by Lagrosen and Lagrosen (2005) that the service quality significantly influences positive word of mouth and leads to positive customers' purchasing intention. The findings of this study are also contrary to the opinion of Yavas et al. (2004) which states that there was relationship between service quality and behavioral outcomes. From the students' perspective, good perceived service quality has no positive effect on UniBrand performance as the students will not tend to recommend the university to others although they are experiencing good service quality from the university.

H2 (Hypothesis 2): Perceived Service Quality has a significant effect on students' satisfaction, this is supported by the value of the ( $\beta = 0.742$ ,  $t\text{-value} = 18.115$ ), and  $p$  (significance probability) =  $0.000 < 0.05$ . The findings of this study support the results of the empirical study conducted by Alves and Raposo (2007) and Brown and Mazzarol (2009) that the service quality significantly influences satisfactions. The findings of this study also support the idea of Ledden et al. (2011), Wu (2013), Ying and Cheng Lu (2006), and Zaibaf et al. which states that there was direct and indirect relationship found between service quality and satisfaction.

H3 (Hypothesis 3): The relationship between perceived service quality and students' loyalty is not supported, this is evidenced by the value of ( $\beta = 0.065$ ,  $t\text{-value} = 0.756$ ), and  $p$  (significance probability) =  $0.450 > 0.05$ . The findings of this study are not in line with the opinion of Helgesen and Nettet (2007a) and Rojas-Mendez et al. (2009) that there is direct and indirect relationship between perceived service quality and students' loyalty.

H4 (Hypothesis 4): Students' satisfaction has a significant effect on students' loyalty, this is evidenced by the value of ( $\beta = 0.493$ ,  $t\text{-value} = 5.364$ ), and  $p$  (significance probability) =  $0.000 < 0.05$ . The findings of this study support the results of the study of Law et al. (2004), Hong and Goo (2004) and Helgesen and Nettet (2011) that the satisfaction is the necessary prerequisite for loyalty. The findings of this study also support the idea of Athiyaman (1997), Arif and Ilyas

(2013), Palacio et al. (2002), which emphasizes there is a significant and positive influence of satisfaction on loyalty. It is confirmed that there was relationship between students' satisfaction and students' loyalty within the context of higher education.

H5 (Hypothesis 5): Students' satisfaction has a significant effect on students' trust, this is evidenced by the value of ( $\beta = 0.794$ ,  $t\text{-value} = 29.054$ ), and  $p$  (significance probability) =  $0.000 < 0.05$ . These findings support the research conducted by Cronin and Taylor (1992) and Delgado-Ballester and Munuera-Aleman (2001) that when students are satisfied with the service quality provided, trust is developed.

H6 (Hypothesis 6): Students' trust has a significant effect on students' loyalty, this is evidenced by the value of ( $\beta = 0.250$ ,  $t\text{-value} = 2.657$ ), and  $p$  (significance probability) =  $0.008 < 0.05$ . The findings of this study support the results of empirical research conducted by Bitner (1995) that the trust significantly influences consumer's loyalty. The findings of this study also support the idea of Bowen and Shoemaker (2003) that since trust is not easily copied by competitors, thus it is the major element of loyalty. Thus it is believed that students tend to be more loyal to the university when they trust the university.

H7 (Hypothesis 7): Students' satisfaction has a significant effect on UniBrand performance, this is evidenced by the value of ( $\beta = 0.228$ ,  $t\text{-value} = 2.440$ ), and  $p$  (significance probability) =  $0.015 < 0.05$ . The findings of this study support the results of research conducted by O'Neill et al. (2006) that customers' satisfaction has a significant effect on sales performance. The findings of this study showed that when students are satisfied with the service quality provided by the university, it will result in improved university brand perception, increased market share and low switching intention.

H8 (Hypothesis 8): Students' trust has a significant effect on UniBrand performance, this is evidenced by the value of ( $\beta = 0.490$ ,  $t\text{-value} = 4.905$ ), and  $p$  (significance probability) =  $0.000 < 0.05$ . The results of this study support the empirical study conducted by Jøsang et al. (2007) that the consumer's trust has a significant effect on brand reputation. The results of this study are also in line with the opinion of Harris and de Chernatony (2001) which states that brand reputation is

a close representation of brand performance. Students' trust play an important role in marketing the university's programmes and increasing university brand reputation.

H9 (Hypothesis 9): The relationship between students' loyalty and UniBrand performance is not supported, this is evidenced by the value of ( $\beta = 0.118$ ,  $t\text{-value} = 0.981$ ), and  $p$  (significance probability) =  $0.327 > 0.05$ . The findings of this study contradict the results of research conducted by Hallowell (1996) that the loyalty has a significant effect on company's performance. The findings of this study are also not in line with the opinion of Ladhari et al. (2011) and Akhter et al. (2011) that customer's loyalty improved company's profit. Hence, student's loyalty did not play an important role in UniBrand performance.

## **4.5 Conclusion**

Chapter four showed the patterns of the results and the analysis of the results which are relevant to the research questions and hypotheses. It also reported on the result of the statistical analysis as well as interpretation of the result of the hypotheses. Next, chapter five will further elaborate on the discussion, managerial implications, limitations, future research and conclusion of this study.

## **CHAPTER 5 DISCUSSION, IMPLICATIONS AND CONCLUSIONS**

### **5.0 Introduction**

Based on the results obtained from Chapter 4, the discussion of the major findings will be presented in this chapter. All the research questions will be answered and the achievement of each research objective will be determined. After that the implication of this study will be presented. It is followed by discussion of the limitation of this study. Recommendations for future research will then be made and finally the conclusion of the study.

### **5.1 Discussion and Managerial Implications**

The concept of relationship marketing is of high importance in services marketing, especially, the services that require high-contact and also long-term contact to get the desired outcomes. Maintaining relationships with the tertiary students in a higher education environment can produce long-term benefits to the university, and this is reflected in the empirical evidences of this study. The following paragraphs briefly discuss each of our research questions based on our empirical findings.

This study confirms that while the modified SERVQUAL dimensions were multidimensional, relative performance was uni-dimensional and both could be utilized to capture service quality in higher education in Malaysia. Importance of tangibility, reliability, assurance, empathy and responsiveness to perceived service quality was established. However, perceived service quality showed insignificant direct effect on UniBrand performance.

This study shows that perceived service quality has significant effect on students' satisfaction, which then leads to significant effect on UniBrand performance. Other than that, students'

satisfaction was also tested to have significant effect on students' trust which then also leads to significant direct effect on UniBrand performance. Students' trust also leads to significant effect on generating students' loyalty. From this study, it is noted that perceived service quality shows insignificant effect on students' loyalty and students' loyalty did not lead to significant effect on UniBrand performance.

Since institutions of higher education, particularly public universities are driven to engage in reforms by a variety of forces such as globalization, supply and demand issues, competition, accountability and technology, the theoretical implications of this study is to raise awareness about UniBrand performance. Higher education institutions will be able to have better understanding on relationships between perceived service quality, students' satisfaction, students' trust, students' loyalty and UniBrand performance.

## **5.2 Limitations and Future Research**

This study is an exploratory study intended to build a foundation for future studies. There are a number of limitations in this study. First, this study used samples by engaging a small number of students from different universities. As a result, the study cannot be used to generalize its findings across all students of the universities. However, taking a sample from students from a few universities to study students' attitudes generates valuable insights, which can be used as an empirical basis for more representative follow-up studies. Second, the study did not capture a real-time 'prior to enrolment' experience. As a result, recalling 'prior to enrolment' experience may have been influenced by real-time present experience (i.e., during data collection period). Third, universities are social higher education institutions, where building 'good citizenship' is one of the final outcomes. In this context, the 'UniBrand performance' construct does not include 'good citizenship', and 'community engagement' items.

Future research should examine the generalisability of the measures and the model in the wider context of the higher education sector by considering nationwide university students, programmes, schools and campuses, and determine and monitor each of the universities' 'health

checks'. A longitudinal study could further estimate the validity of the model in terms of practical changes over time, changes in the model prediction and the time requirement to progress to each tier/phase of this model. Improving UniBrand performance construct in the context of higher education sector and determining its overall validity remain another scope for future study.

Future research should be cautious in terms of using the model as students' backgrounds, especially in terms of their program of study, mode of attendance, level of study, nationality, maturity and gender may have an impact on the overall model estimation. Future research should also be cautious in employing the Web-based survey method as the findings from a Web-based survey often influence the overall model estimation through self-selection bias, where a respondent self-selects a survey to answer (or not to answer). Future research should also examine the moderating effects of the demographic variables in the model estimation. A qualitative research aiming to develop themes through pattern matching and determining relationships between themes across institutions could further contribute to the current literature.

Future research could also contribute by studying the appropriate marketing mix strategies, communication channels and messages that build prospective students' cognitive, affective and behavioral judgments. A research on how cross-cultural understanding and level of acceptance/tolerance improve perceived service quality, brand performance and positive behavioral intentions could further add value to the current literature. Future study should examine how political and legal issues, such as, immigration and international student visa rules; and social issues, such as, cultural intolerance, ethnocentrism, and stereotyped behavior, affect perceived quality and international student enrolment. A cross-country study and comparison of results may also provide interesting findings. Finally, the usability of this model in the higher education domain and its subsequent applicability in commercial settings may be of interest to some scholars.



### **5.3 Conclusion**

The present study develops and validates a comprehensive two-tiered 'integrated-process' model, and advances the service quality literature in higher education. The current study developed and validated two new constructs: loyalty and UniBrand performance, and established their relationships in this model by examining several hypothesized relationships. Some of these hypothesized relationships are relatively new when compared with other established relationships, such as, perceived service quality-satisfaction. The current study validated these newly developed hypotheses such as, perceived service quality to loyalty, trust to loyalty, trust to brand performance, loyalty to brand performance, satisfaction to brand performance, in the context of higher education.

Overall, the model provides a good explanation of the core dimensions of perceived service quality, and to what extent perceived service quality contributes in developing students' satisfaction, loyalty and UniBrand performance. It also examines students' satisfaction in generating students' trust towards students' loyalty. Universities aiming for a sustainable presence in a competitive global market and intending to enhance brand performance to attract and retain students are encouraged to consider this model and its implications.

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## **APPENDICIES**

1. Research Questionnaire	A
2. Demographic Profiles	B
3. Internal Reliability and Convergent Validity Test Result	C
4. Loadings and Cross Loadings	D
5. Conference and Publication	E

## APPENDIX A



### Questionnaire Survey

**UNIVERSITI TUNKU ABDUL RAHMAN  
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)  
MASTER OF BUSINESS ADMINISTRATION**

Dear respondent,

**Survey on the factors influencing brand performance in higher education in Malaysia**

I am an MBA student from University Tunku Abdul Rahman (UTAR). I am conducting a research project on the topic of “An integrated model of perceived quality in the brand performance of higher education institution”.

The respondent's identity will be kept anonymous and confidential. This survey contains only two sections, which should take not more than 15 minutes to complete. Your answer is very important for us to conduct this research successfully.

Thank you for your precious time and participation in this survey.

## An integrated model of perceived quality in the brand performance of higher education institution

\* Required

### Part 1: Demographic information

Please tick or fill in the blank for each of the questions below. For each question, select only ONE answer

1. Age \*

Mark only one oval.

- ☐ 17-20  
☐ 21-25  
☐ 26-30  
☐ 31-35  
☐ Above 35

2. Gender \*

Mark only one oval.

- ☐ Male  
☐ Female

3. Current level of study \*

Mark only one oval.

- ☐ Certification/foundation/A-level  
☐ Diploma  
☐ Undergraduate  
☐ Master  
☐ Doctoral  
☐ Other:

4. Please list down the universities \*

.....

### Part 2: Construct measurements



# An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution

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## 5. Service Quality (Tangibility) \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
University has appropriate facilities for the teaching programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University provides excellent counseling/student welfare facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 6. Service Quality (Reliability) \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
University employees provide services on time as promised	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University has effective classroom management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are adequate/appropriate procedures of knowledge delivery at the school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is proper record keeping on performance of students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 7. Service Quality (Assurance) \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
University employees are knowledgeable about their work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University employees have relevant skills to perform their duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University employees are trustworthy in the course of their duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe what the employees tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 8. Service Quality (Empathy) \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
University employees do their best to understand us and our needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University employees listen to our complaints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University employees are approachable and easy to contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University employees keep us informed on our issues/complaints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<https://docs.google.com/a/1utur.my/forms/d/1A4-IBekg1rLfAhRV0VHWS4dk6oM9EPH4qgRVYqLWGI/edit>

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# An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution

1/1/2017

An integrated model of perceived quality in the brand performance of higher education institution

## 9. Service Quality (Responsiveness) \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
University staff are always willing to help me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University staff are never too busy to respond to my requests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
University staff are courteous/polite to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 10. Satisfaction \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Overall, I am satisfied with this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, it is a good University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, this University fulfils my needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It has been a good decision to select this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am satisfied with the service performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am satisfied with the quality relative to price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, this University provides satisfaction compared to an alternative higher education institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 11. Loyalty \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I will continue at the same university if I want to start a new course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will continue at the same university if I want to further my education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend this university to my friends and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution

1/1/2017

An integrated model of perceived quality in the brand performance of higher education institution

## 12. Trust \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I trust this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can depend on this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, this University is honest with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel secure at this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This University provides reliable quality of services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The University staff are trustworthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My emotional relationship with this University is strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always get help from staff, if I ask for it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I will get a good job after graduation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 13. UniBrand performance \*

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
This university as a brand is reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A degree from this University is worthwhile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This university performs well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found that this University has a good reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to be a student of this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A degree from this University enhances employability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The graduates of this University receive a good salaries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employers prefer graduates from this University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## APPENDIX B

### DEMOGRAPHIC PROFILES

Characteristics	Frequency	Percentage (%)	Cumulative Percentage (%)
<b>Age</b>			
17-20	64	28	28
21-25	146	64	92
26-30	11	5	97
31-35	4	2	99
Above 35	2	1	100
<b>Gender</b>			
Female	161	71	71
Male	66	29	100
<b>Education level</b>			
Certification/Foundation	16	7	7
Professional programme	2	1	8
Diploma	32	14	22
Undergraduate	164	72	94
Master	13	6	100
<b>Types of university</b>			
Private university	80	35	35
Public university	147	65	65

## APPENDIX C

### LOADING FOR EACH VARIABLE

Constructs	Items	Description	Loadings
Assurance	SQ(A1)	University employees are knowledgeable about their work	0.868
	SQ(A2)	University employees have relevant skills to perform their duties	0.899
	SQ(A3)	University employees are trustworthy in the cause of their duties	0.902
Empathy	SQ(A4)	I believe what the employees tell me	0.772
	SQ(E1)	University employees do their best to understand us and our needs	0.827
	SQ(E2)	University employees listen to our complaints	0.872
	SQ(E3)	University employees are approachable and easy to contact	0.847
Loyalty	SQ(E4)	University employees keep us informed on our issues/complaints	0.863
	Loy1	I will continue at the same university if I wanted to start a new course	0.876
	Loy2	I will continue at the same university if I wanted to further my education	0.914
Perceived Service Quality	Loy3	I will recommend this university to my friends and family	0.868
	SQ(A1)	University employees are knowledgeable about their work	0.742
	SQ(A2)	University employees have relevant skills to perform their duties	0.778
	SQ(A3)	University employees are trustworthy in the cause of their duties	0.770
	SQ(A4)	I believe what the employees tell me	0.642
	SQ(E1)	University employees do their best to understand us and our needs	0.788
	SQ(E2)	University employees listen to our complaints	0.772
	SQ(E3)	University employees are approachable and easy to contact	0.771
	SQ(E4)	University employees keep us informed on our issues/complaints	0.744
	SQ(R6)	University employees provides services on time as promised	0.739
	SQ(R7)	University has effective classroom management	0.711
	SQ(R8)	There are adequate/appropriate procedures of knowledge delivery at the school	0.628
	SQ(R9)	There is proper record keeping on performance of students	0.614
	SQ(RE1)	University staff are always willing to help me	0.755
	SQ(RE2)	University Staff are never too busy to respond to my requests.	0.729
	SQ(RE3)	University staff are courteous/polite to me	0.644
Reliability	SQ(T1)	University has appropriate facilities for teaching programs	0.579
	SQ(T5)	University provides excellent counseling/student welfare facilities	0.641
	SQ(R6)	University employees provides services on time as promised	0.768
Responsiveness	SQ(R7)	University has effective classroom management	0.866
	SQ(R8)	There are adequate/appropriate procedures of knowledge delivery at the school	0.803
	SQ(R9)	There is proper record keeping on performance of students	0.759
Satisfaction	SQ(RE1)	University staff are always willing to help me	0.865
	SQ(RE2)	University Staff are never too busy to respond to my requests.	0.901
	SQ(RE3)	University staff are courteous/polite to me	0.845
Satisfaction	Sat1	Overall, I am satisfied with this University	0.852
	Sat2	Overall, it is a good University	0.865
	Sat3	Overall, this University fulfils my needs	0.872
	Sat4	It has been a good decision to select this University	0.853
	Sat5	Overall, I am satisfied with the service performance	0.853
	Sat6	Overall, I am satisfied with the quality relative to price	0.733
	Sat7	Overall, this University provides satisfaction compared to an alternate higher education institution	0.819

## An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution

Tangibility	SQ(T1)	University has appropriate facilities for teaching programs	0.838
	SQ(T5)	University provides excellent counseling/student welfare facilities	0.870
Trust	Tru1	I trust this University	0.816
	Tru2	I can depend on this University	0.813
	Tru3	Overall, this University is honest with me	0.860
	Tru4	I feel secure at this University	0.758
	Tru5	This University provides reliable quality of services	0.845
	Tru6	This University guarantees best value	0.820
	Tru7	The University staff is trustworthy	0.796
	Tru8	My emotional relationship with this University is strong	0.760
	Tru9	I always get help from staff, if I ask for it	0.719
	Tru10	I am confident that I will get a good job after graduation	0.710
UniBrand Performance	UP1	This university as a brand is reliable	0.806
	UP2	A degree from this University is worthy	0.833
	UP3	This university performs well	0.883
	UP4	I found that this University has a good reputation	0.867
	UP5	I am proud to be a student of this University	0.846
	UP6	A degree from this University enhances employability	0.872
	UP7	The graduates of this University receive good salary	0.795
	UP8	Employers prefer graduates from this University	0.758

## APPENDIX D

### LOADINGS AND CROSS LOADINGS

	Assurance	Empathy	Loyalty	Perceived Service Quality	Reliability	Responsiveness	Satisfaction	Tangibility	Trust	UniBrand Performance
Loy1			0.876							
Loy2			0.914							
Loy3			0.868							
SQ(A1)	0.868									
SQ(A1)				0.742						
SQ(A2)	0.899									
SQ(A2)				0.778						
SQ(A3)	0.902									
SQ(A3)				0.770						
SQ(A4)	0.772									
SQ(A4)				0.642						
SQ(E1)		0.827								
SQ(E1)				0.788						
SQ(E2)		0.872								
SQ(E2)				0.772						
SQ(E3)		0.847								
SQ(E3)				0.771						
SQ(E4)		0.863								
SQ(E4)				0.744						
SQ(R6)					0.768					
SQ(R6)				0.739						
SQ(R7)					0.866					
SQ(R7)				0.711						
SQ(R8)					0.803					
SQ(R8)				0.628						
SQ(R9)					0.759					
SQ(R9)				0.614						
SQ(RE1)						0.865				
SQ(RE1)				0.755						
SQ(RE2)						0.901				
SQ(RE2)				0.729						
SQ(RE3)						0.845				
SQ(RE3)				0.644						
SQ(T1)								0.838		
SQ(T1)				0.579						
SQ(T5)								0.870		
SQ(T5)				0.641						
Sat1							0.852			
Sat2							0.865			
Sat3							0.872			
Sat4							0.853			
Sat5							0.853			
Sat6							0.733			
Sat7							0.819			

## An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution

Tru1	0.816	
Tru10	0.710	
Tru2	0.813	
Tru3	0.860	
Tru4	0.758	
Tru5	0.845	
Tru6	0.820	
Tru7	0.796	
Tru8	0.760	
Tru9	0.719	
UP1		0.806
UP2		0.833
UP3		0.883
UP4		0.867
UP5		0.846
UP6		0.872
UP7		0.795
UP8		0.758

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## **APPENDIX E**

### **CONFERENCE AND PUBLICATION**

This research project was presented in 2016 International Conference on Social Sciences and Humanities (SOSHUM 2016)

and

Published in ADVANCED SCIENCE LETTERS (ISSN 1936-6612)



UTAR  
UNIVERSITI TUNKU ABDUL RAHMAN

**[SOSHUM'2016] Official Acceptance Notification - Your paper #1570260952 ('An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution')**

To: Moong Shue Chua <moongshue@1utar.my>, Mohammad Falahat <falahat@utar.edu.my>

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such as textbooks frequently used by learners in their language studies prior to the start of their tertiary study. In this study, we conducted a corpus-based research on the current English language textbooks used in Malaysian secondary schools in order to inspect whether similar standing on the importance of academic words were shared by the authors of the textbooks through the inclusion of the AWL into the textbooks corpus. Using the Range software, the data analysis revealed that 480 (84%) out of 570 AWL words were found in the corpus. However the findings on the frequency of each of the AWL words showed that only 237 (41.6%) word families occurred at least 10 times while the rest consist of 333 word families (58.4%) are found either occurring on average frequency between five to nine times, between one to four times or not found at all in the textbook corpus. These findings indicate the lack of frequency of academic words in the Malaysian English Language Textbooks corpus. Without adequate exposure to academic words, students would not be able to acquire the words fully before the start of their undergraduate studies. Thus, the current textbooks must to be updated to meet the learners' academic words needs.

#### **3:45 An Integrated Model of Perceived Quality in the Brand Performance of Higher Education Institution**

Moong Shue Chua and Mohammad Falahat (Universiti Tunku Abdul Rahman, Malaysia)

In Malaysia, higher education is facing dynamic changes due to the government's focus in making Malaysia as a leading education hub in the region. As all programmes are under the purview of the Malaysian Qualifications Agency (MQA), the syllabus across institutions are required to strictly adhere to the standards outlined by MQA. Having similar programmes offered by various universities makes it difficult to be differentiated from one to the other. Thus UniBrand performance has become an important strategy for universities. The purpose is to study relationships between perceived service quality, student satisfaction, student loyalty and UniBrand performance; hypothesizing positive relationships between perceived service quality and UniBrand performance, student satisfaction and UniBrand performance and between student loyalty and UniBrand performance. Perceived service quality as the antecedent of student satisfaction and student loyalty is also included in this study.

#### **4:00 Contemporary Video Arts in Malaysia: A New Framework**

Mohamad Fadly Sabran (Universiti Teknologi Mara, Malaysia); Izaddin Matrahah (Universiti Teknologi MARA, Malaysia); Anwar Fikri Abdullah (Universiti Teknologi MARA (Perak), Malaysia); Ishak Ramli (Universiti Teknologi MARA, Malaysia)

This paper has aimed to study the development of Video Arts in Malaysian Contemporary Arts. Referring to this study, the definition of the video arts category has hardly been defined. This is the crucial reason why contemporary art practitioners amongst Malaysian artists have not involved in video arts. Employing the content analysis approach as the