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**INTERNATIONAL STUDENTS' QUALITY
EXPECTATIONS IN HIGHER EDUCATION**

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ABSTRACT

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The purpose of this research is to examine factors affecting international students' service quality expectations in higher education. The aim is pursued by investigating the international students' quality expectations and the role of price, culture and personal values in forming these expectations.

The theoretical part of this research is centered on themes related to service quality, the nature of educational services, the process of forming quality expectations and the antecedents of service quality expectations. The empirical part of the research was conducted with a quantitative method and the data was collected by using a web based questionnaire. The sample consisted of 268 students who applied to international master's degree programmes in Finland in the spring of 2012. The response rate was 24,1 %.

The research results show that personal values and culture affect the international students' quality expectations of educational services but that price is not significantly related to the quality expectations.

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Tämän tutkielman tarkoitus on tarkastella tekijöitä, jotka vaikuttavat kansainvälisten opiskelijoiden laatuodotuksiin korkeakoulutuksessa. Työssä tutkitaan kansainvälisten opiskelijoiden laatuodotuksia ja sitä, miten hinta, kulttuuri ja henkilökohtaiset arvot vaikuttavat laatuodotuksiin.

Tutkimuksen teoreettisessa osassa keskitytään palvelun laatuun, koulutuspalveluiden luonteeseen, laatuodotusten muodostumiseen ja tekijöihin, jotka vaikuttavat laatuodotuksiin. Tutkimuksen empiirinen osa toteutettiin määrällisellä menetelmällä ja aineisto kerättiin internetkyselyn avulla. Tutkimusjoukko koostui 268 opiskelijasta, jotka hakivat keväällä 2012 kansainväliseen maisteriohjelmaan Suomessa. Vastausprosentti oli 24,1 %.

Tutkimustulokset osoittavat, että henkilökohtaiset arvot ja kulttuuri vaikuttavat kansainvälisten opiskelijoiden laatuodotuksiin koulutuspalveluiden suhteen, mutta hinnalla ei tulosten mukaan ole tilastollisesti merkittävää yhteyttä laatuodotuksiin.

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1. INTRODUCTION

The focus of this research is on international students' quality expectations in higher education and on the factors that shape these expectations. This chapter is an introduction to the topic and it commences by taking a look into the background of the subject. Next, the research questions and objectives are presented, followed by a literature review on the prior research on this topic. After this, the theoretical framework is presented and the delimitations are discussed. The introduction chapter also includes definitions of key concepts in order to avoid misconceptions, as various definitions exist in the current literature. The research methodology is discussed briefly and the chapter concludes with a short presentation of the research's structure.

1.1. Background of the research

Lately, there has been a growing interest in international tertiary education and Hemsley-Brown and Oplatka (2006, 316) claim that the higher education market is now well established as a global phenomenon and that the competition for international students has intensified. According to Yeo (2008, 267), for many institutions service quality becomes the means to retain student numbers and to capture the market share.

In recent years, marketization policies and market-type mechanisms have been introduced in sectors that were previously characterized by a high degree of government control. In higher education, these types of marketization policies are designed to strengthen student choice and liberalize markets in order to improve the quality and variety of educational services. (Jongbloed 2003, 113.) As a result of these changes, many universities are now gradually adopting marketing theories and concepts

to gain competitive advantage and a larger share of the international market (Hemsley-Brown and Oplatka 2006, 317).

In Finland, the recent changes to university legislation have brought attention to the importance of internationalization in tertiary education. The Universities Act that was passed in June 2009, made significant changes to the Finnish higher education policy as universities became independent legal personalities (Ministry of Education and Culture, Finland, 2012a). The reforms increased the universities' financial freedom and gave them the possibility of participating in a trial of tuition fee system for certain master's degree programs for students outside of the European Economic Area (EEA). The purpose of the trial is to enhance the internationalization of universities. (Ministry of Education and Culture, Finland, 2012b.) The free higher education in Finland has been known to attract international students and therefore, it will be interesting to see how the new trial of tuition fees affects the number of international students applying to Finnish universities. In Sweden, the number of international applicants plummeted due to the introduction of tuition fees (Helsingin Sanomat 2011).

In the European level, the Bologna Process was introduced to harmonize the education system in Europe by creating a European Higher Education Area (EHEA) that attracts students from outside (Cardoso et al. 2006, 2). According to the Berlin Communiqué (2003, 3), ensuring the quality of higher education is at the heart of setting up EHEA and the primary responsibility for quality assurance lies with each institution itself in accordance with the principle of institutional autonomy. The Bologna Process aims to create efficient processes in order to increase European competitiveness in higher education (Kettunen and Kantola 2007, 68).

According to Joseph et al. (2003, 11), international students are coveted by recruiters around the world because they often represent the very best their countries have to offer. One of the main benefits of having international students enrolled is that they provide a learning opportunity for other students regarding global awareness, cultural sensitivity and diversity (Lamkin 2000, 2). International students are also often essential for the maintenance of many graduate level programs, especially at smaller universities where student demand determines whether a particular course will be offered (Joseph et al. 2003, 12). Joseph et al. (2003, 12) further suggest that international students are important from an economic perspective because they often pay more tuition fees compared to in-country students whose tuition cost is largely tax-payer subsidized. This applies particularly well to Finnish universities as the international students from outside of the EEA are the only possible source of tuition fees.

Durvasula et al. (2011, 33) claim that marketing has become crucial to higher education as universities compete aggressively for students and differentiate their service offerings. The internationalization of higher education has also highlighted the importance of international competition in higher education. According to Hemsley-Brown and Oplatka (2006, 316), higher educational institutions now recognize the need to market themselves in a climate of international competition. Durvasula et al. (2011, 34) further suggest that differentiating the service offerings through quality management has become imperative as the international competition for students intensifies. In order to create effective marketing plans, universities need to fully understand the students' expectations because it is a vital part of service quality and Zeithalm et al. (1990, 51) argue that knowing what customers expect is possibly the most critical stage in delivering quality service. The purpose here is to analyze the

factors that affect international students' quality expectations in higher education.

1.2. Research questions and objectives

The main objective of this research is to examine factors affecting international students' service quality expectations in higher education. Zeithaml et al. (1990, 51) argue that providing excellent service requires the customer expectations to be known. In higher education, it is imperative for the institutions to understand what the students expect in terms of service quality in order to be successful in attracting new students and also in retaining the current ones. This research focuses on the quality expectations that prospective international students have of the university that they have been accepted to. The main research question is as follows:

What is the role of personal factors and product attributes in forming international students' quality expectations?

In order to find an answer to the main research question, the topic is further examined through supportive research questions. The first sub question focuses on whether the price of education has an impact on the students' quality expectations. Previous research suggests that price is important in students' university selection process (Maringe and Carter 2007, 468; Petruzzellis and Romanazzi 2010, 149) but its effect on students' quality expectations remains to be determined. Therefore, the first sub question is:

What is the role of education's price in forming quality expectations?

The second and third sub questions examine the role of personal factors in shaping expectations. The second sub question is related to culture:

What is the role of culture in shaping international students' expectations of quality?

The cultural influences on service quality expectations have been researched in other contexts and based on their findings, several authors claim that quality expectations vary across cultural groups (Donthu and Yoo 1998, Mattila 1999, Furrer et al. 2000). The aim here is to examine if this applies to higher education.

The third sub question concerns personal values that according to Durvasula et al. (2011, 42), influence students' quality perceptions.

What is the role of personal values in forming international students' quality expectations?

Personal values have recently emerged as a way to understand how customers fulfill deeper needs when consuming a service and they may also offer deeper understanding of how customers judge the quality of educational services (Durvasula et al. 2011, 33).

1.3. Literature review

Quality in higher education has received an increasing amount of attention as has quality management in service industries in general (O'Neill and Palmer 2004, 39). Hill (1995) conducted a study on service quality theory in the context of British higher education and in his research he highlighted the need for higher education institutions to gather information on students' expectations. Although the importance of understanding quality expectations is generally acknowledged, the current literature has focused mainly on service quality and the antecedents of quality expectations have not received enough attention from researchers. The quality dimensions in higher education have been researched by Owlia and Aspinwall (1996) and their article offers a useful review on the matter. Although important, the quality dimensions are only a small piece of the complex puzzle associated with managing and measuring service quality in higher education (Rowley 1997, 7).

Zeithaml, Parasuraman and Berry have been widely credited for their work on service quality and their model of customer assessment of service quality is commonly used. The authors developed the SERVQUAL model that measures customers' perceptions of service quality. SERVQUAL is a quantitative instrument that consists of two sections. First, the general customer expectations are assessed through 22 statements and then the customers' perceptions of a certain firm's service is measured with the same set of 22 statements. (Zeithaml et al. 1990, 23.) In this research, only the first section of the instrument is used as the purpose here is to examine the students' expectations in higher education and not their perceptions of quality.

Zeithaml et al. (1993) have also further studied the nature and determinants of customer expectations of service. In their article the authors present a model that classifies service expectations into three different categories: desired service, adequate service, and predicted service. These three types of expectations are later discussed in more detail.

The SERVQUAL model has been applied by several authors in examining service quality in higher education (McElwee and Redman 1993, Soutar and McNeil 1996, Tan and Kek 2004, Yeo 2008). Soutar and McNeil (1996) conducted a study on service quality in tertiary education by using a modified version of the SERVQUAL model and determining students' expectations about the quality of educational services was one of the objectives of their research. The results suggest that the students were quite satisfied with the quality of the academic institutions surveyed. In the area of tangibles, the students' expectations had been exceeded but the administrative service quality was less favorable.

The students' perspective on service quality in higher education was researched by Joseph et al (2005). According to the authors, the existing research has been too focused on the academic insiders' point of view. The study examines the factors that the 450 sample freshmen used as choice criteria in selecting their university. According to the results, the sample students do not consider their university a "quality" institution. In a prior research by Joseph et al. (2003), the international students' perspective on the determinants of quality service in education was studied by using the importance/performance paradigm.

A recent study by Durvasula et al. (2011) examines how personal values operate in the evaluation of higher education services. The purpose of the study is to determine whether personal values in higher education have an impact on perceptions of overall value, satisfaction, and behavioral outcomes, such as loyalty and intention to recommend. According to the authors, educational institutions need to move beyond attributes in measuring service quality and also consider personal values, as these have an effect on customer satisfaction and loyalty.

Recently, researchers have begun to examine the role that culture plays in the service evaluation process. However, to date the link between cultural values and tertiary students' choice decisions has been poorly researched (Kim-Choy et al. 2009, 57), even though research in other service industries has showed that culture affects customers' service expectations (Donthu and Yoo 1998, Mattila 1999, Furrer et al. 2000). In higher education, students' cultural values have been found to influence students' university selection and preferred sources of information for university choice (Kim-Choy et al. 2009) but the role that culture plays in shaping students' quality expectations remains to be determined.

The existing research on students' quality expectations and perceptions has focused on current students and thus far, no study has measured prospective students' quality expectations after they have applied but before they have begun their studies. Current students' expectations cannot be completely unbiased due to their experiences at their chosen university and therefore, measuring students' expectations prior to perceptions of the service provides valuable information to university marketers.

1.4. Theoretical framework

The theoretical framework, that is presented in figure 1, is a modification of a model by Zeithaml et al. (1990, 23). According to the authors, the four key factors that shape customers' expectations are: word-of-mouth communications, personal needs, past experience, and external communications. Later, the authors revised their model, suggesting that the nature of expectations determines their antecedents (1993, 5). Personal needs were not viewed as influencing predictive expectations that are investigated in this research.

Personal values were added to the model of this research as personal needs do not cover all of the personal reasons behind customers' quality expectations. The broader factor of personal values was deemed necessary as Durvasula et al. (2011, 42) suggest that personal values in higher education affect perceptions of service quality. In the original model by Zeithaml et al. price is subsumed under the general influence of external communications (Zeithaml et al. 1990, 19) but in this research price is a factor on its own and the influence it has on student expectations is examined. The arguments that support this claim are further discussed in chapter 2.5.5. Culture is also added as a factor and one of the aims of this research is to investigate how the cultural dimensions shape students' quality expectations. The five dimensions of service quality are based on the dimensions that the SERVQUAL model measures (Zeithaml et al. 1990, 26). The factors that were added to the model are marked in blue in the theoretical framework and the focus of this research is on these factors and the other antecedents of quality expectations, marked in grey, are covered more briefly.

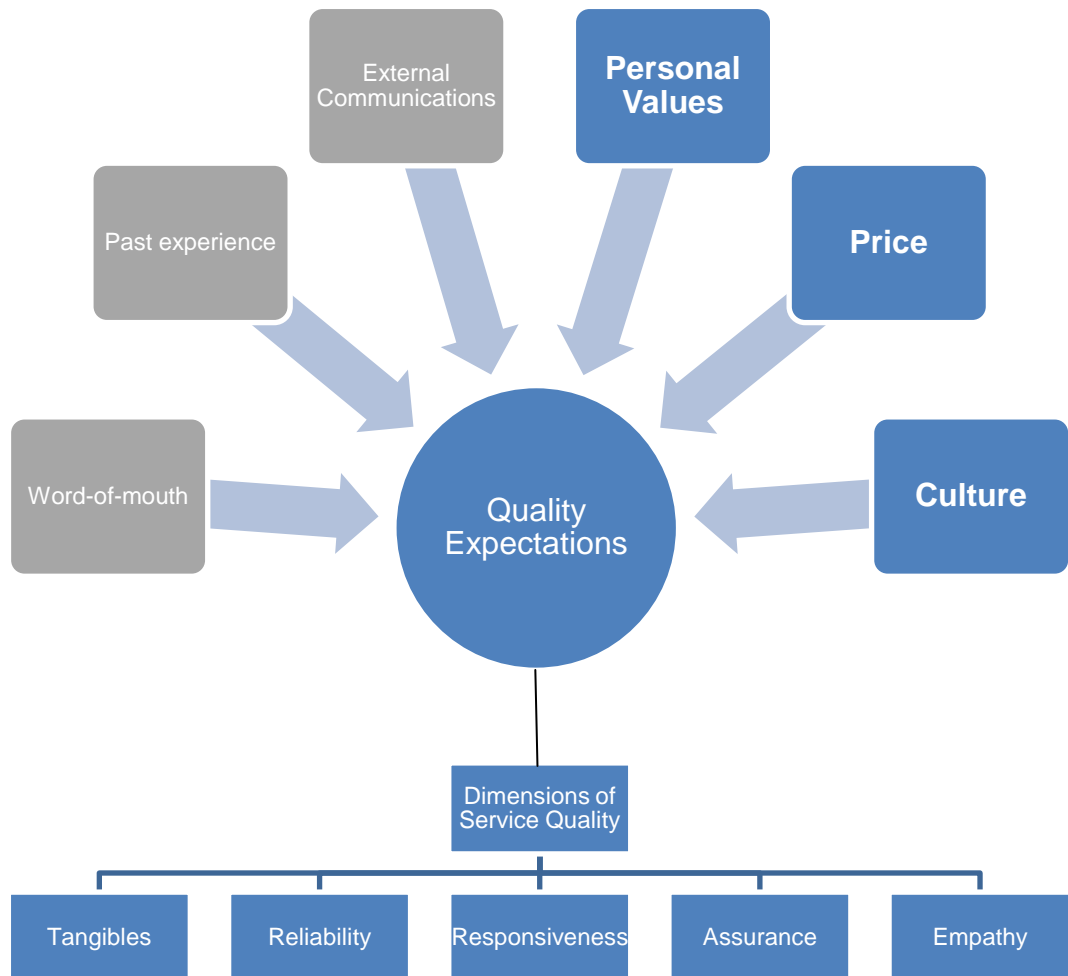


Figure 1: Theoretical framework

1.5. Delimitations of the research

The focus of this research is on the international students' quality expectations and perceived service is not a part of this research. The concept of service quality is examined in the theoretical part as it is so closely related to quality expectations but the students' perceived service quality is not measured in the empirical section. This research is conducted from the Finnish universities' point of view and all of the sample students have applied to a Finnish university. In this research, international students are defined as students who have applied to an international master's degree programme. The quality expectations are

only studied from the students' point of view and other stakeholders, such as academic staff, are not focused on.

The empirical part of this study concentrates only on international master's degree students but the theoretical part has a broader perspective, taking into account international degree students at both bachelor's and master's degree levels. Exchange students are not examined in either part of this research.

This research studies the role of personal factors and product attributes in forming international students' quality expectations. Culture and personal values are the chosen personal factors that are examined in this research and other personal factors are not investigated. Price is the product attribute that is of specific interest in this research and the role of other product attributes in forming students' quality expectations is not studied.

1.6. Definitions of key concepts

Next the key concepts related to this research are defined.

Culture can be defined in many ways due to its complex nature and therefore, various interpretations of culture exist in literature. Robbins and Stylianou (2001, 3) define culture "as a shared set of values that influence societal perceptions, attitudes, preferences, and responses".

Customer expectations are defined as "predictions about what is likely to happen" (Waler 1995, 6). They serve as standards or reference points to

which the actual perceived service is compared to (Zeithaml et al. 1993, 1).

Service quality is the discrepancy between customers' expectations and perceptions (Zeithaml et al. 1990, 21) and it can be defined as "an attitude developed over all previous encounters with a service firm" (Clow et al. 1997, 232).

International student is defined in this research as a student who is applying to an international degree programme.

Personal values can be defined as beliefs and relatively stable cognitions that strongly impact emotions (Durvasula 2011, 8).

Price of education refers only to tuition fees and it does not include any other costs related to education.

1.7. Research methodology

The theoretical part of this research is based on existing literature in the field of international marketing of higher education. The focus is on service quality in tertiary education and also on subjects, such as personal values, price, word of mouth, and external communications of educational institutions. Numerous articles and books are studied in order to create a solid theoretical basis for the research.

The empirical research is conducted by using a quantitative method and the data is collected via survey in August 2012. A modified version of the SERVQUAL model will be used to measure the students' quality expectations. This research will focus only on the expected service and not on the perceived service quality that measures the gap between the customers' expectations and the perceived service.

1.8. Structure of the research

Next, the structure of this research is briefly discussed. The first chapter of the study introduces the topic of the research by first presenting the background of the chosen subject and then the research objectives and questions. The introduction chapter also includes a literature review on the prior research concerning service quality in higher education. The theoretical framework of this study is also presented and illustrated in figure 1. In addition, definitions of the key concepts are provided in order to define how they are used in this research as various definitions exist in the literature. The first chapter also includes delimitations of the research, followed by a short introduction of the research methodology, and the research's structure.

The body of the research can be divided into a theoretical and an empirical part. The second chapter of the study discusses the students' quality expectations in higher education from a theoretical point of view. The nature of educational services is examined through the often cited characteristics of services that are persiability, inseparability of production and consumption, intangibility, and heterogeneity. Implications of these characteristics on quality expectations are also examined. The concept of service quality is discussed as well as the role of student as the primary customer in higher education. The next section of the theoretical part

examines how the quality expectations are formed and what their antecedents are. Discussion centers especially on the antecedents that are not based on the model that was developed by Zeithaml et al. (1990).

The third and fourth chapters of the research cover the empirical part of the study. In the third chapter, the research methods are studied in more detail and the sampling and response rate are presented. The survey and the chosen questions are discussed as well as the design of the survey and how the results are coded and measured.

The last chapter of the research consists of the conclusions and discussion. The theoretical contribution of this research is presented as well as the practical utility. Limitations and suggestions for further research are also analyzed.

2. QUALITY EXPECTATIONS IN HIGHER EDUCATION

Understanding students' expectations is a vital part of delivering quality educational service and Hill (1995, 10) highlights the need to gather information on students' expectations during their time at the university but also at the point of arrival and before in order to manage students' expectations from enrolment through to graduation. He further stresses the importance of aligning expectations as closely as possible with what can be delivered in terms of service quality. Yeo (2008, 266) also agrees with the importance of customer expectations in higher education and states that "Management of student expectations is fundamental to ensuring appropriate service quality in higher education."

2.1. Nature of educational services

Services are often characterized as intangible, heterogeneous, perishable, and requiring simultaneous production and consumption (Zeithaml et al. 1985, 33). According to Kotler and Fox (1995, 279-280) all of these characteristics apply to educational services and, as in services marketing in general, these characteristics require a particular marketing strategy application. Carman and Langeard (1980, 7) claim that the usual determinants of profitability: life cycle, experience, and marketing share, are not easily applied to service firms; therefore, the strategic planning of service marketing needs careful consideration.

Zeithaml et al. (1990,51) suggest that the gap between customers' expectations and perceptions may be considerably larger in service companies than it is in manufacturing firms because services have few clearly defined and tangible cues. Hill (1995, 10) states that the abstract nature of services causes problems for both providers as well as customers. According to him, service providers have difficulties in

differentiating their offerings from those of competitors, while consumers find it equally difficult to evaluate a service before it is acquired and consumed. The difficulties in pre purchase evaluation also affect the customers' quality expectations.

According to Zeithaml et al. (1985, 33), intangibility is the fundamental difference between services and goods because as performances, rather than objects, services cannot be sensed in the same manner as goods. Intangibility is often associated with high level of risk (Cubillo et al. 2006, 103) because they cannot be seen, touched, tasted, or possessed. The indirect mechanism of service evaluation influences the international students' university selection process as the intangible nature of services leads the students to analyze aspects, such as institution image or country of origin (Cubillo et al. 2006, 103.) Mazzarol (1998, 164) notes that intangibility applies particularly well to educational services where the specific nature of the service offering is difficult to define. Consequently, international students will face difficulties when forming their quality expectations.

The inseparability of consumption and productions adds to the challenges of services marketing. The simultaneous consumption and production of services results in the need to involve the customer in the production of the service and as Carman and Langeard (1980, 8) note, it also forces the buyer into intimate contact with the production process. According Shuell and Lee (1976, pp. 4-9 cited in Mazzarol, 1998) this is particularly true with education because student participation is a critical factor in determining the success of learning process. Hill (1995, 11) states that the service quality is not only dependent on the service provider's performance, but also on the performance of the customer, which can cause difficulties for quality management. As the student's own input has an effect on the

quality of education, it should also be considered when forming quality expectations. Yet, it might be challenging for students to evaluate their own input beforehand when they are forming their quality expectations of higher education.

In addition, the inseparability of consumption and production makes it impossible to store services or have them inventoried. Rathmell (1966, 34) points out that this leads to a situation where direct sales are the only viable distribution channel, causing the marketing and production to be highly interactive. This aspect of services also means that there can be many consumers involved in the production of the same service, thus influencing each other's service experience. According to Owlia and Aspinwall (1996, 12) this is particularly important in higher education, considering the interaction and influence among students. They also point out that personal contact, for instance between student and lecturer, plays an important role in quality of the education (Owlia and Aspinwall 1996, 13). Rowley (1997, 10) stresses the importance of interaction among students by stating that "the significance of student-to-student interaction may be greater the customer-to-service agent interaction".

According to Hill (1995, 11) the human interaction and labor intensity involved in service delivery leads to a lack of standardization. The heterogeneity of services poses significant problems for quality management as it may cause high variability in the performance of services. There might be variations in the quality of service from producer to producer, from customer to customer, and from day to day. (Zeithaml et al. 1985, 34.) In higher education this means that the quality may vary significantly in different circumstances, such as from year to year, class to class, student to student, and lecturer to lecturer (Owlia and Spindwall 1996, 13).

Perishability is the last of the four common characteristics of services. It means that because services are performances they cannot be saved or stored, thus leading to the difficulty of synchronizing supply and demand (Zeithaml 1985, 34). Harvey and Busher (1996, 27) point out that perishability and inseparability are linked and that in education, teaching and learning are inextricably intertwined. Services can only be consumed while the activity or process continues and therefore, their utility is short lived and mass production is impossible for services (Hill 1995, 10). In education, online studies have been somewhat of an exception to this rule.

According to Zeithaml et al. (1985, 34) each unique characteristic of services leads to specific problems for service marketers and special strategies are necessary in order to deal with these issues. Hill (1995, 11) stresses the importance of the implications that these characteristics have on the delivery of service quality. Zeithaml et al. (1993, 3) further point out, that the distinguishing characteristics of services may complicate the expectations formation process. The service concept in education has abstract qualities and therefore, measuring its perceptions presents a challenge (Durvasula et al. 2011, 34).

2.2. Defining the customer

According to O'Neill and Palmer (2004, 39), quality in higher education has received an increasing amount of attention and thus, following the pattern set by service industries in general. Service quality has different meaning for different people (Hill 1995, 11) and according to Berry et al. (1990, 29) customer is the sole judge of service quality. In higher education, there are many stakeholders, all of whom have different expectations and perceptions of higher education. According to Rowley

(1997, 9) the stakeholders include: students, their parents and family, the local community, society, the government, the governing body, staff, local authorities, and current and potential employers. There have been different perceptions in the literature on who is considered to be the primary customer. Rinehart (1993, 59) suggests that it is in the schools' best interest to treat the potential employers as the primary customers by preparing their graduates well for employment.

The most common view, however, is to regard the student as the primary customer. Jaraiedi and Ritz (1994, 34) claim that when the future employers are viewed as the ultimate customers, the focus should be on what is taught in order to ensure that the education given provides the students with the necessary skills to succeed at their jobs. But they also continue that in their opinion, it is more important to pay attention to how the students are being taught. Even the most perfect curriculum, in terms of what the employers are looking for, is useless if not presented in a manner that allows the students to learn and apply the material.

Viewing the student as the primary customer is also supported by the fact that in order to compete in the higher education market institutions need to develop strategies that will attract a sustainable share of the market. This can only be accomplished by knowing the customers, understanding their needs and then developing strategies to satisfy those needs. (Joseph and Joseph 1998, 95; Yeo 2008, 269.) In this research, the student is regarded as the primary customer and the quality expectations are examined from their point of view.

2.3. Service quality

The growing importance of services has led to a higher level of interest in services marketing and several authors have researched the problems related to measuring and managing service quality (Bitner 1990; Zeithaml et al. 1990, 1993; Teas 1993; Boulding et al. 1993). Therefore, it is not surprising that a variety of service quality determinants have been proposed by researchers.

Grönroos (1984, 38-39) suggests that service quality can be broken down to two subcomponents that are technical quality and functional quality. The former relates to what is provided during the service process, such as knowledge and tangibles, whereas the functional quality refers to the manner in which the service is provided (Grönroos 1984, 38-39). More recently, he proposed that there are seven determinants or factors of good service quality: professionalism and skills, attitudes and behavior, accessibility and flexibility, reliability and trustworthiness, service recovery, serviscape, reputation and credibility (Grönroos 2000, 80). Lehtinen and Lehtinen (1991, 287-288) propose two different approaches on service quality: three dimensional and two dimensional. The two dimensional approach examines service quality from the customers point of view, focusing on process quality and output quality of service production (Lehtinen and Lehtinen 1991, 291). This approach is similar to the technical and functional quality model developed by Grönroos. The three dimensional approach, on the other hand, examines service quality on three different dimensions: physical quality, interactive quality, and corporate quality (Lehtinen and Lehtinen 1991, 288).

Despite the variety of proposed definitions and constructs, the SERVQUAL model that was developed by Parasuraman et al. (1985,

1988), remains the most widely adapted and tested conceptualization of service quality (Kueh and Voon 2007, 659). The model suggests that customer assessment of service quality results from a comparison of service expectations with actual performance (Zetihaml et al. 1993, 1). SERVQUAL is a 22-item instrument for measuring customers' expectations and perceptions along five quality dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Zeithaml et al. 1990, 33). The physical aspects, such as appearance of facilities, equipment, personnel, and communication materials, are labeled as tangibles. Reliability means accurate and dependable service delivery. The dimension of responsiveness refers to the willingness to help customers and provide prompt service. Assurance involves knowledge and courtesy of service employees and their ability to convey trust and confidence. Empathy is the caring and individualized attention that is provided to the customer. (Parasuraman et al. 1988, 6.) The dimensions of service quality are presented in figure 2.

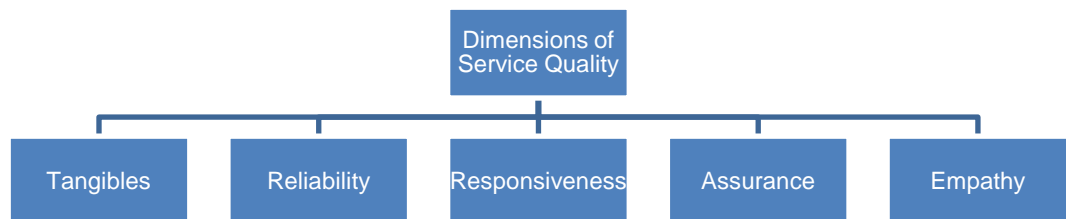


Figure 2: The dimensions of quality (based on Zeithaml et al. 1990, 26)

SERVQUAL has been widely applied in studies covering a variety of service industries and different cultural contexts (Kueh and Voon 2007, 659). Notwithstanding its popularity, SERVQUAL has been criticized on theoretical and operational aspects. Cronin and Taylor (1992, 55) suggest that the conceptualization and operationalization of SERVQUAL is inadequate and according to the authors, it is inappropriately based on an expectations disconfirmation model rather than an attitudinal model of

service quality (Cronin and Taylor 1992, 57). Teas (1993, 18) calls into question the validity of the instrument due to the problems involving the concept of expectations. Parasuraman et al. (1991, 422) responded to this criticism by redefining their concept of expectations. In spite of the criticism SERVQUAL has been subjected to, it seems to be moving rapidly towards institutionalized status (Buttle 1996, 25).

In higher education, numerous studies (McElwee and Redman 1993, Soutar and McNeil 1996, Tan and Kek 2004, Yeo 2008) have applied or adapted the SERVQUAL model of Parasuraman et al. (1985, 1988) which measures quality based on the gaps between customer's expectations and their perceptions of the service performance. These studies support the use of SERVQUAL in higher education and prove that it can be relevant and useful in studying service quality in this context. However, the topic of quality expectations and their antecedents remains to be investigated in higher education. Especially the role of tuition fees and culture in shaping students' quality expectations has been poorly researched.

2.4. Forming quality expectations

Service quality is a complex issue, concerning physical, institutional, and psychological aspects of higher education (Yeo 2008, 267). According to Zeithaml et al. (1990, 16) service-quality perceptions stem from how well a provider performs compared to the customers' expectations about how the provider should perform. The authors define service quality as the discrepancy between customers' expectations and perceptions. In other words, if the provider meets the customers' expectations then service quality is perceived to be satisfactory; if the expectations are not met then it is perceived to be less than satisfactory; and if the provider manages to exceed expectations then the service quality is perceived to be above satisfactory (Hill 1995, 11). Similar approach is taken by Grönroos (1984,

37), according to whom the perceived service quality is the result of an evaluation process, where the customer compares his expectations with his perceptions of the service he has received.

The importance of understanding customers' expectations is commonly acknowledged in service quality literature and Zeithaml et al. (1990, 51) claim that knowing what customers want is possibly the most critical step in delivering quality service. Yeo (2008, 268) suggests that especially in higher education, the service quality of each learning experience is unique as it is largely determined by the student's expectation. There is some debate in the literature concerning the exact nature and role of quality expectations and Coye (2004, 55) notes that the definition for expectations in the service marketing literature varies considerably. Next, a brief review of the two dominant concepts is presented and the definition to be used in this research is discussed.

According to Zeithaml et al. (1993, 2), in the customer satisfaction and dissatisfaction literature expectations are generally viewed as predictions made by customers about what is likely to happen during a service encounter. Oliver (1981, 33) states that "It is generally agreed that expectations are consumer-defined probabilities of the occurrence of positive or negative events if the consumer engages in some behavior." He further continues that the customer always enters a situation with various expectations that can be ranked on a probability continuum from certain not to occur to certain to occur. Boulding et al. (1993, 8) also agree that in the satisfaction literature expectations are typically viewed as predictions of future events and Prakash (1984, 65) describes predictive expectations as how a brand is likely to perform on brand attributes. The predictive expectations are likely to be influenced by various stimuli including information sources that can be controlled by marketing

managers because the predictive expectations represent the service customers believe they will receive (Hamer et al. 1999, 277).

Normative expectations of future events, that are operationalized as either desired or ideal expectations, represent the other of the two main standards that are commonly used (Boulding et al. 1993, 8). Spreng et al. (1996, 17) believe that there is a clear distinction between predictive expectations and desires. They define the former as beliefs about the likelihood that a product is associated with certain attributes, benefits, or outcomes and the latter as evaluations of the extent to which those attributes, benefits, or outcomes lead to attaining a person's values. According to Coye (2004, 55), in service quality literature the normative expectations are expressions of what customers think a service provider should offer rather than would offer. Prakash (1984, 65) defines normative expectations as how a brand should perform in order for the consumer to be completely satisfied. Zeithaml et al. (1993, 6) use the term desired service for the normative standard and they define it as the level of service the customer hopes to receive. They further state that the desired service is a combination of what the customer believes can be and should be.

According to Hamer et al. (1999, 277) normative expectations are relatively stable over time as they represent enduring customer desires about the level of service they should receive even if that level of service is unfeasible or impossible to deliver. Zeithaml et al. (1993, 6) also agree that the desired service level tends to change incrementally and according to them the level moves in an upward direction due to the accumulation of experiences.

Coye (2004, 55-56) claims that the normative should expectations are often conceptualized as combining both customer wants and their beliefs about what the service is capable of providing. However, Boulding et al. (1993, 9) make a distinction between what the customers believe that should happen in their next service encounter and the ideal or desired standard of expectations. According to them, the should expectations may change as a result of what the customers have been told to expect by the service provider. In addition, these expectations can be influenced by what the consumer views as reasonable and feasible based on what they are told of a competitor's service or based on experiencing the firm's or the competitors' service. The ideal expectations, on the other hand, may be unrelated to what is reasonable or feasible and to what the service provider tells the customer to expect. Thus, ideal expectations are much more stable over time than consumer expectations of what should occur. The ideal expectations remain unaffected by marketing and competitive factors that can be used to alter the should expectations. (Boulding et al. 1993, 9.)

In addition to the aforementioned dominant concepts, several other expectation standards have been proposed in service quality literature. A model created by Zeithaml et al. (1993) suggests that customers have two levels of expectations; the normative level that the authors refer to as the desired service, describes the level of service the customer hopes to receive and it is compared to a lower level of expectations that is the threshold of acceptable service. The difference between these two levels is called the zone of tolerance and it represents the extent to which customers are willing to accept heterogeneity of service quality. (Zeithaml et al. 1993, 6.)

According to Coye (2004, 58) the literature on expectations tends to imply a fairly straightforward relationship in which the customers compare their stable expectations about the service with their perceptions of the service delivered. Hamer et al. (1999), however, investigated the changes in expectations during the service encounter. Their research suggests that customers update their expectations continuously within a service encounter and they also examined the intra-encounter antecedents of expectations. A similar approach was taken by Coye (2004) who also supported the notion of intra-encounter changes in expectations.

In this research, expectations are defined as “predictions about what is likely to happen” (Walker 1995, 6). Thus, the nature of expectations measured in this research is predictive rather than normative. This is in accordance with the revised SERVQUAL questionnaire in which the original “should” terminology was changed to “would” because the authors of SERVQUAL acknowledged that measuring “should” expectations might result in unrealistically high scores (Parasuraman et al. 1991, 422). In the empirical part of this research, the sample students are asked to show the extent that they believe that the university, where they have been accepted to, has the features described. Therefore, the study measures the students’ expectations of what their perceptions are going to be like. Zeithaml et al. (1996, 40) postulate “the perception-only operationalization is appropriate if the primary purpose of measuring service quality is to attempt to explain the variance in some dependent construct”. The purpose here is to explain the variance according to the chosen antecedents and thus, the perception-only operationalization was chosen for this research.

2.5. Factors affecting quality expectations

Next, the factors that affect the international students' quality expectations are discussed. The focus is especially on the cultural aspects, personal values and price because the purpose of this study is to find out their role in forming quality expectations. The antecedents of service quality that are suggested by Zeithaml et al. (1990, 23, 1993, 5) are covered more briefly as these factors have already been researched quite thoroughly.

Figure 3 presents the model developed by Zeithaml et al (1993, 5). It shows that the predicted service component is influenced by explicit and implicit service promises, past experience, and word-of-mouth-marketing. The authors claim that personal needs and enduring service intensifiers, such as derived expectations, only influence the level of desired service. According to the model, the adequate service level is influenced by transitory service intensifiers, such as emergencies and service problems; perceived service alternatives; self-perceived service role; situational factors, such as bad weather or catastrophe; and predicted service. The focus here is on the factors that affect predictive expectations and therefore, the other antecedents are not covered in this research.

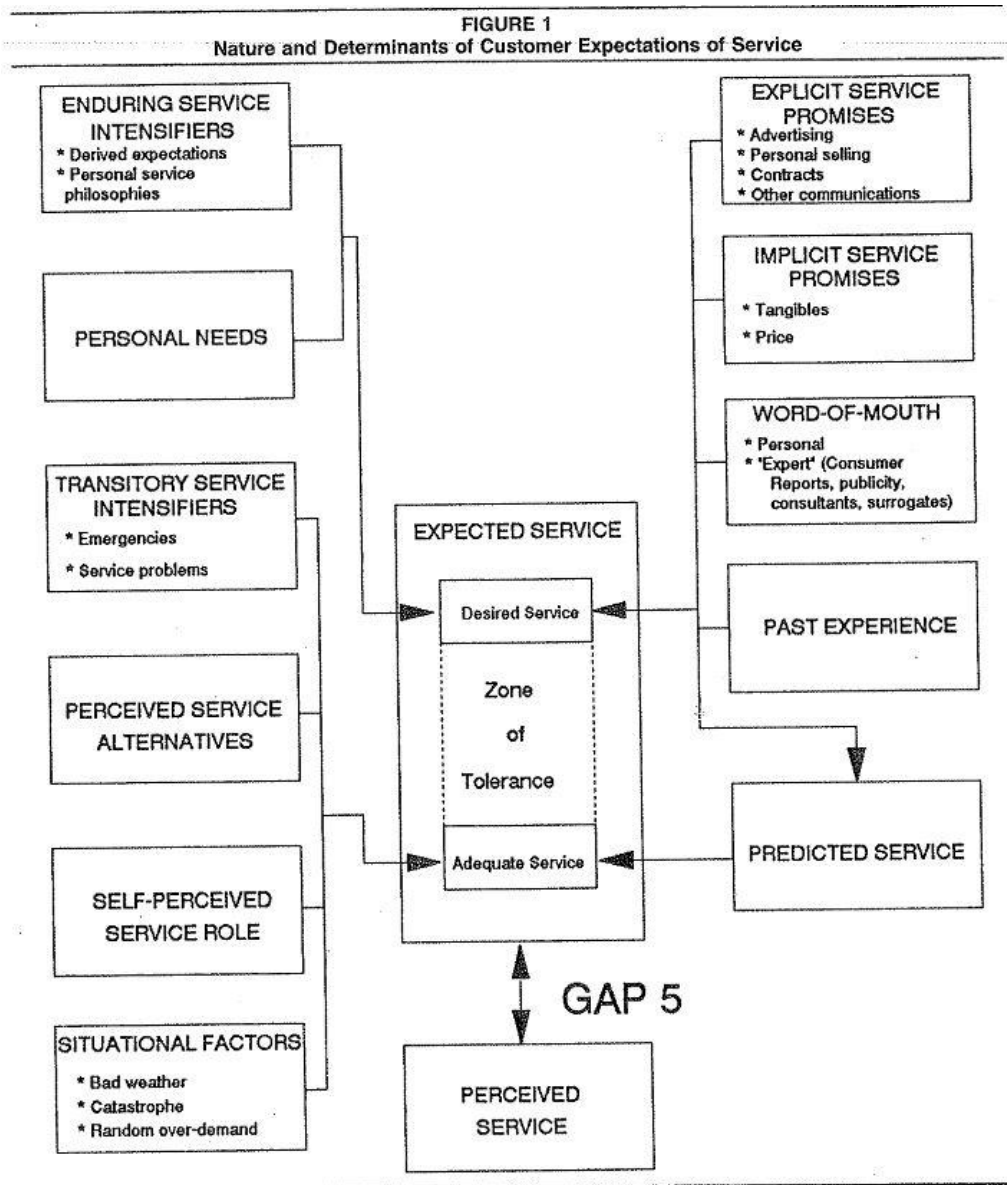


Figure 3: A model of the nature and determinants of customer expectations of service (based on Zeithaml et al. 1993, 5).

2.5.1. Past experience

Several authors name past experience as one of the antecedents of service expectations (Cadotte 1987, 306; Davidow and Uttal 1989, 85; Zeithaml et al. 1990, 19, 1993, 5; Boulding et al. 1993, 9). Hill (1995, 13), Shank (1995, 77), and Rowley (1997, 13) all agree that students'

expectations are influenced by prior experience, suggesting that past experience is relevant in the context of higher education. Past experience that influences consumer expectations includes not only experience of a particular service provider but also experience of competitive service providers and of other types of services (Zeithaml et al. 1990, 125). Therefore, the past experiences that students have of educational services do affect their quality expectations even if the previous service is different from the prospective services. Hill (1995, 14) proposes that this is of particular relevance in higher education. He states that some undergraduate students' expectations are influenced by their experiences at school and that this may lead to a mismatch between expectations and perceptions. He further suggests that the postgraduate students may be better informed by their experiences at other higher education organizations. Shank et al. (1995, 77) also agree that as students progress in their studies, their expectations should become more realistic because of past experience.

The focus here is on international students applying to master's degree programs who have already acquired experience of higher education in their bachelor level studies. It is assumed that this experience often has the largest influence on their past experience because in international education, the students often do not have the chance to visit their study destination beforehand. Hill (1995, 13) promotes greater use of existing students on occasions where prospective students visit the university because these are opportunities to shape the prospective students' expectations and make them as realistic as possible. This should also be applied to international students' visits when plausible.

2.5.2. External communications

External communications are critical in determining customers' expectations and, unlike most factors that influence expectations, they include many controllable sources of expectations (Zeithaml et al. 1990, 126). By external communications, Zeithaml et al. (1990, 19) refer to a variety of direct and indirect messages conveyed by the service provider. In higher education, these include, for instance, university websites, brochures, advertisement, and other explicit and implicit service promises made by the university personnel.

Zeithaml et al. (1993, 5) later revised their model of the antecedents of service expectations, changing external communications to explicit and implicit service promises. The former refers to personal and nonpersonal statements made by the service provider to the customer. These include, for instance, advertising, personal selling, and contracts. Implicit service promises refer to other service-related cues, including price and tangibles, that lead to inferences about what the service will entail. (Zeithaml et al. 1993, 9.) Here external communications are viewed as a combined factor as their earlier work suggests (Zeithaml et al. 1990, 19). Price, however, is regarded as an antecedent on its own and it is later discussed in more detail.

Davidow and Uttal (1989, 85) point out that the customers interpret the communications differently stating that "The same advertisement that shouts 'personal service' to one person tells another that the advertiser has promised more than it can possibly deliver." Therefore, the impact that external communications have on quality expectations may differ from customer to customer. Zeithaml et al. (1993, 9) suggest that the effects of explicit service promises, such as advertising, are larger when the

available evidence about quality is ambiguous. This is supported by Ha and Hoch (1989, 359) who claim that ambiguity is important in determining whether advertising shapes the interpretation of objective evidence. As discussed earlier, the distinguishing characteristics of services may complicate the customers' quality expectation formation process. In international tertiary education, the students might not be able to visit their study destination beforehand and therefore, due to the lack of firsthand experience and tangible cues, the students may be greatly influenced by explicit service promises.

Research suggests that tangible cues can influence the customers' quality expectations (Zeithaml et al. 1993, 9; Baker et al. 1994, 330; Clow et al. 1997, 232). Tangible cues refer to, for instance, the exterior of the facility, interior design, the furniture, and the equipment used in the service (Clow et al. 1997, 232). In higher education, tangible cues include such things as lecture halls, library facilities, study areas, and information technology. Students who are not able to visit their study destination beforehand, will often regardless look for information about the tangible cues. Russell (2005, 68) suggests that prospective students often look to the physical evidence surrounding the service when they form their evaluation of the service. She further claims that the physical evidence is especially important to international students who may not be able to visit the campus prior to making their choice.

2.5.3. Word-of-mouth

Word-of-mouth communication is personal or nonpersonal statements made by parties other than the service provider and they convey to customers what they can expect (Zeithaml et al. 1993, 9). A number of researchers have found word-of-mouth communication to be important in

shaping customers' expectations (George and Berry 1981, 53; Webster 1991, 10; Zeithaml et al. 1993, 9). Clow et al. (1997, 232) claim that word-of-mouth communications are viewed as more reliable and trustworthy due to the experiential nature of services. Zeithaml et al. (1993, 9) suggest that word-of-mouth about service performance is an important source of information because it is perceived as unbiased

Webster (1991) conducted a research to examine the relative impact of several factors affecting customers' expectations of services and according to her findings, word-of-mouth communications have the greatest effect on quality expectations (Webster 1991, 10). According to Zeithaml et al (1993, 9), word-of-mouth is especially important in services due to the difficulty of evaluating services prior to purchasing and directly experiencing them. Word-of-mouth communication is prevalent in services because they reduce the risk related to purchasing services (George and Berry 1981, 54).

2.5.4. Price

According to Zeithaml et al (1990, 19-20), price plays an important role in shaping expectations and particularly so in the case of prospective customers of a service. In their original model Zeithaml et al. (1990) subsume price under the general influence of external communications but as discussed earlier, Zeithaml et al. (1993, 5) later revised their model of the antecedents of service quality expectations and divided external communications to explicit and implicit service promises. Implicit service promises refer to other service-related cues, including price and tangibles, that lead to inferences about what the service will entail (Zeithaml et al. 1993, 9.) but in this research the focus is only on the role of price. The authors claim that price sets expectations for the quality of service, especially when other cues to quality are lacking (Zeithaml et al. 1990,

127). Customers often use price as a surrogate for quality when it is the only available cue but when it is combined with other cues, its influence seems to be less essential (Zeithaml 1988, 8).

Harvey and Busher (1996, 25) suggest that the intangibility of educational services makes it difficult for prospective students to assess the quality of the service. As discussed earlier, some students might not have firsthand experience of the university where they are applying and thus, the tangible cues might be difficult to evaluate. This would support the use of price in determining the students' level of expectations. However, the perceived importance of the international student's university selection would suggest the opposite because students are prepared to invest more time and effort in evaluating the educational services. Mazzarol (1998, 165) describes the decision to study abroad as one of the most significant and expensive initiatives that a student may ever undertake and therefore, it can be characterized as a high-involvement purchase decision. Binsardi and Ekwulugo (2003, 320) point out that students tend to be extremely analytical and critical when choosing their educational institutions. High-involvement purchases are perceived to be riskier than low-involvement purchases and to minimize the risk, students are willing to spend more time and effort in searching, reviewing, and comparing different alternatives (Kotler and Armstrong 2001, 191-192). Therefore, the students gather extensive information about the possible study destinations and price is by no means the only available cue. Briggs and Wilson (2007, 61), on the other hand, suggest that students can be poorly informed about the institutions to which they apply despite the substantial amount of information provided and available.

According to Petruzzellis and Romanazzi (2010, 149), price related information is critical in students' university selection process. The

importance of price was also confirmed by Maringe and Carter (2007, 468) who identified the direct cost of higher education to be the greatest risk that students associated with the decision to study abroad. The effects of price on students' quality expectations have been poorly researched, despite the importance that it has on students' decision-making.

In Finland, higher education institutions can pilot tuition fees from 2010 to 2014. During the trial period, tuition fees can be charged from students, coming from outside of the EU or the European Economic Area, who have been admitted to a degree program taught in a foreign language. (Ministry of Education and Culture, Finland 2012a.) Before the trial all tertiary education in Finland was free and it is yet to be determined whether the tuition fees have affected students' quality expectations. Voss et al. (2007, 949) suggest that the introduction of tuition fees in Germany will force the German universities to monitor the quality of educational services more closely as students will probably become more selective and demanding. Wood (2001 as cited in Russell 2005, 68) claims that international students who pay for education are more sensitive to internal and external quality issues and are less likely to be understanding of a university's failure to meet their expectations. Therefore, this research proposes the following:

H1: Price elevates students' quality expectations.

2.5.5. Personal values

Personal values can be defined as beliefs and relatively stable cognitions that strongly impact emotions (Durvasula 2011, 8). Values are an integral part of our lives as they determine, regulate and modify relations between individuals and societies (Agle and Caldwell 1999, 327). Rokeach (1973, 5) suggests that values can be regarded as enduring beliefs that a certain

mode of behavior or end-state of existence is preferable to opposite modes of conduct. Durvasula et al. (2011, 33) claim that personal values have recently emerged as a way to understand how customers fulfill deeper needs when consuming a service. Zeithaml's (1988, 4) means-end model suggests that before a purchase decision is made, customers analyze information associated with the service using four different levels: attributes, quality, value, and personal values. Since personal values are at the highest end of the evaluation hierarchy, they provide deeper insight about the reasons that lead a consumer to select a certain service provider (Durvasula 2011, 34). The needs and values of customers that determine their purchase choice also have an impact on the quality expectations (Grönroos 2000, 67).

Ledden et al. (2007) examined personal values in education to determine if they differed from perceived value of an education. Their findings showed that personal values are of great importance to students and the authors urge marketers not to overlook the importance of personal values (Ledden et al. 2007, 972). The role of student expectations on service quality in higher education was researched by Voss et al. (2007) and according to their results students particularly want to satisfy the following values: well-being, security, satisfaction, universalism, self esteem, and hedonism (Voss et al. 2007, 955).

Lages and Fernandes (2005) created a scale called SERPVAL that measures the personal values that are associated with using a service. The scale consists of three dimensions of service values that are peaceful life, social recognition, and social integration. Their findings showed that all three of the SERPVAL dimensions are positively and significantly associated with satisfaction (Lages and Fernandes 2005, 1569). The SERPVAL scale was applied by Durvasula et al. (2011) in measuring how

personal values operate in the evaluation of higher education services. Their research shows that personal values have an impact on student satisfaction and service quality. The authors also detected that the importance of the dimensions of personal values varied across the two sample countries: the US and India. The SERPVAL scale will also be used in this research to measure the international students' personal values. The personal values are presented in figure 4.

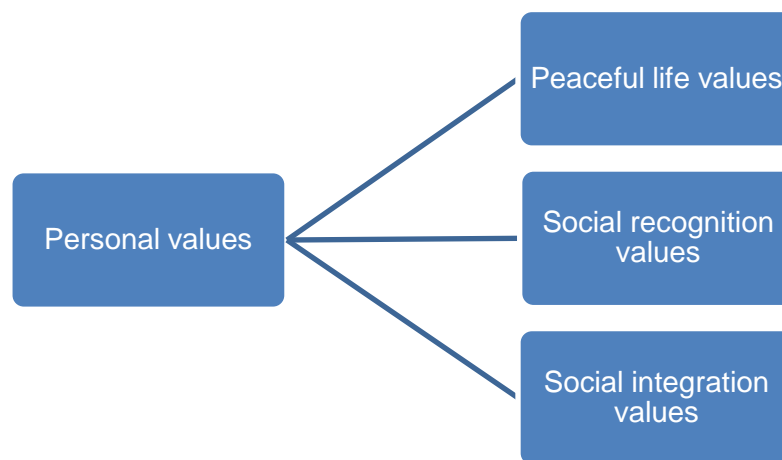


Figure 4: Personal value dimensions (based on Lages and Fernandes 2005, 1565).

The first dimension of the SERPVAL scale, service value to peaceful life, refers to values that promote a pleasurable life, bring or improve tranquility, safety and/or harmony (Lages and Fernandes 2005, 1565). In higher education, values related to peaceful life protect the students from threats to life or pressures on it. It is proposed here that students who strongly believe that a more peaceful life can be achieved by studying a master's degree have higher quality expectations in terms of responsiveness, assurance and empathy because these dimensions can promote tranquility, safety and harmony. Assurance is directly related to the dimension of peaceful life because assurance refers to the service providers' ability to inspire trust and confidence (Parasuraman et al. 1988, 23). Empathy and responsiveness are also important for students seeking a more peaceful life because the two dimensions refer to caring, individual

attention and willingness to help the student (Parasuraman et al. 1988, 23), which can all help to create and foster a safe environment and bring tranquility and harmony to the service experience. It is proposed here that tangibles and reliability are not significantly related to values of peaceful life because they are not as important in ensuring a peaceful service experience.

H2: Service value to peaceful life is positively related to responsiveness, assurance and empathy. The peaceful life dimension is not significantly related to tangibles or reliability.

Service value to social recognition, implies that the service helps the customer in gaining respect from others, social recognition and status, and allows the customer to achieve and potentially demonstrate to others a more fulfilling and stimulating life (Lages and Fernandes 2005, 1565). The assumption here is that the students who strongly believe that social recognition can be achieved by studying a master's degree have higher expectations regarding tangibles because the physical aspects of the service can be used to demonstrate status to others. Reliability, responsiveness, assurance and empathy do not help the students in gaining respect from others, social recognition or status and therefore, service value to social recognition does not lead to higher quality expectations regarding these four dimension.

H3: Service value to social recognition is positively related to tangibles. The dimension of social recognition is not significantly related to reliability, responsiveness, assurance or empathy.

Service value to social integration relates to the consumer perceiving that a service strengthens friendships, provides the possibility of becoming more integrated in the group, or promotes better relationships at the social, professional or family levels (Lages and Fernandes 2005, 1565). It

is proposed here that students who strongly believe that social integration can be achieved by studying a master's degree have higher quality expectations along all of the five SERVQUAL dimensions.

Tangibles can often be used to strengthen the sense of unity among students of a university or faculty. Many universities have clothing with their logos on them and in the USA, it is common for the colleges to have their own sport teams that can create a feeling of unity among the students. The service provider's responsiveness and willingness to help the students is important in promoting a better relationship between the university staff and the student. The university's ability to inspire trust and confidence and show that they care for the student, are all vital in promoting a good relationship with the student and also such an environment is fruitful to building better relationships between the students.

H4: Service value to social integration is positively related to tangibles, responsiveness, assurance and empathy. The dimension of social integration is not significantly related to reliability.

The hypothesized relationships between the quality expectations and the personal value dimensions are presented in table 1.

Table 1: The hypothesized relationships between quality expectations and personal value dimensions

	Peaceful life	Social recognition	Social integration
Empathy	+		+
Assurance	+		+
Reliability			
Responsiveness	+		+
Tangibility		+	+

2.5.6. Culture

Numerous definitions and interpretations of culture exist in the literature. Robbins and Stylianou (2001, 3) define culture “as a shared set of values that influence societal perceptions, attitudes, preferences, and responses”. According to Laroche et al. (2004, 62) culture often manifests in consumer decisions, which are driven by individual values that members of a culture have. Hofstede (1983, 74) describes culture as collective mental programming that is the part of our conditioning that distinguishes us from members of other nations, regions, or groups.

Donthu and Yoo (1998, 178) claim that customers in different cultures or countries can have different levels of service expectations, because cultures differ in their patterns of behavior and attitude. They further suggest that there is a need to understand the role of culture in service quality management because the impact of marketing efforts is greater when they fit the culture (Donthu and Yoo 1998, 179). Many researchers support their notion that culture has an impact on customers’ service expectations (Mattila 1999, Furrer et al. 2000, Tsoukatos and Rand 2007, Kueh and Voon 2007).

According to Tsoukatos and Rand (2007, 469), the predictive expectations are influenced by the customers’ experience of the service level that is usually delivered in a society with specific cultural characteristics. They further state that the normative expectations, on the other hand, are affected by the customers’ own cultural characteristics. This would suggest that the international students’ predictive expectations are influenced by their prior experience of educational institutions in the country where they have studied and that their normative expectations are shaped by their cultural background.

Hofstede's dimensional model of culture is adopted in this research to examine cultural influences on service expectations. Hofstede's work on cultural dimensions has been heavily cited and his findings have been confirmed in numerous studies (Sondergaard 1994). He initially defined culture in terms of four universal dimensions that are largely independent of each other. The dimensions are power distance, uncertainty avoidance, individualism-collectivism, and masculinity-femininity. They are based on his findings from a research that was carried out between 1967 and 1978 and data from 40 countries was used to conduct the analysis. Hofstede later added a fifth dimension to his paradigm: the Confucian dynamic or long term orientation. (Hofstede 1983, 78; Hofstede and Bond 1988, 16.) The five dimensions of culture are presented in figure 5.

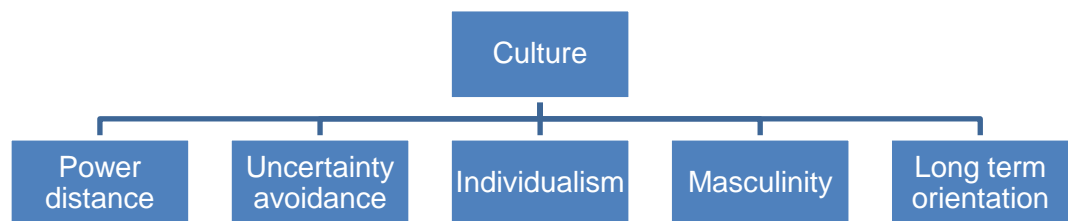


Figure 5: Dimensions of culture (based on Hofstede 1983).

Power distance is defined as “the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally” (Hofstede and Bond 1988, 10). Power and inequality are very fundamental aspects of any society and thus all societies have some level of inequality. Furrer et al. (2000, 359) suggest that in cultures with a large power distance, there are considerable differences between the behaviors of the customers, who feel like they are in a position of power, and the customers who feel weaker compared to the service provider. According to them, the powerful

customers expect extremely good treatment and pay specific attention to responsiveness, reliability, and empathy. Mattila (1999, 252) made the assumption in her research of luxury hotels that powerful customers face weak service employees and according to her the lower status of service providers requires them to provide customers with a high level of service.

Donthu and Yoo (1998, 184), on the other hand, made the opposite assumption claiming that most service providers have some kind of power over their customers. Their research results show that high power distance customers have lower service quality expectations than low power distance customers. According to them the high power distance customers had lower expectations of responsiveness and reliability from the service provider than the low power distance customers. Furrer et al. (2000, 363) got similar results from their research as they found a negative relationship between power distance and three of the service quality dimensions: empathy, responsiveness, and reliability. In addition, their results showed that there is a positive relationship between power distance and the dimensions of tangibles and assurance. They suggest that this is due to the weak customers' need to be assured by the more powerful service provider and the need to maintain an expected distance between the customer and the service provider. Kueh and Voon (2007, 668) found power distance to be negatively related to all five dimensions, thus, advocating that customers with low power distance have higher quality expectations in all of the dimensions.

The assumption in this research is that the students from high power distance cultures will feel that as customers they are in a more powerful position compared to the higher education institutions. Therefore, they expect the service provider to offer them a high level of service. The hypothesis of this research is in line with the research by Mattila (1999):

H5: Power distance is positively related to students' expectations of assurance, responsiveness, reliability, empathy, and tangibles.

Individualism and its opposite collectivism describe the degree to which individuals are integrated into groups. In individualistic cultures, the ties between individuals are loose and everyone is expected to look after his or her own self-interest and the immediate family. Individuals have a large amount of freedom in these types of societies. Collective cultures, on the other hand, have societies in which people from birth onwards are integrated into collectivities or in-groups that may be their extended family. Everyone is supposed to look after the interest of the in-group and in exchange for unquestioning loyalty, the in-group will protect them when they are in trouble. (Hofstede 1983, 79; Hofstede and Bond 1988, 10-11.)

Furrer et al. (2000, 360) claim that individualists are more demanding customers than people from more collective cultures. Donthu and Yoo (1998, 184) also support this notion based on their research. According to the findings of Furrer et al. (2000, 363), responsiveness and reliability are important to individualists but due to their self-confidence and self-responsibility, they do not place much importance to assurance. In addition, their research suggests that there is a positive relationship with tangibles and individuality because the tangibles serve as a means to reduce the closeness of the interaction as individualists prefer to keep a distance from the service provider. Kueh and Voon (2007, 668) got opposite results from their research. According to their findings, the dimension of tangibles is positively related to collectivism because the tangibles serve as a surrogate evidence for assuring the customer.

Donthu and Yoo (1998, 184) found that individualistic customers had higher expectations of empathy and assurance than collectivistic customers. They claim that individualistic customers make their own

benefits the top priority and therefore, they expect the service provider to show empathy and attention and to give them confidence about the service they are acquiring. Despite the argument made by Donthu and Yoo, the need for assurance does not fit the profile of a self-confident individualistic and therefore, it is expected that individualism is negatively related to assurance. The hypothesis of this research is supported by the Findings of Furrer et al. (200, 364) and it is as follows:

H6: Individualism is positively related to students' expectations of tangibles, responsiveness and reliability but negatively related to empathy and assurance.

Masculinity versus femininity refers to the division of roles between the sexes in society. The societies that have a maximized social sex role division are masculine and the ones with a relatively small social sex role division are feminine. The values that are related to masculine societies include, for example, the importance of showing off, of performing or achieving something visible, and of making money. Feminine cultures are more concerned with putting relationships with people ahead of money, helping others, and minding the quality of life. (Hofstede 1983, 83-85; Hofstede and Bond 1988,11.)

Donthu and Yoo (1998, 180) did not include masculinity-femininity dimension in their research because they thought that it is not strongly related to service expectations. Kueh and Voon (2007, 664) made similar hypothesis, but while their findings showed that masculinity-femininity is not significantly related to all the dimensions of service quality, the results offered only directional supported for the dimensions of responsiveness, assurance, and empathy.

Furrer et al. (2000, 360) suggest that in masculine cultures the service quality expectations differ according to whether the service provider is

male or female. This notion, however, is not fully supported by their findings. They hypothesized that there would be a positive relationship between masculinity and empathy and a negative one between masculinity and assurance, but no such relationships were found from the data (Furrer et al. 2000, 364). They did find a negative relationship between masculinity and responsiveness and according to them the customers in masculine cultures expect the female service provider to be more feminine than professional. The expected negative relationship between masculinity and reliability was not significant. Their findings showed that there is a positive relationship between masculinity and tangibles and they suggested that it was due to the importance of female service providers having a feminine appearance. In accordance with Furrer et al. (2000), Tsoukatos and Rand (2007, 472) also suggest that customers in masculine cultures expect the service quality to differ based on the sex of the service employee. Their findings show a negative relationship between masculinity and the dimensions of reliability, assurance, and responsiveness (Tsoukatos and Rand 2007, 477).

Kueh and Voon (2007, 664) suggest that the gender of the service provider is less important than the values that are required by the service itself. According to Hofstede and Hofstede (2005, 184-185), both feminine and masculine values are as necessary in jobs whose essence is human contact, regardless of whether the service employee is a man or a woman. As discussed earlier, the inseparability of consumption and production of services forces the buyer into intimate contact with the production process and especially so in education where student participation is crucial. Therefore it is expected that both masculine and feminine values are needed regardless of whether the student is from a masculine or feminine culture but the relative importance that students place to such values may vary according to their cultural background.

In education, the difference between masculine and feminine cultures is noticeable in classroom behavior. In feminine cultures excellence is not flaunted because it can easily lead to jealousy, whereas in masculine cultures, the students are expected to strive to be the best. (Hofstede and Hofstede 2005, 137.) Due to the nurturing values of feminine cultures, it is expected that students from feminine cultures place more importance on the dimensions of responsiveness, empathy, and reassurance. In masculine cultures “big is beautiful” and showing off and achieving something visible is important (Hofstede 1983, 85). Therefore, tangibility is more important to students from masculine cultures.

H7: Masculinity is positively related to students' expectations of tangibles but negatively related to responsiveness, empathy, and reassurance. Masculinity-femininity dimension is not significantly related to reliability.

Hofstede and Hofstede (2005, 167) define uncertainty avoidance as “the extent to which the members of a culture feel threatened by ambiguous or unknown situations”. Cultures with weak uncertainty avoidance socialize their members to accept the uncertainty of life and not become upset by it. People in these societies tend to be relatively tolerant of different behavior and opinions because they do not feel threatened by them (Hofstede 1983, 81). Uncertainty-avoiding cultures, on the other hand, have strict laws and rules that aim to minimize the possibility of unknown and surprising situations. People in these cultures tend to be more emotional and it is socially acceptable to be expressive unlike in uncertainty-accepting cultures (Hofstede and Bond 1988, 11). In education, students from strong uncertainty avoidance countries often prefer structured learning situations with precise objectives, detailed assignments, and strict timetables. Typically students from weak uncertainty avoidance cultures, like open-ended learning situations with vague objectives, broad assignments, and no timetables at all. They also expect to be rewarded for originality. (Hofstede and Hofstede 2005, 178-179.)

Donthu and Yoo (1998, 181) suggest that high uncertainty avoidance customers are cautious in choosing services and their evaluation process takes time because they do not make haste decisions. They further claim that due to the careful planning and risk-diverse decisions, the high uncertainty avoiders are likely to generate high service quality expectations. Their findings supported their notion, showing that high uncertainty avoidance customers do in fact have higher quality expectations. Donthu and Yoo (1998, 181) also suggested that these customers would place more importance on tangibles because they help to lower their perceived risk in service situations but the results showed only directional support for this as the difference was not significant.

According to Furrer et al. (2000, 360), all of the service quality dimensions are important to high uncertainty avoidance customers because they reduce uncertainty. They suggest that this is especially so in infrequent service situations because in frequent service situations, customers do not need to reduce ambiguity because they already know how to behave in the service process. In frequent service situations, uncertainty avoiding customers wish to lower the risk of service failure and tangibility is not related to this. Therefore, they hypothesized that there is a positive relationship between uncertainty avoidance and the four dimensions: empathy, responsiveness, reassurance, and reliability. A negative relationship between uncertainty avoidance and tangibles was expected in the frequent service situations that were studied in the context of retail banking services. Their finding supported these hypotheses. (Furrer et al. 2000, 360-361, 364.)

Kueh and Voon (2007, 665) also claim that high uncertainty avoidance customers have higher service quality expectations than customers with low uncertainty avoidance. Unlike Furrer et al. (2000), they suggest that

this applies to all of the service quality dimensions regardless of the frequency of the service situation. They state that “even in frequent service situations, there is still the uncertainty that future service will not be of the same quality compared to what the customer has received in the past” (Kueh and Voon 2007, 665). Their findings supported their hypothesis and confirmed that uncertainty avoidance is positively related to all of the five service quality dimensions (Kueh and Voon 2007, 668). The hypothesis of this research on the matter is in line with the research conducted by Kueh and Voon.

H8: Uncertainty avoidance is positively related to students' expectations of all dimensions of service quality (tangibles, reliability, responsiveness, assurance, empathy).

A fifth dimension, developed by Hofstede and Bond (1988), was later added to the model. The last dimension was labeled long-term versus short-term orientation. Long-term orientation stands for the fostering of virtues that are oriented toward future reward. Perseverance, thrift, ordering relationships by status, and having a sense of shame are valued in long-term oriented cultures. The opposite pole, short-term orientation, stands for valuing virtues related to the past and present, and especially respect for tradition, preservation of “face”, and fulfilling social obligations are viewed crucial. (Hofstede and Hofstede 2005, 209-210.)

Donthu and Yoo (1998, 182) claim that long-term-oriented customers are more likely to accept poor service delivery, especially in the short-term, because they do not expect every service experience to be perfect and they are willing to give the service provider time to improve. Their findings proved their hypothesis of long-term-oriented customers having lower quality expectations than short-term-oriented customers (Donthu and Yoo 1998, 184). They also hypothesized that long-term-oriented customers would place less importance on responsiveness than short-term-oriented

customers but the results provided only directional support for this as the difference was not significant.

Furrer et al. (2000, 361), on the other hand, argue that reliability, empathy, and assurance are more important in long-term-oriented cultures because these are the result of a close relationship with the service provider that is expected to develop over time. They further claim that assurance is not critical in such cultures because the relationship with the service provider is expected to last and tangibility is also deemed less important in long-term-oriented cultures. Their results confirmed their hypotheses on all of the dimensions, except for empathy. The findings showed that the relationship between long term orientation and empathy is not significant and thus, provided only directional support on this hypothesis. (Furrer et al. 2000, 364.)

Opposite to Donthu and Yoo (1998, 184), Kueh and Voon (2007, 665) argue that long-term orientation is positively related to all of the service quality dimensions because the future oriented customers will look for evidence that it is worthwhile to return to the same service provider in future. Their claim is supported by their research results (Kueh and Voon 2007, 668). Tsoukatos and Rand (2007, 473) proposed that there is a positive relationship between long term-orientation and the importance of reliability but that the relationships between long-term orientation and the importance responsiveness, empathy, reassurance, and tangibility are of no specific direction. They claimed that long-term oriented customers are prepared to find excuses when they accept relatively poor service in order to maintain the relationship with their service provider and as long as the service is reliable they will not place much importance on the other dimensions. Their hypotheses were supported by their findings (Tsoukatos and Rand 2007, 477).

In accordance with Furrer et al. (2000, 361), it is assumed here that long-term oriented customers wish to develop long lasting relationships with their service providers and that they place more importance on the service dimensions that result from a close relationship. Therefore, empathy, reliability, responsiveness, and assurance are more important to long-term oriented customers. Furrer et al. (2000, 361) argued that assurance was not important in such close relationships but the opposite is argued in this research because assurance is needed when building and maintaining a lasting relationship between a customer and a service provider. Tangibility is more important to short-term-oriented customers who are more focused on the present service experience.

H9: Long-term orientation is positively related to students' expectations of assurance, reliability, responsiveness, and empathy but negatively related to tangibility.

The hypothesized relationships between the quality expectations and the cultural dimensions are presented in table 2.

Table 2: Hypothesized relationships between quality expectations and cultural dimensions

	Power distance	Individualism	Masculinity	Uncertainty avoidance	Long-term orientation
Empathy	-	-	-	+	+
Assurance	+	-	-	+	+
Reliability	-	+		+	+
Responsiveness	-	+	-	+	+
Tangibility	-	+	+	+	-

2.6. Managing quality expectations

Marketing has become essential to higher education as universities compete aggressively for students and search for means to gain differential advantages. Measuring service quality and customer satisfaction has been one of the ways to determine deficiencies in order to make improvements. (Durvasula et al. 2011, 33). Zeithaml et al. (1990, 125) suggest that managing customers' expectations is a vital part of a strategy to attain perceived quality service. According to Robledo (2001, 28) it is necessary to influence the customers' expectations in order to ensure that they are realistic and that they can be fulfilled by the service provider.

Petruzzellis and Romanazzi (2010, 141) claim that students have become more critical in their university selection and more demanding with their chosen university and that therefore, it is pivotal for the institutions to understand what the students expect. Durvasula et al. (2011, 35) also highlight the need to understand students' expectations because knowledge of the expectations can help in developing compelling messages to attract prospective students or in tuning the service offering to make it more appealing. External communications is an antecedent of quality expectations that can be controlled by the service provider (Zeithaml et al. 1993, 126) and it should be used to ensure that customer expectations are realistic. The gap between what a service provider promises about a service and what it actually delivers is one of the major causes of low service-quality perceptions (Zeithaml et al. 1993, 115).

2.7. Summary of the research's hypotheses

This chapter has presented the theoretical part of this research by examining students' quality expectations in great detail. The antecedents of expectations were discussed and the hypotheses were proposed. Next, the hypotheses are summarized and presented in table 2. The hypotheses are tested in the empirical part of this research in chapter 4.

Table 3: Hypotheses of the research

H1	Price elevates students' quality expectations.
H2	Service value to peaceful life is positively related to responsiveness, assurance and empathy. The peaceful life dimension is not significantly related to tangibles or reliability.
H3	Service value to social recognition is positively related to tangibles. The dimension of social recognition is not significantly related to reliability, responsiveness, assurance or empathy.
H4	Service value to social integration is positively related to tangibles, responsiveness, assurance and empathy. The dimension of social integration is not significantly related to reliability.
H5	Power distance will be negatively related to students' expectations of responsiveness, reliability, empathy, and tangibles but positively related to assurance.
H6	Individualism is positively related to students' expectations of tangibles, responsiveness and reliability but negatively related to empathy and assurance.
H7	Masculinity is positively related to students' expectations of tangibles but negatively related to responsiveness, empathy, and reassurance. Masculinity-femininity dimension is not significantly related to reliability.
H8	Uncertainty avoidance is positively related to students' expectations of all dimensions of service quality (tangibles, reliability, responsiveness, assurance, empathy).
H9	Long-term orientation is positively related to students' expectations of assurance, reliability, responsiveness, and empathy but negatively related to tangibility.

3. RESEARCH METHODOLOGY

The following two chapters focus on the empirical part of this research. In this chapter, the quantitative research methodology and research design are explained and the sampling and data collection are presented.

3.1. Quantitative research

The empirical part of this research is conducted by using a quantitative research method in the form of a web-based survey. Quantitative, rather than qualitative, method was chosen because it better serves the purpose of this research and suits the research questions and objectives that are presented in chapter 1.2. Metsämuuronen (2006, 73) highlights the importance of choosing a method that fits the research question and he further suggests that the research subject and problem ought to determine which method is chosen (Metsämuuronen 2006, 257-258). In this research, the purpose of finding out the role of personal values and price in forming international students' quality expectations is best examined by measuring the incidence of various views and opinions in the research sample.

3.2. Questionnaire design

A web-based survey was used in this research as it is the most convenient and efficient way of reaching international students from various countries. The data was collected in two phases for a more comprehensive research on international students and only a part of the data is analyzed in this research. The parts of the questionnaires that are used in this research can be found from appendix 1.

The parts of the questionnaires that are used in this research contain three different types of questions: multiple choice questions, scale questions and open questions. In multiple choice questions, the respondents are given response alternatives and asked to select one or many of the alternatives that fit the best (Hirsjärvi et al. 2000, 186). In this research, multiple questions are used in questions related to the respondents' background information, for instance, when asking respondent's gender and also in questions related to tuition fees.

Majority of the questions are presented as statements to which the respondents are asked to reply by choosing an answer from a 5-point or 7-point Likert scale to indicate the extent to which they agree with the given statement. All of the SERVQUAL questions are presented in this manner. Open questions are used when multiple choice questions are not a valid option, for instance, when asking the respondents their nationality it would not be feasible to have a list of all countries.

The parts of the questionnaires that are analyzed in this research consist of the following sections:

1. Respondents' background information
2. Personal values
3. Tuition fees
4. Service quality expectations

The respondents' background information includes questions related to personal information, such as gender and age. The respondents' nationality is also asked in this section because the information is needed to examine the role of cultural aspects in forming quality expectations. The

respondents' background information was part of the first questionnaire sent to the sample students. In the second questionnaire, respondents are also asked the name of the university where they will start their studies. The respondents have all applied to a master's degree programme in Finland but many have accepted a study place in another country.

The respondents' personal values are measured by asking 12 questions on what a master's degree allows the respondent to achieve. The personal values are also part of the first questionnaire. The questions are presented as statements and the respondents are asked to indicate the extent to which they agree on a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree). This part of the questionnaire seeks answers to the second supportive research questions which is: "What is the role of personal values in forming students' quality expectations?" The questionnaire items are based on research by Lages et al. (2005) and Durvasula et al. (2011) and according to these studies the 12 statements be classified into three types of values: peaceful life, social recognition and social integration. In this research, service peaceful life is measured by:

- peace of mind
- family security
- harmony and stability in life
- A pleasurable life

Service social recognition is measured by:

- respect from others
- The feeling that the world is an agreeable place
- Social recognition
- Status
- A stimulating and adventurous life

Service social integration is measured by:

- A high level of integration in my group
- Good relationships (e.g. social, professional and family)
- Strong relationships (e.g. social, professional and family)

In the second questionnaire, the international students are asked whether their chosen master's degree program has tuition fees. This information is needed in order to answer the third supportive question: "What is the role of education's price in forming quality expectations?". The students are also asked whether they will receive a scholarship to cover the tuition fee and if so then to indicate the percentage of the tuition fee that is covered by the scholarship.

Questions on service quality expectations form the last section of the questionnaires that this research is focused on. This is the most important part as the objective of this research is to examine factors affecting international students' service quality expectations in higher education. This part of the questionnaire is based on the SERVQUAL instrument that was developed by Parasuraman, Zetihaml, and Berry (1988) but it has been modified to better fit the educational context. The original SERVQUAL instrument consists of 22 statements but the questionnaire that is used in this research includes 30 statements. According to Parasuraman et al. (1988) the SERVQUAL items can be grouped into five distinct dimensions: tangibles, reliability, responsiveness, assurance, and empathy.

The following statements relate to tangibility:

- The university will have modern equipment
- The university's physical facilities will be visually appealing

- The university's employees appearance will be neat and professional
- Materials associated with educational services (such as study guides and information materials) will be visually appealing

The following statements relate to reliability:

- Educational services will be provided as promised
- Students' will be able to depend on the university's employees in handling their study problems
- Educational services will be provided at the promised time
- Educational services will be performed right at the first time
- Professors and teaching assistants will grade fairly and accurately
- Courses will be well taught
- The university's employees will ensure that the masters' degree programmes will run smoothly
- Professors will be well organized and prepared for class
- When professors promise to be available during office hours, they will be there for students

The following statements relate to responsiveness:

- Employees of the university will keep students informed when educational services are performed
- Employees of the university give students prompt service
- Employees of the university will be willing to help students
- Employees of the university will respond to student requests promptly
- Professors will help students with course work
- Professors answer student questions completely and accurately during the same class session

The following statements relate to assurance:

- Employees of the university will instill confidence in students

- Students feel safe in their transactions with the university
- Employees of the university will be consistently courteous with students
- Employees of the university will have the knowledge to answer students' questions
- Professors will not tolerate dishonesty

The following statements relate to empathy:

- The university will give individual attention to students
- The university will have operating hours convenient to all its students
- The university will have employees who deal with students in a caring fashion
- The university will have its student's best interest at heart
- The employees of the university will understand students' needs
- The employees of the university will help students with career advice

3.3. Sampling and response rate

The sample consists of students who have applied to international masters' degree programmes in Finnish universities in the spring of 2012. The applicants were sent a link via e-mail to an online questionnaire using Qualtrics software. The e-mail was sent through the four participating higher education institutions to their international master's degree applicants.

The first questionnaire was sent to the sample students in March 2012 on the day the application period was closed. The sample size for the first questionnaire in phase one was 1718 and the response rate 43,8 %. 1110

of these respondents entered into a panel through which the data was collected for the second phase in the beginning of August 2012. There were 481 respondents for the second questionnaire, resulting in a response rate of 43,3 %. However, only 268 of the responses were usable for this research and therefore, the final response rate for this research is 24,1 % as the second questionnaire was sent to 1110 students.

The first data collection phase was conducted after the students' information search on higher education institutions but before they had received any information about their acceptance to the university. The students' background information and personal values were asked in this phase as no significant changes in these areas were expected to occur within the five month period between phase one and two. The data for the second phase was collected when the applicants had received acceptance letters from different universities and had already made their final choice but before they had began their studies. Therefore, the respondents did not have any study experience of the university that they had chosen, when they answered the questionnaire. The results are best applicable to international master's degree programmes in Finland because the respondents represent this context.

3.4. Data collection and coding

The data for the empirical part of this survey was collected in two phases as a part of a larger research on international students. The data was collected through two web based questionnaires using Qualtrics software. The sections of the questionnaires that are used in this research can be found from appendix 1. The collected data was analyzed by using SPSS (Statistical Package of Social Sciences) software and the questions were coded in SPSS.

4. RESEARCH RESULTS AND ANALYSIS

The research results are presented and analyzed in this chapter. The chapter begins with a brief description of the respondents' background information to provide some insight about the sample of this research. Next the students' quality expectations are presented and the SERVQUAL dimensions are discussed in more detail. This is followed by examining the results that answer to the supportive research questions and hypotheses. At the end of the chapter the results are summarized.

4.1. Respondents' background information

The data collection for this research was conducted in two phases and the sample students were sent a link via e-mail to participate in the survey. The sample students consisted of international master's degree applicants of four participating Finnish universities. Altogether 268 responses were usable for this research. More detailed information on the sample and data collection can be found from the previous chapter. As can be seen from figure 6, 58 % of the respondents were men and 42 % women.

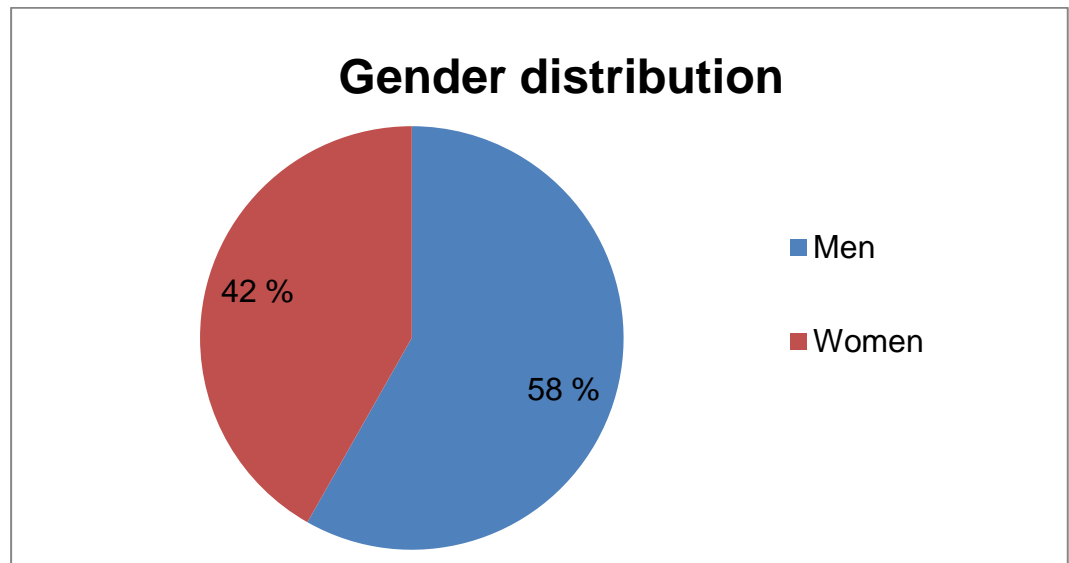


Figure 6: Respondents' gender distribution

The age distribution is presented next in figure 7 and as can be seen, 14 % of the respondents were in the youngest age group of 18-21 years. The majority of the respondents, 58 %, were aged between 22-25 years and 20 % were 26-29 years old. Only 8 % of the respondents were 30 years or older.

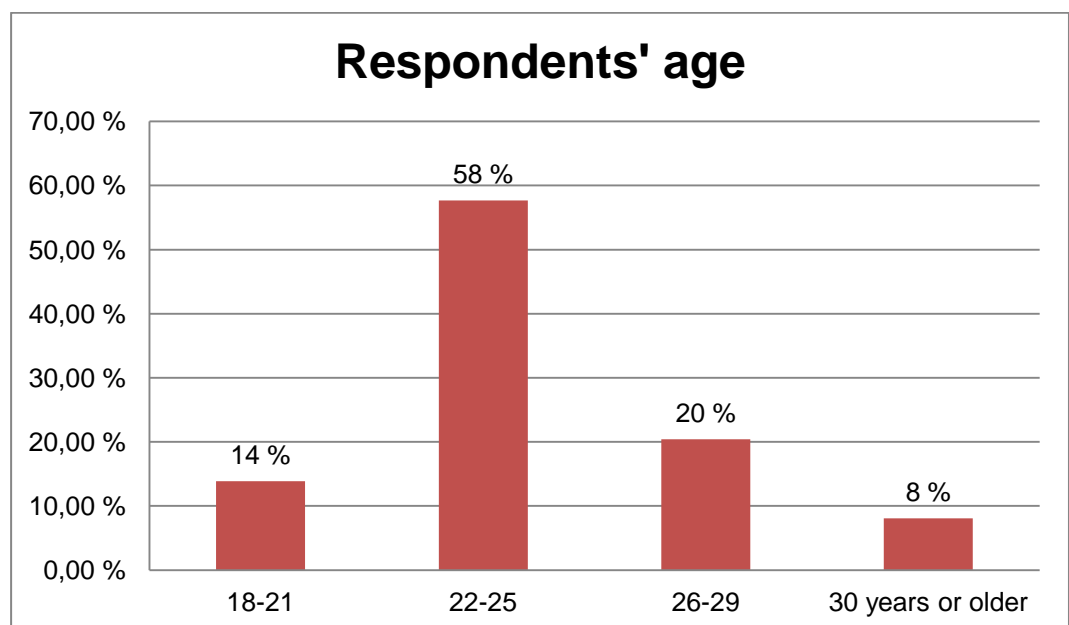


Figure 7: Respondents' age distribution

The respondents represented 50 different nationalities. 58 of the respondents were from China and there were 43 respondents from both Russia and Iran. The comprehensive list of all the nationalities and number of answers from each country can be found from appendix 1. The respondents by continents are presented in figure 8 and as can be seen, majority of the responses, 57 %, came from Asia. 31 % of the respondents were European, 7 % African and only 3 % of the respondents were from South America and 1 % from North America.

The values for the five dimensions of national culture: power distance, uncertainty avoidance, masculinity, individualism and long-term orientation were taken from Hofstede's research (Hofstede Centre). The values for each country were used when examining the relationship between culture and quality expectations.

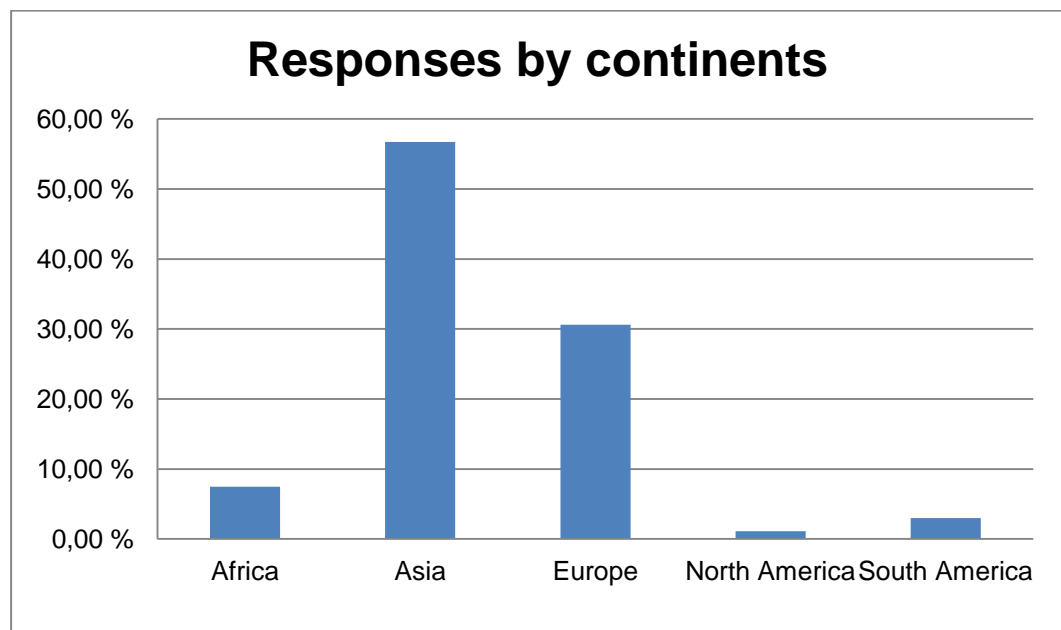


Figure 8: Responses by different continents

4.2. Quality expectations

The students' quality expectations were measured by using a modified version of the SERVQUAL instrument that was first developed by Parasuraman et al. (1988). The respondents were presented with 30 statements related to their quality expectations about the educational services and they were asked to indicate the level to which they agree with each statement. The results can be found from table 4.

Table 4: International students' quality expectations regarding educational services

Service quality expectation	Mean	Standard deviation
Professors will be well organized and prepared for class	6,23	0,85
Courses will be well taught*	6,19	0,89
Educational services will be provided as promised*	6,18	0,78
Professors and teaching assistants will grade fairly and accurately*	6,17	0,89
Educational services will be provided at the promised time	6,16	0,81
Employees of the university will be willing to help students*	6,15	0,82
Students feel safe in their transactions with the university*	6,15	0,88
Professors will not tolerate dishonesty	6,12	0,92
When professors promise to be available during office hours, they will be there for students	6,08	0,95
The university will have modern equipment*	6,06	0,79
The university's employees will ensure that the masters' degree programmes will run smoothly	6,06	0,85
Educational services will be performed right at the first time	6,01	0,87
Employees of the university will keep students informed when educational services are performed *	5,97	0,88

Materials associated with educational services (such as study guides and information materials) will be visually appealing	5,89	1,00
Employees of the university will have the knowledge to answer students' questions*	5,89	0,90
Employees of the university will respond to student requests promptly *	5,87	0,94
Employees of the university give students prompt service	5,85	0,93
The university's employees appearance will be neat and professional *	5,84	0,89
Students' will be able to depend on the university's employees in handling their study problems	5,83	0,95
Professors answer student questions completely and accurately during the same class session	5,83	1,05
Employees of the university will be consistently courteous with students*	5,81	0,95
The employees of the university will help students with career advice*	5,81	1,01
The university's physical facilities will be visually appealing*	5,72	0,97
Employees of the university will instill confidence in students*	5,72	0,97
The university will have operating hours convenient to all its students*	5,66	1,06
The university will have its student's best interest at heart *	5,66	1,03
The employees of the university will understand students' needs *	5,66	0,98
The university will give individual attention to students*	5,51	1,02
The university will have employees who deal with students in a caring fashion*	5,44	1,09

Note: *items included in the final instrument after factor analysis

As can be seen from the results, the respondents had high expectations regarding the educational services. All of the items have a mean score above 5,4. According to Parasuraman et al. (1988, 23) the SERVQUAL items can be classified into five dimensions of service quality: tangibles, reliability, responsiveness, assurance and empathy. The mean scores for the aforementioned dimensions are: 5,88 for tangibles, 6,10 for reliability,

5,96 for responsiveness, 5,94 for assurance and 5,62 for empathy. Statement number 18, "Professors will help students with course work", was excluded from the results because the results for the item were deemed unreliable due to a significantly low amount of responses. According to Metsämuuronen (2006, 512), it is advisable to exclude a variable from an analysis if many of the respondents have not provided an answer to the question.

According to the results, the respondents had the highest expectations of the educational services' reliability. The five items that had the highest mean scores of all the statements were part of the reliability dimension. Reliability refers to the service provider's ability to deliver the promised service dependently and accurately (Parasuraman et al. 1988, 23). The findings of this research suggest that students especially expect the professors to be well organized and prepared for class and that the courses will be well taught and educational services will be delivered as promised. Soutar and McNeil (1996, 78) had similar findings from their research on measuring service quality in the context of Australian tertiary education. They used a modified version of the SERVQUAL instrument and they studied academic and non academic service quality separately. Their results also showed that students had the highest quality expectations in the dimension of reliability. In this research, empathy received the lowest mean score and this is also supported by the findings of Soutar and McNeil (1996, 78) who found students' non academic expectations of empathy to have the lowest mean score of the five dimensions and in terms of academic expectations, empathy received the second lowest mean score.

4.3. Personal values

The respondents' personal values were measured with 12 statements to which the respondents were asked to indicate the degree to which they believed studying a master's degree would allow them to achieve each value. The questionnaire items were based on the research by Lages and Fernandes (2005) and Durvasula et al. (2011). The results are presented in table 5.

Table 5: Personal values achieved by studying a master's degree

Personal values	Mean	Standard deviation
A stimulating and adventurous life	4,09	0,96
Peace of mind*	4,00	0,89
Good relationships (e.g. social, professional and family)*	3,95	0,88
Social recognition*	3,95	0,79
A high level of integration in my group	3,93	0,82
Status*	3,92	0,69
Strong relationships (e.g. social, professional and family)*	3,89	0,90
Respect from others*	3,88	0,80
Harmony and stability in life*	3,85	0,92
A pleasurable life*	3,84	0,88
The feeling that the world is an agreeable place	3,74	0,96
Family security*	3,58	0,90

Note: *items included in the final instrument after factor analysis

The results clearly show that the respondents believed that studying a master's degree would, to a significant extent, allow them to gain the 12 presented values as the mean score of each item is above 3,5. The original studies by Lages and Fernandes (2005) and Durvasula et al. (2011) suggest that the 12 statements measure three broad groups of individual dimensions: peaceful life, social recognition and social integration. In this research, the mean score for the service value of

peaceful life is 3,82 and 3,92 for both social recognition and social integration values.

According to the results, most of the respondents agreed that a master's degree would allow them to achieve a stimulating and adventurous life as it received the highest mean score of 4,09. Peace of mind also received a high mean score of 4,00 but family security received the lowest mean score of 3,58, suggesting that the respondents did not strongly believe that family security can be achieved by studying a master's degree.

The dimensions of social recognition and social integration received the highest mean scores of 3,92 indicating that the respondents believe that the master's degree aids in gaining respect from others and promotes better relationships and provides the possibility of becoming more integrated in the group (Lages and Fernandes 2005, 1565). The dimension of peaceful life received the lowest mean score of the three dimensions but the difference is only 0,10 compared to the mean scores of the other two dimensions. The overall high mean scores indicate that the respondents believe that studying a master's degree allows them to achieve the important personal values. The results are similar with the findings of Durvasula et al. (2011, 40). According to their results, social integration values had the highest mean score, followed by social recognition values and the peaceful life had the lowest mean score. However, the mean scores from their research were even higher as the authors reported the means for all the three dimensions to be well above 4.

4.4. Summated scales

Before testing the research hypotheses that were summarized in chapter 2.7, summated scales were created from personal values and service quality items.

Summated scale is a method of combining several individual variables into a single composite measure in an attempt to increase the reliability of the measurement through multivariate measurement. Summated scale is formed by combining all of the variables loading highly on a factor and commonly the average score of the variables is used as a replacement variable. (Hair et al. 2010, 124.) In this research, personal values were measured with 12 statements and quality expectations with 30 statements. However, the interest is no longer on each individual variable but rather on the concepts that the items measure and therefore, the summated scales are formed in order to study the concepts of personal values and quality expectations from a more comprehensive perspective.

Factor analyses were conducted for the variable groups of personal values and quality expectations. The primary purpose of a factor analysis is to define the underlying structure of interrelationships among the variables in the analysis by defining a set of common underlying dimensions that are named as factors. (Hair et al. 2010, 94.) An essential requirement for creating a summated scale is that the items are unidimensional, meaning that the items are strongly associated with each other and represent a single concept. The test of unidimensionality is that each summated scale that is formed, should consist only of items loading highly on a single factor. (Hair et al. 2010, 125.) The goodness of a variable can be evaluated based on its communality which is the sum of the square factor loadings for all the factors for a given variable. Communality values close

to 1 indicate that the variable is strongly loaded to a single factor. Variables that have a low communality (below 0,30) should be excluded from the analysis because they confound the interpretation of results. (Metsämuuronen 2006, 635.)

In this research, the reliabilities of the summated scales were evaluated by calculating Cronbach's alpha that is a measurement of reliability ranging from 0 to 1. The value of 0,6 is generally considered the lower limit of acceptability for Cronbach's alpha. (Metsämuuronen 2007, 531.) Next the summated scales of personal values and quality expectations are discussed and the alpha for each factor is presented.

Personal values were measured with 12 statements and a Principal Axis Factoring with oblimin rotation was conducted to create summated scales. Three of the variables were excluded and the remaining nine variables loaded into three different factors. The factors were named according to the research by Lages and Fernandes (2005) and Durvasula et al. (2011) as peaceful life values, social recognition values and social integration values. The results are presented in table 6. As can be seen from the results, all of the communalities exceeded the limit of 0,3 and the Cronbach's alphas are above 0,6. The pattern matrix of the factor analysis can be found from appendix 3a and the correlation matrix in appendix 3b. The correlation matrix shows that all the items correlate well and none of the correlations are greater than 0,9. Also, the determinant value (0,026) is greater than the limit of 0.00001 and therefore, multicollinearity is not a problem for these data (Field 2005, 657).

Table 6: Personal value scales after factor analysis

Factor 1: PEACEFUL LIFE VALUES ($\alpha = 0,772$)	Factor loadings	Communality
Peace of mind	0,625	0,413
Family security	0,487	0,406
Harmony and stability in life	0,923	0,772
A pleasurable life	0,529	0,368

Factor 2: SOCIAL RECOGNITION VALUES ($\alpha = 0,747$)	Factor loadings	Communality
Respect from others	0,772	0,580
Status	0,659	0,501
Social recognition	0,628	0,479

Factor 3: SOCIAL INTEGRATION VALUES ($\alpha = 0,897$)	Factor loadings	Communality
Strong relationships (e.g. social, professional and family)	-0,968	0,945
Good relationships (e.g. social, professional and family)	-0,771	0,707

The respondents' quality expectations of educational services were measured with 30 statements that are based on a modified version of the SERVQUAL instrument developed by Parasuraman et al. (1988). A Principal Axis factor analysis with oblimin rotation was conducted to assess the unidimensionality of the factors that is required in order to create the summated scales. Based on the analysis, 11 of the variables were excluded and the remaining 19 variables loaded into five different factors that were named according to the dimensions developed by Parasuraman et al. (1988, 23). The results are presented in table 7 and as can be seen from the results, all of the communalities exceeded the limit of 0,3 and the Cronbach's alpha for each factor is well above 0,6. The pattern matrix of the factor analysis can be found from appendix 4a and the correlation matrix from appendix 4b. The correlation matrix shows that all the items correlate well and none of the correlations particularly large.

In addition, the determinant value (0,00002176) is greater than the necessary value of 0.00001 and therefore, multicollinearity is not a problem (Field 2005, 657).

Table 7: Quality expectation scales after factor analysis

Factor 1: TANGIBLES ($\alpha = 0,749$)	Factor loadings	Communality
The university will have modern equipment	0,698	0,615
The university's physical facilities will be visually appealing	0,806	0,655
The university's employees appearance will be neat and professional	0,448	0,398

Factor 2: RELIABILITY ($\alpha = 0,801$)	Factor loadings	Communality
Educational services will be provided as promised	0,499	0,539
Professors and teaching assistants will grade fairly and accurately	0,499	0,587
Courses will be well taught	0,579	0,676

Factor 3: RESPONSIVENESS($\alpha = 0,789$)	Factor loadings	Communality
Employees of the university will keep students informed when educational services are performed	0,675	0,600
Employees of the university will be willing to help students	0,592	0,602
Employees of the university will respond to student requests promptly	0,448	0,522

Factor 4: ASSURANCE ($\alpha = 0,845$)	Factor loadings	Communality
Employees of the university will instill confidence in students	0,708	0,657
Students feel safe in their transactions with the university	0,656	0,659
Employees of the university will be consistently courteous with students	0,390	0,586
Employees of the university will have the knowledge to answer students' questions	0,488	0,512

Factor 5: EMPATHY ($\alpha = 0,894$)	Factor loadings	Communality
The university will give individual attention to students	-0,763	0,597
The university will have operating hours convenient to all its students	-0,723	0,558
The university will have employees who deal with students in a caring fashion	-0,757	0,629
The university will have its student's best interest at heart	-0,734	0,638
The employees of the university will understand students' needs	-0,729	0,701
The employees of the university will help students with career advice	-0,557	0,525

4.5. Testing the research hypotheses

The main objective of this research is to examine factors affecting international students' service quality expectations in higher education. The roles of three different factors: culture, personal values and price, were chosen for closer examination. Nine hypotheses related to these three factors were presented in the theoretical part of this research and a summary of the research hypotheses can be found from chapter 2.7. The hypotheses were tested by using a One-Way ANOVA analysis and several regression analyses and next, the results are presented and discussed.

4.5.1. The role of price

One of the aims of this research was to investigate whether the price of education has an impact on the students' quality expectations. A One-Way ANOVA analysis was performed in order to see if the quality expectations would differ between the respondents in degree programmes with tuition fees and the respondents whose degree programmes did not have tuition

fees. The assumption in this research was that the tuition fees would raise the students' quality expectations and therefore, the hypothesis was as follows:

H1: Price elevates students' quality expectations.

The results of the One-Way ANOVA are presented in table 8. The value F refers to the ratio of the variance calculated among the means to the variance within the sample and Sig. to the significance of the difference between the groups. If the Sig. value is less than 0,05, the difference is considered significant. (Metsämuuronen 2006, 749.) The row 1 tells the mean score of each service quality dimension in the group with tuition fees and row 2 the mean scores of students with no tuition fees.

Table 8: The results of the One-Way ANOVA analysis examining the role of price in forming quality expectations

	Tangibles	Reliability	Responsiveness	Assurance	Empathy
1	5,888	6,126	5,996	5,910	5,589
2	5,862	6,199	5,998	5,890	5,642
F	0,075	0,612	0,000	0,042	0,246
Sig.	0,784	0,435	0,987	0,838	0,620

Note: 1 = tuition fees N=93, 2 = No tuition fees N=175

As can be seen from table 8, tuition fees are not significantly related to any of the service quality dimensions. Zeithaml (1988,8) claims that customers often use price as a surrogate for quality when it is the only available cue but when it is combined with other cues, its influence seems to be less essential. Binsardi and Ekwulugo (2003, 320) point out that students tend to be extremely analytical and critical when choosing their educational institutions. Due to the significance of choosing a higher education institution abroad, students are willing to spend more time and effort in searching, reviewing, and comparing different alternatives. Therefore, the

students gather extensive information about the possible study destinations and price is by no means the only available cue. The findings suggest that price does not affect the students' expectations of educational services and therefore, hypothesis 1 is rejected.

4.5.2. Cluster analysis

Before testing the research hypotheses 2-9 with several regression analyses, a cluster analysis was conducted in order to see if the role of culture and personal values would differ between the two clusters that are presented in appendix 3. Based on the results of the cluster analysis, two clusters were formed: cluster 1, consisting of respondents with medium expectations and cluster 2, consisting of respondents with high expectations. In the questionnaire, the respondents were asked to indicate their quality expectations of their chosen university in a Likert scale of 1 to 7. Therefore, the responses were based on expectations regarding several different universities. The clusters were made to examine the comparability of the responses.

A One-Way ANOVA analysis was performed in order to examine the two formed clusters. The results showed that there are significant differences on the importance of service attributes among the two clusters and for instance, the university's high ranking position and reputation were significantly more important to the respondents with high quality expectations. The One-Way ANOVA analysis results are presented in appendix 5.

4.5.3. Regression analyses of the antecedents of quality expectations

Each of the five dimensions of service quality was examined with regression analyses. Regression analysis is a widely used statistical tool for estimating the relationship between a single dependent variable and several independent variables. In a regression analysis, the dependent variable is being explained by the chosen set of independent variables. (Metsämuuronen 2006, 675.)

The results from the regression analyses are presented in the following table. Three regression analyses were performed for each of the five dimensions of quality. The first regression was conducted with the entire data of 268 respondents, the second with the cluster 1 and the third with cluster 2. Table 8 includes all the results that were of significance. All of the results from the regression analyses can be found from appendix 6.

The value R refers to the multiple correlation coefficient and R^2 to the coefficient of determination that measures the proportion of variance in the dependent variable which can be explained by the independent variables. Adj. R^2 stands for the coefficient of determination adjusted for the sample size and the number of explanatory terms in the model. The value F shows the result of the F test and sig. shows its significance. In the regression coefficients, the column B shows the initial regression coefficient of the variable and Beta stands for the standardized coefficient. The t and Sig. values are the t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero. Tol. refers the value of tolerance and it measures the multicollinearity. (Metsämuurainen 2006, 698-699, UCLA: Statistical Consulting Group.)

Table 9: Results of the regression analyses

Dependent variable	R	R²	Adj. R²	F	Sig.
Tangibles	0,459	0,211	0,150	3,472	0,001
Independent variable	B	Beta	t	Sig.	Tol.
Social integration**	0,272	0,268	2,547	0,012	0,687
Power distance*	0,018	0,417	1,828	0,070	0,146

Dependent variable	R	R²	Adj. R²	F	Sig.
Tangibles (cluster 1)	0,553	0,306	0,121	1,653	0,152
Independent variable	B	Beta	t	Sig.	Tol.
Social integration**	0,485	0,538	3,253	0,003	0,845

Dependent variable	R	R²	Adj. R²	F	Sig.
Reliability	0,447	0,200	0,138	3,249	0,002
Independent variable	B	Beta	t	Sig.	Tol.
Long term orientation**	-0,008	-0,407	-1,990	0,049	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Responsiveness	0,448	0,201	0,139	3,266	0,002
Independent variable	B	Beta	t	Sig.	Tol.
Power distance**	0,025	0,574	2,502	0,014	0,146

Dependent variable	R	R²	Adj. R²	F	Sig.
Responsiveness (cluster 2)	0,400	0,160	0,056	1,545	0,159
Independent variable	B	Beta	t	Sig.	Tol.
Peaceful life**	0,228	0,354	2,246	0,028	0,521
Social integration*	-0,156	-0,265	-1,736	0,087	0,553

Dependent variable	R	R²	Adj. R²	F	Sig.
Assurance	0,454	0,206	0,145	3,380	0,002
Independent variable	B	Beta	t	Sig.	Tol.
Peaceful life**	0,264	0,234	2,104	0,038	0,616
Power distance**	0,022	0,503	2,201	0,030	0,146

Dependent variable	R	R²	Adj. R²	F	Sig.
Assurance (cluster 2)	0,463	0,215	0,118	2,223	0,037
Independent variable	B	Beta	t	Sig.	Tol.
Peaceful life**	0,256	0,436	2,865	0,006	0,521

Social integration**	-0,189	-0,354	-2,392	0,020	0,553
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Dependent variable	R	R ²	Adj. R ²	F	Sig.
Empathy	0,554	0,307	0,254	5,757	0,000
Independent variable	B	Beta	t	Sig.	Tol.
Power distance**	0,030	0,685	3,207	0,002	0,146
Individualism**	0,018	0,453	2,157	0,033	0,151

Dependent variable	R	R ²	Adj. R ²	F	Sig.
Empathy (cluster 2)	0,553	0,306	0,220	3,581	0,002
Independent variable	B	Beta	t	Sig.	Tol.
Peaceful life*	0,177	0,275	1,918	0,059	0,521
Social recognition*	0,177	0,242	1,878	0,065	0,645
Social integration**	-0,182	-0,311	-2,237	0,029	0,553

Note: *p<0,10. p**<0,05.

Hypotheses 2-4 were all related to the personal values and they addressed the second sub question of this research: What is the role of personal values in forming international students' quality expectations?

H2: Service value to peaceful life is positively related to responsiveness, assurance and empathy. The peaceful life dimension is not significantly related to tangibles or reliability.

As can be seen from table 9, the second hypothesis receives partial support as peaceful life values are positively related to assurance ($p = 0,038$) when testing with the entire data. The results also showed that peaceful life values are positively related to responsiveness ($p = 0,028$), assurance ($p = 0,006$) and empathy ($p = 0,059$) in cluster 2. The findings suggest that the students who strongly believe that peaceful life values can be achieved by studying a master's degree have higher quality expectations in terms of responsiveness, assurance and empathy in the

cluster 2 that consists of respondents with high quality expectations. Service value to peaceful life was not significantly related to the other service quality dimensions and no significant relations between peaceful life values and service quality expectations were found in cluster 1, consisting of students with medium overall expectations.

H3: Service value to social recognition is positively related to tangibles. The dimension of social recognition is not significantly related to reliability, responsiveness, assurance or empathy.

The third hypothesis is partially supported by the results as none of the relations between social recognition values and quality expectation dimensions are statistically significant when testing with the entire data. Therefore, the findings do not support the hypothesized positive relationship between social recognition values and tangibles. The results show that in cluster 2, social recognition values are positively related to empathy ($p = 0,065$). This suggests that students who strongly believe that social recognition values can be achieved by studying a master's degree have higher quality expectations in terms of reliability in the cluster that consists of students with overall high quality expectations.

H4: Service value to social integration is positively related to tangibles, responsiveness, assurance and empathy. The dimension of social integration is not significantly related to reliability.

Also, the fourth hypothesis receives only partial support because service value to social integration is positively related to tangibles in the regression analysis with the entire data ($p = 0,012$) and in cluster 1 ($p =$

0,003) that consists of respondents with medium quality expectations. Surprisingly, social integration values were negatively related to responsiveness, assurance and empathy in cluster 2. The results show that the respondents who strongly believe that social integration can be achieved by studying a master's degree have lower quality expectations in terms of responsiveness ($p = 0,087$), assurance ($p = 0,02$) and empathy ($p = 0,029$) in the cluster 2 that consists of students with high quality expectations.

The remaining five hypotheses were all concerned with the role that culture plays in forming students' quality expectations.

H5: Power distance is positively related to students' expectations of assurance, responsiveness, reliability, empathy, and tangibles.

Hypothesis 5 is partially supported by the research results because the findings suggest that power distance is positively related to tangibles ($p = 0,070$), responsiveness ($p = 0,014$), assurance ($p = 0,030$) and empathy ($p = 0,002$). According to the results, power distance is not significantly related to reliability and no significant relationships between power distance and the quality dimensions were found when conducting the regression analyses with either of the two clusters. The results are similar to Mattila (1999), according to whom, customers from highpower distance cultures have higher quality expectations.

H6: Individualism is positively related to students' expectations of tangibles, responsiveness and reliability but negatively related to empathy and assurance.

Hypothesis 6 is not supported by the results as the table 9 shows that individualism is only significantly related to empathy and the other relationships are not statistically significant. Opposite to the assumption, individualism is positively related to empathy, meaning that students from individualistic cultures have higher quality expectations in the dimension of empathy. This is supported by the findings of Donthu and Yoo (1998, 184), according to whom, individualistic customers expect the service provider to respect and care about them and to show empathy and attention (Donthu and Yoo 1998, 181). Hypothesis 6 is therefore rejected.

H7: Masculinity is positively related to students' expectations of tangibles but negatively related to responsiveness, empathy, and reassurance. Masculinity-femininity dimension is not significantly related to reliability.

The results show that masculinity is not significantly related to any of the service quality dimensions. The findings are in line with Donthu and Yoo (1998, 180) who suggest that masculinity dimension is not strongly related to service expectations.

H8: Uncertainty avoidance is positively related to students' expectations of all dimensions of service quality (tangibles, reliability, responsiveness, assurance, empathy).

Hypothesis 8 is not supported by the results as the findings show that uncertainty avoidance is not significantly related to any of the service quality dimensions. Therefore, hypothesis 8 is rejected.

H9: Long-term orientation is positively related to students' expectations of assurance, reliability, responsiveness, and empathy but negatively related to tangibility.

The results do not support hypothesis 9 because opposite to the hypothesis, long-term orientation is negatively related to reliability ($p = 0,049$) and based on the findings, long-term orientation is not significantly related to any other service quality dimension. The negative relationship between long-term orientation and reliability is surprising as it contradicts with previous research by several authors (Furrer et al. 2000, 364; Kueh and Voon 2007, 668; Tsoukatos and Rand 2007, 477). Donthu and Yoo (1998, 184), on the other hand, did find long-term oriented customers to have overall lower service quality expectations.

4.6. Summary of the research results

The research results were presented and discussed in the previous chapter and next, the results are summarized and analyzed in light of the research question and objectives that were presented in chapter 1.

The main objective of this research was to examine factors affecting international students' service quality expectations in higher education. Therefore, the main research question of this study was: What is the role of personal factors and product attributes in forming international students' quality expectations? Culture and personal values were the chosen personal factors to be examined in this research and other personal factors were not investigated. Price was the product attribute that was of

specific interest in this research and the role of other product attributes in forming students' quality expectations was not studied.

First, the students' quality expectations were examined and the results suggest that students have the highest quality expectations in terms of reliability ($\bar{x} = 6,10$) and the lowest expectations in the dimension of empathy ($\bar{x} = 5,62$). A factor analysis was performed and as a result five different factors related to the service expectations were made and they were named according to the SERVQUAL dimensions developed by Parasuraman et al. (1988, 23).

The results also showed that students believed more strongly that social recognition and social integration values ($\bar{x} = 3,92$) could be achieved by studying a master's degree compared to peaceful life values ($\bar{x} = 3,82$). A factor analysis was also performed to the personal value variables and three factors were made that are in accordance with the research by Lages and Fernandes (2005, 1565). Cronbach's alphas were calculated for each of the service quality and personal values factor to determine their reliability and all of the alpha values were well over the limit of 0,6.

The role of price in forming international students' quality expectations was investigated by performing a One-Way ANOVA analysis. The analysis was conducted in order to see if the quality expectations would differ between the respondents in degree programmes with tuition fees and the respondents whose degree programmes did not have tuition fees. According to the results, there are no significant differences between the two groups and thus, it can be concluded that price does not affect international students' quality expectations.

Before conducting the regression analyses to find out the role that personal values and culture play in forming international students' quality expectations, a cluster analysis was performed and two clusters were made: cluster 1, consisting of students with medium expectations and cluster 2, consisting of students with high expectations. Three regression analyses were conducted for each of the five quality dimensions to see if there would be differences in the factors that affect quality expectations between the two clusters.

The results of the regression analyses show that three of the dimensions of culture have an effect on the quality expectations: power distance is positively related to four of the dimensions of service quality expectations: tangibles, assurance, responsiveness and empathy; long-term orientation is negatively related to reliability and individualism is positively related to empathy. Regression analyses with neither cluster 1 nor cluster 2 provided any results of significant relationships between culture and quality expectations.

The findings also showed that personal values have some effect on the students' quality expectations. Regression analysis with the entire data showed that peaceful life values are positively related to assurance and social integration values are positively related to tangibles. Regression analyses with cluster 2, consisting of students with high expectations, showed that peaceful life values are positively related to responsiveness, assurance and empathy, social integration values are negatively related to responsiveness, assurance and empathy and social recognition values are positively related to empathy. Social integration values are positively related to tangibles in the first cluster, consisting of respondents with medium expectations.

Table 10: Research results with entire data

	SVPL	SVSR	SVSI	PDI	MAS	IDV	LTO	UAI
Empathy				***		***		
Assurance	***			***				
Reliability							**	
Responsiveness				***				
Tangibility			***	*				

Table 11: Research results with cluster 1

	SVPL	SVSR	SVSI	PDI	MAS	IDV	LTO	UAI
Empathy								
Assurance								
Reliability								
Responsiveness								
Tangibility			***					

Table 12: Research results with cluster 2

	SVPL	SVSR	SVSI	PDI	MAS	IDV	LTO	UAI
Empathy	+	+	**					
Assurance	***		**					
Reliability								
Responsiveness	***		*					
Tangibility								

Note: SVPL= Service value to peaceful life, SVSR=Service value to social recognition, SVSI=Service value to social integration, PDI=Power distance, MAS=Masculinity, IDV=Individualism, LTO=Long-term orientation, UAI=Uncertainty avoidance, Price=Tuition fees. *p < 0,10, **p < 0,05

The research results are presented in tables 10-12 and as can be seen from the results, there are differences between the two clusters. This suggests that the respondents of these two clusters have different antecedents of service quality. The first cluster consisted of only 93 respondents and the positive relationship between service value to social integration and tangibles was the only significant relationship that was found between personal values and quality expectations. The second cluster consisted of 175 respondents and the results showed several

significant relationships between personal values and service quality. Therefore, personal values have more affect on the quality expectations of the respondents in the second cluster, consisting of students with overall high quality expectations. No significant relationships between culture and service expectations were found in either of the two clusters.

5. CONCLUSIONS

The purpose of this research was to examine factors affecting international students' service quality expectations in higher education. The goal was pursued by studying the role that culture, personal values and price play in forming students' quality expectations. The theoretical part of this research was covered in chapter 2 and it focused on the nature of educational services and determining the customer, on the concept of service quality and on the antecedents of service quality expectations. The chosen research methodology of a web-based survey was described in chapter 3 and the research results were presented and analyzed in chapter 4. This chapter concludes the research by first presenting the theoretical contribution and managerial implications, followed by the reliability and validity of the research. Finally, the limitations are described and suggestions for future research are proposed.

5.1. Theoretical contribution

This research contributes in various ways to the existing knowledge on international students' quality expectations in higher education. More specifically, this research offers valuable insight about the prospective students' quality expectations as the data for this research was collected after the students had already been informed of their study place but before they had any firsthand experience of the educational services that might affect their expectations.

The main theoretical contribution of this research is the increased knowledge of international students' quality expectations and their antecedents. This research focused on the role of culture, personal values and price in forming students' quality expectations and the results show

that the two former do affect the students' expectations. According to the findings, power distance is positively related to four of quality dimensions: tangibles, assurance, responsiveness and empathy; long-term orientation is negatively related to reliability and individualism is positively related to empathy. No other significant relationships between culture and quality expectations were found. The role of personal values was also examined and the results showed that peaceful life is positively related to assurance and social integration is positively related to tangibles. The findings showed no significant relationship between price and quality expectations. In addition, the research results revealed that there were differences in the antecedents of quality expectations between the two clusters. The first cluster consisted of students with medium expectations and the second cluster of students' with high overall expectations. A closer examination of the clusters also showed that the respondents in cluster 2 placed more importance on the university's high ranking position and reputation.

5.2. Managerial implications

As discussed in chapter 1.1., the interest in international tertiary education has been increasing and the competition for international students has intensified. For many universities, service quality has become the means to retain student numbers and to capture the market share. Therefore, it is vital for the educational institutions to understand the prospective students' quality expectations and knowing their antecedents can give the educational institutions an advantage in planning their marketing measures to attract new students.

This research provides information about the quality expectations of students who have applied to international master's degree programmes in Finland and the findings can be utilized in designing marketing plans

that are better suited to address these expectations. The research results are important because the prospective students' quality expectations have been scarcely researched. Most researches measure the students' quality expectations when they are already studying at a university but at this point their expectations have already been affected by their experiences of the educational services. In this research, the quality expectations were measured after the students' had learned of their acceptance to the university but before they had begun their studies and thus, had no firsthand experience of the educational services that might influence the respondents' quality expectations.

The results of this research show that international students have the highest quality expectations in terms of reliability and the lowest expectations in the dimension of empathy. According to the findings, students' personal values and cultural background affect their quality expectations but the results suggest that price does not have an effect on the service quality expectations. Universities can use this information when planning their marketing activities for the target students. The role of price in determining students' quality expectations is important especially for the Finnish universities that are taking part in the tuition fee trial.

5.3. Reliability and validity of the research

Reliability refers to the extent to which results are consistent over time and a research instrument is considered to be reliable if the results can be reproduced under a similar methodology. (Metsämuuronen 2006, 117.) Incidental errors can lower the reliability of the results (Alkula et al. 1994, 94). In this research, the reliability of the summated scales was measured by calculating Cronbach's alpha for each factor. The reliability test was conducted in order to ensure that all of the variables in a factor measure

the same underlying construct. All of the alpha values were well above the required limit of 0,6.

Validity determines whether the research truly measures what it intends to. Validity can be divided into internal and external validity. External validity refers to the extent to which the results can be generalized and internal validity refers to the accuracy of the results, the extent to which the systematic error of the study is minimized and confounding variables are eliminated. The validity of a research can be improved by having a well-thought-out research design, proper constructs and theory and well-suited data sampling. (Metsämuuronen 2006, 57.) In order to reach a high validity in this research, a comprehensive theoretical research was conducted and the used SERVQUAL and SERPVAL instruments were carefully examined.

5.4. Limitations of the research

The limitations of this research need to be taken into account when considering the contributions and implications. The response rate is one of the limitations of this research. The sample size for the first questionnaire in phase one was 1718 and the response rate 43.8 percent. 1110 of these respondents entered into a panel through which the data was collected for the second phase in the beginning of August 2012. There were 481 respondents for the second questionnaire, resulting in a response rate of 43.3 percent. However, only 268 of the responses were usable for this research and therefore, the final response rate was 24,2 %. Also, all of the respondents had applied to an international master's degree programme at a Finnish university and caution should be used if the results are generalized to other contexts.

This research focused only on the role of culture, personal values and price in forming students' quality expectations but the other antecedents were not investigated in the empirical part of this research. The other antecedents of service expectations might however, have an effect on the role of the examined factors and this was not covered in this research. The coefficient of determination (R^2) values that measures the proportion of variance in the dependent variable that can be explained by the independent variables are quite low in this research. The values range from 0,16 to 0,30, meaning that only 16-30 % of the dependent variable (each dimension of quality) can be explained by the chosen independent variables (culture and personal value dimensions). Therefore, 70-84 % of the variance in the quality dimensions could be explained by variables that were not covered in this research.

5.5. Suggestions for further research

Quality in higher education has received an increasing amount of attention and service quality in higher education has been examined by several researchers, as was previously discussed in chapter 1.3. However, the students' quality expectations have not been thoroughly studied and research on the antecedents of service quality in higher education is scarce at best.

The role of culture in shaping customer expectations has been examined in other service sectors and the topic deserves more attention from researchers in higher education as well. In this research, the cultural values were based on Hofstede's research on national culture but it would be beneficial to conduct research on the role of culture in shaping students' expectations by applying Hofstede's cultural typology at the individual level. Other cultural typologies could also be used in further

research on culture's role in shaping students' expectations. For instance, the GLOBE dimensions developed by House et al. (2004) could be an excellent framework for studying the role that culture plays in forming international students' quality expectations.

This research focused only on the role of culture, personal values and price in forming international students' quality expectations but a more extensive research covering a larger amount of antecedents could offer new insight on this matter. In addition, it would be interesting to see how the different antecedents are linked to one another and what their relative importance is in forming students' expectations of higher education.

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APPENDICES

Appendix 1 Parts of the questionnaire that were used in this research

Please indicate your gender

- Male
- Female

Please indicate your age

	18	21	23	26	29	32	34	37	40	42	45
Years											

Please indicate your nationality

Please indicate the extent to which you agree or disagree on what a Master's degree allows you to achieve

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Respect from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peace of mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmony and stability in life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong relationships (e.g. social, professional and family)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good relationships (e.g. social, professional and family)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A pleasurable life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The feeling that the world is an agreeable place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A stimulating and adventurous life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A high level of integration in my group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2 List of respondents' nationalities and culture dimensions based on Hofstede's research (The Hofstede Centre).

Nationality	N	PDI	IDV	MAS	UAI	LTO
Afghan	1					
Argentina	1	49	46	56	86	
Azerbaijan	3					
Bangladeshi	3	80	20	55	60	40
Brazilian	1	69	38	49	76	65
Bulgarian	2	70	30	40	85	
Cameroonian	2					
Canadian	1	39	80	52	48	23
China	52	80	20	66	30	118
Colombian	1	67	13	64	80	
Croatian	1	73	33	40	80	
Cypriot	1					
Eritrean	1					
Estonian	3	40	60	30	60	
Ethiopian	2	70	20	65	55	
Filipino	2	94	32	64	44	19
Finnish	13	33	63	26	59	41
German	7	35	67	66	65	31
Ghanaian	2	80	15	40	65	
Greek	5	60	35	57	112	
guatemalan	1	95	6	37	101	
hungarian	1	46	80	88	82	50
Indian	16	77	48	56	40	61
Indonesian	3	78	14	46	48	
Iranian	39	58	41	43	59	
Irish	1	28	70	68	35	43
Italian	3	50	76	70	75	34
Kazakh	1					
KENYAN	1					
Latvian	1					
Liechtenstein	1					
Lithuanian	1					
Malaysia	1	104	26	50	36	
Mexican	4	81	30	69	82	
Moroccan	1	70	25	53	68	
Nepali	5					

Nigerian	8	80	30	60	55	16
No response/insufficient response	3					
Pakistani	15	55	14	50	70	
Romanian	1	90	30	42	90	
Russian	37	93	39	36	95	
Rwandan	1					
Serbian	1	86	25	43	92	
Singaporean	1	74	20	48	8	48
sinhalese	1					
South Africa	1	49	65	63	49	
Turkish	5	66	37	45	85	
Ukraine	3					
USA	2	40	91	62	46	29
Vietnamese	5	70	20	40	30	80

Note: PDI=Power distance, MAS=Masculinity, IDV=Individualism, LTO=Long-term orientation, UAI=Uncertainty avoidance

Appendix 3 Factor analysis with oblimin rotation to personal values.

3a) Pattern matrix

Pattern Matrix^a

	Factor		
	1	2	3
PV1			,772
PV2			,659
PV3	,625		
PV4	,487		
PV5	,923		
PV6		-,968	
PV7		-,771	
PV8	,529		
PV10			,628

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser

Normalization.^a

a. Rotation converged in 7 iterations.

Note: PV1: Respect from others, PV2: Status, PV3: Peace of mind, PV4: Family security, PV5: Harmony and stability in life, PV6: Strong relationships (e.g. social, professional and family), PV7: Good relationships (e.g. social, professional and family), PV8: A pleasurable life, PV9: The feeling that the world is an agreeable place, PV10: Social recognition, PV11: A stimulating and adventurous life, PV12: A high level of integration in my group

3b) Correlation matrix

Correlation Matrix

	PV1	PV2	PV3	PV4	PV5	PV6	PV7	PV8	PV10
PV1	1,000	0,540	0,350	0,248	0,286	0,255	0,224	0,301	0,493
PV2	0,540	1,000	0,293	0,335	0,346	0,261	0,243	0,303	0,470
PV3	0,350	0,293	1,000	0,345	0,516	0,258	0,303	0,466	0,234
PV4	0,248	0,335	0,345	1,000	0,593	0,440	0,390	0,327	0,360
PV5	0,286	0,346	0,516	0,593	1,000	0,424	0,456	0,483	0,271
PV6	0,255	0,261	0,258	0,440	0,424	1,000	0,814	0,307	0,390
PV7	0,224	0,243	0,303	0,390	0,456	0,814	1,000	0,337	0,361
PV8	0,301	0,303	0,466	0,327	0,483	0,307	0,337	1,000	0,303
PV10	0,493	0,470	0,234	0,360	0,271	0,390	0,361	0,303	1,000
PV1		0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
PV2	0,000		0,000	0,000	0,000	0,000	0,000	0,000	0,000
PV3	0,000	0,000		0,000	0,000	0,000	0,000	0,000	0,000
PV4	0,000	0,000	0,000		0,000	0,000	0,000	0,000	0,000
PV5	0,000	0,000	0,000	0,000		0,000	0,000	0,000	0,000
PV6	0,000	0,000	0,000	0,000	0,000		0,000	0,000	0,000
PV7	0,000	0,000	0,000	0,000	0,000	0,000		0,000	0,000
PV8	0,000	0,000	0,000	0,000	0,000	0,000	0,000		0,000
PV10	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	

a. Determinant = ,026

Appendix 4 Factor analysis with oblimin rotation to service quality expectations.

4a) Pattern matrix

Pattern Matrix^a

	Factor				
	1	2	3	4	5
SQ1			0,698		
SQ2			0,806		
SQ3			0,448		
SQ5				0,499	
SQ9				0,499	
SQ10				0,579	
SQ14					0,675
SQ16					0,592
SQ17					0,448
SQ20	0,708				
SQ21	0,656				
SQ22	0,39				
SQ23	0,488				
SQ25		-0,763			
SQ26		-0,723			
SQ27		-0,757			
SQ28		-0,734			
SQ29		-0,729			
SQ30		-0,557			

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.^a

a. Rotation converged in 16 iterations.

Note: SQ1: The university will have modern equipment, SQ2: The university's physical facilities will be visually appealing, SQ3: The university's employees appearance will be neat and professional, SQ5: Educational services will be provided as promised, SQ9: Professors and teaching assistants will grade fairly and accurately, SQ10: Courses will be well taught, SQ14: Employees of the university will keep students informed when educational services are performed, SQ16: Employees of the university will be willing to help students, SQ17: Employees of the university will respond to student requests promptly, SQ20: Employees of the university will instill confidence in students, SQ21: Students feel safe in their transactions with the university, SQ22: Employees of the university will be consistently courteous with students, SQ23: Employees of the university will have the knowledge to answer students' questions, SQ25: The university will give individual attention to students, SQ26: The university will have operating hours convenient to all its students, SQ27: The university will have employees who deal with students in a caring fashion, SQ28: The university will have its student's best interest at heart, SQ29: The employees of the university will understand students' needs, SQ30: The employees of the university will help students with career advice

	SQ21	SQ22	SQ23	SQ25	SQ26	SQ27	SQ28	SQ29	SQ30
SQ1	0,372	0,295	0,358	0,320	0,303	0,292	0,325	0,318	0,277
SQ2	0,291	0,353	0,282	0,315	0,258	0,363	0,321	0,327	0,264
SQ3	0,363	0,361	0,395	0,298	0,324	0,245	0,340	0,294	0,265
SQ5	0,465	0,377	0,350	0,358	0,353	0,286	0,434	0,417	0,423
SQ9	0,521	0,475	0,487	0,352	0,389	0,311	0,403	0,450	0,444
SQ10	0,573	0,453	0,459	0,366	0,403	0,299	0,474	0,499	0,474
SQ14	0,497	0,532	0,464	0,373	0,420	0,442	0,396	0,483	0,494
SQ16	0,531	0,556	0,483	0,480	0,454	0,484	0,477	0,514	0,410
SQ17	0,481	0,555	0,502	0,480	0,430	0,455	0,529	0,534	0,435
SQ20	0,652	0,568	0,582	0,463	0,379	0,434	0,472	0,495	0,493
SQ21	1,000	0,580	0,550	0,359	0,360	0,383	0,485	0,529	0,441
SQ22	0,580	1,000	0,523	0,487	0,465	0,463	0,501	0,582	0,524
SQ23	0,550	0,523	1,000	0,421	0,402	0,442	0,465	0,486	0,412
SQ25	0,359	0,487	0,421	1,000	0,584	0,603	0,615	0,586	0,536
SQ26	0,360	0,465	0,402	0,584	1,000	0,611	0,569	0,586	0,499
SQ27	0,383	0,463	0,442	0,603	0,611	1,000	0,580	0,624	0,473
SQ28	0,485	0,501	0,465	0,615	0,569	0,580	1,000	0,689	0,556
SQ29	0,529	0,582	0,486	0,586	0,586	0,624	0,689	1,000	0,651
SQ30	0,441	0,524	0,412	0,536	0,499	0,473	0,556	0,651	1,000
SQ1	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ2	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ5	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ9	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ10	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ14	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ16	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ17	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ20	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ21		0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ22	0,000		0,000	0,000	0,000	0,000	0,000	0,000	0,000
SQ23	0,000	0,000		0,000	0,000	0,000	0,000	0,000	0,000
SQ25	0,000	0,000	0,000		0,000	0,000	0,000	0,000	0,000
SQ26	0,000	0,000	0,000	0,000		0,000	0,000	0,000	0,000
SQ27	0,000	0,000	0,000	0,000	0,000		0,000	0,000	0,000
SQ28	0,000	0,000	0,000	0,000	0,000	0,000		0,000	0,000
SQ29	0,000	0,000	0,000	0,000	0,000	0,000	0,000		0,000
SQ30	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	

a. Determinant = 2,176E-005

Appendix 5 Cluster analysis and One-Way ANOVA results on the difference between the clusters on the importance of evaluation attributes

Service quality item	Cluster 1	Cluster 2
The university will have modern equipment	6	6
The university's physical facilities will be visually appealing	5	6
The university's employees appearance will be neat and professional	5	6
Educational services will be provided as promised	6	6
Professors and teaching assistants will grade fairly and accurately	6	6
Courses will be well taught	6	7
Employees of the university will keep students informed when educational services are performed	5	6
Employees of the university will be willing to help students	6	6
Employees of the university will respond to student requests promptly	5	6
Employees of the university will instill confidence in students	5	6
Students feel safe in their transactions with the university	5	7
Employees of the university will be consistently courteous with students	5	6
Employees of the university will have the knowledge to answer students' questions	5	6
The university will give individual attention to students	5	6
The university will have operating hours convenient to all its students	5	6
The university will have employees who deal with students in a caring fashion	5	6
The university will have its student's best interest at heart	5	6
The employees of the university will understand students' needs	5	6
The employees of the university will help students with career advice	5	6
	N= 93	N= 175

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	2,494	1	2,494	2,113	0,147
	Within Groups	312,906	265	1,181		
i1	Total	315,401	266			
	Between Groups	11,143	1	11,143	19,662	0
	Within Groups	150,183	265	0,567		
i2	Total	161,326	266			
	Between Groups	12,685	1	12,685	17,643	0
	Within Groups	190,529	265	0,719		
i3	Total	203,213	266			
	Between Groups	7,465	1	7,465	7,232	0,008
	Within Groups	273,554	265	1,032		
i4	Total	281,019	266			
	Between Groups	28,203	1	28,203	12,066	0,001
	Within Groups	619,4	265	2,337		
i5	Total	647,603	266			
	Between Groups	8,619	1	8,619	7,098	0,008
	Within Groups	321,793	265	1,214		
i6	Total	330,412	266			
	Between Groups	9,432	1	9,432	4,22	0,041
	Within Groups	592,276	265	2,235		
i7	Total	601,708	266			
	Between Groups	12,805	1	12,805	10,284	0,002
	Within Groups	327,459	263	1,245		
i8	Total	340,264	264			
	Between Groups	9,492	1	9,492	6,352	0,012
	Within Groups	395,976	265	1,494		
i9	Total	405,468	266			
i10	Between Groups	17,127	1	17,127	20,11	0

	Within Groups	225,69	265	0,852		
	Total	242,816	266			
	Between Groups	8,793	1	8,793	19,118	0
	Within Groups	121,881	265	0,46		
i11	Total	130,674	266			
	Between Groups	18,221	1	18,221	14,476	0
i12	Within Groups	333,54	265	1,259		
i12	Total	351,76	266			
	Between Groups	0,961	1	0,961	0,565	0,453
	Within Groups	450,665	265	1,701		
i13	Total	451,625	266			
	Between Groups	4,668	1	4,668	4,493	0,035
	Within Groups	275,362	265	1,039		
i14	Total	280,03	266			
	Between Groups	20,981	1	20,981	13,605	0
	Within Groups	408,667	265	1,542		
i15	Total	429,648	266			
	Between Groups	5,794	1	5,794	3,513	0,062
	Within Groups	432,172	262	1,65		
i16	Total	437,966	263			
	Between Groups	18,132	1	18,132	9,356	0,002
	Within Groups	507,774	262	1,938		
i17	Total	525,905	263			
	Between Groups	6,283	1	6,283	2,164	0,142
	Within Groups	766,533	264	2,904		
i18	Total	772,816	265			
	Between Groups	1,675	1	1,675	0,528	0,468
	Within Groups	834,34	263	3,172		
i19	Total	836,015	264			
i20	Between Groups	7,683	1	7,683	2,455	0,118

	Within Groups	826,396	264	3,13		
	Total	834,079	265			
	Between Groups	31,564	1	31,564	21,469	0
	Within Groups	389,612	265	1,47		
i21	Total	421,176	266			
	Between Groups	24,872	1	24,872	12,681	0
	Within Groups	519,765	265	1,961		
i22	Total	544,637	266			
	Between Groups	13,507	1	13,507	8,096	0,005
	Within Groups	442,096	265	1,668		
i23	Total	455,603	266			

Note: i1: University's cost of education/tuition fees are reasonable, i2: The degree's offered have academic value, i3: The degree's offer good career prospects, i4: clean and safe study environment, i5: possibility of studying for a doctoral degree, i6: Reasonable entry/admission requirements, i7: The university has a central location, i8: Country's high academic reputation, i9: A positive city image, i10: Institution is well known for its reputation, i11: The programme fulfills my educational needs, i12: University's high ranking position, i13: The possibility to work during one's studies, i14: Reasonable living costs (accommodation, food, traveling etc.), i15: The availability of advice and help with organizing everyday life in the host country, i16: The availability of financial help/scholarships, i17: Recommendations from alumni or current students, i18: My friends are applying to the same university, i19: I know someone who has studied or is currently studying in the university, i20: I know someone who has studied or is currently studying in the country, i21: A high level of security in the host country, i22: A low level of racial discrimination in the host country, i23: An active student life

Appendix 6: Results of the regression analyses

Dependent variable	R	R²	Adj. R²	F	Sig.
Tangibles	0,459	0,211	0,150	3,472	0,001
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	2,988		2,379	0,019	
Peaceful life	0,019	0,017	0,157	0,876	0,616
Social recognition	0,078	0,062	0,564	0,574	0,622
Social integration**	0,272	0,268	2,547	0,012	0,687
Power distance*	0,018	0,417	1,828	0,070	0,146
Individualism	0,012	0,316	1,409	0,162	0,151
Masculinity	0,003	0,046	0,374	0,710	0,494
Uncertainty avoidance	-0,006	-0,106	-0,546	0,586	0,201
Long term orientation	-0,004	-0,172	-0,848	0,398	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Tangibles (cluster 1)	0,553	0,306	0,121	1,653	0,152
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	5,596		1,998	0,055	
Peaceful life	-0,056	-0,061	-0,341	0,736	0,731
Social recognition	-0,137	-0,127	-0,644	0,524	0,600
Social integration**	0,485	0,538	3,253	0,003	0,845
Power distance	-0,019	-0,638	-0,813	0,423	0,037
Individualism	-0,014	-0,457	-0,523	0,605	0,030
Masculinity	0,002	0,049	0,226	0,823	0,496
Uncertainty avoidance	0,002	0,056	0,141	0,889	0,146
Long term orientation	-0,001	-0,057	-0,094	0,925	0,063

Dependent variable	R	R²	Adj. R²	F	Sig.
Tangibles (cluster 2)	0,405	0,164	0,062	1,598	0,143
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	2,537		1,587	0,117	
Peaceful life	0,038	0,042	0,269	0,789	0,521
Social recognition	0,160	0,157	1,109	0,272	0,645
Social integration	0,040	0,049	0,322	0,749	0,553
Power distance	0,022	0,525	1,631	0,108	0,124
Individualism	0,010	0,319	1,140	0,259	0,164
Masculinity	0,002	0,028	0,147	0,884	0,342
Uncertainty avoidance	0,007	0,149	0,506	0,614	0,148

Long term orientation	0,003	0,203	0,648	0,520	0,131
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Dependent variable	R	R²	Adj. R²	F	Sig.
Reliability	0,447	0,200	0,138	3,249	0,002
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	4,376		3,427	0,001	
Peaceful life	0,112	0,102	0,915	0,362	0,616
Social recognition	0,173	0,137	1,233	0,220	0,622
Social integration	0,039	0,038	0,358	0,721	0,687
Power distance	0,015	0,352	1,534	0,128	0,146
Individualism	0,007	0,184	0,815	0,417	0,151
Masculinity	0,003	0,048	0,384	0,702	0,494
Uncertainty avoidance	-0,010	-0,173	-0,884	0,379	0,201
Long term orientation**	-0,008	-0,407	-1,990	0,049	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Reliability (cluster 1)	0,453	0,205	-0,006	0,970	0,478
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	3,259		0,873	0,390	
Peaceful life	0,063	0,054	0,284	0,778	0,731
Social recognition	0,257	0,190	0,904	0,373	0,600
Social integration	0,062	0,055	0,309	0,759	0,845
Power distance	-0,002	-0,043	-0,051	0,959	0,037
Individualism	-0,002	-0,058	-0,062	0,951	0,030
Masculinity	0,014	0,269	1,165	0,253	0,496
Uncertainty avoidance	0,014	0,267	0,627	0,535	0,146
Long term orientation	-0,006	-0,302	-0,465	0,645	0,063

Dependent variable	R	R²	Adj. R²	F	Sig.
Reliability (cluster 2)	0,432	0,187	0,087	1,864	0,081
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	5,653		4,837	0,000	
Peaceful life	-0,001	-0,001	-0,009	0,993	0,521
Social recognition	0,167	0,220	1,580	0,119	0,645
Social integration	-0,025	-0,041	-0,275	0,784	0,553
Power distance	0,011	0,358	1,127	0,264	0,124
Individualism	0,003	0,117	0,425	0,672	0,164
Masculinity	0,000	-0,005	-0,024	0,981	0,342
Uncertainty avoidance	-0,009	-0,266	-0,914	0,364	0,148
Long term orientation	-0,004	-0,310	-1,004	0,319	0,131

Dependent variable	R	R²	Adj. R²	F	Sig.
Responsiveness	0,448	0,201	0,139	3,266	0,002
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	3,518		2,732	0,007	
Peaceful life	0,136	0,124	1,108	0,271	0,616
Social recognition	0,071	0,056	0,503	0,616	0,622
Social integration	0,055	0,053	0,498	0,619	0,687
Power distance**	0,025	0,574	2,502	0,014	0,146
Individualism	0,012	0,309	1,370	0,174	0,151
Masculinity	-0,003	-0,042	-0,336	0,737	0,494
Uncertainty avoidance	-0,007	-0,128	-0,657	0,513	0,201
Long term orientation	-0,005	-0,217	-1,061	0,291	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Responsiveness (cluster 1)	0,278	0,077	-0,169	0,314	0,955
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	6,491		1,853	0,074	
Peaceful life	-0,153	-0,152	-0,738	0,466	0,731
Social recognition	-0,150	-0,127	-0,562	0,578	0,600
Social integration	0,149	0,152	0,798	0,431	0,845
Power distance	-0,009	-0,274	-0,303	0,764	0,037
Individualism	-0,016	-0,488	-0,485	0,631	0,030
Masculinity	0,001	0,021	0,083	0,934	0,496
Uncertainty avoidance	0,005	0,111	0,242	0,810	0,146
Long term orientation	0,000	0,017	0,025	0,981	0,063

Dependent variable	R	R²	Adj. R²	F	Sig.
Responsiveness (cluster 2)	0,400	0,160	0,056	1,545	0,159
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	4,596		4,007	0,000	
Peaceful life**	0,228	0,354	2,246	0,028	0,521
Social recognition	0,105	0,144	1,014	0,314	0,645
Social integration*	-0,156	-0,265	-1,736	0,087	0,553
Power distance	0,013	0,424	1,313	0,194	0,124
Individualism	0,003	0,127	0,454	0,652	0,164
Masculinity	-0,006	-0,157	-0,809	0,422	0,342
Uncertainty avoidance	0,006	0,184	0,621	0,537	0,148

Long term orientation	0,002	0,130	0,414	0,680	0,131
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Dependent variable	R	R²	Adj. R²	F	Sig.
Assurance	0,454	0,206	0,145	3,380	0,002
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	3,866		2,943	0,004	
Peaceful life**	0,264	0,234	2,104	0,038	0,616
Social recognition	0,078	0,060	0,539	0,591	0,622
Social integration	-0,047	-0,044	-0,418	0,677	0,687
Power distance**	0,022	0,503	2,201	0,030	0,146
Individualism	0,013	0,326	1,449	0,150	0,151
Masculinity	-0,003	-0,054	-0,432	0,667	0,494
Uncertainty avoidance	-0,013	-0,222	-1,138	0,258	0,201
Long term orientation	-0,006	-0,272	-1,333	0,185	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Assurance (cluster 1)	0,122	0,015	-0,248	0,056	1,000
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	5,772		1,616	0,117	
Peaceful life	0,027	0,027	0,129	0,898	0,731
Social recognition	-0,071	-0,061	-0,261	0,796	0,600
Social integration	-0,003	-0,003	-0,015	0,988	0,845
Power distance	-0,013	-0,405	-0,433	0,668	0,037
Individualism	-0,013	-0,397	-0,381	0,706	0,030
Masculinity	0,001	0,014	0,054	0,957	0,496
Uncertainty avoidance	0,009	0,205	0,432	0,669	0,146
Long term orientation	0,003	0,142	0,196	0,846	0,063

Dependent variable	R	R²	Adj. R²	F	Sig.
Assurance (cluster 2)	0,463	0,215	0,118	2,223	0,037
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	5,921		5,868	0,000	
Peaceful life**	0,256	0,436	2,865	0,006	0,521
Social recognition	0,088	0,133	0,968	0,336	0,645
Social integration**	-0,189	-0,354	-2,392	0,020	0,553
Power distance	0,004	0,151	0,483	0,630	0,124
Individualism	0,001	0,046	0,170	0,866	0,164
Masculinity	-0,001	-0,025	-0,132	0,896	0,342

Uncertainty avoidance	-0,008	-0,274	-0,957	0,342	0,148
Long term orientation	-0,002	-0,197	-0,649	0,519	0,131

Dependent variable	R	R²	Adj. R²	F	Sig.
Empathy	0,554	0,307	0,254	5,757	0,000
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	2,263		1,890	0,062	
Peaceful life	0,169	0,154	1,477	0,143	0,616
Social recognition	0,170	0,134	1,292	0,199	0,622
Social integration	-0,042	-0,041	-0,411	0,682	0,687
Power distance**	0,030	0,685	3,207	0,002	0,146
Individualism**	0,018	0,453	2,157	0,033	0,151
Masculinity	0,004	0,071	0,615	0,540	0,494
Uncertainty avoidance	-0,007	-0,116	-0,637	0,525	0,201
Long term orientation	-0,006	-0,294	-1,547	0,125	0,184

Dependent variable	R	R²	Adj. R²	F	Sig.
Empathy (cluster 1)	0,218	0,048	-0,206	0,188	0,991
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	2,197		0,768	0,448	
Peaceful life	-0,058	-0,072	-0,345	0,732	0,731
Social recognition	0,066	0,069	0,301	0,765	0,600
Social integration	0,004	0,005	0,024	0,981	0,845
Power distance	0,020	0,766	0,833	0,412	0,037
Individualism	0,022	0,806	0,788	0,437	0,030
Masculinity	0,003	0,088	0,347	0,731	0,496
Uncertainty avoidance	0,004	0,102	0,219	0,828	0,146
Long term orientation	0,001	0,076	0,106	0,916	0,063

Dependent variable	R	R²	Adj. R²	F	Sig.
Empathy (cluster 2)	0,553	0,306	0,220	3,581	0,002
Independent variable	B	Beta	t	Sig.	Tol.
(Constant)	4,103		3,929	0,000	
Peaceful life*	0,177	0,275	1,918	0,059	0,521
Social recognition*	0,177	0,242	1,878	0,065	0,645
Social integration**	-0,182	-0,311	-2,237	0,029	0,553
Power distance	0,011	0,385	1,313	0,194	0,124
Individualism	0,004	0,182	0,713	0,478	0,164

Masculinity	0,008	0,210	1,190	0,238	0,342
Uncertainty avoidance	0,000	0,002	0,007	0,995	0,148
Long term orientation	-0,003	-0,216	-0,759	0,451	0,131