Doctoral Thesis

MARKETING MIX INSTRUMENTS AS FACTORS OF IMPROVEMENT OF IMAGE OF HIGHER EDUCATION INSTITUTIONS AND STUDENTS SATISFACTION

AUTHOR:

Sandra Brkanlić

DIRECTORS:

Javier Sánchez Garcia

Edgar Bresó Esteve

Castellón de la Plana, March 2019

Programa de Doctorado en Economía y Empresa

Escuela de doctorado de la Universitat Jaume I

Título de la tesis:

Herramientas de marketing mix como factores de mejora de la imagen de las instituciones educativas y la satisfacción de los estudiantes universitarios.

Memoria presentada por Sandra Brkanlić

para optar al grado de doctor de la Universitat Jaume

El doctorando	Los directores:	
Sandra Brkanlić	Javier Sánchez Garcia	Edgar Bresó Esteve

Castellón de la Plana, Marzo de 2019

To my daughter Petra

ACKNOWLEDGMENTS

First of all, i would like to thank everyone that have helped me to complete my dissertation. It is only thanks to the support, advice and help of the professors, friends, and family, that this dissertation was able to get its final, planned form.

Most importantly, i would like to express my deepest gratitude to my professor, mentor, and advisor - Professor Javier Sanchez Garcia, who have provided immense amount of support and advice, and who didn’t let me to give up at any moment throughout the dilemmas occurring in the research process. I believe that if it wasn’t for his support, i wouldn’t be able to finish Ph.D. studies, nor complete the complex process of collecting data and writing dissertation. Always showing understanding and patience for all my occasional mistakes and never ceasing to believe in me, he provided support and motivation for further work, both during the course of studies, and now at the very end of it. I'm sure that i had the unbelievable fortune to have him as my mentor and advisor, who was always there for me, at any moment, like a sincere friend, and whom i have learned so much from in a professional sense, and about life in general.

I also would like to thank to my co-mentor, Professor Edgar Breso Esteve, who has also provided support and direction for my work, and who has, together with my mentor, Professor Javier Sanchez Garcia, enabled me to collect valuable data, without which i would not be able to complete the research process. Furthermore i am grateful for Professor Breso’s direction and guidelines regarding technical details of dissertation, specifically the ones regarding questionnaire. Moreover, i would like to express my deepest gratitude to Professor Breso for his time and patience in helping me solve any problems that occurred in the research process.

Last but not the least, i would like to thank my family and friends: my daughter Petra; my parents, Dušan and Branka; sister Milena and niece Elena; my friends Jovana, Ivana, Aleksandra, Tanja, Marijana and Petra, whose unconditional love and understanding provided me with strength to complete the complex work. I thank them for being my strength and motivation to keep going even through the toughest times.

THE AUTHOR

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SECTION 1. THEORETICAL FRAMEWORK

CHAPTER 1: INTRODUCTION

1.1 RESEARCH JUSTIFICATION

The global higher education market, the Republic of Serbia and Spain included, has gone through major changes at the end of the former and the beginning of current century. The changes are mostly seen as the tendency to create a singular European Higher Education Area (EHEA). Indeed, neither Serbia, nor Spain, can be left behind by these processes in terms of their long-term development strategies. For this reason, there was a need for changes in the entire education system. Throughout their entire development, higher education institutions were considered as the generator of social development and the source of new social changes and ideas. However, the role and the position of higher education institutions in contemporary society are largely affected by the expansion of knowledge, globalization, uneven development of society, the disproportion of political, military and economic power on the world stage, and many other factors. The transition to the Bologna Process and the pluralism in education, to which faculties adapt on the fly, further complicate the global education trends. It is important to emphasize that institutions of higher education are faced with the requirement to increase their business marketing orientation due to a number of factors that include the following: increasing presence of international higher education institutions, the establishment of private universities, the introduction of the accreditation system, as well as control measures and quality guarantees of education. Marketing orientation implies striving for quality in every management segment of the faculty because the educational service market offers a wide range of education institutions, forms and programs. Among them, the future students choose the characteristics of the education offer which suits them the best, and they are operationalized through marketing mix instruments. Contemporary marketing interprets marketing mix as one of the most commonly used concepts whose instruments are crucial for the creation of the positive image of the company, as well as for the satisfaction of consumers.

The globalization processes and the rapid changes that have affected the higher education system, have made the positive and high ranked image an indispensable factor for the business success of all organizations, including higher education. In the conditions imposed by the globalization and intense competition, it is absolutely imperative to create a distinctive quality that would stand out among other higher education institutions that make up the market. In order to define its image, it is imperative for the higher education institution to have answers to the basic questions, such as: how the teaching process takes place, how much the public is familiar with the higher education institution, whether the higher education institution is recognizable in the public as an institution that offers quality services (programs, teaching and non-teaching staff, etc.). Considering the fact that the image is being built on the basis of public opinion, it is necessary to conduct a public opinion survey, and primarily a service user, that is, students' survey.

The marketing goal of each business organization, including higher education institutions, is to achieve the satisfaction of service users - students. The effort to improve the marketing mix instruments, and thus to upgrade the image of the higher education institution, arises from the fact that all educational institutions in the modern market game strive to achieve as higher student satisfaction as possible in order to gain a competitive advantage in the education market.

Such orientation implies a tendency towards quality in each business segment of the institution of higher education, because the education services market is diversified and offers a wide range of education institutions, programs and education forms, among which, the future users of education services - students, select those, whose indicated characteristics best suit their requirements. The characteristics of the education offer that the future students take into account when deciding on enrollment in the faculty are defined through the effects of the marketing mix instruments on the image of higher education institution and the satisfaction of students, which is the research scope of this paper. It is, therefore, necessary to learn how to upgrade marketing mix instruments (to upgrade education offer) in order to improve the image of higher education institutions and achieve student satisfaction.

1.2 RESEARCH OBJECTIVES

The scope of doctoral dissertation is the application of marketing mix instruments in the field of higher education, as well as the implications they have on the image of institutions of higher education and on the satisfaction of the users of services of the institutions of higher education.

The main focus of the research is the analysis of the effects of the marketing mix instruments in higher education institutions in building the image of higher education institutions and the satisfaction of students, all from the perspective of service users, which in turn, leads to a more successful positioning of a higher education institution in the higher education market.

The aim of this research is to determine how significant the effect of each marketing mix instrument and their combinations are, in relation to the image of the institutions of higher education and the satisfaction of students in the institutions of higher education, as well as to answer the following question "Which marketing mix instruments affect the image of institutions of higher education and student satisfaction to the largest degree?" The conducted research is striving to answer the mentioned question and to find out which marketing mix instruments need to be improved in order to improve image of institutions of higher education and student satisfaction. In order to achieve these goals the following tasks should be fulfilled:

- To explain the theory of marketing in the field of higher education with emphasis on specificity of marketing mix instruments in institutions of higher education.
- To analyze the state of higher education in the Republic of Serbia and Spain.
- To explain the theory concerning the image of institutions of higher education.
- To explain the theory concerning student satisfaction.
- To suggest marketing mix instruments whose improvement leads to improvement of the image of institutions of higher education, based on the results the author had collected.
- To suggest marketing mix instruments whose improvement leads to students satisfaction improvement rate, based on the results the author had collected.

The social goal of this research lies in the fact that obtained results from this research should help all institutions of higher education, in the Republic of Serbia and Spain, as well as in EU countries that want to opt for marketing orientation, by pointing to the significance of certain marketing mix instruments, as well as their synergy in creation of an image and achieving the satisfaction of students. This will help institutions of higher education to position themselves better and to face the growing competition in the high education market more easily. The scientific goal of the research is to verify the validity of the formulated hypotheses, which, on the basis of scientific-research process, define which marketing mix instruments and to what extent, affect the image of the higher education institution and student satisfaction. The aim is to confirm the hypothesis that the instruments of marketing mix both individually and in synergy, greatly affect the image of the higher education institution and the satisfaction of students. Research on the proposed topic will provide scientific knowledge, which will be relevant for future scientific research in this field.

The results obtained in this research can be used for scientific and practical purposes alike. The data obtained in the theoretical research and analysis of scholarly literature, as well as in the practical process of interviewing students of different levels of study, should indisputably be viewed as interconnected and interactive.

Numerous theoretical approaches are considered and analyzed throughout the research in order to accomplish research objectives. They are explained in the following chapter.

1.3 THEORETICAL PERSPECTIVES

By analyzing the current theoretical views of relevant authors, the theoretical basis was established for the independent research variable - marketing in institutions of higher education, more precisely with marketing mix instruments in institutions of higher education (with a special emphasis on the current situation in the higher education market in Serbia and Spain), as well as for the dependent research variables - image of higher education institutions and student satisfaction. The relevant authors' theoretical views represent the starting point in research concerning the effect of marketing mix instruments on the image of higher education institutions and students' satisfaction.

1.3.1 Marketing of institutions of higher education

The most influential marketing organization in the world – American Marketing Association (AMA) – in 1985 defined marketing as the process of planning and implementing concepts, prices, promotion and distribution of ideas, goods and services, in order to create an exchange that meets the needs of individuals and organizations (Milisavljevic, Maricic & Gligorijevic, 2004; Dibb, Simoes & Wensley, 2014; Rodić & Lukic, 2016).

The newly formulated definition of marketing that is also defined by AMA makes a strategic turn in terms of understanding the concept of marketing. Namely, marketing is now considered as an organisational function and a set of processes used to create, communicate and deliver the value to the consumers and manage the customer relationship in a way that is beneficial to the organisation and its stakeholders (official AMA website: www.ama.org).

Due to the newly defined, consumer-centered concept of marketing, marketing concept application has extended to the areas that formerly were affected by it, such as education. Therefore, understanding the value of marketing and the meaning of its application in education should become imperative to the contemporary society. Recognizing knowledge as the most important resource for the development of society that provides intellectual and innovative products and services as its main offer, leads to two important benefits. Firstly, the role of education and research policies is defined as an integral part of economic and other social policies. Furthermore, the request for creating instruments for the development of the policies and indicators for monitoring the results achieved, is also defined (Comments on the proposal of the National Program for Integration into the European Union (NPI) - education and science, 2008.). According to the marketing orientation, education is defined as transaction or a relationship, and therefore, the authors emphasize engagement and marketing efficiency as the most suitable criteria. Once the two aforementioned criteria are met, education becomes more than human significance of marketing in this area (Maringe & Gibbs, 2009; Dibb, Simoes & Wensley, 2014). Appart from contributing to the goal achievement of the institutions of higher education and its students, marketing approach in higher education is also beneficial for the higher, social goals. Marketing orientation implies striving for quality in every management segment of the faculty because the education service market offers a wide range of education institutions, forms and programs. Among them, the future students choose the characteristics of the education offer which suits them the best (Miljkovic & Kovacevic, 2011; Dibb, Simoes & Wensley, 2014).

The marketing approach in higher education institutions' business implies, inter alia, the use of marketing mix instruments for competitive advantage in education market, improvement of image of higher education institutions and higher students' satisfaction.

1.3.1.1 Higher education market in Serbia and Spain

In order to successfully carry out the research and achieve the stated goals of the research, it is crucial to present the higher education market in Serbia as well as the higher education market in Spain in order to point out the current situation in this area in two countries, one that is not a member of the European Union and one that is. The overview is the starting point, and its understanding is necessary for understanding the research of the effect of marketing mix instruments on the image of higher education institutions and student satisfaction in Serbia and Spain. Knowledge of the state of higher education market in Serbia and Spain is also necessary for understanding the comparative research related to marketing mix instruments as factors for improving the image of higher education institutions and student satisfaction in these two countries.

When it comes to education sector in the Republic of Serbia it is necessary to emphasize that transformation and reconstruction of education are one of the prerequisites for overall socio-economic development. For this reason, investing in education, or in human resources, has the character of an investment. Therefore, education policy does not imply only a policy of creating human resources, but also a part of the overall development policy of society. What made this policy specific is its long-term strategic character. Conceptual mistakes in education policy result in more severe but delayed consequences, which are first visible in the labor market in the structural and quantitative discrepancy between supply and demand, which eventually manifests in the general economic lag (Kostadinovic, 2007).

The modernization of Serbian education in the last twenty years has paved the way for the education market, i.e. for private education institutions. Laws on secondary and higher education allow the establishment of private education institutions. In 20 years, 11 private universities have been established in Serbia. Serbia modernization faces market infiltration into education. The practice of competition between public and private education has been established and can not be abolished. However, the accreditation and control system of education institutions can be tightened (Avramovic, 2011). It is relevant to note that out of 19 universities that applied, i.e. submitted the accreditation documentation (8 state and 11 private), by December 2011, 8 state and 8 private universities were accredited, while 3 were rejected. The accredited state universities enroll 85% of the student population that enrolls in the first year, while private universities enroll 15% (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013:25).

Education market in the Republic of Serbia, more precisely Laws on Secondary and Higher Education allow the establishment of private education institutions. In 20 years, 11 private universities have been established in Serbia. Five were accredited in 2011 and six are in the process of accreditation. However, in the middle of the same year, 40 faculties and vocational colleges applied for accreditation. According to some data, out of 220,000 students in Serbia, 24,000 are studying at private colleges. (Avramovic, 2011). The table below shows the number of accredited universities with the status of a legal entity in the Republic of Serbia for 2014.

Table 1. The number of accredited universities with the status of a legal entity in the Republic of Serbia

Public Universities	Number of faculties	Private Universities*	Number of faculties
University of Belgrade	31	Singidunum University	5
University of Arts in Belgrade	4	Megatrend University	10
University of Novi Sad	14	University Business Academy in Novi Sad	4
University of Niš	13	Educons University	1
University of Kragujevac	11	Metropolitan University	1
University of Pristina	10	Union „Nikola Tesla" University	integrated
University of Defense	2	European University	3
University of Novi Pazar	Integrated	Union University	4
Total	85		28

Source: *Guide through accredited study programs at higher education institutions in the Republic of Serbia*, 2014.

As shown above, the education market in the Republic of Serbia consists of public and private universities. Market orientation of public universities differs from that of the private ones. Major difference stems from the fact that public universities can not function as private ones since they do not have to acquire capital and profit for their owners. Public universities can increase sources of secondary funding or tuition fees and try to increase state and industrial research funds, whereas private universities do not have as many options. Private universities can increase their financial resources by expanding their education offer and student satisfaction, which implies that they need to be predominantly market oriented (Ciric, Vapa Tankosic i Ilic, 2012).

It can be stated that Serbia has begun the reform process in education in one of the most difficult periods, given its historical legacy, destabilized economy and labor market, high unemployment rate, massive outflow of young and educated people, political instability and many political problems. It is estimated that only during 1990s 300.000 people have left Serbia, 20% of whom had higher education degree. The Republic of Serbia is among 10 oldest world populations, mostly due to low birth rate. Additionally, Serbia has one of the most pronounced negative population growth rates in the world, ranked as 225th of 233 analyzed countries. Currently, there are 58440 unemployed people with higher education degrees in the labor market, of which 55 have a PhD degrees and 804 have M.Sc. degrees. This data points to the failure to coordinate the enrollment policy with the needs of the labor market and the direction of development of the country (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013).

Education reforms in Serbia were mostly approached in a segmented manner than as a whole. In other words, the reform of primary and secondary education has been implemented (and is still being implemented) separately from the reform of higher education. The reform of primary and secondary education is mostly centralistic, while higher education is largely administered from the *bottom*, i.e. by the higher education institutions themselves (Brankovic, 2011).

The process of coordination of higher education with the Bologna Process began in 2005 with the adoption of the Law on Higher Education, and officially Serbia joined the Bologna Process in September 2003. However, several years earlier, more precisely in February 2001, the Ministry of Education and Sports, appointed by the new Serbian government, set its primary goal in terms of the higher education system, namely the establishment of a modern higher education system in line with the Bologna Process. The main objectives are set within the system's establishment:

- increase the efficiency of the higher education system in terms of reducing the number of those dropping out of studies and reducing the length of studies - introduce a two--tier system with the European Credit Transfer System (ECTS) as a measure of student workload,
- harmonize the higher education system with European tendencies with special emphasis on quality assurance - introduce control mechanisms that will ensure a high level of quality of education outcomes, teaching and research work,

- establish the relevance of curricula taking into account the national needs and market requirements. Improve multidisciplinary and interdisciplinary programs for new professions created in the new technological era,
- promote the concept of applied studies that provide the skills and competencies required by the labor market,
- include students as partners in education process,
- promote student and teacher mobility.

Based on the implemented activities, in 2002, the Higher Education Strategy was adopted. In the same year, the Law on the University was passed, which restored autonomy to the university, and autonomy in the process of adopting study programs and subjects, management and leadership, as well as financial autonomy. Legislation also introduces ESPB, two types of undergraduate degrees and an increasing participation of students in the decision-making process through the formation of student parliament (Vukasovic, 2006).

In the meantime, in order to follow the reform process and to ensure the development and enhancement of higher education quality, the National Council for Higher Education was established as well as several agencies that were responsible for study programs accreditation and evaluation. The National Council for Higher Education was established by the National Assembly in order to develop and promote the quality of higher education in Serbia, in particular in the creation of a strategy and policy in higher education and their harmonization with European and international standards. The Council consists of 21 members, appointed by the National Assembly of the Republic of Serbia. The National Council was tasked with monitoring the development of higher education and compliance with European and international standards, as well as proposing to the Ministry of Education and Science a higher education policy, giving an opinion on the policy of enrollment in higher education institutions, giving opinion in the process of adopting regulations in this field, etc. (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013).

In 2003, the National Council for Higher Education established a special team, the Commission for Accreditation and Quality Assurance, which is responsible for carrying out accreditation tasks, examining the quality of higher education institutions and units and evaluation of study programs. That same year, Serbia joined the signing of the Bologna Declaration. However, the following two years showed lack of tangible results concerning higher education reform, which was evident in the rating Serbia has been assigned in Berlin, where it reached penultimate position. For this reason, the Government and the National Council have accelerated the work on the adoption of the Law on Higher Education, which was adopted in 2005 (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013). Since the adoption of the new Law on Higher Education, higher education reform has become a formal obligation for all. The beginning of the reform of higher education was mainly reduced to the transition to one-semester courses, the reduction in the volume of literature, the introduction of a large number of electives, and the introduction of a continuous students assessment through colloquiums and students' papers. The demands for an activist orientation in the higher education process are mostly manifested as a change in the students' role. Namely, students become much more active participants in the education process because they are positioned to independently create part of their study program because they have the opportunity to select and combine electives (Kodzopeljic & Francesko, 2007).

The new division of the study structure according to the Law on Education was done as follows (Veljic & Bojanovic, 2011):

- first degree studies are basic academic studies and basic vocational studies,
- second degree academic studies – master, specialist vocational studies and specialist academic studies,
- third degree studies – doctoral academic studies.

In the period that followed the adoption of the Law on Higher Education, a lot of work has been done on the reform of curricula at faculties in Serbia, which could be seen as preparation for the accreditation of study programs and higher education institutions. Private and state universities were equalized, which means that they were all obliged to get accreditation, and therefore a license for further work (Miladinovic, 2011).

Accreditation of faculties and universities began in 2007. The Accreditation and Quality Control Commission has the most complete data on higher education institutions. The Commission receives these data electronically on standard forms. Based on the collected data, the Commission makes decisions on accreditation and publishes Accreditation Reports (*Accreditation in higher education*, 2007).

The Accreditation and Quality Control Commission (KAPK), as it is today, was established by the 2005 Law on Higher Education. Members were elected for the first term in June 2006, and in the second term in March, 2011. The mission of the Commission is to contribute to maintaining and improving the quality of higher education in Serbia; to contribute to compliance with internationally recognized quality standards; to create a team of trained reviewers for the accreditation process and external quality assurance; to take on the role of the driving force for the development of quality assurance measures in higher education in the countries of the Western Balkans by encouraging cooperation among agencies in the region. KAPK became a member of ENQA - European Association for Quality Assurance in Higher Education on April 25, 2013 (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013).

Regarding the development of the education system in the Republic of Serbia, the Strategy Serbia 2020 (hereinafter referred to as the Strategy) is also discussed. This Strategy deals with the determination of the purpose, goals, directions, instruments and mechanisms of the development of the education system in Serbia over the next ten years, with an attempt to formulate and define the basic elements of the socio-economic development of the Republic of Serbia up to 2020. It is important to emphasize that this strategic document follows the structure proposed and adopted by the European Commission in the elaboration of the Europe 2020 Strategy. However, the specificities of the country were taken into account (*National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation*, 2013).

The basic guidelines of the Strategy are:

- increasing investment in development and research,
- increasing the number of employed population (from 20 to 64 years),
- increasing the number of population with university degree,
- reducing the poverty rate,
- improving the quality of the teaching process,
- modernization of management and administration,
- international openness and mobility.

In the Strategy for Education Development in Serbia 2020, the goals of the development of the Republic of Serbia up to 2020 are (*Strategy* for *Education Development* in *Serbia 2020, 2012*):

- improvement of human capital,
- increaase employment,
- invest in technology, knowledge and science,
- reduce powerty.

When it comes to education market in Spain, education administration in the Spanish university system is decentralized, and distributed between the State, the autonomous communities and the universities. State education Law defines the rights and responsibilities of the three constituents, and allows autonomous communities to develop their own education laws.When the 1983 University Reform Law was passed, Spain made progress in two areas: internal democratization and university autonomy. The main consequence of these advances was an increase in academic and scientific cooperation with higher education institutions in other European countries in which the culture of quality was already established.In 2001, a New University Act (LOU) was introduced to further adapt the system to the increasing universalization and internationalization of higher education along neo-liberal economic lines. LOU strengthened the role of the central government as coordinator of the Spanish university system. To converge with the European Higher Education Area (EHEA), Spanish universities divided their degree programs into undergraduate and graduate levels, and created a three-tiered system whereby universities could offer their own bachelor's, master's, and doctoral degrees. The National Agency for Quality Assessment and Accreditation of Spain (ANECA) was also created, whose mission and objectives were developed later. ANECA has become a pillar of the new system (Montané, Beltrán, & Gabaldón-Estevan, 2017).

The Modification of the University Act (LOMLOU 2007) introduced the concept of verifying universities' proposals for official degrees, to expand Spain's university degree system. It also established the European credit (ECTS) as the academic unit of measurement in Spain's official degree system, and the Diploma Supplement (DS) as the document that provides detailed information about the academic courses taken by students (Montané, Beltrán, & Gabaldón-Estevan, 2017).

In the 2015-2016 academic year, the Spanish University System (SUS) comprised of 83 universities (81 of which offered face-to-face classes). Fifty of the 83 universities were public, the remaining 33 were private. Face-to-face classes were offered on 234 campuses; distance and specialized learning was offered at 73 centers. According to the Ministry of Education Culture and Sport (2015), in the 2013-2014 academic year, there were a total of 1,532,728 students enrolled in the SUS (1% less than in the previous year) (Montané, Beltrán, & Gabaldón-Estevan, 2017).

The expansion of universities in Spain is the result of growing demand (from 170,000 students that enrolled in 1960, and 700,000 in 1980, to more than double that figure in 2014). It reflects growing modernization and democratization with tensions derived from an increase in inequalities in general, a reduction in autonomy, and trends of instrumentalization. University expansion and internationalization led to major concerns about quality which intensified after 1999 with the Bologna Process and European convergence in Higher Education. (Montané, Beltrán, & Gabaldón-Estevan, 2017).

The coordinating bodies of the Spanish education system include the Council of Universities, whose functions include consultation, cooperation, and coordination with the Ministry of Education, Culture and Sport. The Council of Universities is comprised of the Minister of Education and rectors of public and private universities. It has the power to decide whether to accredit qualifications depending on evaluation reports. It also has the power to accredit teachers. The council appoints the members of evaluation committees selected by ANECA, and participates in making the final decision on the accreditation of an applicant, based on the Agency's decision. The second body is the General Conference on University Policy, which is responsible for consultation and coordination of university policy. It is composed of the Minister of Education Culture and Sports and councilors who are responsible for aspects of higher education in the autonomous communities. Its functions include establishing and evaluating guidelines on university policy. It also establishes criteria for coordinating evaluation, certification, and accreditation activities. The decision to establish centers and the creation of qualifications is the responsibility of universities, but the final decision is made by the autonomous community. In turn, the State owns the register of universities, centers and degrees. (Montané, Beltrán, & Gabaldón-Estevan, 2017).

Official university education in Spain is divided into three cycles: bachelor's, master's, and doctoral degrees (ANECA 2012). There is also a higher technical first level, which is known as non-university higher education. The Ministry of Education, Culture and Sport is responsible for defining the characteristics of these cycles and the corresponding evaluation processes. The universities draw up the curricula, and ANECA and the agencies in the autonomous communities are responsible exclusively for evaluation. Higher education in Spain is currently regulated by the new European credits, the ECTS (European Credit Transfer and Accumulation System) each of which represents between 25 and 30 hours of learning, including classroom attendance, inividual study, seminars, exercises, and all other academic acitivities that enable the student to acquire the expected competencies. (Montané, Beltrán, & Gabaldón-Estevan, 2017).

The National Agency for Quality Assesment and Accreditation (ANECA) was created on July 19, 2002 according to the provision of Article 32 of the LOU as a public sector foundation.Through Article 8 of Law 15/2014, of Septembar 16,on rationalisation of the public sector and other administrative reform measures, ANECA has become an autonomous body that is dependent on the Ministry of Education, Cuture and Sport. Its mission is to contribute to improving the quality of the higher education system trough evaluation, certification, and accreditation of degree programmes, teaching staff, and institutions. On January 1, ANECA started working according to its new legal status to promote and assure the quality of Spanish universities and, thus, increase their effect in Spain and internationally. (Montané, Beltrán, & Gabaldón-Estevan, 2017).

The mission of ANECA is to promote the quality assurance system for higher education in Spain and oversee its continuous improvement trough processes of guidance, assessment, certification, and accreditation. ANECA will contribute to the consolidation of the European Higher Education Area and increase accountability to society. The Agency’s functions cover all of the Spanish territory. It has exclusive powers in the process of accrediting official teaching staff (national accreditation for access to university teaching bodies). In conjuction with agencies in the antonomous communities, it shares the evaluation of university education (verification, monitoring and accreditation). In addition, ANECA is responsible for assessing the quality of degrees and non-tenured teaching staff in autonomous communities that do not have their own quality agency. Like other regional quality assurance agencies. ANECA is a full member of the European Association for Quality Assurance in Higher Education (ENQA). (Montané, Beltrán, & Gabaldón-Estevan, 2017).

Accreditation from the perspective of ANECA has the purpose of:

- improving diploma quality
- informing citizens about different levels of study and encouraging student and teacher mobility
- provide the public administration with relevant information about universities in the country.

Accreditation has three important effects:

- Accreditation can serve as a tool for university system improvement.
- The need for equalizing all parameters and creating certain ranking system in this area.
- Periodic accreditation or re-accreditation will help institutions to introduce (or maintain) quality assurance mechanisms. (Vidal, 2003).

The Spanish university system experienced a rise in the last third of the twentieth century. Although its institutions with long-standing tradition are organized according to the model of public institutions, there are also those with a different organization such as private universities, except those founded by the Catholic Church in the 1940s and 1950s (Royal Decree 557/199). The characteristics of the state, private and Catholic universities, which make up the Spanish university system are:

- State universities are funded by the state and they represent its organizational units.
- Private universities are funded by private individuals, while in some cases they are partially funded by the state.
- Catholic universities have equally valid degrees as state and private universities and are mostly funded by their students. Unlike private universities, they operate on the basis of an agreement between Holy See and the Spanish state.

According to the Spanish legislation, the purpose of a university, whether public or private, is the provision of a public higher education service, which includes research, teaching and study. At least in theory the mission is the same for everyone. In total, 67% of Spanish universities are public. Madrid, Catalonia and Andalusia are the regions with the largest number of institutions. (Casani, De Filippo, García-Zorita & Sanz-Casado, 2014). The vast majority of students (92%) attend state institutions. Although there are an increasing number of private institutions, the most important are state universities. Non-university higher education is not appreciated nor significant in Spain. (Vidal, 2003).

Ever since 1983, and later since the Bologna Process in 2011, the three-cycle higher education is present in Spain. This implies that at the first level, the basic degree is awarded at the end of the first study level, then the master's degree by the end of the second level and the doctoral degree by the end of the third level. Bachelor's degree is the first study level program which consists of 240 ECTS (equal to four years) and leads to master's degree, which is the second level and can contain between 60 and 120 ECTS (the expected duration is from one to two years). Universities can establish a specific request for admission to the Master's program, if necessary. Therefore, for access to the third cycle, known as the third degree - doctorate, a minimum of 300 ECTS is required. (Sánchez, Zornoza, & Subirana, 2016).

Regarding the financing of Spanish universities, the greatest income comes from regional governments. They allocate funds to universities as a lump sum. Universities can then freely distribute funds among themselves. However, universities do not control the main item of expenditure (the central government determines wages) nor the main sources of income (appropriations and scholarships), which are determined by regional governments. The faculty members are members of each university and are divided among departments where teaching and research activities take place. (Vidal, 2003).

The accreditation of higher education institutions and the adaptation of the European Higher Education Area (EHEA) have changed priorities within institutions in Spain, starting from quality assurance to accreditation and a wide range of proposals for improvement and adaptation of EHEA. These new developments will be the priority within institutions in the next decade. It is therefore important that the process, criteria and quality standards are similar to those used in other European countries. The EHEA will need to focus on revealing the degree to which the programs provide students with the expertise (knowledge and skills) needed in the labor market. This requires uniformity between the states because a special effort is needed for the inter-state coordination of these activities (Vidal, 2003).

1.3.2 Image of higher education institutions

Formation of a positive corporate image has become imperative and marketing practitioners have started to pay more attention to it in the contemporary period. The term image implies a complete impression a user or consumer has regarding a business organization. Research has shown that organizations that have a positive corporate image will benefit more from customer or user relations (Bhattacharya & Sen, 2003), their product will receive better reviews (Brown & Dacin, 1997), their sales will increase, their user loyalty will increase (Andreassen & Lindestad, 1998; Osman, Saputra & Luis, 2018) and they will experience rise in positive user behavior seen as a positive *word of mouth* (Hong & Yang, 2009).

Contemporary science and the field of education is becoming more competitive regarding attracting students. Institutions of higher education cannot afford the luxury of waiting for students to select their institution, they are rather striving to reach them by realizing their needs and answering each of their requests. Institutions of higher education nowadays pay special attention to the needs of students seeking traditional higher education. Within this context, one of their greatest concerns is the question of their personal identity and image and what this represents to students. There are extensive research dealing with the topic of student perception of the image of institution of higher education. More precisely, the research is directed towards four segments of the image of institutions of higher education that students most often identify with. The four segments include: achieved prestige, tuition fees, practicality and simplicity in attending classes at the institution and the selection of the institution of higher education (Minjung & Sung-Un, 2008). It is therefore, very important to establish which marketing mix instruments affect the image of institutions of higher education to the largest degree, in order to work on their improvement and simultaneously improve the image of institutions as well as their competitive advantage in the education market.

1.3.3 Student satisfaction

In order to determine how consumers react to and how satisfied they are with a particular service, it is necessary to perform certain measurements and research, as well as to quantify the results. The goal of measuring satisfaction is to demonstrate the level of consumer satisfaction and achieve objectivization and quantification of subjective perceptions of consumers (Veljkovic, 2009; Gallifa & Batalle, 2010.). Therefore, measurement and research of consumer satisfaction is carried out in institutions of higher education.

Many education institutions tend to improve their offer in order to attract more users. Focusing on customer satisfaction is what every institution should start from. Creating happier, satisfied users - whether they are students, their parents, donors, professors or employers - should be the primary goal that will contribute to quality in education institutions. User satisfaction is significant for the work of each institution of higher education. The level of satisfaction is determined by the difference between the service features, how they were experienced by the users and their expectations. There are three levels of satisfaction. If the service is below expectations, the user's dissatisfaction arises. If a faculty fails to meet the students' expectation, the students will change their attitude towards the faculty and may leave or switch to another department or spread negative information about the college. On the other hand, if the faculty meets students' expectations, students will be satisfied and will become the best promoters of the faculty. If the characteristics of the institution exceed students' expectations, students will be very satisfied or delighted (Kotler & Fox, 1995; Vázquez, Aza & Lanero, 2016; Hrnjic, 2016). Given the fact that the satisfaction of students is the ultimate goal of every institution of higher education, it is necessary to determine which marketing mix instruments affect the student's satisfaction to the greatest extent possible, in order to improve the performance of higher education institutions.

1.4 STRUCTURE OF THE DISSERTATION

This dissertation is organized in two sections. The first section offers theoretical framework and literature review which at the very beginning present the independent research variable (marketing mix instruments), and later the dependent research variable (the image of institutions of higher education and student satisfaction) on the basis of which the research hypotheses were formulated and set. The second section is dedicated to empirical framework. This part introduces the methodology to be applied, followed by the results and discussion, conclusions, limitations and future line of the research.

The two main sections are subdivided into seven chapters: the first four chapters include the theoretical section, the following two chapters include the empirical research and results, and chapter seven includes the discussions, conclusions, limitations and future line of the research. The following table demonstrates the content of each chapter.

Table 2. Structure of the dissertation

Section 1. Theoretical Framework	Chapter 1	Introduction and research justification and literature review.
	Chapter 2	Literature review about Marketing of higher education institutions.
	Chapter 3	Literature review about Image of higher education institutions.
	Chapter 4	Literature review about Students satisfaction
Section 2. Empirical Framework	Chapter 5	The empirical research methodology
	Chapter 6	Results of empirical research
	Chapter 7	Discussions, Conclusions,Limitations and Future line of the Research

CHAPTER 2: LITERATURE REVIEW PART 1: MARKETING OF HIGHER EDUCATION INSTITUTIONS

2.1 INTRODUCTION

The most influential marketing organization in the world – American Marketing Association (AMA) – in 1985 defined marketing as the process of planning and implementing concepts, prices, promotion and distribution of ideas, goods and services, in order to create an exchange that meets the needs of individuals and organizations (Milisavljevic, Maricic & Gligorijevic, 2004; Dibb, Simoes & Wensley ,2014; Rodić & Lukić, 2016). The newly formulated definition of marketing that is also defined by AMA makes a strategic turn in terms of understanding the concept of marketing. Namely, marketing is now considered as an organisational function and a set of processes used to create, communicate and deliver the value to the consumers and manage the customer relationship in a way that is beneficial to the organisation and its stakeholders (official AMA website: www.ama.org).

Due to the newly defined, consumer-centered concept of marketing, marketing concept application has extended to the areas that formerly were affected by it, such as education. Therefore, understanding the value of marketing and the meaning of its application in education should become imperative to the contemporary society. Recognizing knowledge as the most important resource for the development of society that provides intellectual and innovative products and services as its main offer, leads to two important benefits. Firstly, the role of education and research policies is defined as an integral part of economic and other social policies. Furthermore, the request for creating instruments for the development of the policies and indicators for monitoring the results achieved, is also defined (Comments on the proposal of the National Program for Integration into the European Union (NPI) - education and science, 2008.). According to the marketing orientation, education is defined as transaction or a relationship, and therefore, the authors emphasize engagement and marketing efficiency as the most suitable criteria. Once the two aforementioned criteria are met, education becomes more than human capital creation. It includes critical thinking and awareness development that reflect the significance of marketing in this area (Maringe &

Gibbs, 2009; Dibb, Simoes & Wensley, 2014). Throughout their entire development, higher education institutions were considered as the generator of social development and the -source of new social changes and ideas. However, the higher education has been in the state of crisis due to the uneven development of society, disproportions, economic, political and military power at the international level, the explosion of knowledge, globalization, etc., which question the role and function of the university in the modern education. (Miljkovic, 2010). Appart from contributing to the goal achievement of the institutions of higher education and its students, marketing approach in higher education is also beneficial for the higher, social goals. Marketing orientation implies striving for quality in every management segment of the faculty because the education service market offers a wide range of education institutions, forms and programs. Among them, the future students choose the characteristics of the education offer which suits them the best (Miljkovic & Kovacevic, 2011; Dibb, Simoes & Wensley, 2014).

Throughout this segment that deals with the detailed analisis of marketing and its application in institutions of higher education, the following theoretical discussion will be carried out *the significance of marketing mix instruments and its particular aspects for institutions of higher education*. Different combinations of marketing mix instruments and their use can lead to a competitive advantage on a higher education market. Likewise, it leads to image improvement and greater student satisfaction within a higher education institution. Therefore, this segment highlights each paticular instrument, which clearly points to the following: according to the most often cited definitions, the service represents any activity or benefit that one party offers to another, and which is, essentially intangible and does not result in having ownership over anything. Its production can, yet need not be connected with tangible goods (Palmer, 2005; Rodić & Lukić, 2016) and it should be viewed in terms of its general characteristics and components, specifically regarding the nature of its particular characterisitcs in the institutions of higher education. According to one of the definitions, the price represents the amount at which goods and services are exchanged, therefore, the price in any case represents expense for the consumer (Veljkovic, 2006; Rodić & Lukić, 2016), and in the text, the price is viewed through the uniqueness of its formation in the institutions of higher education. Distribution represents the ways of delivering goods or services to the consumer. Since in the contemporary business most producers are not directly in conntact with the end user, they use the services of a middleman in order to achieve a better product or service placement. Therefore, the marketing middleman make up the marketing or distribution channel that manages all aspect of the movement of goods or services, from the production to the consumption and it makes the base of distibution (Ljubojevic, 2002; Rodić & Lukić, 2016). Distribution is presented within this segment as the sum of all of its characteristics in the field of higher education. According to one of the definitions, promotion is the process of communication between the service organization (institution of higher education) and a client (student) with the goal of creating positive attitude towards the services of the organization in the buying process (Ciric, 2013, Wilkins & Huisman, 2015; Rodić & Lukić, 2016). This segment as well shows the nature of promotion features within institutions of higher education. Human factor represents one of the service marketing mix instruments and the notion includes each person included in the service process. On the one hand, those are the employees that need to be properly recruited, trained, motivated, awarded, trained in team work etc. On the other hand the human factor implies service users that can affect the entire perception of the service, therefore, it is important to pay attention to their behaviour, the degree of their engagement, the level of conntact between them, education, training, etc. (Veljkovic, 2006; Wilkins & Huisman,2015; Rodić & Lukić, 2016) This segment highlights the specific nature of the human factor within the field of higher education. Physical evidence is comprised of the exterior and the interior of the object with the accompanying furniture, equipment, etc. Besides that, physical evidnece implies the atmosphere inside the object and a number of other factors (Veljkovic, 2006; Wilkins & Huisman, 2015; Rodić & Lukić, 2016) which are explained within this segment through the significance of physical evidence for the institution of higher education. Service process implies procedures, mechanisms and the flow of activities that create the service. Therefore, the decisions that include the processes greatly affect the delivery of service to the users (Jobber & Fahy, 2006; Rodić & Lukić, 2016). The significance of this instrument is shown within this segment through the review of its coplexity and specific nature, as well as the process designing and its characteristics within institutions of higher education.

By analysis and understanding of each of the aforementioned marketing mix instruments and their characteristics and potential, marketers are able to gain a great number of benefits in the process of creating service offer (in the field of education). The benefits will enable them to achieve advantage in the higher education market, to improve image of institution of higher education and to achieve higher satisfaction of students.

2.2 THE SPECIFIC NATURE OF MARKETING MIX INSTRUMENTS IN INSTITUTIONS OF HIGHER EDUCATION

Marketing mix implies the division of labor, the combination, design and integration of elements into a program or mix, which will, on the basis of an assessment of market forces, achieve the goals of the company at a certain point in time. As it happened in the case of any marketing concept, the practice preceded the formulation by a couple of decades. The term marketing mix was first launched by Neil Borden. It happened at a time in the United States when it was popular for marketing to be considered a science, whereas the marketing mix was embellished with a great number of complex details. Neil Borden has created a lengthy list of twelve details (Ljubojevic, 2002; Rodić & Lukić, 2016):

- product planning,
- price,
- brand,
- distribution channels,
- independent sales,
- advertising,
- promotion,
- packaging,
- display,
- servicing,
- product handling,
- fact finding and analysis.

Marketing mix is one of the key concepts of the contemporary marketing theory. It represents the combination of controlled marketing variables, which the companies use to achieve a required sales level in the market. Although there are a great number of marketing mix elements, McCarthy reduced the varieties to the four factors (Ljubojevic, 2002; Rodić & Lukić, 2016):

- product,
- price,
- place/distribution,
- promotion.

When it comes to service marketing mix, experience has shown that the concept requires revision in terms of expanding of the classic marketing mix. A great number of empirical research shows that marketing service management notices several tasks that are specific as opposed to the industry practice. Difficulties arise most often when it comes to maintaining the service quality; the role of human factor in service creation and offer; inability to procure patent protection; the problem of service product innovation.

Booms and Bitner present the modified and extended service marketing. It includes the seven following elements (Booms & Bitner, 1981):

- product,
- price,
- placement,
- promotion,
- people,
- physical evidence,
- process.

As evident from the list, the revised service marketing mix includes three additional elements (people, the physical evidence and the process) that were not mentioned in the original work by Borden. The seven elements should become the center of marketing programs of service organizations. Ignoring any of the elements could significantly damage the success rate of the entire program.

Translated into atmosphere and service ambience of the institutions of higher education, each of the abovementioned marketing mix instruments implies a number of specific characteristics that are created as a product of adjustment of marketing mix instruments to education circumstances. Specific characteristics of education services put special emphasis on the importance of defining marketing mix instruments (students, teaching and non-teaching staff, faculty building, accompanying objects, technical and technological equipment and teaching process).

Similarly to any service product, the service product in the field of education, carries with it a number of specific features. They differ from the products in a number of clear characteristics that include the following: intangibility, perishability, heterogeneity, inseparability, lack of ownership, variability, etc. In order to explain the essence of a service product it is necessary to understand its characteristics through the service classification, which can then be applied to understanding the services in the field of education.

As the marketing mix instrument in the institutions of higher education, price carries specific characteristics. The overall specific character of the services implies the complexity of the formation of prices for education services. This is especially seen in the field of higher education, where it is necessary to take all circumstances into account in order to adequately form pricing that the students will be satisfied with. The factors that affect the price formation in institutions of higher education include the expenses, demand and competition, as well as a number of other factors. There are a number of elements that focus solely on the price as a marketing mix instrument and that affect the formation of prices of tuition fees in higher education. The elements will be discussed in the text bellow. Although institutions of higher education can use different strategies in the price formation process, they should put special emphasis on the coordination between the set price and the value that the service organization – the institution of higher education delivers to the user. This coordination affects the image of the institution of higher education and satisfaction of its users (students) to a great degree.

One of the marketing mix instruments that need to be highlighted as well is the distribution or the service sale channels that are most often associated with the education sector in terms of location and mode of service delivery. Very often, the location or the mode of service delivery itself can be the determining factor in the selection of institutions of higher education. The location implies the place where the service facility is located, therefore, the determining factors in the selection of the institution of higher education becomes the question of whether the building is near the student's home, whether it can be easily reached, whether it is near the city center, if it is located in the elite part of the city, etc. Regarding the mode of delivery of services in the field of education, as well as in all other service activities, service providers strive to make the service as accessible to the users as possible using various means. Using modern technology, the Internet and distance learning (DLS), the institutions are trying to make the service as accessible as possible, so students do not have to visit the camp at all if their employees and obligations do not allow them, but can study via internet technology from the workplace or from home. We come to the conclusion that, one of the imperatives of a higher education institution should be to provide better location and delivery of services in order to achieve higher student satisfaction.

Promotion as an instrument of marketing mix in the contemporary period becomes part of integrated marketing communications that provide communication between the higher education institution and the student. Integrated marketing communications represent a very complex process in the field of education, as well as in all service sectors. The communication mix that service organizations most often use includes advertising, sales improvement, personal sales, public relations, publicity and direct marketing. By using these instruments, the higher education institution can be presented to the public in an adequate manner and positioned in the service user awareness.

As a key instrument in the educational process, people include professors, employees of institution of higher education, students and other stakeholders in the environment that work with the institution. Teaching and non-teaching staff participate together in the delivery of services and affect the perception of service users. Depending on the nature of the service, all participants participating in the service delivery affect the decisions of the service users. As the participants are trained, their personal attitude and behavior affect the perception of the service user. The role of those who provide a service and those who are in personal contact with future service users, is very important. Therefore, it can be concluded that in service professions dominated by direct contact the one who delivers the service creates the service. Surveys indicate that the contributions of these participants can be crucial to the success of the service provider. On the other hand, service users also have a dominant role in the service delivery, its quality, but also in their own satisfaction levels. In education, students affect the quality of the service they receive, which is indicated in whether they attend the lecture, participate actively or are not present, or are passive and absent during lessons. In addition to students' effect on quality of service, their effect on other current and potential students should be emphasized. In institutions of higher education, users can affect the quality of service they receive from others. The quality perception improves or decreases based on students experience. Also, the effect of the social environment and its members is significant, as well as the effect of the labor market, government policies, etc.

The service environment is also one of the marketing mix instruments that, among other things, includes the place where the educational service is delivered and where all those involved in the delivery of services meet the students meet. It also includes all the tangible components that facilitate service transactions or communications. On the other hand, along with the service environment, there is a physical environment of services that includes all the tangible service components such as books, presentations, promotional materials of education institutions (brochures, business cards, handouts, and catalogs), buildings, amphitheaters, equipment, etc. Physical environment of the education institution; interior and exterior, speak of and contribute to the quality of the service and should send a message consistent with the mission and vision of the institution (Zeithaml, Bitner & Gremler, 2006; Rodić & Lukić, 2016).

Process as a marketing mix instrument includes the mechanisms and flow of activities that provide the delivery of educational services and are also indicators of service quality. Educational services are very complex and imply active participation of users in order to make the process complete and high quality. It is also necessary to make a clear schematic plan within the service process for education in order to provide educational services in an adequate manner and to know the sequence of activities within the processes and roles of each participant in the process. Given the fact that the providing process, delivery and use of services occur at the same time, it is necessary that it be realized in the right way, since the overall quality of the service depends on it. Therefore, the same emphasis that is placed on the activities that take place in the backstage of an organization, should be mirrored onto activities in the front stage, because these activities achieve the aforementioned quality of service.

The text below will discuss the specific nature of each marketing mix instrument in the field of higher education in more detail.

2.2.1 The specific nature of service in institutions of higher education

Education service is a planned organized activity of the institution of higher education whose goal is to satisfy certain educational needs of an individual, group and society. The product i.e. the service is the basic marketing mix element and the main instrument through which the needs of the users are met.

According to Kotler, services have four main characteristics that greatly affect the creation of marketing program in all service organisations including institutions of higher education. The mentioned characteristics can be listed as follows: intangibility, heterogeneity, inseparability, and perishability (Kotler, 2001; Chen, 2015).

Services are classified in terms of tangibility, depending on the extent to which the service provided includes the sale of the corresponding material goods. Education services are characterized by low level of tangibility. Since educational services are intangible, the potential user can not try and use them before making a decision. Choosing future career, investing in oneself, both from the aspect of the material costs and from the aspect of the time and energy required makes this decision one of the most important ones in life. It is only on the basis of the image of the institution that the user can make a decision concerning that institution of higher education (Kotler, 2001; Chen, 2015).

The use and provision of services occur simultaneously. The service user or student and service provider (teaching and non-teaching staff) are also present in the process of providing services in institutions of higher education. It is their interaction that is one of the specific features of services in institutions of higher education. We can notice a possible deviation from this rule in the on-line model of education, due to possible temporal asynchronies in the provision of services, and the physical separation of the participants of the exchange.

A characteristic derived from the two preceding ones is *the impossibility of storing service or perishability*, as other authors call it. Perishability of service in institutions of higher education arises from the fact that the service cannot be stored, kept, resold or returned. As understood from this characteristic of the service, this type of service is a matter of current use and cannot be managed in the same manner as products. In terms of marketing, perishability implies that it is difficult to coordinate the service supply and demand, and that services cannot be returned or resold (Veljkovic, 2009; Chen, 2015). Thus, the lessons cannot be kept for later, it happens at the moment, and if the student does not attend classes, they will not have the opportunity to use the service later in the same form.

The heterogeneity or variability of services implies that services are quite different since they depend on the provider and the user. The differences can relate to the institutions of higher education, the curriculum, methods, teachers, motifs and abilities of the students. On the other hand, Ljubojevic points out that heterogeneity is tightly connected to the variability of the service quality, since the service quality varies from one producer to the other (Ljubojevic, 2002; Chen, 2015). Thus, there are no standardized services in the field of higher education. Since each higher education institution provides service in their own way, there is no ground for standardized teaching.

Apart from the above mentioned characteristics of services, Ljubojevic emphasizes another characteristic - the *lack of ownership* or *the inability to own services*. The consumer of the education service can only access the service or use certain capacities, therefore payment is for the use of the service only, while in the case of tangible products the customer has full and unlimited benefits from the product and becomes the owner of it. The student, therefore, is not the owner of the teaching process, but only uses the service provided by the institution of higher education (Ljubojevic, 2002; Chen, 2015).

According to Kotler, the service offer in the field of higher education is presented in curricula and services (Kotler i Fox, 1995; Chen, 2015).Teaching programs and services constitute the core of education services in institutions of higher education. The principle of education services can be differently understood by the students attending higher education institutions, depending on their expectations, desires and needs. Therefore, expectations and perceptions of students who are in experienced, can be conditioned by a number of other factors, such as: media, parents, environment and the like (Bruhn & Georgi, 2006; Masserini, Bini & Pratesi, 2018).

Services are mostly created in the contact with the service user, and the process is same in the education sector. Students can test the quality of a particular study program only by being present at a certain number of lectures, but they certainly cannot evaluate the effectiveness of professor lectures by reading their syllabus. If students applying for a study program miss some lessons, they can borrow notes from their colleagues, but this will not have the same effect as if they were attending the lecture (Kotler & Fox, 1995; Masserini, Bini & Pratesi, 2018).

The restrictions that services have in relation to the product represent, on the other hand, their strength that the suppliers should turn into a comparative advantage. The professor should use the information he receives from verbal and non-verbal communication with students (their views / reactions) during lectures in order to modify the structure and methods of teaching. Nothing can replace the interaction with the service user, in this case the student, because it is precisely from this interaction that the service provider can come up with different information that are instrumental for the improvement of the service. By using these benefits, marketing managers can form a service that is attractive to users.

From the point of view of a student, the purpose of the service of institutions of higher education is to provide knowledge and information. Whereas from the point of view of the institution of higher education it is to determine which curriculum and services to offer to students. The majority of institutions of higher education offer the following: education programs (lectures, library and IT services, campus lectures, etc.), recreational programs (dancing lessons, fitness clubs, movie theaters, etc.), psychological programs and services (counseling etc.), health services, career development programs and services (career development counseling etc.) (Smart, 2004; Masserini, Bini&Pratesi, 2018). According to Dann, the principle of service marketing in the education field is based on the fact that the buyer creates certain experience or feelings through services that the institution of higher education provides. The most significant goal of the services is not to gain tangible evidence such as diplomas, certificates etc. but to enhance skill and mental development. In author's opinion, the purpose of the marketing in institutions of higher education is the service, i.e. the service product that the institution provides for the student, whereby, the student gains knowledge and develops personal skills that lead to acquiring qualifications and future career improvement (Dann, 2008).

The dynamic environment of higher education points to several more indispensable characteristics of this industry (Maringe & Gibbs, 2009; Masserini, Bini & Pratesi, 2018):

- ❖ The complexity of the education product - higher education creates a complex product by combining educational and developmental experience in order to train its students for the benefit of society.
- ❖ The complex social role of education institutions - the independence of the faculty and the complexity of their work complicate the added value through changes that arise in practice and often require large investments (DLS, external associates hiring, special programs, etc.). It happens that the mission of the institution is at odds with its behavior, and then the changes that are initiated by the complex social role of the educational institution should follow.
- ❖ The importance of financial performances in diverse education system - institutions must form a market offer that will attract investments, or more precisely future students (scholarships, research, donors, and other sources). These financial resources are key institutional consumers and they invest in areas they believe will provide the product / service that suits them.
- ❖ Competition and competence – benefits arising from the market mechanism include functional diversity and a large selection of programs. The heterogeneity of the market imposes diversity as the main goal of each education institution. Difficulties in realizing this goal arise when an institution, stimulated by the market, gives more priority to maintaining short-term revenue than maintaining a long-term reputation. The effect of globalization directly affects the institutions of higher education, encouraging the reduction of their national structure and their harmonization with established quality standards (Bologna Declaration, 2000). Competence planning helps in assessing and controlling whether the money has been invested in education in order to create a consistent system focused on students. These and similar characteristics, reflect the specific quality of services in institutions of higher education.

There are certain views that consider students as raw materials for education, graduates as products, and future employers as products buyers. On the other hand, as students pay to institutions of higher education for services they provide, they are often considered to be purchasers of diplomas as tangible products. The education market, on the other hand, treats students as active and inventive persons who acquire educational experience rather than as purchasers of diplomas i.e. qualifications. In addition to students some authors consider parents, future employers, or society as a whole, as well as anyone who benefits from the service, as education service consumers. In his earlier work, Levitt determines that the university offer consists of different products that can be represented by the following levels (Levitt, 1980; Masserini, Bini & Pratesi, 2018):

- *the core benfit*
- *the actual product*
- *the augmented product*

If we consider the benefits of *the core product*, we will notice that students do not buy a diploma, but they buy the benefits that a degree brings to their future employment, status, lifestyle, and so on. *The actual product* implies and may include a campus, a library, a lab, etc. While *the augmented product* implies intangible things such as library membership for graduates, employment, student loans and finance, and so on. If these levels are not achieved, students will not be satisfied with the service.

Marketers working in higher education marketing, need to pay attention to the accuracy of the information shared since it is the information that creates expectations with students. Inaccurate information leads to students creating too great of expectations with students, which can later on lead to dissatisfaction with the service. The simultaneous process of production and consumption only increase this risk. This means that the buyer (the student) can affect the nature of the service, which is, in this case, controlled by the “voice of the consumer” (Smith, Fischbacher & Wilson, 2007).

Clearly, characteristics are individual components of the offer that can be easily added without changing the style or quality of service. In order to increase the number of enrolled students, the university should include various activities for students before and after lectures. The activities should be introduced into the process, independent of teaching activities. The use of characteristics has many advantages - they are also instruments of differentiation of services from services of competition. The main advantage lies in the fact that the characteristics can be easily added, but also removed, therefore it is important that the management of institutions of higher education use them and thus achieve a competitive advantage in the education market.

2.2.2 The specific nature of price formation in institutions of higher education

The specific nature of services in general, as well as the complexity of price formation that are caused by it, are reflected onto education services as well. This is especially evident in the field of higher education, where all the circumstances must be taken into account in order to achieve adequate price formation and student satisfaction.

When establishing the price of services in institutions of higher education, emphasis is placed on the following factors:

- costs,
- demand,
- competition.

The tuition fee must therefore be formed so as to cover all costs or most of the costs that occured in providing services, with understanding that not all costs can be covered by tuition fees. The cost plus price strategy is not very applicable in this sector precisely because of the specific nature of the educational service. Regarding competition, each higher education institution must take into account the price ratio between them and competitors and determine whether the price will be higher or lower that the price of the competition. The advantage of approaching price in relation to competition is that in comparison with competition in terms of prestige, quality of service and other factors, each institution can easily determine the price of the service. Price formation from the aspect of demand may be the most important. Therefore, forming the price in line with demand, implies that the price decreases or increases in proportion to demand, because if there is no demand for a particular service, the entire effort of the institution of higher education is futile.

In many institutions of higher education the prices of the services are differentiated according to certain parameters such as level of studies, type of students, etc. This method of price formation is called price discrimination or price differentiation. Institutions of higher education can form differentiated prices based on the following parameters (Kotler & Fox,1995; Rodić & Lukić, 2016):

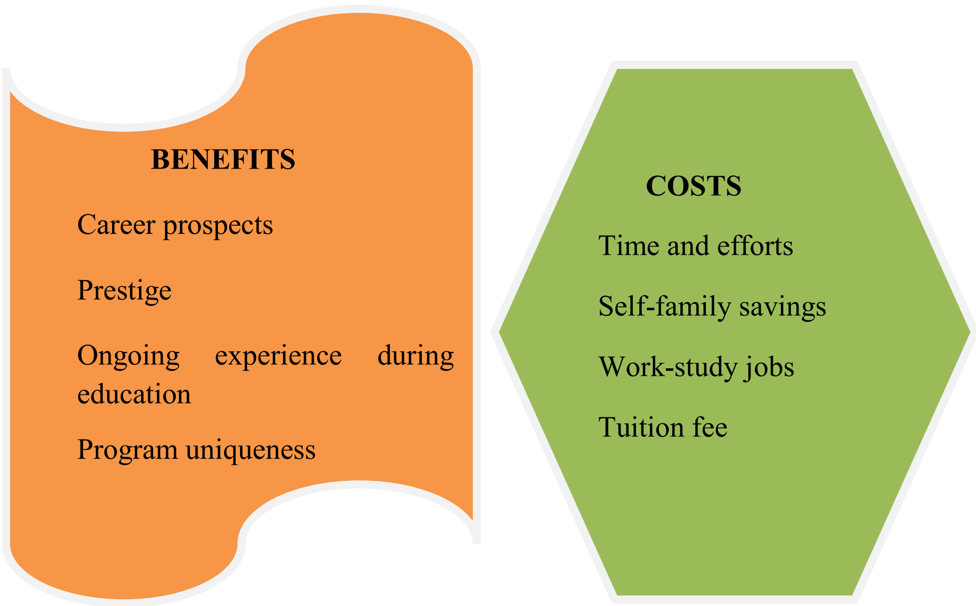
- According to the program - more precisely according to type of faculty, course or group of subjects (therefore we have the case that the price of study differs on the Faculty of Economics, Faculty of Law, Faculty of Arts, etc.).
- According to the level of studies - depending on whether it is graduate or postgraduate studies or whether it is the first or second year of the faculty.
- According to the duration of the study program - depending on the number of lectures or semesters spent in a study program.
- According to the type of student - whether they are graduate (three-year or four-year studies) or undergraduate.
- According to geo-demographic characteristics - depending on whether they are domestic or foreign students.
- According to the time and location of the education service - depending on whether it is for example summer semester or distance learning, and so on.

One of the methods of price formation in institutions of higher education, which should certainly be pointed out and characteristic of the United States, is the way in which prices are formed by the price of individual courses. This type of price formation is characteristic of higher education institutions that have a large number of part-time students, who are given the opportunity to choose subjects and courses, so the tuition fee is determined by the subject or the course the student attends. This method of price formation provides easier cost calculation and record track. It also provides flexibility for students and encourages enrollment of part-time students. However, the disadvantage of this method of price formation is reflected in the inability to monitor the number of part-time students and to determine income from tuition fees. This is evident in thecases when, for example, students who have attended one course in one year, can decide to take another course next yea, whrich is very difficult to track. This type of price formation does not include fixed costs such as administrative costs and the like. Another commonly used method of price formation in institutions of higher education is the formation of prices per semester where each student can attend as many courses as possible for a fixed amount of tuition for each semester. The aim is to further motivate students to pass as many exams as possible during one semester in order to finish studies earlier and save money.

On the other hand, there are faculties that do not allow students this option and oblige them to pay tuition fees according to plan and program. This method implies that students will pass the exams and pay the tuition according to this plan and program without any deviation, regardless of the progress of some students. There are a number of different methods of forming the price of services in the education sector. For example, some faculties provide the possibility of agreeing with parents on the amount of tuition in the range from zero to the full price of tuition. Other faculties offer discounts in the case of enrolling more students at once, thus encouraging future students to bring friends and relatives to the faculty in order to make a discount. Furthermore, some institutions of higher education give discounts for another family member or for those who pay the tuition in advance.There are also opportunities for certain students to pay part of their tuition fees through work at the faculty. As evident from the examples above there are many maethods used to form the price of services in institutions of higher education, and the primary goal is to attract and retain as many students as possible (Gajic, 2010).

As has been staded so far, the price of services should be considered from the economic and psychological point of view. The price has multiple significance for consumers or users as it affects their perception and informs them about what they can expect from the service in terms of quality and costs. People who are responsible for price in higher education institutions are not very often aware of the importance of the price for consumers or service users. It should also be noted that the price set by a particular education institution is not the only cost for the user. The diagram below shows some costs and benefits for users. In addition to the material price, users are faced with other expenses such as efforts, and physical and time expenses, which should certainly be taken into acc.

Figure 1. The consumer's costs and benefits



(*Additional costs*: time and efforts, self/family savings loans, work-study jobs, other concurrent employment, external scholarship, university scholarship; *Benefits:* career prospects, prestige, ongoing experience during education, program uniqueness)

Source: Kotler & Fox, 1995;

Regardless of the tuition fee of the university (official fees and prices are most often printed in the catalog), potential students and their families are in most cases interested in the effective price (the amount actually paid for education) and the received value (what they will receive for the amount of money paid). The effective price is the net amount actually paid any possible financial assistance and other discounts excluded (Kotler & Fox, 1995; Rodić & Lukić, 2016).

As stated by Kotler and Fox (Kotler & Fox, 1995; Rodić & Lukić, 2016), according to William Ilanfeldt, the institution should consider:

- the effects of a given price policy on the nature and mission of the
- institution,
- the effects of a given price policy on enrolment,
- the degree to which a specific price policy can encourage acceleration.

In addition, the institution must consider:

- the prices charged by competition,
- he effects of their prices and price changes on actions of competition.

These considerations provide a basis for price. Price decisions should reflect the mission, objectives and priorities of the institution (Kotler & Fox, 1995; Rodić & Lukić, 2016).

The specificific nature of education is reflected in the fact that it is an experience that can not be assessed before it is experienced, and the results of the acquired education in an education institution can only be evident at the beginning of a professional career. In this regard, it should be emphasized that the student will be able to understand the price-service ratio only after becoming the user of the service provided by the institution of higher education. Likewise, it should be noted that the price represents only one marketing mix component, which affects the user's choice. Besides tuition, potential students are interested in the program of education institution, quality of education service, location, way of communication, etc. Many college students and their families are willing to pay a higher price to get a better service, more precisely higher quality education. The location of an institution or academic prestige can be crucial in the process of slection of education institution, regardless of the cost of the tuition. Reviewing and using the price and the marketing mix instruments cannot be viewed separately, but as a part of the overall marketing strategy (Gajic, 2012).Therefore, the price factor, although crucial in most cases, is not the most important factor in the selection process of a higher education institution. Other marketing mix instruments with varied levels of significance play a role in the process as well.

Lamb et al. make a distinction between the concept of prices and the concept of tuition fees, considering that the price is what parents most often pay to the provider of complete services, and that tuition represents the amount paid only for education services. Therefore, the tuition fee is incorporated in the price (Lamb, Hair, McDaniel, Boshoff & Terbalancle, 2004; Wilkins & Huisman, 2015).

As a marketing mix instrument the price affects not only the income that a higher education institution receives from students' payment, but it also affects the students' perception of the service quality in these institutions. For example, when it comes to charging tuition fees for postgraduate studies, sometimes this tuition fee can have an effect on whether students can afford postgraduate studies, and some researchers have even found a direct link between tuition fees and postgraduate studies demand. The price represents a critical business element of each higher education institution, especially when it comes to the private sector (Ivy, 2008). However, as most marketing mix instruments, it can be used as a good tool for attracting new students by providing scholarships, discounts, various benefits for students from abroad, and more. Some higher education institutions are resorting to a strategy in which they offer students discounts and scholarships in order to attract them. Therefore, through these strategies, the institutions provide financial benefits to students in order to attract them, which is sometimes viewed as wrong from the ethical standpoint since future students will not have an adequate motive for enrollment at the university (Al-Fattal, 2010; Wilkins & Huisman, 2015).

The key question that could be posed in relation to this marketing mix element is the price-quality ratio of the education service. The view that a higher price should mean a higher quality, in the case of higher education, could be questioned. It is to be expected that in a developing country, as well as in the conditions of transition economy and the global crisis, this item would be significant when considering a potential faculty. It is worth pointing out that users often use the price as a transparent element of comparing the diversity of services among bidders (Miljkovic & Kovacevic, 2011). Therefore, as previously mentioned, the price is a powerful tool that can attract service users – the students.

As users of educational services, students are most often aware of the costs they have while studying, but they request the value that would justify those costs. The question is whether higher education institutions should offer courses at the lowest possible prices in order to attract students, as this can often affect the overall image of the institution. This is closely related to the perception of service quality by students, as some service users relate the price to the quality of service considering that the higher the price, the higher the quality of the service provided by the institution is (Foskett & Hemsley-Brown, 2001; Wilkins & Huisman, 2015). Due to users' remarks, the institution of higher education also considers the price-offer ratio. In other words, users ask whether the service matches the price. Accordingly, if it wants the price of its service to be higher than the price of the competition, the institution of higher education should justify it and infrom the public about it (Al-Fattal, 2010).

Several authors point out that people mostly pay a higher price for services similar to the ones provided by consultants or doctors. Within such services a better offer or service position dictates the price. Similarly, in the context of education, the student will pay a higher price for education at a prestigious or more well-known faculty. A higher education institution can use various means in price to generate as much profits as possible. One of the techniques implies deciding on including of all additional costs in the service package. As a result, some higher education institutions resort to not including additional costs (coursebook, transportation, sports) in the final service price in order to present the lowest price of the service (Al-Fattal, 2010) .

While forming the price for the service they provide, faculties can use different strategies, especially due to the specificial nature of the service and the service product. However, all institutions need to focus on achieving the harmonized price-value ratio. This balance greatly affects the image of the higher education institution and the satisfaction of its students.

2.2.3 The specific nature of service distribution in institutions of higher education

As service distribution can be achieved in a number of modes – directly, i.e. using direct channels of service delivery, and indirectly, or by using the service of the middleman, it can be established that the direct service delivery mode is most common in the field of education. Regardless, it is certain that location and service delivery mode are equally important factors during the selection of institution of higher education, since in most cases, these two factors can be the determining ones in the process of selection of institution of higher education.

The question arises as to how to make the higher education institution study programs more available and more accessible to students. Education services imply a strong and very close contact between the service provider and the service user. Therefore, the location of the service providing facility becomes very important. The location implies the place where the institution is located, but it can also imply the current and future students’ residence. Institutions of higher education must also take into account the overall state of the buildings at service delivery locations (the segment about the service environment as a marketing mix tool will focus on this factor in greater detail) (Gajic, 2010).

Decisions concerning location and distribution channels should be in line with the overall strategy of the institution. If the strategy is specialized in offering a specific study program or serving a specific target market, this will result in a particular location and delivery system. Institutions of higher education need to establish whether they offer some of their programs elsewhere (in a different location) or through different distribution channels. Since they use direct delivery channels, the institutions are like retail shops where people can come to make choices and purchases. Following the same principle as retailers, they must make a decision (among other things) on how many location to perform the delivery of their services. Institutions of higher education usually decide to establish new locations or channels of distribution due to the saturated local market, or when there are several competitive higher education institutions on the market. Therefore an education institution is not able to attract students or its offer is not in accordance with the interests of the local / regional market, while on the other hand, there are other places where their offer would be appealing. There are other reasons that cause a higher education institution to look for other locations or distribution channels in order to continue to have a market for its offer. The reasons vary from the reduction of the local market size, changes in the lifestyle and / or employment system, and so on. These are not the only factors that affect the decision. In some cases, regardless of the solid position in a particular market, institution of higher education decides to place its service on another market due to interest for their services shown therein. Kotler and Fox (Kotler & Fox, 1995; Rodić & Lukić, 2016) defined the steps in the process of choosing the location of the higher education institution. Firstly, it is necessary for the institution to evaluate the existing distribution method in order to determine whether it meets the existing and projected needs of clients, and whether the current delivery method is in line with the resources the institution has at its disposal. Secondly, if the existing method is not adequate, it is necessary to revise the distribution objectives and to express them so that they are measurable. Thirdly, it is necessary for the institution to determine the desired mode of distribution. It is necessary to determine whether the institution will offer its programs from a single or from multiple locations, which depends on the ability and willingness of the clients to travel to the facility. At the same time, the institution must take into account the balance of costs and revenues that result from having multiple locations. The fourth step is the location selection. First and foremost, the institution should identify the location (or locations) that would provide the best access to the target market. The final choice will depend on several factors, such as the lifestyle of people, the demographic characteristics of the area, and so on.

The location is primarily a distribution method that should satisfy students' expectations and justify the tuition fees that students pay. With the contemporary fast-paced development of alternative teaching methods, students are no longer bound to the classroom and teachers in order to be successful in courses they attend. Lectures and printed materials become available through virtual media such as Moodle or Blackboard, so students do not necessarily need to attend classroom lectures (Ivy, 2008).

Very often the location can be crucial in situations where the service user realizes that the education service offered by the competing institutions is of the same quality. With regards to this we should certainly mention the concept of added value that the user expects graduating from the faculty. It is extremely important for students' future careers that the location of their faculty is in the capital or in some of the more developed cities, since it provides them with more contacts important for their future profession. Therefore, for the success of higher education institution, it is not only the exact location of the building that matters, but also the wider environment in which the institution operates must be taken into account (Kotler & Fox, 1985; Rodić & Lukić, 2016).

In order to achieve the competitive advantage of the institution using location, all the elements related to the location must be taken into account. Some authors consider that parents, who most often make the final decision when it comes to the selection of the higher education institution, put special emphasis on the location of the institution. The institution should be accessible, near the house of the student, and overall, it should be located in the more urban part of the town. Very often, parents will choose a particular institution only because it is located near their house (Lockhart, 2005; Dibb, Simoes & Wensley, 2014). Yoo and co-authors believe that reducing the time of travel to school can increase the positive perception of the institution by parents and, therefore, a greater chance of enrolling children or future students in that institution (Yoo, Donthu & Lee, 2000; Dibb, Simoes & Wensley, 2014).

The service delivery and the delivery method are as important as the location since the delivery system determines who can benefit from the programs and services of the university. Considering the fact that education services can not be stored, higher education institutions should consider making their services more convenient and practical for their target market, in terms of location and timing. Increased convenience and quality can include the implementation of distance learning and / or the use of new technologies (Kotler & Fox, 1995; Rodić & Lukić, 2016).

In order to create an efficient delivery system, a higher education institution must determine which level of convenience it should offer to its target group, as it often happens that it is not able to provide the required level of convenience. New technologies are bringing the opportunity to improve the service without particularly large investments. In the education sector, in particular, the Distance Learning System (DLS) should be paricularly highlighted as a powerful tool in the education improvement process. The introduction of modern technologies into education processes has enabled the transition from the traditional, knowledge reproduction model, to a model of knowledge building that is entirely contemporary. The application of this contemporary model is inevitable because the joint action of professors and students in the knowledge building process has become one of the imperatives of contemporary society. The basic characteristics of this model imply that students take responsibility for their own actions, more precisely, the complete dynamics of learning and materials studying depends on them. The target group of the distance learning system are: people who live far away from the institution, older students who began their studies later, working people, people who require more activities and learning interactions, persons with physical limitations or disorders, and the like. Being the key to improving the mission of higher education institutions, online learning, or elearning also represents the incentive for a corporate - academic partnership. According to a survey conducted by the Economist Intelligence Unit, the effect of IT on higher education is growing - almost two-thirds of respondents in the public and private sectors believe that technological innovation will have a major effect on the teaching methodology in the next five years. Technology will become the basis for the differentiation and positioning of universities, as well as for attracting students and corporate partners (Agostino, 2008; Dibb, Simoes & Wensley,2014).

The fact that students no longer have to spend time on campus or in a classroom to attend classes and study provides opportunity for specific groups of people to study. The groups include working people who want to advance in their career; or for women who are housebound due to taking care of children, etc. (Al-Fattal, 2010).

In conclusion, it is in the interest of the higher education institution, to provide adequate location and service delivery in order to provide satisfaction of the existing students, as well as to achieve better positioning of the institution in the minds of future service users, i.e. future students.

2.2.4 The specific nature of promotion in institutions of higher education

Promotion is a process that implements communication between universities and service users in order to create a positive attitude about the service and lead to creating preference for the institution in the process of buying in the market. Promotion can not be effective if other instruments (product, price, distribution, people, process, and physical environment) do not efficiently perform their roles, that is, promotion can not compensate for the shortcomings in the effectiveness of other marketing mix instruments. Effective communication involves universities understanding the needs and wishes of students. The university should send its messages through an effective medium, communicating with the target group (Gajic, 2012; Rodić & Lukić, 2016).

The marketing communicator needs to identify the target audience; to clarify the required response; compile a message; select the medium or the media; select the source attributes; and collect feedback. Regardless of the choice of media, the mentioned steps that a communicator must decide on are crucial to achieving effective communication (Kotler & Fox, 1995; Rodić & Lukić, 2016).

In order to achieve significant success in the education market, the institution of higher education needs to find an adequate method of service promotion. While it is crucial to have good curricula and competitive prices, this is not the only important criterion. In order to motivate future users to use the services of the institution, it is necessary to inform all service users and all who are interested in the service, about the goals, activities and offers of the institution. Communication with users can take place in many different forms. Regardless of having a communication program or not, institutions of higher education send a direct message to the public about their existence by default. Prior to approaching communication with the public, the institution has to determine what information needs are in the internal environment (faculty, employees, current students and others within the internal environment) (Gajic, 2012; Rodić & Lukić, 2016).

In order to use adequate channels of communication, institution of higher education needs to group them. More precisely, it needs to group marketing communications in general into the following aspects: propaganda, sales promotion, personal sales, public relations, publicity, direct marketing. According to Kotler and Fox, most education institutions use public relations, publications and to a lesser extent propaganda in their communication with the public (Kotler & Fox, 1995; Rodić & Lukić, 2016).

In private higher education institutions, common promotional activities are public relations, which include a range of activities such as media relations and interviews (Friedman, Villamil, Suriano & Egolf, 1996; Assimakopoulos, Antoniadis, Kayas & Dvizac, 2017).Their role is integral in creating the public awareness of the institution achievements, and therefore of the institution itself (Symes, Meadmore & Limerick, 1994; Assimakopoulos, Antoniadis,Kayas & Dvizac, 2017). Educational fairs represent one of of the most commonly used promotional activities in education institutions, especially at private universities. Educational fairs are most often aimed at parents' perception of everything provided within the institution. In this way, educational fairs prevent the spread of rumors about the institution (Oplatka & Hemsley-Brown, 2004).Parents are thus acquainted with the achievements of the education institution and its characteristics. The fairs certainly promote communication between school and parents. The most commonly used forms of promotional activity in private higher education institutions are brochures. The brochures also provide initial contact between the institution and parents, which is crucial for the student's selection of the institution. The brochures can be instumental to creating and developing the most positive image of the institution in the parents' awareness (Alipour, Aghamohammadi, Ahmadi & Hoseini, 2012).

The promotion includes other tools that can be used by the institution to attract new service users and to address the target segments. It takes a lot more than using a brochure or a website to address a wide spectrum of public. Different tools are used for different representatives of the public or different target segments. The tools used to attract potential future students include the following: open days, international educational fairs, direct mail and advertising (Ivy, 2008).

A number of authors point out that education institutions should cooperate with local agents and advertise on local target segments in the target market in order to accelerate the effect on potential service users. They also suggest that the internet promotional activities should be the primary focus of the institutions, whereas the word-of-mouth communication should be the primary communication method.

One of the forms of faculty promotion is the higher education institutions cooperation (national and international) with relevant organizations and universities. The most transparent form of the cooperation is the exchange of students and teaching staff. Teaching staff and graduates can also promote the institution of higher education with their work and professionalism. It is necessary to point out that the concept of advertising campaign in the educational offer "must start from advertising not only offering a product or service, but much more, knowledge and skills, the way of thinking, and thus the style and way of life. The creators of advertising campaigns in this field should affect the formation of a value system" (Alibabic, 2002; Miljkovic & Kovačevic, 2011).

Regardless of the means and forms of communication a higher education institution is using, the sincerity plays the most important role in the communication process. Potential students require sincerity, which maximizes effective choice, regardless of their level of development before, or during the enrolment process (Canterbury, 2007). Therefore, the institution of higher education can achieve a competitive position in the education market using sincerity and all offered promotional mix elements when reaching students.

In addition to the mentioned most commonly used promotional mix instruments in education institutions, the socal media must not be neglected as they pave the way in the trust relationship between the institution and its users. The social media imply a very personal note since people are motivated to share important information with their online friends, expecting their experience to be helpful to others.

Institutions oigher education communicate with different target groups (students, parents, donors, employees and the community), whose interests are different. The public can very often raise enthusiasm and motivate teachers and professors to improve their services. In addition, former students may be donors and faculty promoters, and in this way students affect the attitudes and behavior of the rest of the university. Therefore, the public are equally affected by employees as service providers and by students as service users, hence, the image and reputation of the institution is greatly dependant on them.

There is a clear difference in marketing between internal and external information research. Considering the fact that the selection of faculty represents a unique experience, the internal method is insufficient, and it is necessary to rely on external information. External information involves the collection of information from various external channels (friends, propaganda, leaflets, etc.). Several authors claim that the media have the weakest effect on the formation of attitudes in this sector, while personal sources have shown the most dominant effect.

It can be noted that the application and development of an effective promotion strategy is not an easy and simple task, especially in the field of education. There is nounique approach that guarantees success. However, the key activities in the promotion management must include potential students analysis, needs identification, analysis of the promotional activities of competition, etc. (Gajic, 2012; Rodić & Lukić, 2016).

2.2.5 The specific nature of human factor in institutions of higher education

The human factor in the service organization is represented by the organisation employees and service users. With regards to education in general, or higher education, people as a key instrument of the service process include: full-time and part-time staff of higher education institutions, students and other partners of the education institution. Full-time and part-time staff of the institution together participate in the service provision and they affect the perception of service users. Similarly, the students participating in the service provision affect the decisions of the service users and the staff of the institution alike. The degree of this effect largely depends on the nature of the service. The mutual effect between service users can be seen through the style of dressing, through their personal opinion and behavior, and so on. When it comes to employees and their effect on service users, firstly, the emphasis should be put on the first service line. As the one who creates the service, makes the service, the direct contact between future service users and the first service line employees is very important. We can conclude that people or the human factor in institutions of higher education is represented by (Gajic, 2012; Jameel, 2018; Rawn & Fox, 2018):

- the employees (teaching and non-teaching staff) and
- the students.

2.2.5.1 The employees

The employees make up the key component in the implementation of the service process in institutions of higher education. From the user's perspective, the difference between medium and very good service experiences lies in the direct interaction with the person providing the service. This person embodies the service in the consumer's perception. A large number of authors point out that the institution's popularity is greatly affected by the image and work quality of the staff employed in the education institution. A teacher's popularity in scientific or professional circles can often serve as a determining factor in students' choice of the insitution. Teachers' professional and didactic expertise must be the subject of continuous development and improvement. The significance of this factor for the quality of teaching process is reflected in the fact that it is regulated by the Law on Higher Education as well as by the special statutes of higher education institutions (Miljkovic i Kovacevic, 2011; Barajas,Vela & Huerta, 2016).

Employees in higher education institutions have a multiple role and a very demanding task to communicate both with the external and internal environment of the institution. First of all, each member of the vertical hierarchy must be aware of its significance, as well as its contribution to the implementation of the marketing strategy. Each employee must recognize the intentions and requirements of students, as well as the specific nature of the service they provide. In order to ensure that employees in higher education institutions perform their role in an adequate manner, firstly, the management needs to ensure quality recruitment and election of personnel. Secondly, they need to train the new, or enable the development of the existing staff. At the same time, the management needs to motivate the personnes using various material and immaterial rewarding systems. Employee motivation represents a significant element of the implementation of marketing plan and internal marketing. People work to fulfill physical, psychological and social needs. In order to satisfy employees, managers need to understand their and develop motivation methods accordingly (Williams, 2010). In order to promote the employee motivation, a higher education institution should understand the nature,thoughts, feeling and needs of its employees using internal research. Institutions can motivate their employees in different ways: financially, through promotion, using flexible reward programs, etc. Motivation can be directed to specific individuals, using specific methods, based on a single value system. Managers can reward their employees with money, additional benefits, promotions, nonfinancial rewards. Moreover, in some cases, employees are motivated by the specific job that is rewarding and fulfilling.

The quality and commitment of employees is paramount to the success of the higher education institution business. In order to create those conditions, the institution needs to provide motivating work conditions (academic freedom, adequate financial compensation, etc.). Successful academic systems must provide their teaching staff with adequate work and compensatory conditions as well as with the ability to build a career with guarantees of long-term employment and professional development. Teaching staff should be able to further edvelop by participating in international conferences, publishing works in renowned journals, and attending training sessions in order to improve teaching methodology and the teaching process in general.

Employees are a key element of productivity growth, because they provide quality service to users and achieve a competitive advantage. Quality represents the level of service performance that students expect. Service quality is particularly important and can vary depending on the skills, motivation and mood of the service provider (professors and the student service employees, i.e. teaching and non-teaching staff) (Gajic, 2012).

The marketing strategy design in an institution of higher education starts from the staff development. The success of each institution of this type depends more on the attitudes, skills and commitment of employees than on any other factor. In addition, the idea of creating a positive relationship with customers has animportant role as well. Along those lines, Brassington (Brassington, 2006) explains that if a customer feels comfortable and believes in a particular service provider or an employee in a service organization, that relationship can not be disrupted by any competition. Therefore, it is about relationship marketing where the relationship between the professor and each individual student is analized including each aspect including the academic one. If performed adequatly, this relationship, as well as the relationship with alumni students, can not be disrupted by any competitive institution (Al-Fattal, 2010; Balzer, Brodke & Kizhakethalackal, 2015).

Likewise, the role of non-managerial staff or administrative staff in the process of delivering services should be mentioned. In some instances they can be the determining factor in student's decision regarding the choice of faculty. Moreover, during the course of studies, they greatly affect the student's satisfaction, because they are in many cases mediators between teaching staff and students. And finally, it is their effectiveness that affects students ability to quickly perform certain administrative tasks at the faculty (Starck, Zadeh, Ekman & Olsson, 2013).

2.2.5.2 The students

Being the users of education services in institutions of higher education, students can affect the perception and satisfaction of other students or service users as much as the employees. Therefore, the satisfaction of students with services is important in order to make a positive effect on potential students . In addition, students can also affect the design of services in institutions of higher education. They can also improve the teaching process with their own suggestions. Moreover, the students can affect potential students to select a particular institution of higher education by sharing positive impressions about it. Concerning the fact that the decision regarding the choice of faculty is not at all easy, current students of the faculty can play a key role in this process by promoting it in an adequate way.

The process of selecting faculties is a key decision in the life of each individual and requires information on alternatives, as well as how these alternatives are ranked in relation to specific situations. Many choices about selecting education are decisions that require a high level of involvement. A high level of personal involvement is usually present when there is one or more of the following conditions (Kotler and Fox, 1995; Rodić & Lukić, 2016): a client's decision reflects his or her image and can have long-term consequences; the costs of implementing this decision include great personal or material resources; high personal and social the risks of making a wrong decision; a significant amount of pressure from the reference group to make choices or to act in a certain way, while the target customer is strongly motivated to meet the expectations of these reference groups.

A large number of students does not consider the process of studying in terms of the acquisition of certain skills and theoretical knowledge, but also in terms of personal growth and social development (Jurkowitsch, Vignali& Kaufmann, 2006; Bryson, 2016). A number of different circumstances can lead to the wrong decision regarding the choice of faculty. It can include the tendency towards conformity - to be closer to home; or to minimize costs of all kinds; or the decision for prestigious names in the field of education.

The choice regarding the type of the institution of higher education depends on the complex combination of personal expectations, motivation and aspiration. In addition the role of the family, peers, relatives, media, teachers and idols is also very significant. Parents play a specially significant role in this process, therefore this role requires adequate attention (Gajic, 2012). However, in some situations, students of the higher education institution play a key role in the process of selecting institutions as they share their own experiences to potential students, therefore, their role should not be ignored. The overall success, quality and overall result of the university experience determines the level of service user satisfaction (Maringe, 2005; Bryson, 2016), which later affect the future performance of a higher education institution.

A satisfied student represents the main competitive advantage of a higher education institution and in that case it can be considered a marketing instrument of the institution. It is important to put emphasis on this dimension and examine the level of its effect on the improvement of institutions of higher education. If students' needs and expectations are met it is to be expected that it will positivelly affect not only the process of attracting, but also the retaining of students. Likewise, satisfied students reduce the cost of attracting new customers for the university and increase the overall reputation of the university by the word-of-mouth advertising, whereas dissatisfied students produce the opposite effect. Students can also return as graduates and help to recruit future students or make donations to their former institution. There are many ways of students' contribution to the work and success of the higher education institution they attend or have attended. This is why many authors view them as temporary employees of an institution of higher education (Gajic, 2010; Bryson, 2016).

The synergy of all the marketing mix instruments implements the short-term and long-term goals of institutions of higher education. For this reason, they represent significant tools that institutions of higher education use in order to accelerate their public image and the satisfaction of students.The following research hypotheses were set up so as to answer the question of the extent to which each of the marketing mix instruments affects the image of the higher education institution and the satisfaction of the students:

2.2.6 The significance of physical evidence in institutions of higher education

One of the most important decisions made by young people and their families is the decision concerning the choice of university. For students who were lucky enough to have the resources and abilities, the options can be countless. The physical environment of the university, the campus itself, as well as the specific objects, can play an enormous role in student decision making as well as in their real experiences. Nowadays, some universities offer virtual tours of their camps online that allow students to preview the physical entvironment. This clearly indicates the importance of the physical environment in the process of selection of a higher education institution (Zeithaml, Bitner & Gremler, 2009; Rodić & Lukić, 2016).

The character of a service requires using different methods and means in order to make it more accessible to the users. Institutions of higher education have the same task. Physical environment and physical evidence are significant factors in the process of introducing students to teaching process and other avilable services of the institution of higher education. The physical environment and all its elements include all physical factors controlled by the higher education institution with the intent to initiate or limit the activities of employees and users, while the physical evidence points to roles and transactions during the service process. The physical evidence enables the institutions to differentiate itself from the competition. (Gajic, 2010; Ashtari & Eydgahi, 2017).

Similarly to other service organisations, institutions of higher education obtain the servicescape that consists of the interior and exterior of the service facility, which must possess adequate characteristics, as well as other tangible elements. The interior of the institution of higher education needs to be innovative and modern in order to attract the target segment. Likewise the facilities need to be of good quality in order to provide the quality teaching process. The use of modern technology has been increasingly applied in all institutions of higher education today, so innovation should be maximized in this area in order to make the studying process easier for students. It is also necessary that the interior of the building is characterized by a good clasroom layout so as to facilitate easy studying process. The classrooms should be properly marked in order to provide easier orientation. As far as the exterior of the servicescape is concerned, the building of the institution needs to have an impressive appearance in order to attract as many visitors and future service users as possible. The servicescape needs to be located in a pleasant environment and that it is easily found, meaning that it is not located in the remote part of the city. It is also important that the building has parking as well as all the external elements that will provide students with a pleasant stay in the institution. Other tangible elements of higher education institutions include properly trained employees who at first sight leave the impression of education institution workers. Other tangible elements include the institution website, which must be designed in accordance with the reputation and image of the institution. Virtuel world of the internet and social media are also considered as other tangibles, and the institution must utilize these channels for its presentation to target users who prefer this communication method.

The physical evidence can perform a number of functions when it comes to institutions of higher education. For example, the university environment has a significant effect on the process of image building for the institutions of higher education. The functionality of the ambient is very important in the physical evidence planning since it can enable the most effective realization of education activities. The use of audio - visual and information and communication technologies poses special ambient requirements in order to achieve maximum effectiveness. Signage is a significant function with the aim of better students, visitors and employees orientation. The increasing number of students, employees, part-time students and foreign students requires special attention to this function of the physical evidence. The signs should be clear, well-designed, consistent in style and placed in the appropriate location. The function of the appearance itself and the atmosphere of the higher education institution has a significant effect on the behavior and attitudes of the education service users. According to a great number of architects, the physical environment plays a significant role in recruiting and retaining students This function of the physical environment was recognized by private universities who became aware of the importance of the attractive look of the service facility and the campuses and use it skillfully in promotional campaigns. The physical evidence function is service packaging that affects the creation of expectations. It represents a visual metaphor for intangible services. Being an element of image building, it sends a message, draws attention and causes effects or reactions among users (Veljkovic, 2009; Ashtari & Eydgahi, 2017).

Institutions of higher education must make four important decisions regarding the service facility appearance (Kotler and Fox, 1995; Rodić & Lukić, 2016):

- Exterior appearance of the facility - the decision should be in accordance with the location of the educational institution, as well as with the message it intends on sending to potential students.
- Functional and varying characteristics of the object - the decision should be in accordance with the use and type of space used and it should include the benefits (library, amphitheater, restaurant, sports facilities, as well as the adaptation of space and equipment for people with special needs).
- Interior appearance of the building - according to the image, the message sent by the interior of the university can be modern, bright, business, warm, and so on. Each of the characteristics has a different effect on the participants and their overall satisfaction during the course of study.
- Material that will best support the desired effect - paint, material and furniture create the desired impression..

In education services different elements are considered as significant than in other services. This is due to the fact that education services are based on a higher level of physical contact.

The physical environment and physical evidence elements can be used to cause a cognitive reaction of the consumer, that is, to cause the formation of the opinion in the consumer's mind. It can also cause an emotional or affective reaction, meaning that the consumer can select the institution based on the physical evidence of the institution. Finally, it can cause a psychological reaction which implies the psychological effect that a student can have upon entering the institution of higher education.

In addition to the needs and preferences of students, the needs of other users, partners, employees should also be considered when making decisions regarding the physical evidence. The physical evidenc should be organized to support and facilitate the activities of employees. The employees servicescape directly corelates to the atmosphere for users (students, teaching and extra-curricular staff, visitors and others) and for annyone visiting the university.

The application of the physical evidence elements causes the improvement in several aspects of educational institutions business. The improvement can be seen in the following aspects: internal and external communication, education services delivery process, financing and tuition forming, the teaching process quality, the image of the institution and user satisfaction.

2.2.7 The service process in institutions of higher education

As within majority of service organizations, the service process in institutions of higher education takes a specific and complex mode. It is necessary to make a clear schematic plan of this process in order to accurately know the sequence of events and activities of its numerous participants.

Analysis of the service process in the education service, shows that education belongs to a category that includes the treatment of mental stimuli that relate to intangible, human-awareness activities. Therefore, within the framework of this process, the student is required a maximum mental presence. The student can be located at the place of service creation, such as an amphitheater or classroom, or at a remote location that is connected through telecommunications networks or some other means of contemporary technology. Regarding the characteristics of the specific service process, managers must have a clear insight into the benefits of education services. They also need to understand students and formulate channel distribution strategies, and design a service delivery system (using information technologies). Education services are personal and they are characterized by intensive intellectual, emotional and / or physical participation of students in the service process. The services are often implemented in several steps, which constitute the service process. The production and consumption of education services take place simultaneously, with the students participation as a an important part of the process. Since the students assess the service quality, the shaping of the service process is imperative to the improvement of the education service quality. According to several authors it is the actual essence of the service (Senic & Senic, 2008; Ransom, Nieto & Korndorffer, 2017). Service users - students of higher education institutions are vastly engaged in the service process. Therefore, the flow and progress of the service delivery process, for services, are more significant than those for the production of goods. The service user does not take only the amount of information received as the factor in lecture evaluation. It is greatly affected bu the following factors as well: interaction with teachers, precision and comprehensibility of information, information presentation method, classroom comfort, interaction with other service users (students). All the factors stated afffect the students' satisfaction with the institution and their willingness to recommend it to others.Therefore, the perception of the process by service users should be particularly emphasized while designing the service delivery process. Consequently, marketing and operations are closely linked to the institutions' management in order to improve the service quality. Service quality improvement is not a simple process, given that it must have significant implications for the enitre culture of the organization.

There is a clear differentiation at the univeristy between services realized in direct contact with users and various service processes that take place outside of direct contact. Although there are several functions and services involved in the process of creating an education service from the perspective of univerity, the public, i.e. the students view it as a unique integral process or system. Likewise, the students (service users) represent an integral part of the service system model within the organization. They interact with other parts of the organization in the service process and represent a resource for the service production (Gajic, 2012; Ransom, Nieto & Korndorffer, 2017).

There are two distinguished parts of the service system in the education services process. Those include *interactive (visible - frontstage)* and *support (hidden-backstage)* part of the service system. *The interactive part or frontstage* represents a meeting place for students and universities, or users and service providers. It is made up of students and the rest of the resources whom generate quality with whom students directly contact. The quality-generating resources are: students involved in the process, employees who contact with customers, systems, physical resources and equipment. *Zeithaml* and *Bitner* consider that customer compatibility is important in the service experience, especially in situations where the service environment attracts a heterogeneous combination of users (Zeithaml, Bitner & Gremler, 2006; Masserini, Bini & Pratesi, 2018). Since it strongly affects the interactive part, *the support part* of the service system is a prerequisite for quality service. The management support is priority since it implies employees supporting corporate culture and promoting shared values of the institution. Teaching staff must rely on physical support provided by services and functions invisible to students. Supporting staff is treated as an internal customer and service and should be of the same quality as external, otherwise all failures will be integrated into the end service and will be noticed by the end user. System support implies investing in technology, equipment, buildings, documentation and compliance with rules and regulations that are in line with quality standards. The differences between the front stage and the back stage show the way back stage activities support the interaction between the first service line employees and service users. It is necessary to establish service standards for each of the service process steps and identify potentially critical points in the service system. In the beginning, the focus is on the overall service process, and later it breaks into more detailed phases and activities in certain areas, which enables the materialization of services.

As the basic process of the institution of higher education, the teaching process should be specially highlighted. Consequently, any successful teaching should be based on teaching (didactic) principles. In fact, all teaching systems, methods, forms and all means of work are relying on them as they would be incomplete otherwise. The teachers' proficiency in the application of the system, methods, forms and means of work within teaching (didactic) principles results in the productive outcome and the students would gain quality knowledge. Contemporary pedagogy and methodology approach mainly advocates for the following teaching or didactic principles: the principle of science (some also relate the principle of education to this prinicple), the principle of systematicity and graduality (in some, this principle is indicated in reverse order: graduality and systematicity), principle of taking into account the age of the student (different theoreticians of teaching differently formulate this principle, but their definition is similar), the principle of respecting individual personality of the student, the principle of student activities, the principle of obviousness, the principle of the connection between theory and practice, principle of sustainability of knowledge, skill and habit, and the principle of economics (some also add rationalization) (Simeunovic, 2004; Dmochowski, Garofalo, Fisher,Greene & Gambogi, 2016).

The education process is very often defined as a form of cooperation between those who teach and those who learn. This cooperation is realized through their mutual interaction and communication. As the special feature of this communication is the deliberate, targeted acquisition of certain information, it can therefore be viewed as pedagogical communication. Therefore, the professor needs to be informed about the relization of pedagogical communication; about the teacher-student interaction; and about the type and structure of verbal contacts. There are four communication structures that usually occur in teaching. Firstly, there is the one-way vertical communications that is realiyed from professors to students, without feedback. This type of communication has been common for many years in the earlier period. Nowadays, it is obsolete. Its weaknesses include professor's lack of insight into students' knowledge. Therefore, the use of this communication is limited to some processes and forms of teaching. Secondly, there is the two-way communication between professors and individual students, but not between students themselves. This type is most often used in examining and checking students' knowledge. The advantage of this type of communication lies in increasing student abilities in the teaching process. The third communication structure is more convenient and efficient than the previous one, since it enables not only the vertical two-way communication between professors and students, but also the horizontal, between individual pairs of students. This improves the overall activity and efficiency of student participation. The fourth communication structure is the structure that is considered the most effective because it enables the communication in each direction. Apart from being most productive, this is very difficult to achieve and is possible only in smaller student groups. This type of communication requires certain student sitting arrangement, which is something that many authors have been discussing (Gajić, 2010; Kilgo&al., 2017, Masserini, Bini & Pratesi, 2018).

In addition to focusing on the service system and process, special attention must be paid to the marketing service concept during the designing of the education service. The marketing service concept enables education institutions to provide their services efficiently with continuous communication both with the target market and within the organization. Yet the concept and culture of marketing must first of all be understood by all employees before it can be applied outside the institution. The education institution presentation to the public must be carefully planned and formalized so as not to be counterproductive.

***Hypothesis 1* – Marketing mix instruments affect the image of institutions of higher education to a large degree (general hypothesis)**.
Hypothesis 1.1 – Service quality affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.2 – Tuition fees affect the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.3 – Service distribution affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.4 - Promotion affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.5 - The human factor affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.6 – Physical evidence affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.7 – Flow of activities and service process quality affect the image of institutions of higher education to a large degree(specifichypothesis)

Hypothesis 2 - Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree (general hypothesis).
Hypothesis 2.1 - Service quality affects the student satisfaction in institutions of higher education to a large degree (specific hypotheses).
Hypothesis 2.2 - Tuition fees affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.3 - Service distribution affects the student satisfaction in institutions of higher education to a large degree (specific hypotheses).

Hypothesis 2.4 - Promotion affects the student satisfaction in institutions of higher education to a large degree (specific hypotheses).
Hypothesis 2.5 - The human factor affects the student satisfaction in institutions of higher education to a large degree (specific hypotheses).
Hypothesis 2.6 – Physical evidence affects the student satisfaction in institutions of higher education to a large degree (specific hypotheses).
Hypothesis 2.7 - Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).

2.3 CHAPTER SUMMARY

This chapter presents theoretical observations related to the specific nature of marketing mix instruments in institutions of higher education, and more precisely, the characteristics of each marketing mix instrument separately in institutions of higher education. The chapter presented standpoints of a number of authors on the possibilities offered by the marketing mix instruments as tools that can improve the performance of institutions of higher education, and thus improve the image of the institutions and students' satisfaction.

An overview of the relevant authors' opinion regarding the marketing mix instruments as an independent variant of research is presented. This is seen as a specific basis for research which examines the effect of this independent variable on the dependent research variables, the image of higher education institutions and students' satisfaction. Chapter 3 and 4 discuss this in more detail.

CHAPTER 3: LITERATURE REVIEW PART 2: IMAGE OF HIGHER EDUCATION INSTITUTIONS

3.1 INTRODUCTION

The contemporary highly competitive education market urges institutions of higher education to develop their image in the right way in order to be competitive in the market.

Therefore, the beginning of this chapter will deal with the definition of the notion of *image and its specific characteristics* as dependent variables or dependent research variables, which entails the definition of concepts closely related to it as well. Firstly, it is necessary to define the notion of identity of a higher education institution by reviewing the relevant authors' point of view. This is translated into the notion of image through communication. Over time, the image of the higher education institution is consolidated and developed a reputation that represents the ultimate goal of its business. After the theoretical overview, this chapter will emphasize the important notion seen as *the specific nature of image in institutions of higher education* and its causal relationship with student satisfaction. Image has a strong effect on student satisfaction, whose research and measurement in institutions of higher education can greatly affect the development and improvement of marketing mix instruments.The improvement of these instruments clearly affects the image of the institutions as well as student satisfaction.The final section summarises the main points of the chapter.

3.2 DEFINITION AND THE SPECIFIC CHARACTERISTICS OF THE CONCEPT OF IMAGE

Understanding the essence and specificity of the concept of image, as well as its definition, brings about a series of definitions of other concepts that are closely related to the concept of image. These definitions include the concept of identity, reputation, and often in this context, communication is also mentioned. Authors often assimilate these concepts, which leads to confusion, therefore, they need to be clearly distinguished and precise, so that the image is understood in the right way and to avoid any uncertainty regarding its meaning and essence.

The connection of the abovementioned concepts is based on the fact that communication translates the identity of a business organization into the image of a business organization, which over time turns into reputation of a business organization in the minds of the public (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018.).

When it comes to defining the concept of image, it is necessary to define the concept of a *business organization identitiy* first. The concept is usually defined as the perception of itself which is similar to the notion of our personal identity perception. Ind (Ind,1992; Brown et al., 2006) emphasizes that a working organization identity consists of its history, belief and philosophy, the nature of technology, its property, -people, the personality of its managers, its ethical and cultural values and its strategy. It does not represent a means of embellishment, but the essence of the existence of a business organization.

A high level brand identity of a business organisation is based on its ethics and aesthetics and represents its major advantage. It is noticed through visual and material means the organisation is using for public presentation that include the following: company name, logo, brand, production program, product looks and quality, corporate culture, mission and vision, physical appearance of the organisation facility, employee motivation and demeanor, etc. Identity is essentially a set of features, means and special characteristics of a business - its distinctive business style that distinguishes it from others, primarily from competition (Miljanovic, 2009; Cian & Cervai,2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018). Some authors believe that identity is expressed in two forms (Miljanovic, 2009; Cian & Cervai,2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018):

- the real (history, employees, behavior, products or services, culture, goals, strategy, experiences) and
- the visual (symbols, trademarks, etc.).

This division reflects the real situation since these two identity expressions are present in almost any business organisation. In most cases, the first step a new management would take is to redefine or refresh the visual features of the company. The next step would be to define graphic standards for each type of communication. The presented way of building business identity is only present in a small number of companies, whereas the most would stop at visual identity creation.

Visual identity also implies a set of rules to be followed. It should be completely original and distinctive. Visual identity implies all the components a ompany is recognisable by (Herbst,1999):

- logo (implies design of a company's sign);
- color (can be used on product packaging);
- corporate font (which implies a specific type of letters used in all printed materials);

The aforementioned components of visual identity are used in all promotional campaigns of the company and contribute to its eminence. Visual identity should clearly point to a business organization by defining its business, pointing to its style, differentiating it from the competition and by communicating the changes made within the company.

According to Schoemaker (as cited in Vos, 1992; Brown et al., 2006) it is the question of broader conformity between corporate image and corporate identity and it is achieved, as stated before, by an effective communication system. If the image is clear, distinguished and in harmony with the identity, the public will know what the business stands for. If the actual identity digresses from the expected one, the management needs to take certain measures with the same approach to image and identity.

The next matrix indicates the connection of these aspects with the indication of the complexity of the problem in creating the desired image.

Table 3. The image-identity compatibility matrix and relevant situational suggestions

Identity dimensions			
Image dimensions		compliance with identity	different from identity
	negative image	change identity	communication can achieve results
	positive image	continue but be on the alert	riskful, improve identity

Source: Vos, 1992; Brown et al.,2006.

The relationship between the business organization reality and perception can result in three outcomes (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018):

- *Image and identity are similar*. It happens when the communication of a companyreflects its business results and real potentials. The image generated by the public generally coincides with the corporate identity.
- *Corporate image is far better than identity.* The company efficiently designs its desired image and is, as such, accepted by the majority of the public. However, the corporate identity is not in any way similar to that presented by managers or other communicators. This situation poses a great danger to the long-term business of the organization and threatens to damage its reputation. The solution is a complete change in the communication strategy and a better redefinition of the corporate image so as toreflect the real state, or, if feasible, to improve the company's business performance in the shortest time possible so that they are in line with the already created image.
- *Corporate identity is better than image.* This situation leaves a great communication and business potential unused. It is necessary to make analysis of all communication resources and capacities and define a new, much more ambitious communication strategy.

By means of communication, everything that represents the business organization corporate identity turns into a corporate *image*. The goal of communication activities is to translate the corporate identity of a company into an external representation, that is, the desired image level. Otherwise, company values and strategies would not be understood nor generally accepted, and the organizational modality would not have a clear identity. There are a number of different views and definitions of the concept of image. Word image is often used in everyday communication. Before approaching a more detailed study of the concept of image, it is necessary to determine the basic definition of the concept and its key aspects. One of the most important is the definition that consideres corporate image as *the image of the organization as it is experienced by the various publics*.

The stated definition is probably one of the most comprehensive ones since it is quite difficult to sum up all aspects of the corporate image in one sentence. The existing literature hardly ever presents the complete essence of the corporate image with all of its characteristic features. Therefore, the following list presents all corporate image features that are linked to the basic definition stated above, including a number of conclusions regarding corporate image interpretation:

- *The image is an experience which takes shape in people's minds.*According to Wierenga i Van Raaij (as cited in Vos,1992) the concept of image originates in the school of psychoanalysis in which the subconscious plays the central role in initiating authentic thinking. Image ,therefore, includes internal representation of sensory perceptions and their processing (Wilkins & Huisman,2015);
- *The image is personal.* Kotler and Fox point out that the image is more of a personal perception of an object that can vary greatly from person to person. It does not only reflect the company, but it implies an image constructed by the information recipient in the overall communication flow (Kotler & Fox, 1985; Wilkins & Huisman, 2015). Regarding the corporate image constructed by various public segments, Dowling states that considering that a company serves various public using different types of interaction, as a result, each public modality will construct a different image of a company. Therefore, the corporate image of a company is not singular but rather a multiple entity (Dowling, 1988; Wilkins & Huisman, 2015).
- *The image is time-linked.* According to Blauw the image indicates the achieved level of goal accomplishment and is affected by new events which directly affect the company business, as well as by the changes in the social environment. Changes in the image can be significant for the business policy creation (Ries & Trout, 1981; as cited in Vos, 1992; Wilkins & Huisman, 2015). An independent measurement is not relevant in terms of analysis of of time-linked nature of image. Measurement and assessment is done periodically whereby the level of extensiveness varies.
- *The image can vary from vague to vivid and from restricted to comprehensive.* Kotler and Fox point out that the degree of variation of the image perception depends on the following factors: the intensity of identity aspect presentation, the significance of the influencing component, the time span between the moment of observation and the moment of image perception. Recent observation does not result in a clear image degree, as the degree of vividness extensiveness vary according to the image measurement aspect applied (Kotler & Fox, 1985; Wilkins & Huisman, 2015).
- *The image can conform to a greater or lesser extent to the identity of the organization.* The image clearly indicates how the identity isperceived by different public segments. Very often the image can differ from the reality of the company which is a consequence of different forms of addressing the public. The statement that the image often implies somewhat fraudulent tendency originates from the perception that it hides significant

contents from the company life (Vos, 1992; Brown et al., 2006; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018).

- *The image is created from personal or indirect experiences.* Bevis considers a corporate image to be a net result of the interaciton of all experiences, beliefs, emotions and impressions the public has formed about a certain company.The image is formed based on a personal experience with the company and based on indirect communication with others, whereby the greatest effect is given to rumors and media reports. These are the basic components whose sublimation leads to formation of the image that almost completelly mirrors the existing corporate identity. Thereby, the mind transforms the collected impressions into a sort of a personal reality imprint, called a *cognition* or a *cognitive map* (Vos,1992; Brown et al., 2006; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018.).
- *The image incorporates impressions and evaluations about the organization.*Kotler and Fox speak of dominant impressions, beliefs and ideas as categories that regulate creation of the image (Kotler & Fox, 1985; Wilkins & Huisman, 2015). Likewise, certain authors emhasize the effect of the company reputation on the corporate image creation. They state that in order for a company to buid a solid image, a quality reliable communication should represent its reputation (Gray,1986; Brown et al., 2006).
- *The image can affect people's behavior.* Loundon and Della Bittahave explained this statement by noting that marketers have noticed a long ago that in order to protect the company image, the behavior models which reflect the company image through product or service image need to be created. According to them, a strong and clear corporate image can lead to increased consumer confidence in company products or service and therefore, create a predisposition for purchase (Loundon & Della Bitta, 1988; Brown et al., 2006).

The product, service or corporate image is a certain image, perception or an association created by consumers or other public representatives about an actual or potential product, service or company. It is a sum of beliefs, ideas or concepts that a person has regarding an object, a product or a company. A solid product image is not only the communication goal of the company, but it is the goal of its entire business.Ogilvi considers the brand image to be the 90 percent of what the producer has to sell (Belch & Belch, Kerr & Powell, 2003).

The corporate image represents an actual rather than invisible company asset that is mostly formed incidentally, not by using a specific medium, but it implies a continual process (Vracar, 1999; Cian & Cervei, 2014.). A single negative piece of information can sometimes transform the corporate image that took years to be formed. It is even worse if the information is incorrect or fictitious, or it does not correspond to the actual state of affairs. However, misinformation affects the corporate image to a great extent. On the other hand, benefits of the good corporate image are numerous and resemble the benefits brought by the good corporate reputation. The following segment will discuss this in more detail. The specific feature of corporate image is that all its benefits can affect the company business results in a positive way. Whereby, short positive increases can lead to more problems in the long turn.Since great jumps and falls in the corporate image lead to public distrust, a solid corporate image needs to be formed gradually and systematically. Its formation is complex as it is subject to a great amount of effect. The corporate image is affected by earlier experience, preconceptions, stereotipes, knowledge, misinformation, social status and political views of the message recipient. Various people interpret the messages in various ways, therefore they percieve the corporate image in a number of different ways. In this way, a single company can evoce different perceptions among different people. However the difference in perception is not of a great amount as it is mostly about non-essential features (Miljanovic,2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada,2018.).

The especially significant aspect of the corporate image is that it needs to be transmitted through each communication medium and constantly publicly advertised (Kotler,1997; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018).

The question that many authors are dealing with is what makes a good corporate image, and thus there are explanations that a good and distinguished corporate image is formed with the help of recognition in the words, the picture and the market (Herbst, 2001).However, the most comprehensive explanation of the corporate image formation states that the corporate image is formed through: products and services (quality), company's social responsibility, business ambiance (offices, stores, buildings), corporate communication (Belch & Belch, Kerr & Powell, 2003).

All the aforementioned efforts aimed at a positive corporate image formationare made in order to transform it over time into *the reputation* in the minds of the public. In the contemporary business world, the corporate reputation is a highly regarded concept. It can be safely assumed that appart from profit, the corporate reputation is the most valuable characteristic of a successful business organisation. The corporate reputation does not imply the opinion of a single person, but it is the result of experinces a target public has collected regarding a company over a long period of time.

Key differences between corporate image and reputation include the following (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018.):

- *The timing.*The image is formed in a significantly shorter period of time than the reputation and it can easily be transformed, whereas the reputation implies long-term assessment.
- *The value judgment.*The image is not in most cases connected to the values judgment, whereas the reputation exists only as good or bad, therefore it is essentially a category of value.

Grunig points out that the reputation implies (Grunig, Grunig & Dozer, 2002):

- all general observations regarding a company or a person;
- the collective judgment, even though a person or company can have more reputations.

Reputation is not something that an individual or company can acquire or possess in complete isolation. It depends directly on the relationship with the environment. Once formed, the reputation cannot be *locked* or *stored*. It is flexible and relative to the needs and desires of the target groups, therefore, it cannot be formed and frozen so that it can be used in case of a problem (Jackson, 2004).

Metaphorically speaking, if the image represents the amateur photo, the reputation represents an album that was made for a long time (*A strong corporate reputation is increasingly a PR responsibility*, 2005).The reputation is deserved and formed over a long period of time. It is formed with the help of the target segments relationships, but also depends on what others are talking about the corporation. As a result of this, the search for reputations often considered analogous to the search for happiness, because the more you strive to achieve it, the more you are doomed to failure (Jackson, 2004).Although the reputation is considered to be dependent upon the public evaluation, its successful formation still begins with the company itself, more precisely with the top management. The reputation elements are even present in the definition of mission and vision, as well as in the behavior of top management. Therefore, the formation of the reputation in a business organization moves internally, from the company management, through employees in order to form the clear presentation for the public (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018).

Reputation Institute has defined the concept of reputation as a certain level of trust, admiration, esteem and positive attitude that target groups have towards a company. By conducting a number of research, the institute has established that a corporate reputation is based on a combination of attributes centered on the seven following dimensions: products/services, performance, innovation, workplace, citizenship, leadership and governance (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018).

Weber Shandwick agency has defined six key factors of corporate reputation (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018.):

- *Vision and leadership.* This factor includes both the CEO and the rest of the management present in public. A number of research shows that corporate reputation is affected by the reputation of the CEO of the company to a large extent (*A strong corporate reputation is increasingly a PR responsibility*, 2005).Aside from that, leadership should be demonstrated within the industry, in relations with the target public where the company represents the industry.
- *Financial results.* In the past, the profit was the only criterion of a company success, whereas nowadays this is not the case since the society demands the profit to be made not only in legal terms but in a socially acceptable means as well. All business results therefore need to be publicly presented. Balance sheets represent documents of public importance and as such they must be made available to the public. However, without a well-organized communication, only a small number of people will be familiar with those, which means that successful companies have to tell the public how successful they are.
- *Service and product quality.* Solid business results cannot be achieved without quality product or service. It is assumed that every successful company must at all times take care of it. But that is not enough. Consumers and customers need to be regularly informed about the concern for quality improvement of products or services.
- *Corporate social responsibility.*As mentioned before, successfull performance and profit are not the only factors for success nowadays.The community demands business organizations to participate in its development and to give back some of the value they have received from it. The timeframe for actions undertaken by a company is especially important here. Good reputation can never be built with a single or several sporadic actions. A business organization needs to be committed to caring for the social and natural environment and to show it regularly.

- *Workplace.*This factor implies creating tehnichal, technological and ambience conditions for the successful work of employees and associates of the business organisation. If the working conditions are not the most ideal, in some cases that won't disturb the work of employees, yet it will in most cases affect the corporate reputation.
- *Emotional appeal.*Unlike the previous technical aspect, here the emphasis is on the spiritual values that need to be created in relations with employees and with the public alike. Employees are not only phisical operateors, but they are individuals that evluate the company on a daily basis. Each of them, if satisfied with the company, can acquire a role of the company promoters.

As can be clearly identified, many of these elements are similar to the activities that are mentioned in the image formation section. The key difference between these terms, as already mentioned, is reflected in sustainability. It is important to point out that all the above mentioned values must have a long time-dimension, i.e. the prod-uct quality must be constant, and the financial results should be positive from year to year. Also, sporadic manifestations of social responsibility can even be counter productive. In order to form a good corporate reputation, the business organization should help the social environment in the long run, invest in working conditions and education of employees, and regularly present its results to the public (Miljanovic, 2009; Cian & Cervai, 2014; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018).

Reputation capital is based on trust. Business organizations are linked to consumers, suppliers, government, media, local communities, special interest groups, and sometimes competitors, through strategic alliances. The mentioned relationships constitute a reputation network that implies having friendly partners at all points. Regarding this, Buffett points out that he would have understanding for the loss of money, but he considers loss of the company's reputation unforgivable (Hagstrom, 2005).

With regards to reputation capital, which is essential for the company business, it should be taken into account that although itsassets are intangible, it has two entities. One is surface or ethical which at first glance does not seem to have anything to do with the financial aspect of the business, and the other is purely financial or profit-oriented. All aspects of corporate identity, image and reputation should be taken into account so that the business organization can successfully operate in the long run, and consumers or service users are satisfied and loyal.

Communication serves as the linking factor in relation between corporate identity, image and reputation. Internal communication accelerates the process of reputation formation. The corporate reputation represents the final goal of the company's business, and it represents it externally to the interested public later on. As already mentined, the role of the communication is to translate the corporate identity into corporate image, which in time transforms into corporate reputation in the minds of the public. Consequently, the path from the corporate identity to the formation of corporate reputation would not be properly realized without the cimmunication. The communication enables the company's essence to be presented to the public. Without it, the public would not be able to percieve the identity of the company, which would affect the formation of the corporate image and the corporate reputation, which is significant for the long-term successfull business of the company.

3.3 THE SPECIFIC NATURE OF THE IMAGE IN INSTITUTIONS OF HIGHER EDUCATION

In order to overview the specific nature of the image in institutions of higher education, which is affected by the specific nature of the institutions as service organizations that provide a complex type of service, it is necessary to overview the image in general through its connection to the identity of the institutions, all in order to achieve a long-term positive corporate reputation of the institution. The identity, image and reputation of the institution affect student satisfaction as they serve as factors in student expectation. If the student expectation do not reflect the real state, it can cause dissatisfaction. Therefore, the relationship between these elements is causal in all terms and should be considered as such.

Formation of a positive corporate image has become imperative and marketing practitioners have started to pay more attention to it in the contemporary period. The term image implies a complete impression a user or consumer has regarding a business organization. Research has shown that organizations that have a positive corporate image will benefit more from customer or user relations (Bhattacharya & Sen, 2003), their product will receive better reviews (Brown & Dacin, 1997), their sales will increase, their user loyalty will increase (Andreassen & Lindestad, 1998; Osman, Saputra& Luis, 2018) and they will experience rise in positive user behavior seen as a positive *word of mouth* (Hong & Yang, 2009).

Contemporary science and the field of education is becoming more competitive regarding attracting students. Institutions of higher education cannot afford the luxury of waiting for students to select their institution, they are rather striving to reach them by realizing their needs and answering each of their requests. Institutions of higher education nowadays pay special attention to the needs of students seeking traditional higher education. Within this context, one of their greatest concerns is the question of their personal identity and image and what this represents to students. There are extensive research dealing with the topic of student perception of the image of institution of higher education. More precisely, the research is directed towards four segments of the image of institutions of higher education that students most often identify with. The four segments include: achieved prestige, tuition fees, practicality and simplicity in attending classes at the institution and the selection of the institution of higher education (Minjung & Sung-Un, 2008).

Nowadays, the higher education market is competitive in terms of academic programs that are offered as well as in terms of incentives aimed at retaining students. Heterogeneity in terms of choice is not the only agent in contemporary process of student selection. Nowadays, students consider the distinguished name of the institution, tuition fees, comfort and atmosphere within institution as factors in selection of higher education institution. This selection is the second most important decision in a person's life (Domino, Libraire, Lutwiller, Superczynski &Tian, 2006).The decision is made based on all offers present in the education market. Institutions of higher education compete in many fields in order to get noticed by students and acquire reputation. They are prone to innovation, campus renovation and offer improvement as they combine student and parent requests that appear during the selection process. Students and parents alike are particularly careful and dedicated to the selection of the higher education institution. They take academic, economic, cultural, geographic and even political factors into consideration during the selection process (Domino, Libraire, Lutwiller, Superczynski &Tian, 2006).

The education scene of today is such that the competition for students takes place on national and international levels alike. A great number of new institutions of higher education emerges as well as a great number of new methods of knowledge transfer. Traditional universities are competing against universities that base their curriculum on the contemporary technology and perform it online including flexible timetables for working students. In some cases, the courses are designed so as to allow the students to attend classes twice a week. These concepts are making the market game more difficult for the traditional higher education institutions, especially regarding attracting working students. Online education or distance learning is becoming more popular in the education market. Distance learning allows attending classes from any place with the internet access.For this reason it is becoming difficult for the traditional higher education institutions to compete with the universities that offer their services across all meridians thanks to the internet. This type of competition can force institutions of higher education to behave in the same manner as business corporations. Veloutsou, Lewis and Paton (Veloutsou, Lewis & Paton, 2004) point out that this type of market game among institutions of higher education, which are now getting similar to business organizations, is raising ethical questions regarding students role as service users and consumers. This education market situation urges traditional institutions of higher education to analyze their image perceived by target groups. Several online institutions became very successful and recognized by students because they have invested a lot of effort into creating their image and messages that were send directly to their target audience. More precisely, they were applying targeted and specialized marketing in order to access larger number of students (Sharp, 2009).

Similarly to other business organizations, institutions of higher education are becoming more interested in development and sustainability of the positive corporate image in order to affect future students' choice. A distinguished image of a university can often help in attracting quality associate faculties, in fundraising, as well as in attracting greater alumni donations (Alves & Raposo, 2010; Treadwell & Harrison, 1994; Osman, Saputra& Luis, 2018).Earlier research has considered the image of institutions of higher education more from the perspective of its effect on student behavior (Alves & Raposo, 2010; Arpan, Raney & Zivnuska, 2003; Helgesen&Nesset, 2007; Kazoleas, Kim & Moffitt, 2001; Palacio, Meneses & Perez, 2002; Pampaloni, 2010; Sung & Yang, 2008; Wilkins&Huisman,2015; Osman,Saputra& Luis, 2018). However, a number of contemporary authors have especially emphasized research of criteria that students use in evaluating the appeal of the image of a particular higher education institution. Therefore, formation of the image of higher education institution can be affected by the program features, admission conditions, tuition fees and the campus location.

Several research have led to conclusion that the category of image in institutions of higher education includes prestige achieving, tuition fees, comfortable lesson attendance and the possibility of faculty selection. These factors cause the contemporary students to spend a lot of time researching institutions present in the contemporary market. Nowadays, this decision is particularly difficult. Practice does not confirm the statement that institutions of higher education create their image for the sake of their business. The formation of the image of institution of higher education enables greater choice options, and thus, a greater student satisfaction. In these institutions, the image is viewed through the analysis of the prestigeachieved, tuition fee, attendance comfort and the possibility of faculty selection within the institution (Sharp, 2009).

In order to design a specific identity of the organization, which will transform into adequate image in the minds of the students, higher education institution's managers need to be aware of how the institution is being perceived by the external stakeholders. More precisely, how the signs that represent their institution are accepted and transformed into the image of the institution and what criteria are used when assessing the attractiveness and impressiveness of the image of the institution. The literature that deals with students criteria during the selection process, points out that in these situations international students are most often motivated by the ranking of universities and their perception of its academic quality (Abubakar, Shanka & Muuka,2010; Binsardi & Ekwulugo, 2003; Bodycott, 2009; Gatfield &Chen,2006; Li & Bray, 2007; Maringe & Carter,2007; Mazzarol & Soutar,2002; McMahon, 1992; Pampaloni, 2010; Pimpa, 2005; Shanka, Quintal & Taylor, 2005; Wilkins & Huisman, 2015.).

During the last couple of years, a number of research has analyzed different aspects of the image of institutions of higher education. The research included the public acceptance of the image (Kazoleas, Kim & Moffitt, 2001);the use of marketing for the image formation and promotion (Cetin, 2003);the ways of differentiation in the market (Ivy, 2001), the effect of the image on the selection of faculty (Cubillo, Sanchez & Cervino, 2006; Pampaloni, 2010; Wilkins&Huisman,2015) as well as the effect of the image on student satisfaction (Alves & Raposo, 2010; Helgesen & Nesset,2007; Palacio, Meneses & Perez, 2002; Osman, Saputra& Luis, 2018), loyalty and supporting behavior in general (Sung& Yang, 2008; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018.).

A number of problems that affect the image formation in institutions of higher education must not be neglected as they are specific to these type of business organizations. For example, the fact that in the past, institutions of higher education were considered a public good, whereas nowadays it is a profit-oriented business organization. This caused many people to view these contemporary goals and strategies of the institutions as negative. Likewise, in most cases the correlation between institution's quality and its image and reputation is rarely strong. This results in students opting for more prestigious institutions rather than institutions lower in the ranking scale, even though the institutions of lower ranking are known for quality teaching staff or higher degree of student satisfaction (Marginson, 2006).Furthermore, it is rather difficult to form a unique image of a higher education institution since each department, each faculty and teachers group possesses their own individual image. At the same time, all stakeholders have different image as well, since each of them uses different criteria while evaluating the institution and its image (Arpan, Raney & Zivnuska, 2003; Wilkins & Huisman, 2015; Osman, Saputra& Luis, 2018).

The prestige and the reputation of an institution of higher education do not necessarily reflect the quality of the institution, therefore, the correlation between these elements is not necessarily accurate. A large number of individuals consider that the prestige of an institution clearly points to the quality of education it provides, and that students will gain better quality knowledge in those institutions. However, this is rarely the case in reality (*The California master plan for higher education – Kindergarten through University*, 2002). Another misconception is that the price of the education is representative of the value provided by the higher education institutions. Some consider that the quality provided is related to the expenses a faculty has per student, to the research conducted, as well as to the library size. It is also related to the selection process during enrollment and the ranking of faculties (Minjung & Sung-Un 2008).

Therefore, in order to answer the requests of students as service users and the requests of dynamic environment they are operating within, institutions of higher education need to develop and improve communication with all external stakeholders in order to develop the desired image as a part of the coordinated public relations campaign. The user-focus within the service company is focused on the satisfaction of users since it enables the word of mouth promotion which affects the reputation of the institution as well. The nature of higher education poses complex requirements on institutions of higher education including the students' expectation that quality universities' programs include a set of challenging, stimulating and yet achievable programs (Arpan, Raney & Zivnuska,2003; Wilkins & Huisman,2015; Osman, Saputra & Luis, 2018). All the above facts support the claim that the goal of each institution of higher education is the satisfaction of students and clearly indicate the connection of these terms.

Within their study, Sung and Yang (Sung&Yang, 2008; Aghaz et al.,2015; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada,2018.) measure the higher education institution iamge appeal using three variables: university personality (friendly, stable, practical, warm); external prestige (it implies the prestige of the institution of higher education in a society in general and it can be seen as the high esteem that the people hold of it, high ranking and positive media coverage); and the reputation of the institution of higher education (student care as the main priority, solid options for future career development, good management, social responsibility etc.).Kazoleas and co-authors (Kazoleas, Kim & Moffitt, 2001) have taken different perspectives in analyzing the image, including the personal perspective (socio-economic background), environment (quality, location, financial elements, admission conditions) and organizational factors (the higher education institution building, landscape architecture, sports facilities, the campus size, academic programs, library and technical equipment). The authors have established that each of the mentioned options, opinions, attributes and segments related to the insight into the institution can affect the formation of the image of the institution of higher education.For example, the accadmic programs, quality teaching, environment factors and sports programs affect the formation of the image of institution of higher education to a large extent. Factors affecting the subimage that relates to the complete image of the higher education institution, include the following: teaching programs, the look and the size of the campus. Later research conducted among students show that the academic teaching factors, sports activities and general information regarding institutions of higher education (the news availability etc.) are key for the formation of the image of institutions of higher education (Arpan, Raney & Zivnuska, 2003; Osman,Saputra& Luis, 2018.). Theus (Theus,1993; Wilkins & Huisman, 2015.) has established and identified the following factors that affect the image formation in institutions of higher education: the library volume, demographic and economic trends, social matters and technology developments. Therefore, different authors use different criteria for analyzing the factors that affect the image of institutions of higher education, however, each of the factors are certainly equally important.

Regarding the management of the image of institutions of higher education, it firstly implies internal agreement on the desired identity of the institution. Secondly, it implies implementing a strategy that will achieve the desired identity. Finally, an analysis must be conducted regarding the image of the institution that is formed within the stakeholders based on the identity formed. Aside from that, in order to improve and upgrade the image of the institution of higher education, managers need to identify the basic difference between the desired and achieved image among stakeholders. Therefore, the managers need to examine the existing students, the alumni students, employees and their entire surrounding (Alves & Raposo, 2010, Osman, Saputra & Luis, 2018). In order to effectivelly undertand the perception of the image of institution of higher education in the students' minds, it is necessary to thoroughly analyze the criteria used by students while assessing the image of institutions of higher education (Wilkins & Huisman, 2013).

The research conducted so far shows that students do not define the image of institutions of higher education solely based on its logo as the past practice shows. Nowadays, students take a much wider perspective when assessing the institution they would like to enroll in. The assessment starts from the logo and the name of the institution; continues with the physical state of the campus, the size of the classrooms, and ends with the opinion of the former students of the faculty. It includes all details that are important for the process of studying

(Domino, Libraire, Lutwiller, Superczynski & Tian, 2006.).The days when students relied solely on the slogan, the name or the reputation of the institution are long gone. Belanger, Mount and Wilson (Belanger, Mount & Wilson, 2002.) all agree that defining the image of institution of higher education is more complex now than in the days when it was identified with the logo. It takes years to form the image of an institution of higher education and sometimes it can take a minute for it to be completely destroyed.

The recognition as a very important aspect of the image of institutions of higher education is created using a combination of tangible and intangible image aspects. The recipient of the form of the image perceives the products or services with regards to the image of the institution, which implies that when getting acquainted with the higher education institution, the student is clearly getting acquainted with its image as well. The process of providing information inside or outside of the institution of higher education allows for the formation of the image of the institution (Barnett, 2005).These claims refute the claim that the image of institutions of higher education is solely dependant upon the perception of the public. Arpan, Raney and Zivnuska (Arpan, Raney & Zivnuska, 2003; Wilkins & Huisman, 2015; Osman, Saputra & Luis, 2018.) agree on the opinion that the image of institutions of higher education is dependent upon the signals and messages the institutions send to their target audience, which percieves the signals and forms the perception of the image in their minds. Aside from that, the image of the institutions is dependent upon the public perception of it. The image of the higher education institution determines the student interest and the interest of donors or organizations which make contracts with institutions for research purpose (Ivy, 2001). Maringe (Maringe, 2006; Chen, 2015.) points out that students show consumer approach in the process of selection of institutions of higher education. This claim supports the concept by which the image represents one of the key factors in the process of selection of institutions of higher education. Students need to consider the process of selection of institutions of higher education not as purchasing a diploma, but as purchasing a future lifestyle, a status and a means for creating their own life (Naude & Ivy,1999; Wilkins & Huisman, 2015).

According to literature overview regarding the dependent variable of the research – the image of institutions of higher education, the following research hypotheses were set up:

Hypothesis 1 – Marketing mix instruments affect the image of institutions of higher education to a large degree (general hypothesis).

Hypothesis 1.1 – Service quality affects the image of institutions of higher education to a large degree (specific hypothesis)

Hypothesis 1.2 – Tuition fees affect the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.3 – Service distribution affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.4 - Promotion affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.5 - The human factor affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.6 – Physical evidence affects the image of institutions of higher education to a large degree (specific hypothesis)
Hypothesis 1.7 – Flow of activities and service process quality affect the image of institutions of higher education to a large degree (specific hypothesis)

3.4 CHAPTER SUMMARY

This chapter introduced the theoretical standpoint regarding the definition of the image and its specific features alongside the definition of the identity and reputation that are closely related to the concept of image. The standpoints of a number of authors regarding one of the two dependent research variables. Likewise, the chapter emphasizes the specific nature of the image in institutions of higher education, as well it causal relationship with the student satisfaction. Considering that students practice consumer approach in the process of selection of higher education institutions, it is necessary that they be approached in this manner in order to achieve the final goal – consumers' satisfaction, or in this case – service users' satisfaction. The service users' satisfaction can be considered as a unified psychological or a subjective consumers' standpoint based on the comparison of their expectations and the actual experience. Very often this concept has been defined in a number different ways. According to one of the definitions, satisfaction is the feeling or the standpoint a person has acquired about a product after use (Solomon,1994; Masserini, Bini & Pratesi,2018.) or it is considered a summary of affective or changeable thoughts directed at a given moment to a particular object being evaluated (Giese & Cote, 2000). The student satisfaction can be understood as a parallel concept that can be defined in a number of ways (Browne, Kaldenberg, Browne & Brown, 1998; Elliott &Healy, 2001; Elliott & Shin, 2002; DeShields, Kara & Kaynak, 2005; Navarro, Iglesias &Torres, 2005; Masserini, Bini & Pratesi, 2018.), for example, as a short-term attitude that is formed and developed by a student's education experience (Elliott & Healy, 2001); or as a subjective student's opinion formed by his various experiences from education and life on campus (Elliott & Shin, 2002).The user satisfaction affects not only their loyalty, but also the image, reputation and brand reputation of the institution. A great number of authors (Anderson, Fornell & Lehmann, 1994; Johnson & Gustafsson, 2000; Johnson, Gustafsson, Andreassen, Lervik & Cha, 2001; Masserini, Bini & Pratesi, 2018.) have studied the index models of consumer satisfaction and have given advice regarding the models, such as the advice that the corporate image should be formed in a way that it becomes the effect rather than a trigger of satisfaction. The effect of satisfaction on the image is created due to a product or a service use by consumers or users during a certain period of time (Johnson, Gustafsson, Andreassen, Lervik & Cha, 2001; Masserini, Bini & Pratesi, 2018). Students form experience related to institutions of higher education that is based on the one hand on the academic program, and on the other hand, on the institutions of higher education. Therefore, the student satisfaction positively affects the image of the academic program and the image of the institution of higher education alike. The correlation of the mentioned categories are becoming a frequent topic of research of a number of authors in their studies. The image formation is of a paramount importance for attracting and retaining students, and an important trigger of student satisfaction at the same time (Sevier, 1994; Bush, Ferrell i Thomas, 1998; Standifird, 2005; Masserini, Bini & Pratesi, 2018).Considering the inevitable connection and the causal relationship of the concepts, the following text (Chapter 4) will deal more thoroughly with the student satisfaction as the second dependent research variable.

CHAPTER 4: LITERATURE REVIEW PART 3: DEFINITION AND DETERMINANTS OF STUDENT SATISFACTION

4.1 INTRODUCTION

The basic concept behind the market economy is that comapnies exist and compete between each other in order to provide service user satisfaction. Investors decide to invest in the companies based on these parameters. The economic prosperity cannot be improved without the increase in user satisfaction. In the market economy environment, where the providers compete for the buyers, and buyers do not compete for products and services, the user/buyer satisfaction becomes the major purpose of the econimic activity. It is more important how well the business has satisfied the consumers than how much was produced or spent. Therefore, it is crucial to understand the concept of user satisfaction, the elements that affect it, how it is measured, and how it can be improved (Ciric, 2007).

There are a great number of definitions of user satisfaction. The common feature of all definitions is that the user satisfaction emerges from the relationship which implies comparison and evaluation. The evaluation is taken subjectively and is valued and compared depending on the author:

- the degree of expectation and experience perception (Oliver, 1980; Fuentes et al. 2015; Nell and Cant,2014; Stukalina, 2014; Sultan and Yin Wong, 2014),
- expectations and perceptions of the performance levels of products/services and other outcomes (Westbrook & Oliver,1991; Monferrer-Tirado, Estrada-Guillén, Fandos-Roig, Moliner-Tena & Sanchez Garcia,2016; Abu, Ruswiat & Martino, 2018),
- current quality and past satisfaction (Anderson, Fornell & Lehmann, 1994; Abu, Ruswiat & Martino, 2018; Babaei et al.,2015),
- the expected value and the chosen alternative (Vranesevic, 2000; Weerasinghe. Lalitha & Fernando, 2017),
- expected satisfaction and the product purchased or the service used (Shiv & Huber, 2000; Weerasinghe, Lalitha & Fernando, 2017),

- ❖ set of consumer/user requirements and total product/service (Hill & Alexander, 2003; Weerasinghe, Lalitha & Fernando, 2017).

This implies that on the one side there is expectation, or a situation that preceded the product purchase or a service use, while on the other side, the mentioned situation is compared to the obtained product features and/or service use, experience or past satisfaction.

Veljkovic defines consumer satisfaction as the emotional response of consumers (the feeling of satisfaction), that is evoked by comparison of the expectation formed before the purchase and the experienced product or service performance. He points out that in order for the satisfaction to occur, the user expectation need to be met or even surpassed. If consumer satisfaction (S) is presented as a function of consumer expectations (Op) and seen, experienced product or service performance (P), satisfaction occurs in stuation when P = Op, as consumer expectations are met. Sometimes it happens that service performance exceeds consumer expectations, in the situation P > Op, which is called a positive non-conformation of the presumption (Milisavljevic, Maricic & Gligorijevic, 2004), whereas the highest degree of satisfaction implies user excitement and amazement. Recently, the concept of the Total Consumer/Customer Satisfaction (TCS) is being increasingly discussed. The aim of the concept is that companies provide a service that will continuously meet the needs and wants of consumers, and thus achieve a complete or absolute consumer satisfaction. On the other hand, there is a disassociation that occurs in situations where consumer expectations are not fulfilled, or when Op > P, and in all descriptions and consumer statements it is presented in more extreme terms than those describing the degree of satisfaction, which leaves impression that it expresses anger and dissatisfaction or disturbance of consumers due to dissatisfaction with the service (Veljkovic, 2009).

It can be noticed that the common feature of all the mentioned definitions is that satisfaction is considered as the satisfaction developed through forming relationships with consumers and service users. Namely, by forming relationships with consumers and service users, a company obtains the information needed for providing greater degree of satisfaction (Ciric, 2007).

Regardless of the ways the satisfaction is being observed, all definitions have certain common elements. If analyzed as a whole, the three general components can be identified (Giese & Cote, 2000):

- consumer/user satisfaction is a reaction (emotional or cognitive),
- the reaction implies a certain (expectations, product, service, user experience etc.),
- the reaction occurs at a certain time (after using the service, after the selection, based on accumulated experience, etc.).

While observing satisfaction Giese and Cote (Giese & Cote, 2000) do not suggest forming a single definition, but rather emphasize that definition of satisfaction cannot be unique due to the different aspects of satisfaction. However, they consider that each definition depending on the context, should have the following features:

- orientation towards the satisfaction oriented reactions that affect it in different intensity levels,
- time dimension ie. an exact point of observation or a certain duration,
- emotional reactions directed towards important aspects of purchase or use of a product/service.

The mentioned recommendations in defining the concept of satisfaction lead to the conclusion that studying satisfaction implies a complex process and it inludes different determinants that affect its occurence and volume.

The main goal of each institution of higher education (which will be discussed in the text) is to provide satisfaction to the users of their services - which will result in loyalty and positive financial results of the institution.Therefore, it is of utmost importance for each institution of higher education to know which factors or determinants lead to customer satisfaction. The views and definitions of different authors are also different in this regard.Thus, the following elements of customer satisfaction are stated in the literature in the field of marketing and management: perceived quality, value, price, time spent by the user in the search for services, company image, services, expectations, needs, wants, experience.All the above-mentioned elements can be incorporated within the effect of the *needs*, *wants* and *user expectation* as well as the *perceived value* on satisfaction. Therefore, the elements will be discussed in more detail in the following segment together with *the method of determining student satisfaction in institutions of higher education.* This chapter presents the prevailing authors' views on the dependent research variable as the starting theoretical basis in research that examines the effect of marketing mix instruments on the image of higher education institutions and student satisfaction.

4.2 THE EFFECT OF EXPECTATIONS ON CONSUMER SATISFACTION

In order to sustain itself in the market, each service company, including institutions of higher education need to firstly create a certain level of user expectation concerning the service provided. The importance of user expectation lies in the fact that the quality represents an estimation based on an established standard. When estimating the service quality, users evaluate it using an internal standard, which is essentially the expected quality. According to this, the expectations can be defined as internal standards on the basis of which the user assesses the quality of the service provided (Ljubojevic, 2001; Forgas-Coll, Palau-Saumell, Sánchez-Garcia & Garrigós-Simon, 2016).

Consumer expectations include beliefs about the service and its delivery that serve as a standard or some sort of reference point in relation to which a certain performanceor its perception is assessed. Due to this, according to Veljkovic, undertanding consumer expectations represents a key point in creating and delivering services, more precisely in the overall service business (Veljkovic, 2009; Masserini, Bini & Pratesi, 2018).

According to Anderson, Fornell and Lehmann (Anderson, Fornell &- Lehmann, 1994; Vaz, Freira, Vernazza, & Alves, 2016), expectations in relation to service quality have a positive effect on user satisfaction. Expectations are based on the accumulated market knowledge of the quality offered by the provider. In the same manner as the current quality has a positive effect on the overall user satisfaction, so all previous quality experiences should also be reflected through user expectations. Furthermore, user expectations are not based solely on their experience, but on a great number of factors including external sources such as advertizing, word of mouth marketing and the media in general. Aside from the past experience, user satisfaction is also affected by positive information regarding the quality of the services used.

While forming their expectations, service users use past experiences and non-experiential information in order to predict the ability of provider to provide expected quality in the future. This role of expectation is important concerning the fact that the nature of relationship between a company and its user base dictates that the expected future quality is primary for user satisfaction and their retention, i.e. creation of long-term relationships with users. When it comes to permanent goods, the user satisfaction depends on the extent to which a product satisfies the needs of the consumer as well as on the predicted quality of future service. In the service industry, the user satisfaction depends on the anticipated quality of future service as well as on the ability of the service to satisfy future needs. Likewise, this component of prediction in expectations points to the positive effect of expectation on satisfaction (Ciric, 2007; Vaz, Freira, Vernazza, & Alves, 2016).

There are also views that differ from the above. From this viewpoint of understanding the customer satisfaction in the context of specific transactional situations, it follows that the growth of user expectations leads to a short-term decline in customer satisfaction with a specific transaction. Namely, if the user has high expectations, and they do notmaterialize, the logical fall in the satisfaction will occur. In this context, user expectations do not have a positive effect on satisfaction, because if they are too high, it will cause dissatisfaction (Ciric, 2007).

4.3 THE ROLE OF NEEDS AND WANTS IN ACHIEVING USER SATISFACTION

If the service company e.g. institution of higher education wants to stay in the competitive game, its primary task is to completely meet its user expectations. However, if its goal is to achieve the highest degree of satisfaction and competitive advantage it can be achieved by satisfying some of the subconscious user needs.

The user needs manifest in terms of demand for services in the market. The needs need to be fulfilled in order to reduce (but not to remove it, since the want can be removed, but the need will remain) the tension and achieve the perceived lifestyle. The needs cannot nor should be created by advertizing.The needs are defined as the feeling of lack followed by the urge to fulfill it. There are a number of different definitions of needs and wants (Galogaza, 2001; Vaz, Freira, Vernazza, & Alves, 2016):

- the need is the concept that points out to the demand that it must be fulfilled,
- to need something means to be dependent on it as an essential factor in obtaining and improving a lifestyle,
- individuals, consumers/users are not always aware of their needs,
- the need cannot be fulfilled unless the cosncious part concerning instincts and wants is activated,
- the need is the source of a want to own a product or to use a service,
- the needs are constant and cannot be changed by marketing efforts, only the methods of their fulfillment can be changed,

- marketing efforts are used to fulfill the existing needs by creating new values for the consumer/user and new competitive advantages,
- without marketing efforts and alternative choice, needs and wants become synonyms,
- an intensified want becomes a need of the consumer/user, whereas the removal of such a want no longer implies satisfaction, but the removal of an unmet need.

Wants are defined as the feeling of craving, urge, appetite, etc. that is directed towards an object. To want a certain object means to have predisposition towards buying, using and owning a product/service. Wants are created spontaneously as a result of human observation, contemplation, remembrance, etc. A person perceives a want as somethig that produces satisfaction, pleasure, pleasantness.A want represents some kind of anticipated benefit. A need is the source of a want to own a product/service. A need implies something that has to be satisfied, whereas a want implies something a person prefers among the clearly defined alternatives. A want is a type of a manifestation of need. Wants are what is missing, not the needs. Processes of creation and fulfillment of needs are never finished since there are constantly new ones appearing throughout the entire dinamyc of personality developments. The content od wants changes according to age, whereas in old age they become significantly reduced. People have numerous wants but limited resources for its fulfillment. Consumer/user wants based on the actual purchasing power manifest as the demand for specific products and services on the market. The goal and task of marketing is to start with needs, to create a want and initiate a notion of a goal in terms of motive which affects making a willing decision based on the available offer of the brand of a product/service. The offer will simultaneously fulfill a need, remove a want, reduce an urge of consumers/users and make them satisfied and loyal for longer throughout exchange process. However, the phenomenon related to the need and want fulfillment is that users can develop a want for a new service even if they are satisfied with the previously used one. The reasons for this can be the emergence of a more perfect service and the change in consumers/users taste. Yhe problem of consumer/user needs is far more significant in the sector of service use as opposed to product purchase, especially from the perspective of the significance of user behavior in the process of service delivery. While the greatest number of needs are subconsciously created, users are more often aware of their expectations when it comes to purchasing a service.If the user expectation are identified and fulfilled by recognising some of their subconscious needs, it would serve as a key for diferentiation in the service business. Therefore, possibilities for achieving user satisfaction will be created. Understanding and taking care of the subconscious user needs represents the best competitive method for achieving succes in today’s service game (Galogaza, 2001; Vaz, Freira, Vernazza, & Alves, 2016).

4.4 THE PERCEIVED SERVICE QUALITY

The term quality is a rather vague and subjective. In fact, quality is similar to beauty, that is in the eye of the beholder. According to Deming (*Deming's Quality Points*, 2006) quality implies a lack of defects or a reduce in variation. Juran (*Juran's message*, 2006) defines quality as the use capacity of a product or a service. Crosby (*Crosby's Message*, 2006) supports the viewpoint that quality is conformance to requirements. Collier (Collier, 1994) highlights the following most popular definitions of quality:

- quality is compliance with the specifications,
- quality is the degree of consumer/user specification fulfillment,
- quality represents a fair value-price exchange,
- quality is fitness for use.

Depending on the approach and the baseline there are a nubmer of definitions types. According to one of the scientists, the following five approaches can be identified (Lovelock, 2004):

- transcendent approach and quality definition (starts from the assumption that the service is superb and excellent, which can only be realized through service experience),
- product-based definitions (precise and measurable definitions, which stem from the fact that the difenrence in quality is caused by differences in some element or attibute of the product, therefore it is an objective measurment category that can be applied to tangible goods),
- user-based definitions (stem from the basic constatation that quality is in the eye of the consumer and equals maximum satisfaction of the consumer),
- manufacturing-based definitions (mainly given by the manufacturing companies where the engineers and manufacturing specialists have leading roles),
- value-based definitions (regard quality within value and price, i.e. quality is value for price).

Basic ideas and premises related to product quality cannot be necessarily applied to service quality.When it comes to undesrtanding and defining service quality, it is important to start from the consumer's perception of quality. Therefore, quality is anything considered by consumer or market segment as such. More precisely, it represents the ability of a service to fulfill or exceed the consumer expectation (Veljkovic, 2009; Masserini, Bini & Pratesi, 2018). Parasuraman, Zeithaml and Berry (Parasuraman, Zeithaml & Berry, 1985; Abu, Ruswiat & Martino, 2018) point out that it is more dificult for users to assess the quality of services than the quality of products and that the perceived service quality is a result of the comparison between user expectation and the performance of the experienced service. Likewise, they point out that the quality assessment is not solely based on service results, but on the service delivery process as well. Besides, when purchasing a service, user has less tangible elements than when purchasing a product, therefore it is more difficult to assess the service quality. Groonros (Gronroos, 1984; Monferrer-Tirado, Estrada-Guillén, Fandos-Roig, Moliner-Tena & Sanchez Garcia, 2016; Abu, Ruswiat & Martino, 2018.) too supports the viewpoint that the perceived service quality is a result of comparison between expected and perceived service. Considering the fact that this definitions is similar to the definition of the term satisfaction, further explanation of the deifference between the two is needed.

The user satisfaction is different from quality for a number of reasons. Firstly, the expectation in Parasuraman'sdefinition of quality relate to normative expectations (ideals), whereas the definition of satisfaction implies expectations related to user predictions of the service quality. Secondly, users need the service experience in order to assess their satisfaction with it. Quality, on the other hand, can be pervieved without an actual user experience. Thirdly, user satisfaction is dependant on value (Kotler, 1997; Gallifa & Batalle, 2010), in which the value implies the relation between perceived quality and the price, geined benefits and expenses. Therefore, user satisfaction is dependant on the price, whereas service/product quality is generally considered as independant on the price. Finally, quality is based on the present user perception of the service, whereas according to a number of authors, user satisfaction is not based solelly on the present experience but on all the past, and predicted future experiences (Anderson, Fornell & Lehmann, 1994).

4.4.1 The relationship between perceived quality and user satisfaction

When it comes to the relationship between service quality and user satisfaction, the question arises whether the satisfaction leads to perception of service quality or the service quality affects satisfaction. Parasuraman and co-authors (Parasuraman, Zeithaml & Berry, 1991; Abu, Ruswiat & Martino, 2018) view the perveived service quality as the long-term total service assessment, whereas Parasuraman views satisfaction as the assessment of a specific service transaction. Based on this viewpoint, he supports the thesis that experience of satisfaction over time results in perception of service quality. A number of other authors support the argument that user satisfaction leads to service quality. For example, Bitner (Bitner, 1990) has developed a model of service encounter assessment which empirically supported the effect of satisfaction on service quality. Bolton and Drew (Bolton & Drew, 1991) also consider that satisfaction leads to perception of service quality.

There are however a number of different oppinion and empirical evidence that support the thesis that the perceived service quality is the determinant of user satisfaction, i.e. that the perceived service quality affects user satisfaction. Cronin and Taylor (Cronin &Taylor, 1992) indicate that in their structural analysis of the causal relationship between satisfaction, the overall service quality and the purchase intention, all the coefficients belonging to the trajectory service quality, satisfaction, purchase intention are statistically significant. Whereas the coefficients of the trajectory satisfaction, service quality, purchase intention are statistically insignificant. Lee and co-authors (Lee, Lee &Yoo, 2000) have also researched the connection between service quality and user satisfaction and have come up with conclusions that the perception of service quality precedes satisfaction. They justify their viewpoint by the fact that in order to be assessed, the service firstly needs to be perceived. Users can perceive the service quality immediately after the use, whereas the comparison of the perception and the predicted expectation occurs later on. Perceived service quality, expectations and disconfirmation will therefore result in satisfaction or dissatisfaction. This viewpoint regarding perceived service quality as the determinant of satisfaction is supported by empirical studies by Anderson and Sullivan (Anderson & Sullivan, 1993), Oliver and Desarbo (Oliver & Desarbo, 1988) and Fornell (Fornell, 1992).

4.4.2 Measuring service quality

SERVQUAL is the most popular instrument for servce quality measuring (Parasuraman, Zeithaml & Berry, 1991; Abu, Ruswiat & Martino, 2018). It consists of 44 items used to measure user expectations and perceptions through five dimensions of service quality: tangibles, reliability, responsiveness, assurance and empathy. Within the SERVQUAL model, the 44 items are divided into two sections of 22: the first part measures user expectation (what the company should offer), whereas the second part measures the user perception of the company performance. Respondents are asked to express their expectations and perceptions using a seven-degree Likert scale by asigning marks from 1 (completely disagree), to 7 (completely agree). The results are then used to identify positive and negative gaps in performance perception of the five dimensions of service quality of a company. The expectation and perceived performance gap is measured as the difference between two results (performance – expectation). For each respondent the service quality is calculated for each dimension in the following way:

$$SQ_j = \frac{\sum_{i=1}^{nj} P_{ij} - E_{ij}}{nj}$$

Where:

SQ $_j$ – is service quality of dimension j

E $_{ij}$ – is expectation from a company concerning item i that realtes to dimension j

P $_{ij}$ – is the perceived company performance for item i that relates to dimesnion j

n $_i$ – is a number of items for dimension j

The average result for each dimension of service quality is calculated by adding the results of all respondents. The total service quality is received by calculationg average results of each five dimensions of service quality. Positive result indicates that the service quality is better than the perceived, whereas the negative result implies low service quality. If the result equals 0, it implies a satisfactory service quality.

The later revision of SERVQUAL model by Parasuraman, includes the following modifications (Parasuraman, Berry i Zeithaml, 1991; Abu, Ruswiat & Martino, 2018.):

- Firstly, the term *should* used in the first version can lead to unrealistically high results concerning expectations, therefore the new model includes a modified terminology.The revised terminology focuses on what consumers could expect from the company that delivers excellent service. For example, the item *Institution of higher education should have a precise and fixed lecture schedule*, is modified into the item *An excellent institution of higher education will insist on a precise and fixed lecture schedule*.
- Secondly, all the items that were negatively formulated within the original version of SERVQUAL model are replaced by a positive formulation. For example, *Employees in the institution of higher education are not always willing to help users*, is replaced by*Employees are always willing to help you.*

- Thirdly, the two original items, one within tangibility, and the other within assurance, are replaced with two new ones that better explain the dimensions: tangibles and assurance.
- Fourthly, in the original model the assessment of significance of each of the five dimensions is obtained by indirect regressional analysis. The revised model includes third set of questions which is used to directly measure the relative significance of each of the five dimensions for users. The results are then used to value indicators of each dimension of perceived service quality. The main purpose is to obtain as accurate total result of perceived service quality as possible.

Immediately upon its creation the SERVQUAL has become a focus of research of many authors. The authors that do not support and criticize it include Babakus and Boller (Babakus & Boller, 1992), Bolton and Drew (Bolton & Drew, 1991), Cronin and Taylor (Cronin & Taylor, 1992), Teas (Teas, 1993), Lee, Lee andYoo (Lee, Lee & Yoo, 2000.) whereby the oppinions of Cronin and Taylor and Teas will be especially highlighted.

Cronin and Taylor state that SERVQUAL model confuses the satisfaction and attitude. They consider that service quality can be conceptualized similarly to attitude, and it can be operationalized through "adequacy-significance" model. Namely, they consider that service quality is determined by performance rather than by performance-expectation relation, therefore, they have developed alternative method for measuring perceived service quality - SERVPERF, that considers performance only. Within their empirical study, the SERVQUAL is adequate for measuring perceived quality in two fields only, whereas the SERVPERF is suitable for each of the four researched fields.

Teas discusses conceptual and operational difficulties in using the approach performance minus expectation, with special emphasis on expectation. He suggests and tests two alternative models of perceived service quality: performance assessment and standardized quality. He thereby comes to the conlusion that the performance assessment model surpasses SERVQUAL and the standardised quality model. This moder of service quality is measured as a gap between perveived performance and ideal sum of characteristics, instead of expectations. Oppinions regarding the best model for measuring perceived quality clearly vary greatly.

SERVQUAL is applied to a large extent in different cultures, in the business and final consumer market, in different service fields as well as in the profit and non-profit sector. When it comes to concrete cases, it is applied in realestate business, public recreation programs, institutions of higher education, etc. (Zeithaml & Bitner, 2000; Gallifa & Batalle, 2010.).

It can be concluded that the SERVQUAL model represents a solid baseline for service companies, institutions of higher education included, to create their own model for measuring service quality which will be suited to a concrete purpose and service context.

Concidering the fact that there a lot of deviations from providing the ideal service that would fulfill the consumer expectation, it is necessary to explain the GAP model of service quality. The model, developed by Parasuraman and his colleagues was presented in 1985. godine. According to this model the service quality represents the function of consumer perception, i.e. the way they experienced the service and expectations they formed before purchasing or using a service. (Veljkovic, 2009):

$$SQ= \sum_{j=1}^{k}(Pij - Eij)$$

Where:
SQ – is service quality;
Pij – is perception affected by attribute j;
Eij – is expectation for attribute j based on standards set for stimulus i .

Although the presented model started from the ten basic service quality dimensions in the beginning, development of the SERVQUAL approach, that relies on the GAP model of quality, have caused the reduction of dimensions to five basic ones that were discussed in more detail earlier.

The main problem for companies is the consumer gap, that is essentially caused by the consumer's dissatisfaction with a service. Consumer gap represents the most significant difference between consumer expectation concerning a service and consumer perception concerning their results from the service transaction with a particular company. Consequently, the gap indicates the degree of consumer dis(satisfaction) with the service (Zeithaml & Bitner, 2000; Gallifa & Batalle, 2010).

The consumer gap is most often the consequence of some of the following four service company gaps (Veljkovic, 2009; Gallifa & Batalle, 2010):

- Misunderstanding of customers' actual expectations (management doesn't know exactly what customers expect) – GAP 1,

- The difference between company's understanding of the customer expectations and the translation of that understanding into service creation and quality standards– GAP 2,
- There are differences in the service defined by management (quality, standards, delivery methods) and in the actual service delivery – GAP 3,
- The difference between the delivered service and the promises to consumers made via different communication channels (most often the consumers are promised more that can be provided) – GAP 4.

GAP 1 occurs as a consequence of misunderstanding of the actual consumer expectations. These are the situations when management does not understand what consumers expect from a particular service, and this mistakes in the beginning have great repercussions including loss of significance and quality for all other phases. The reasons for gap 1 can include the following (Zeithaml, Bitner & Gremler, 2006; Gallifa & Batalle, 2010):

- *Inadequate marketing research orientation*: insufficient market research information; lack of service quality focus; inadequate use of marketing research.
- *Lack of vertical communication: lack of management-consumer interaction*; insufficient communication between contact personnel and management; too many layers between contact personnel and top management.
- *Insufficient relationship development focus:*lack of market segmentation; transaction focus instead of long-term relationship focus; focus on new consumers not on creating loyal consumers.
- *Inadequate consumer complaint management and inadequate corrective actions:* consumer complaints are not listened to; dissatisfaction is not researched; inadequate procedure setting.

GAP 2 shows the difference between the way a company understands the consumer expectation and the ways it creates its services and quality standards. The reasons for gap 2 can include the following (Zeithaml, Bitner & Gremler, 2006; Gallifa & Batalle, 2010):

- *Inadequatly designed service:* unsystematic new service development process; unclear, undefined service design; service design is poorly positioned.
- *Lack of consumer defined standards:* standardsare not defined with regard to consumer requests;lack of process management that would focus on consumer requests; lack of formalized processes for setting adequate service quality goals.
- *Inadequate physical evidence and physical elements:* failure to develop tangible values in accordance with consumer expectations; physical evidence does not suit the consumer nor employees needs; insufficient ambience innovation and necessary restoration.

GAP 3 indicates differences between the service defined by management (concerning quality, standards, delivery methods) and the actual service deliveryto consumers within a specific, concrete situation. The reasons for gap 3 can include the following (Zeithaml, Bitner & Gremler, 2006; Gallifa & Batalle,2010):

- *Deficiencies in human resources management:* inadequate regrutation; unclear roles and conflict of interest; inadequate evaluation and reward systems; lack of teamwork, insufficient authorizations, etc.
- *Consumers do not cooperate in the right way:*consumers are not aware of their role and responsibility within the service process; consumershave a negative ipmact on one another.
- *Problems with service middleman:*conflicts regarding goals and performance; problems regarding quality and consistency control; conflicts regarding authorization and control.
- *Inadequate supply-demand match:*failure to alleviate demand extremes; inadequate consumer or segment selection; excessive relying on price in balancing demand.

GAP 4 implies the difference between the delivered service and the promises to consumers made via different most often external communication channels. The reasons for gap 4 can include the following (Zeithaml, Bitner & Gremler, 2006; Gallifa & Batalle, 2010):

- *Lack of integrated service marketing communications:* It is customary to cinsider any external communication independently; interactive marketing is not a part of the communication plan; lack of a developed internal marketing plan.

- *Inefficient consumer expectationsmanagement:* lack of consumer expectations management through each form of communication; consumers are not adequatly educated.
- *Overpromising:* overpromising through advertizing activites, personal sales, ambienceetc.
- *Inadequate horizontal communications:*insufficient communication between the sales team and the operations; inadequate communication between promotional campaign team and people in charge of operations; differences in policies and procedures in different branch offices within the company.

The main advantage of the above mentioned models for measuring service quality (SERVQUAL and GAP model) is the analytical character and the ability of management to determine the differences in quality on different levels, including an entire group of variables that can affect the service offer quality.They are externally oriented and start from the consumers' definition of quality and therefore, they enable the management to identify relevant quality factors from the consumer's perspective (Seth, Deshmukh & Vrat, 2005).

4.5 THE PERCEIVED VALUE

Consumer satisfaction is an emotional response obtained by comparsion of consumer service expectation and service perception. Considering this fact as well as the fact that consumer expectations are defined previously, it is necessary to define consumer perception, i.e. the way they have experienced the service. This will be no easy task considering the fact that the perception is affected by a number of general and specific factors.

Zeithaml (Zeithaml, 1988; Gallifa & Batalle,2010.) defines perceived value as the perceived service quality relative to the price a user is paying for the service. Heskett et al. (Heskett, Jones, Loveman, Sasser & Schelsinger, 1994.) begin from the fact that value implies results a user obtains as opposed to total expenses (price and other expenses a user bares within service demand).

Value can be considered as a result of the process of providing user satisfaction. Therefore, the prerequisite for achieving satisfaction is that a company creates and offers value to users (Wang & Lo, 2003) a value greater than that of a competitive company. It is the value that makes the users decide on the purchase and use of services. Customer satisfaction is thus created in interaction with a value-giving company, whereby users want to get the best ratio of the value obtained and the money invested. Each institution of higher education should strive to provide users-students with a service that will bring them greater value. In this way, it differentiates itself from its competitors, and can, through the satisfaction of the needs and wants of the users, affect their satisfaction and create long-term relationships with them.

Each higher education institution needs to thoroughly analyze elements that affect customer satisfaction, as it is the only way to provide users with what they want, and to create long-term relationships with them and ensure long-term market positioning and profitability.

4.6 METHOD OF DETERMINING STUDENT SATISFACTION IN INSTITUTIONS OF HIGHER EDUCATION

In order to determine how consumers react and how satisfied they are with a particular service, it is necessary to perform certain measurements and research, as well as to quantify the results. The goal of measuring satisfaction is to show the level of consumer satisfaction and achieve objectivization and quantification of subjective perceptions of consumers (Veljkovic, 2009; Gallifa & Batalle, 2010).Therefore, measurement and research of consumer satisfaction is carried out in institutions of higher education.

Many education institutions tend to improve their offer in order to attract more users. Focusing on customer satisfaction is what every institution should start from. Creating happier, satisfied users - whether they are students, their parents, donors, professors or employers - should be the primary goal that will contribute to quality in education institutions. User satisfaction is significant for the work of eachinstitution of higher education. The level of satisfaction is determined by the difference between the the service features, how they were experienced by the users and their expectations. There are three levels of satisfaction. If the service is below expectations, the user's dissatisfaction arises. If a faculty fails to meet what the students expects, the students will change their attitude towards the faculty and may leave or switch to another department or spread negative information about the college. On the other hand, if the faculty meets student’s expectations, a student will be satisfied and will become the best promoter of the faculty. If the characteristics of the institution exceed student’s expectations, a student will be very satisfied or delighted (Kotler & Fox, 1995; Vázquez, Aza & Lanero, 2016; Hrnjic, 2016).

In order to improve services and service quality in institutions of higher education, and thus achieve a higher level of student satisfaction, a number of models for measuring service quality are used. The most commonly used, SERVIQUAL model relies greatly on the GAP quality model, which measures service quality using five quality dimensions of institutions of higher education. The first problem for the institution is service user gap which is essentially a consequence of a user's dissatisfaction with a service. If a service meets expectations, a user will be satisfied, and vice versa. Sometimes a service exceeds user expectations (positive non-confirmation of the presumption), whereas the dissatisfaction is based on a statement that a user obtained less than expected from purchasing a service (negativenon-confirmation of the presumption) (Maricic, 2011; Vázquez, Aza & Lanero, 2016.).The service user gap implies a consequence of some of the four gaps of institutions of higher education, and the differences are most often a consquence of:*The misunderstanding of the actual service user expectations* the (management does not understand what students expect from a particular service- GAP 1). If the defined academic program is not efficient, the stategic course of service design and delivery is disturbed. The reasons are inefficient or non-existant marketing research, lack of veritical communication, insufficient socus on relationship development (lack of segmentation, focusing on transactions instead on lon-term relationships etc.), disregard for comments and complaints, etc.; *The difference between the way an education institution understands the student expectation and the ways it responds to their wants by creating its services and quality standards* (GAP 2). Knowledge needs to be transformed into an adequate service and service process, including efficiently defined and structured physical evidence. The set standards have to be defined with regard to service user’s wants and needs and their understanding of service quality, as opposed to internal specifications and criteria. Conflicts arise in the cases when stadards are not defined with regard to user requests, and when the physical evidence and physical elements are inadequate; Thedifference between the service defined by management (quality, standards, delivery methods) and the actual service delivery to students (GAP 3). This gap implies the professor-student interaction, and the interaction between student-service staff and students. The problems in these interactions arise due to an inadequate employee selection (teaching and non-teaching staff), inadwquate reward and evaluation systems, lack of activities towards students and parents, as associates in the service process; The difference between the delivered service and the promises to students made via different communication channels (GAP 4). Due to a dinamic competition, institutions of higher education use different communication methods to give larger promises that create overly great expectations with service users. The reasons are a lack of integrated marketing communications, inefficient management of service user expectation, overpromising, inadequate horizontal communication (Gajic, 2011).

Gerson confirms the oppinion that the user expectation research most often includes and solves three gaps that occur between those that develop teaching programs and their users. The first gapis between the actual and perceived needs – adequate academic programs are created and developed by adequate understanding of the market. Othervise, unexpected problems will occur that include insufficient interest for certain academic programs, students switch courses, dissatisfaction with academic process and curriculum, as well as bad grades. The second gap occursbetween given and received teaching programs – it is necessary to determine users' perception regarding characteristics of teaching programs due to the danger of subjective attitude of program creators towards programs created, as they would consider their beliefs rather than future students' expectations. The third gapimplies quality gap – most often the universities have internal mechanisms for evaluation of provided quality. Gerson considers that the service user perspective is the only accurate when it comes to quality (Maringe & Gibbs, 2009).

The mentioned gaps can only be significant if the institution of higher education invests resources and time into continual user satisfaction research. They could also enable the institution to transform from the introverted into the extroverted perspective that is more sensitive and adepted to change. Students and partners can often have completely different perceptions regarding characteristics of institutions of higher education. Students' parents can view a certain university as extraordinary, considering criteria such as academic results and the public reputation of the institution, whereas, on the other hand, their children can view the institution as inadequate considering their own criteria such as e.g. strict faculty rules or uninteresting lectures. Two people can assess the same characteristic differently due to different expectations and interpretations (Kotler & Fox, 1995; Hrnjic, 2016).

Due to aforementioned circumstances it is necessary for institutions to measure student satisfaction, as institutions of higher education have to view students as users and key actors. *Hill* suggests that students are primary university users, and the higher education implies a certain economic and social service. Researchers point out to the significance of these relationships and the overall orientation of the institution should be translated into the level of these relationships in order to be effective. According to *Gronroos* developing long-term relationships with students should be the marketing goal since the students are the most valuable university resource (Jurkowitsch, Vignali & Kaufmann, 2006; Vázquez, Aza & Lanero, 2016).

Measuring quality in different service businesses is above all, based on attributes such as intangibility,reliability, responsiveness, etc.The conventional approach regarding measuring of the attributes is not sufficient and *Littten*considers that students take serveral attributes into consideration when assessing the education service quality – the selection of faculty is based on some kind of holistic pragmatism. A few specific benefits and expenses are taken into consideration, however the final choice is mostly based on a feeling of wellbeing or a lack of discomfort, as well as on any type of rational calculation of expenses or benefits or on a systematic assessment of the institution's characteristics (Durvasula & Lysonski, 2011).

When a university treats students as most valuable users, which is a practice in contemporary business, the revolutional changes occur in the management of institutions of higher education. Student satisfaction should be the center of activities of institutions of higher education (a small number of universities regularly measures student satisfaction and most often the majority of results are not used for marketing planning, evaluation and control) (Jurkowitsch, Vignali & Kaufmann, 2006).

Research in this area do not show a consistent form for student satisfaction and so far, there was not a student satisfaction model that would be based not only on the temporary, but on the previous experience as well as on the expected future one. Considering the fact that the international competition regarding student recruitment has intensified, the diferentiation of service offer through quality management and developing strong relationships with students has become imperative for contemporary universities (Durvasula & Lysonski, 2011).

The question that arises concerns the method of student assessment of institutions of higher education; whether the focus is on the attrinutes (academic counseling, camps support, efficient taching programs and extraordinary service quality) or on the individual values. *Lages*and*Fernande*s were using *Zeithaml's* frameworkand*Rokeach* and*Kahle's*research to identify individual values regarding services in three broad groups of dimensions. The three levels are (Durvasula & Lysonski, 2011):

- The service value regarding personal satisfaction – this dimension is focused on an individual user -studentand his perception of service as personal satisfaction, a means for acquiring peacefulness, security, harmony; when a servcie improves the quality of live and the satisfaction and protects a person from the pressure and threats that can disrupt the harmony.

- The status values which provide social recognition and service values regarding social integrations–These two dimensions imply social recognition and status, respect from others allow an individual to demonstrate satisfaction with life;provide higher level of social integration, better relationships on different levels such as in social, family and professional life.

Evaluation of satisfaction in institutions of higher education at the very beginning was measured only with alumni and employees. Nowadays, the focus is on students since they represent key actors that affect the choices of other students, when it comes to college and society as a whole. The institution of higher education must find a way to promote and encourage student behavior in favor of the institution, more precisely to make theminto its promoters. According to numerous studies, the student satisfaction model is based on the fact that: the student is a special user in the specific service process and part of the development of the education service; the student satisfaction rate varies over time; student serves as a representation of a higher education institution around the world. Accordingly, in Austria, a survey was conducted to identify the characteristics of services and characteristics of universities in order to assess the level of student satisfaction (Gajic, 2011).

In this regard, a student satisfaction model was developed and tested on the basis of exchange. Spreng, Mec-Kenzie and Olshavsky distinguish between general and individual satisfaction, given that specific satisfaction does not precede overall satisfaction, and the overall satisfaction is based on the overall experience. Accordingly, the authors believe that what precedes students' satisfaction is based on four dimensions: characteristics of services, characteristics of universities, relations and position of the university. These dimensions precede the development of general student satisfaction. Positive or negative satisfaction should increase the likelihood of student reaction in some way. These reactions can lead to a change in attitudes toward the image of an institution of higher education or university, and word-of-mouth advertizing to provide good recommendations, warnings or complaints. The proposed model suggests that it is necessary that all service performance are positively correlated with student satisfaction (Jurkowitsch, Vignali & Kaufmann, 2006).

According to this student satisfaction model, one of the four dimensions on which student satisfaction is based is the *characteristics of universities* - researchers claim that students are satisfied with their academic products, but not with support services. As already mentioned, institutions of higher education within the university provide additional services other than academic ones. These support services are crucial for the successful completion of a study program for many students, as well as for the university itself and are one of the competitive advantages used by institutions, considering that they significantly contribute to student satisfaction. Amphitheatres, classrooms and other parts of university environment represent a network of related elements that affect student satisfaction. Therefore, it is necessary to continuously improve the quality of the service and to understand the value that is or is not providedby the competition. The other dimension is *relationships*. There are two factors that are relevant for a higher or lower degree of student satisfaction: bonding and empathy. The relationship is defined as the dimension of the relationship between the two sides - students and universities, who act in a united waytowards the desired goal.

Family, professors, university staff, reference groups, as well as social norms can affect the emotional attitude towards the institution. In the same way, empathy is defined as an attempt to understand someone's wishes and goals. Reciprocity in marketing relations is the basis of a relationship between students and university staff. A successful university in addition to retaining students is concentrating on attracting new ones. Satisfied studentsrepresent the main competitive advantage and they can become a marketing tool of a university. It is important to test this dimension, as significant marketing efforts are focused on communicating with clients. Universities have begun to evaluate the results of their education services and link them to the level of student satisfaction and this has allowed for a better student presentation to potential employers. Developing the image of the university through quality teaching, lecturers and study conditions ensures a competitive position in the service user awareness. Continuous improvement of basic and accompanying characteristics and performance of the university ensures the desired *positioning* (Jurkowitsch, Vignali & Kaufmann, 2006).

The promotion in this model of student satisfaction includes the following components: trust, dedication and future intentions of the alumni. Trust should result in a value outcome and it is associated with a long-term relationship, reciprocity and leads to cooperation, communication and negotiation. There is a positive relationbetween trust and commitment. For users with higher levels of trust and commitment, trust and commitment become central to their attitudes and beliefs. Trust and commitment are key to successful mediation and reflect the level of student satisfaction, because when they are present, they lead to an outcome that promotes efficiency, productivity and effectiveness. Commitment to the university produces loyalty - increased loyalty helps to ensure future income. If students' needs and expectations are recognized, it is realistic to expect that they wuold not only be attracted but retained as well, therefore a satisfied student has a positive effect on motivation of other students, retention of existing ones, recruitment of new ones and fundraising. Likewise, satisfied students using word-of-mouth advertizing reduce the cost of attracting new customers for the university and increase the overall reputation of the university, whereas dissatisfied students have the opposite effect. The former can also return as graduate students, they can recruit future students, or invest in their former institution (Jurkowitsch, Vignali & Kaufmann, 2006.).

Service characteristics have become central in marketing research, especially in combination with quality. In the context of higher education, the service characteristics that include implicit quality are affected by two factors: university professors and specific content of study programs (Jurkowitsch, Vignali & Kaufmann, 2006).

Jurkowitsch, Vignali and Kaufmann point to the results of the student satisfaction research that is the result of two components: teaching and factors of university experience. The teaching component is defined as a solely university product. The second component - the factors of university experience includes promotional activities and experimental factors. Experimental factors are divided into formal and personal. Formal include infrastructure and resources, and personal are a special treatment of students. The tested model of satisfaction indicates that the teaching dimension is 89% significant, and the factors of university experience are 93% significant. Researchers point out that promoting long-term relationships with key clients is the most important element of the strategy and this is the case with higher education services (Jurkowitsch, Vignali & Kaufmann, 2006; Jameel, 2018.).

According to the final model of satisfaction, student satisfaction is affected by dependent and independent factors. The model shows that student satisfaction consists of two components: teaching and factors of university experience. These are managers who show that the relationship with the university is crutial, emphasizing the importance of people in the environment whose activities affect each student and the degree of their satisfaction. Independent factors (student personality and general economic conditions) have a significant effect on student satisfaction. The positive effect of both factors leads to the desired satisfaction, or positive promotion, with the help of the activities of the alumni.

According to literature overview regarding the dependent variable of the research – student satisfaction, the following research hypotheses were set up:

Hypothesis 2 - Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree (general hypothesis).
Hypothesis 2.1 - Service quality affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.2 - Tuition fees affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.3 - Service distribution affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.4 - Promotion affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.5 - The human factor affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.6 – Physical evidence affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
Hypothesis 2.7 - Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).

4.7 CHAPTER SUMMARY

This chapter presents theoretical viewpoints related to the satisfaction of service users in general, as well as the satisfaction of students in institutions of higher education. In this way, the authors' views regarding one of the two dependent research variables are presented.

The stated viewpoints of relevant authors indicate that in order to improve and modify the teaching and learning it is necessary for higher education institutions to focus on the users in order to meet their expectations. Consequently, institutions of higher education should pay special attention to the personal values of students, to the analysis of the decision-making process when enrolling at faculties, primarily focusing on the delivery of service quality. Defining appropriate satisfaction models allows for a better understanding of the decision-making process and all the factors that affect the student satisfaction and opinion, which enables the institution of higher education to more effectively adapt its offer to market demands. Using different satisfaction models, as well as researching and measuring student satisfaction in institutions of higher education, can have a great effect on the development and improvement of marketing mix instruments as a factor in improving the image of institutions of higher education and the satisfaction of students - users of its services.

4.8 SECTION SUMMARY

This section presents theoretical overview of a number of perspectives of different authors regarding research variables, as well as the current state of education in Spain and Serbia.

Section begins with introduction and an overview of the current state of education in Serbia and Spain. Afterwards, the theoretical perspectives are given regarding independent research variable – marketing mix instruments and their specific nature in the field of higher education followed by the overview of theoretical standpoint regarding two dependent variables – the image of institutions of higher education and student satisfaction and their specific nature in institutions of higher education.

The presented overview of theoretical standpoints have served as a valid basis for setting up the research hypotheses. The table below presents the hypotheses summary.

Table 4. The hypotheses summary

H1	**Marketing mix instruments affect the image of institutions of higher education to a large degree (generalhypothesis)**.
H1.1 Service quality affects the image of institutions of higher education to a large degree (specific hypothesis).	
H1.2 Tuition fees affect the image of institutions of higher education to a large degree (specific hypothesis).	
H1.3 Service distribution affects the image of institutions of higher education to a large degree (specific hypothesis).	

H1.4 Promotion affects the image of institutions of higher education to a large degree (specific hypothesis).	
H1.5 The human factor affects the image of institutions of higher education to a large degree (specific hypothesis)	
H1.6 Physical evidence affects the image of institutions of higher education to a large degree (specific hypothesis)	
H1.7 Flow of activities and service process quality affect the image of institutions of higher education to a large degree (specifichypothesis).	
H2	**Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree (general hypothesis).**
H2.1 Service quality affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).	
H2.2 Tuition fees affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).	
H2.3 Service distribution affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).	

H2.4 Promotion affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
H2.5 The human factor affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
H2.6 Physical evidence affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).
H2.7 Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).

The following section describes the methods, techniques and procedures used to empirically assess the hypothesized relationships specified in the research.

SECTION 2. EMPIRICAL FRAMEWORK

CHAPTER 5: THE EMPIRICAL RESEARCH METHODOLOGY

5.1 INTRODUCTION

After defining the research hypotheses, this chapter introduces the layout of the empirical research that provides information about the relevant variables in the hypotheses. The following chapter explains how data are collected and analyzed, covering topics such as selection of statistical techniques, design of questionnaires, or selection of information sources.

The first segment shows research variables that are connected within the set hypotheses. Therefore, one independent variable – marketing mix instruments, and two dependent variables – the image of the higher education institutions and student satisfaction, are defined and schematically shown.

The general approach is quantitative, having obtained data through questionnaire. The second section of this chapter reveals the criteria used for the sample and discusses the relevance of the selected unit of analysis for the purposes of this research. In addition, it defines the data collection strategy followed to obtain information. Likewise, this chapter demonstrates the structure of the questionnaire used for research data collection.

Finally, the third section shows statistical analysis that was used to analyze the data obtained. The analysis were used to generate conclusions regarding the effect the independent variable has on the dependent variables and to finally, test the set hypotheses.

5.2 DEFINING THE RESEARCH VARIABLE

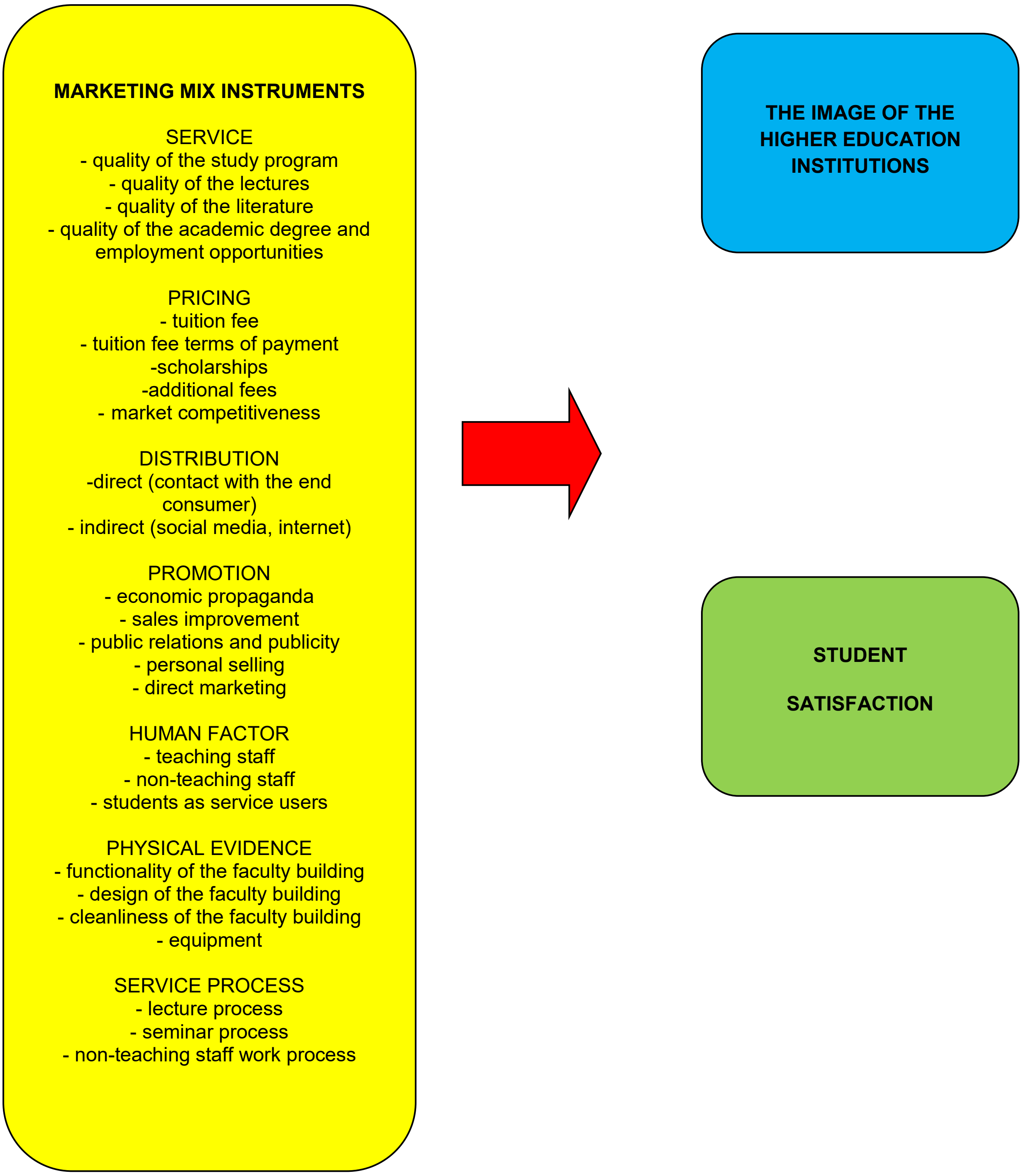
The research on marketing mix instruments as factors of improvement image of higher education institutions and student satisfaction, primarily examines the relation between marketing mix instruments and the image of the higher education institutions and student satisfaction. The following variables were defined:

- marketing mix instruments (independent variable),
- the image of the higher education institutions (dependent variable),
- student satisfaction (dependent variable).

The aim is to determine the degree to which marketing mix instruments as an independent variable are affecting the dependent variables – the image of the higher education institutions and student satisfaction. The results would help to determine which marketing mix instruments need to be improved in order to achieve the improvement in the image of the higher education institutions and student satisfaction, which would positively affect the business of the higher education institution as a consequence. Research variables are schematically shown in figure 2.

-

Figure 2. Research variables



Source: **Author**

5.3 DATA COLLECTION AND SAMPLING

This section demonstrates the procedure used to obtain data on the variables included in this study. Therefore, the first part shows the structure of the sample. Secondly, the data collection strategies and technical details of the empirical research are described. Finally, the third segment defines the structure of the questionnaire that was used to collect data – student survey.

5.3.1 Defining the sample the sociodemographic characteristics of the sample

The research was conducted at the faculties in two countries – The Republic of Serbia (703; 78.5%) and Spain (193; 21.5%). The entire sample includes 896 respondents.

Regarding the gender of the respondents, the sample consists of 386 (43.1%) male, and 510 (56.9) female respondents. The sample included 20 to 60-year-olds, with an average age of 29.10 years (SD = 5.41). The sample includes 165 (19.3%) first-year students, 208 (23.2%) second-year students, 240 (26.8%) third-year students, 227 (25.3%) fourth-year students and 17 (1.9%) fifth-or-higher-year students. 39 (4.4%) respondents didn't give answers to the question regarding the year of study. When it comes to the average grade of the respondents, it ranged from 5 to 10, with an average value of 7.85 (SD = 0.95). A detailed overview of the structure of the sample is demonstrated in table 5.

Table 5. The sociodemographic characteristics of the sample

		N	%	Min	Max	AM	SD
Gender	Male	386	43.08				
	Female	510	56.92				
Year of study	First	165	18.42				
	Second	208	23.21				
	Third	240	26.79				
	Fourth	227	25.33				
	Fifth +	17	1.90				
	No answer	39	4.35				
Age				20	62	29.10	5.41
Average grade				5	10	7.86	0.96

Legend. N – number of respondents. % - percentage of respondents. Min – minimum value. Max – maximum value. AM – arithmetic mean. SD – standard deviation.

In the Republic of Serbia, the research was conducted at four private faculties within the private University Business Academy in Novi Sad, which include the following:

- Faculty of Economics and Engineering Management in Novi Sad,
- Faculty of Law for Commerce and Judiciary in Novi Sad,
- Faculty of Stomatology in Pančevo and
- Faculty for Applied Management in Belgrade.

Regarding the gender of the respondents, the sample consists of 322 (45.8%) male, and 381 (54.2) female respondents. The sample included 20 to 59-year-olds, with an average age of 29.42 years (SD = 4.97). Regarding the faculty, 226 (32.1%) students attend the Faculty of Economics and Engineering Management in Novi Sad, 231 (32.9%) students attend the Faculty of Law for Commerce and Judiciary in Novi Sad, 164 (11.7%) students are from the Faculty of Stomatology in Pančevo, and 85 (11.7%) students are from the Faculty for Applied Management in Belgrade. The sample is even regarding the year of study, with 156 (22.2%) first-year students, 161 (22.9%) second-year students, 156 (22.2%) third-year students, and 191 (27.2%) fourth-year students. The average grade of the respondents ranged from 5 to 10, with an average value of 8.07 (SD = 0.90). A detailed overview of the structure of the sample is demonstrated in table 6.

Table 6. Characteristics of the sample collected in the Republic of Serbia

		N	%	Min	Max	AM	SD
Gender	Male	322	45.80				
	Female	381	54.20				
Year of study	First	156	22.19				
	Second	161	22.90				
	Third	156	22.19				
	Fourth	191	27.17				
Faculty	Fimek	226	32.15				
	Law	231	32.86				
	Stomatology	164	23.33				
	MEF	82	11.66				
Age				20	59	29.42	4.98
Average grade				5	10	8.07	0.90

Legend. N – number of respondents. % - percentage of respondents. Min – minimum value. Max – maximum value. AM – arithmetic mean. SD – standard deviation. FIMEK- Faculty of Economics and Engineering Management. Law - Faculty of Law for Commerce and Judiciary in Novi Sad. Stomatology- Faculty of Stomatology in Pančevo. MEF - Faculty for Applied Management in Belgrade.

The sample is suitable and a volunteer sampling method is used. The research was conducted during one semester (summer). The survey was anonymous and group.

In Spain the survey was conducted at two public faculties within the public Universitat Jaume I in Castellon de la Plana, which include the following:

- Facultad de Ciencias de la Salud
- Facultad de Ciencias Jurídicas y Económicas.

Regarding the gender of the respondents, the sample consists of (33.2%) male, and 129 (66.8) female respondents. The sample included 20 to 62-year-olds, with an average age of 26.28 years (SD = 4.97). Regarding the faculty, 94 (48.7%) students attend the Facultad de Ciencias Juridicas y Economicas, whereas 99 (51.3%) students are from the Facultad de Ciencias de la Salud. The largest number of respondents are third-year students (84; 43.5%), second-year students (47; 24.4%), and fourth year students respectively (36, 18.7%). First-year students are fewer (9; 4.7%), as well as five and higher-year students (17; 8.8%). The average grade of the respondents ranged from 5 to 10, with an average value of 7.24 (SD = 0.82). A detailed overview of the sample structure is demonstrated in table 7.

Table 7. Characteristics of the sample collected in Spain

		N	%	Min	Max	AM	SD
Gender	Male	64	33.16				
	Female	129	66.84				
Year of study	First	9	4.66				
	Second	47	24.35				
	Third	84	43.52				
	Fourth	36	18.65				
	Fifth +	17	8.81				
Faculty	FCJE	94	48.70				
	FCS	99	51.30				
Age				20	62	26.29	7.80
Average grade				5	10	8.07	0.90

Legend. N – number of respondents. % - percentage of respondents. Min – minimum value. Max – maximum value. AM – arithmetic mean. SD – standard deviation. FCJE - Facultad de Ciencias Juridicas y Economicas. FCS - Facultad de Ciencias de la Salud.

The sample is suitable and the volunteer sampling method was used as in the Republic of Serbia. In Spain, the survey was conducted using the online questionnaire, while students in the Republic of Serbia responded to questions via a printed questionnaire in paper form. The sample includes students of all years of studies at the above faculties. The research was conducted during one semester (winter). The questionnaire was online and anonymous.

5.3.2 Procedure for data collection

In accordance with the previously defined hypotheses, the primary purpose, object and goals of the research, the appropriate theoretical and methodological framework of the research was set.

The theoretical framework is conditioned by the methodological framework, which as a set of methods will determine the method of conducting research and collecting scientific facts. Examination of the validity of a defined hypothetical framework requires the use of methods and techniques or research instruments that will ensure the access to relevant data, as well as their processing and integration into certain thought processes and conclusions. Therefore, the research will use several different research methods and techniques, such as the survey method, using questionnaire techniques. The questions in the questionnaire will be closed and the questionnaire will be anonymous.

The research was carried out by the method of theoretical analysis and the empirical method, the so-called research method. The empirical research method had the primary goal, which was the collection of facts about the current situation, as well as their subsequent analysis. The empirical research was conducted in three phases: data collection, preparation of data for analysis, and statistical analysis. The survey method was used to collect concrete data and facts from the respondents via print and online questionnaires. The non-standardized survey questionnaire was used as an instrument for data collection (in the attachment). It was specifically designed for the research, with closed question types. The results acquired using this and other adequate statistical methods, were compared with the information obtained using theoretical analysis method, which ensured more comprehensive conclusions and recommendations.

Statistical methods are relevant to the research as they provide an accurate insight as well as precise results, which then, allow for a clear understanding of the correlation between marketing mix instruments and the image of higher education institutions and student satisfaction. The results also show the degree to which marketing mix instruments affect the image of higher education institutions and student satisfaction. The following statistical methods were used: frequency sampling method, descriptive statistical measures, correlation analysis, multiple regression analysis, and t - test for independent samples. In this way, we obtained relevant and quantitative statistical data in order to prove or disprove formulated hypotheses.

5.3.3 Structure of the questionnaire

The survey method was used for the purpose of the research on marketing mix instruments as factors of improvement image of higher education institutions and student satisfaction. The instrument used in a survey is a non-standardized questionnaire, designed specifically for this research. By using detailed analysis of theoretical data resources and consulting relevant authors' works, (Veljković ,2009; Masserini, Bini, Pratesi, 2018; Wilkins & Huisman, 2015; Yu-Chuan Chen, 2015; Aghaz, Hashemi & Sharifi Atashgah, 2015; Gallifa & Batallé, 2010;

Osman, Saputra & Luis, 2018.) key sections, factors and features were formulated. Based on those, the questionnaire was formulated containing questions whose answers would lead to the ability to process the data and obtain the results needed.

The first part of the questionnaire contains 5 general questions which serve to obtain detailed information on respondents, i.e. the sample. The questions refer to: gender, birth year, the faculty the respondent is attending, year of study, and average grade of the respondents. This information was used only for the purpose of the descriptive analyses.

The questionnaire is compiled of 72 items to which the respondents give a response relative to the degree of agreement with the statement on the scale from 1 to 7 (1- I totally disagree, 7 – I agree completely). Regarding the research variables, the questionnaire is divided into 3 thematic sections:

1. Marketing mix instruments. The first segment deals with the independent research variable – marketing mix instruments. Utilizing different combinations of marketing mix instruments can lead to improving competitive advantage in the education market, improving the image of higher education institutions and student satisfaction. Therefore, each instrument is highlighted separately within this segment. This segment consists of 56 closed type questions, i.e. statements that can be marked on the scale from 1 to 7. The respondents' answers will be used to either prove or disprove the following hypotheses: *hypothesis 1 - Marketing mix instruments affect the image of institutions of higher education to a large degree, and hypothesis 2 - Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree.* The section is divided into 7 subsections that deal with each of the marketing mix instruments separately:

- *Service* – The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.1. Service quality affects the image of institutions of higher education to a large degree,* and *hypothesis 2.1. Service quality affects the student satisfaction in institutions of higher education to a large degree;*
- *Price* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.2. Tuition fees affect the image of institutions of higher education to a large degree,* and *hypothesis* 2.2 *Tuition fees affect the student satisfaction in institutions of higher education to a large degree;*

- ❖ *Distribution* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.3 Service distribution affects the image of institutions of higher education to a large degree,* and *hypothesis 2.3 Service distribution affects the student satisfaction in institutions of higher education to a large degree;*
- ❖ *Promotion* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.4 Promotion affects the image of institutions of higher education to a large degree,* and *hypothesis 2.4 Promotion affect s the student satisfaction in institutions of higher education to a large degree;*
- ❖ *Human factor* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.5 The human factor affects the image of institutions of higher education to a large degree,* and *hypothesis 2.5 The human factor affects the student satisfaction in institutions of higher education to a large degree.*
- ❖ *Physical evidence* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.6 Physical evidence affects the image of institutions of higher education to a large degree, and hypothesis 2.6 Physical evidence affects the student satisfaction in institutions of higher education to a large degree.*
- ❖ *Service process* - The respondents' answers to 8 questions within this subsection will either prove or disprove the following hypotheses: *hypothesis 1.7 Flow of activities and service process quality affect the image of institutions of higher education to a large degree, and hypothesis 2.7 Flow of activities and service process quality affect the student satisfaction in institutions of higher education to a large degree.*

2. The image of institutions of higher education. The second segment deals with the dependent research variable – the image of institutions of higher education. The segment consists of 8 closed type questions, i.e. statements which can be marked on the scale from 1 to 7. The respondents' answers to questions asked will either prove or disprove the following hypothesis *1 - Marketing mix instruments affect the image of institutions of higher education to a large degree,* as well as the hypotheses derived from this, general hypothesis: *1.1. Service quality affects the image of institutions of higher education to a large degree; 1.2. Tuition fees affect the image of institutions of higher education to a large degree; 1.3. Service distribution affects the image of institutions of higher education to a large degree; 1.4. Promotion affects the image of institutions of higher education to a large degree; 1.5.The human factor affects* *the image of institutions of higher education to a large degree.1.6. Physical evidence affects the image of institutions of higher education to a large degree; 1.7. Flow of activities and service process quality affect the image of institutions of higher education to a large degree.*

3. Student satisfaction. The third segment deals with the dependent research variable – student satisfaction. The segment consists of 8 closed type questions, i.e. statements which can be marked on the scale from 1 to 7. The respondents' answers to questions asked will either prove or disprove the following *hypothesis 2 - Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree,* as well as the hypotheses derived from this, general hypothesis: *2.1. Service quality affects the student satisfaction in institutions of higher education to a large degree; 2.2. Tuition fees affect the student satisfaction in institutions of higher education to a large degree; 2.3. Service distribution affects the student satisfaction in institutions of higher education to a large degree; 2.4. Promotion affect s the student satisfaction in institutions of higher education to a large degree; 2.5. The human factor affects the student satisfaction in institutions of higher education to a large degree. 2.6. Physical evidence affects the student satisfaction in institutions of higher education to a large degree; 2.7. Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree.*

Internal consistency (reliability) of seven dimensions of the questionnaire marketing mix instruments and the questionnaire the image of institutions of higher education and student satisfaction is estimated based on the Cronbach α coefficient. α coefficient is used to estimate the internal consistency, i.e. reliability of the test/scale. It ranges from 0.00 to 1.00 and represents an estimate of the extent to which the dimensions of a single dimension measure the same construct. The α coefficient values for the applied questionnaires and their dimensions are presented in the table 8, and they range from .854 to .915. With regards to the criteria proposed by Cho & Kim (2015) the reliability of all dimensions is very high.

Table 8. The reliability of the dimensions of questionnaires marketing mix instruments, the image of institutions of higher education and student satisfaction

Instrument	Dimension	α
Marketing mix instruments	Service	0.854
	Pricing	0.893
	Distribution	0.875
	Promotion	0.952
	Human factor	0.912
	Physical evidence	0.915
	Service process	0.903
The image of institutions of higher education		0.932
Student satisfaction		0.939

5.4 STATISTICAL PROCEDURE

The data collected using the described instrument are analyzed using the program SPSS for Windows, v21 (SPSS inc., 2012). Being numeric, the data didn't need to be encoded. The following methods were used throughout analysis: frequency sampling method, descriptive statistics (arithmetic mean, standard deviation, skewness and kurtosis), correlation analysis (the Pearson correlation coefficient), multiple regression analysis and t – independent samples test. The results of the research are presented numerically and shown in the form of a graph or a table.

Descriptive statistics measures are elementary measures that describe the sample on the basis of the data collected. Those can include the simplest counting, percentage overviews, different dimensions of the central tendency. In this analysis, the arithmetic mean, standard deviation, skewness and kurtosis were used. With this statistical method, we are able to discover the students assessment of marketing mix instrument (the overall faculty service offer, price, distribution, promotion, human factor, physical evidence and service process), as well as the image of the faculty in the public and student satisfaction, all of which are presented in the results bellow.

Correlation analysis determines the degree of correlation between the phenomena presented by the values of numerical variables. The analysis of the degree and strength of the statistical relationship between phenomena consists in determining the corresponding statistical indicators or correlation coefficients. Correlation coefficient is a standardized measure of the strength of the statistical link between phenomena presented by two quantitative variables (Kovačić, 1998). The Pearson correlation coefficient formula is a covariance of standardized values of variables x and y. It ranges from minus one to plus one. Zero coefficient value indicates that there is no linear correlation between phenomena, plus one value indicates that the correlation is strong and positive, while minus one indicates strong, negative correlation. The closer the coefficient value gets to one, the stronger the correlation is. Low value doesn't necessarily indicate weak correlation between phenomena because the connection between phenomena can be weak but curvilinear, in which case the application of the correlation coefficient isn't suitable. The application of this analysis will provide an insight into the direction and strength of the correlation between the individual dimensions of marketing mix instruments with the image of the faculty and student satisfaction.

Regression analysis is a statistical technique that allows us to examine the relationship between several independent or predictor variables. It is based on the effect, and therefore it tells us about the effect, but not about the causality of the link between the predictor and the criterion variable. It provides insight into how precisely the set of variables (predictor) can predict the specific outcome (criterion variable), as well as which predictor variable provides the most accurate prediction (criterion variable) (*Electronic Statistics Textbook*, 2013). The application of this analysis will identify the dimensions of marketing mix instruments that present the most accurate indicators for the image of the faculty and student satisfaction.

Correlation and regression analysis examine the correlation between variables and cannot be interpreted by causality link. Correlation does not imply that one variable is dependent and the other is independent, it suggests that the two variables are linearly correlated. It can be interpreted as symmetrical: correlation between X and Y is the same as the one between Y and X, whereas, in the case of regression analysis, we start by assuming a certain relationship between variables: a dependent (Y) and the other one(s) independent (X_1, X_2…). The dependent is called criterion variable, whereas independent variables are called predictor variables. Regression analysis allows us to predict the dependent (criterion) variable based on the set of independent, predictor variables.

In order to examine the potential differences between subsample from the two countries (Serbia and Spain), within the context of marketing mix instruments, the image of the institutions of higher education and student satisfaction, descriptive statistical measures, and series of t – independent samples tests will be applied. Descriptive analysis and T – tests are carried out with an aim to identify potential differences between subsample from Serbia and Spain. The differences were analyzed based on the assessment of marketing mix instruments, the image of higher education institutions and student satisfaction. The purpose of the analysis was to determine the assessment of relevant marketing mix instruments in faculties in Serbia and in faculties in Spain, as well as to establish if there is a need for the improvement of the instruments. Likewise, the analysis provided insight into the difference between the assessment of the image of higher education institutions and student satisfaction of each subsample separately, which provided clear insight into the current state of affairs in faculties in two countries (Serbia and Spain).

5.5 CHAPTER SUMMARY

In this chapter, the empirical research design is described. Due to this, the first part of the chapter deals with defining of the research variable. Second part describes the sample data collection procedures, within which the sample and the data collection procedure is described, along with the structure of the questionnaire that was used as research instrument. Finally, the third section of the chapter refers to the statistical procedure that will be used to test the hypotheses in the next chapter.

In the following chapter, the data collected using printed and online questionnaire will be processed using the statistical methods mentioned, in order to test the set hypotheses and reach adequate conclusions concerning research variable

CHAPTER 6: RESULTS OF THE EMPIRICAL RESEARCH

6.1 INTRODUCTION

This chapter presents the results obtained in the statistical analysis. The first segment presents the results obtained in the descriptive analysis which included analysis of the assessment of marketing mix instruments, the image of higher education institutions and student satisfaction of the observed sample.

The second and the third segment present the correlation analysis results. The analysis was conducted in order to analyze the correlation between marketing mix instruments and the image of higher education institution, as well as to analyze the correlation between marketing mix instruments and student satisfaction of the observed sample.

The fourth and fifth result segments present the regression analysis results. The analysis was conducted in order to analyze the effect of marketing mix instruments on the image of higher education institutions, as well as the effect of marketing mix instruments on student satisfaction of the observed sample.

Sixth segment presents the comparative overview of the results obtained of the subsamples of respondents from the Republic of Serbia and Spain, separately. This section compares results obtained from the subsample from the Republic of Serbia to the results obtained from the subsample from Spain. The results are compared by descriptive statistics parameters, and by testing the differences between groups.

6.2 ANALYSIS OF THE ASSESSMENT OF MARKETING MIX INSTRUMENTS, THE IMAGE OF HIGHER EDUCATION INSTITUTIONS AND STUDENT SATISFACTION: DESCRIPTIVE ANALYSIS

Descriptive analysis was conducted in order to analyze the assessment of marketing mix instruments, image of higher education institutions and student satisfaction. Descriptive statistics parameters (arithmetic mean, minimum and maximum value and standard deviation), for seven marketing mix instruments, image of higher education institutions and student satisfaction, are presented in table 9 .The value of parameters that indicate the distribution form (skewness and kurtosis presented in table 9), are within the range of recommended values (±1.5; Tabachnick & Fidell, 2013). Therefore, it can be concluded that the distribution of scores is within the normal distribution range, on all tested questionnaires.

Table 9. Descriptive statistics parameters

		Min	Max	AM	SD	Sk	Ku
Marketing mix instruments	Service	8	56	42.76	8.61	-0.52	0.26
	Price	8	56	36.34	12.11	-0.33	-0.54
	Distribution	8	56	46.23	8.61	-0.90	0.60
	Promotion	8	56	36.07	13.54	-0.42	-0.77
	Human factor	8	56	42.61	9.73	-0.55	-0.12
	Physical evidence	8	56	42.81	11.08	-0.99	0.66
	Service process	8	56	41.98	9.84	-0.49	-0.14
The image of higher education institutions		8	56	40.59	10.73	-0.55	0.03
Student satisfaction		8	56	42.96	10.76	-0.72	0.02

Legend. Min – minimum value. Max – maximum value. AM – arithmetic mean. SD – standard deviation. Sk – skewness. Ku – kurtosis.

According to the results presented in table 9, regarding the arithmetic mean value of the observed sample, **distribution** received the highest assessment grade (AM = 46.23). **Student satisfaction** (AM = 42.96), **physical evidence** (AM = 42.81), **service** (AM = 42.76), **human factor** (AM = 42.61), **service process** (AM = 41.98) and **the image of higher education**

institutions (AM = 40.59) received medium assessment grades. The lowest assessment grades are shown regarding **price** (AM = 36.34) and **promotion** (AM = 36.07).

The following results were obtained regarding the assessment of each marketing mix instrument compared to the image of higher education institutions and student satisfaction:

- ❖ While the service, the image of higher education institutions and student satisfaction received medium assessment grades, the service received somewhat higher grade (AM = 42.76) compared to the image of higher education institutions (AM = 40.59), and somewhat lower grade compared to the student satisfaction (AM = 42.96).
- ❖ When it comes to the assessment of the price, it received lower grade (AM = 36.34) both compared to the image of higher education institutions (AM = 40.59) and to the student satisfaction (AM = 42.96), which received medium assessment grades.
- ❖ Distribution received the highest assessment grade of the sample observed (AD = 46.23), therefore it received better assessment compared to the image of higher education institutions (AM = 40.59) and compared to the student satisfaction (AM = 42.96).
- ❖ The lowest assessment is noticed within promotion (AM = 36.07), therefore, it received lower assessment compared to the image of higher education institutions (AM = 40.59), and compared to the student satisfaction (AM = 40.59).
- ❖ While the human factor, the image of higher education institutions, and student satisfaction all received medium assessment grades, human factor received slightly higher grades (AM = 42.61) compared to the image of higher education institutions (AM = 40.59), and somewhat lower, compared to the student satisfaction (AM = 42.96).
- ❖ While the physical evidence, the image of higher education institutions and student satisfaction all received medium assessment grades, physical evidence received somewhat higher grades (AM = 42.81) compared to the image of higher education institutions (AM = 40.59), and somewhat lower grades compared to the student satisfaction (AM = 42.96).
- ❖ While the service process, the image of higher education institutions, and the student satisfaction received medium assessment grades, the service process received somewhat higher grades (AM = 41.98) compared to the image of higher education institutions (AM = 40.59), and somewhat lower compared to the student satisfaction (AM = 42.96).

6.3 ANALYSIS OF THE CORRELATION BETWEEN MARKETING MIX INSTRUMENTS AND THE IMAGE OF HIGHER EDUCATION INSTITUTIONS: CORRELATION ANALYSIS

The correlation analysis was conducted in order to analyze the correlation between marketing mix instruments and the image of higher education institutions. The correlation was analyzed using the Pearson correlation coefficient. The results are presented in table 10. All seven marketing mix instruments achieve statistically significant and positive correlation with the image of higher education institutions. Correlations range from moderate to moderately large (the Pearson correlation coefficient r ranges from .53 to .75).

Table 10. The correlation between marketing mix instruments and the image of HEI

	The image of higher education institutions
Service	.676*
Price	.541*
Distribution	.535*
Promotion	.590*
Human factor	.683*
Physical ambience	.645*
Service process	.749*

*Significant for the level of $p < .01$-

According to the results presented in table 10 the image of higher education institutions achieves the largest correlation with:

- service process (the Pearson correlation coefficient r = .75)
- human factor (the Pearson correlation coefficient r = .68),
- service (the Pearson correlation coefficient r = .68) i
- physical evidence (the Pearson correlation coefficient r = .65).

Somewhat smaller, yet still moderately large correlations are achieved with:

- promotion (the Pearson correlation coefficient r = .59)
- price (the Pearson correlation coefficient r = .54) i
- distribution (the Pearson correlation coefficient r = .54).

Within the context of the set hypotheses, the correlation analysis results lead to the conclusion that all separate hypotheses (H1.1; H1.2; H1.3; H1.4; H1.5; H1.6 i H1.7) are confirmed.Therefore, according to the correlation analysis results, the general hypothesis H1 is confirmed.

6.4 ANALYSIS OF THE CORRELATION BETWEEN MARKETING MIX INSTRUMENTS AND STUDENT SATISFACTION: CORRELATION ANALYSIS

The correlation analysis was conducted in order to analyze the correlation between marketing mix instruments and student satisfaction. The correlation was analyzed using the Pearson correlation coefficient. The results are presented in table 11. All seven marketing mix instruments achieve statistically significant and positive correlation with student satisfaction. Correlations range from moderate to moderately large (the Pearson correlation coefficient r ranges from .46 to .77).

Table 11. The correlation between marketing mix instruments and student satisfaction

	Student satisfaction
Service	.715*
Price	.560*
Distribution	.620*
Promotion	.463*
Human factor	.735*
Physical evidence	.631*
Service process	.769*

*Significant for the level of p < .0

According to the results presented in table 11, the student satisfaction achieves the largest correlation with:

- service process (the Pearson correlation coefficient r = .77)
- human factor (the Pearson correlation coefficient r = .73) i
- service (the Pearson correlation coefficient r = .71).

Somewhat smaller, yet still moderately large correlations are achieved with:

- physical evidence (the Pearson correlation coefficient r = .63)
- distribution (the Pearson correlation coefficient r = .62)
- price (the Pearson correlation coefficient r = .56) i
- promotion (the Pearson correlation coefficient r = .46).

Within the context of the set hypotheses, the correlation analysis results lead to the conclusion that all separate hypotheses (H2.1; H2.2; H2.3; H2.4; H2.5; H2.6 i H2.7) are confirmed. Therefore, according to the correlation analysis results, the general hypothesis H2 is confirmed.

6.5 ANALYSIS OF THE EFFECT OF MARKETING MIX INSTRUMENTS ON THE IMAGE OF HIGHER EDUCATION INSTITUTIONS: MULTIPLE REGRESSION ANALYSIS

The multiple regression analysis was conducted in order to analyze the effect of marketing mix instruments on the image of higher education institutions. The aim of the analysis was to identify which marketing mix instruments predict the image of the higher education institution most efficiently. In this case, marketing mix instruments present independent (predictor) variables, whereas the image of higher education institution is the criterion variable.

Table 12. The regression model parameters: criterion the image of higher education institutions

	Sum of squares	Degree of freedom	Mean square	F	Significance level	R	R^2	Adjusted R^2
Regression	103071.9	895	9666.3	242.4	.000[b]	.810[a]	.656	**.654**

Within table 12, the adjusted R^2 (the coefficient of determination) indicates what percentage of the variance of criterion variable is explained by the set of predictor variables. The regression model is statistically significant, which is confirmed by the F- test ($F (895) = 242.5$, $p < .001$), whereby the set of predictors can explain 65.4% of the variance of criterion variable – therefore marketing mix instruments explain 65.4% (adjusted $R^2 = .654$) of the variance of the image. According to the percentage of the explained variance, it is concluded that the set of predictors is strongly correlated to the criterion variable.

Table 13. Marketing mix instruments as predictors of the image of higher education institutions

Predictors	B	SE	Beta	t - test	p value
Service	.221	.040	**.177**	5.537	**.000**
Price	-.051	.026	-.058	-1.855	.064
Distribution	.006	.035	.005	.163	.870
Promotion	.194	.021	**.244**	9.164	**.000**
Human factor	.129	.040	**.117**	3.260	**.001**
Physical evidence	.134	.030	**.138**	4.509	**.000**
Service process	.367	.044	**.337**	8.270	**.000**

Legend. B – Non-standardized coefficient. SE – standard error. Beta – standardized coefficient.

The contribution of each separate predictor is presented in table 13, therefore the table presents the effect of each separate marketing mix instrument on the image of higher education institutions. The standardized coefficient beta indicates the level of contribution of each predictor of the faculty image. The greatest effects in the image prediction are achieved by the **service process** ($\beta = .34$, $p < .001$) **and promotion** ($\beta = .24$, $p < .001$), somewhat smaller effect is achieved by the **service** ($\beta = .17$, $p < .001$) and **physical evidence** ($\beta = .14$, p < .001), whereas the **human factor** (β = .12, p < .01) achieves the smallest effect in the image prediction. All significant predictors achieve a positive correlation with the criterion variable. **Price** and **distribution** are not significant predictors of the image of a higher education institution.

According to the regression analysis results, it is concluded that hypotheses H1.1, H1.4, H1.5, H1.6 i H1.7 are confirmed. Hypotheses H1.2 and H1.3 are not confirmed. Altogether, the general hypothesis H1 is confirmed.

6.6 ANALYSIS OF THE EFFECT OF MARKETING MIX INSTRUMENTS ON STUDENT SATISFACTION: MULTIPLE REGRESSION ANALYSIS

The multiple regression analysis was conducted in order to analyze the effect of marketing mix instruments on student satisfaction. The aim of the analysis was to identify which marketing mix instruments predict the student satisfaction most efficiently. In this case, marketing mix instruments present independent (predictor) variables, whereas the student satisfaction is the criterion variable.

Table 14. The regression model parameters: criterion student satisfaction

	Sum of squares	Degree of freedom	Mean square	F	Significance level	R	R^2	Adjusted R^2
Regression	103541.6	895	9953.763	261.003	.000[b]	.820[a]	.673	**.670**

Within table 14, the adjusted R^2 (the coefficient of determination) indicates what percentage of the variance of criterion variable is explained by the set of predictor variables. The regression model is statistically significant (F (895) = 261.0, p < .001), whereby the set of predictors can explain 67.0% of the variance of criterion variable – therefore marketing mix instruments explain 67.0 % (adjusted R^2 = .670) of the variance of satisfaction. According to the percentage of the explained variance, it is concluded that the set of predictors is strongly correlated to the criterion variable.

Table 15. Marketing mix instruments as predictors of student satisfaction

Predictors	B	SE	Beta	t - test	p value
Service	.270	.039	**.216**	6.900	**.000**
Price	.045	.026	.051	1.776	.076
Distribution	.122	.034	**.098**	3.565	**.000**
Promotion	.006	.021	.008	.296	.767
Human factor	.215	.039	**.195**	5.556	**.000**
Physical evidence	.125	.029	**.129**	4.300	**.000**
Service process	.287	.043	**.262**	6.600	**.000**

Legend. B – non-standardized coefficient. SE – standard error. Beta – standardized coefficient.

The contribution of each separate predictor is presented in table 15 therefore the table presents the effect of each separate marketing mix instrument on student satisfaction. The standardized coefficient beta indicates the level of contribution of each predictor of student satisfaction. The greatest effects in the image prediction are achieved by the **service process** ($\beta = .26$, $p < .001$) and **service** ($\beta = .22$, $p < .001$), somewhat smaller effect is achieved by the **human factor** ($\beta = .19$, $p < .001$), and **physical evidence** ($\beta = .13$, $p < .001$), whereas the **distribution** ($\beta = .10$, $p < .01$) achieves the smallest effect in the student satisfaction. All significant predictors achieve a positive correlation with the criterion variable. **Price** and **promotion** are not significant predictors of student satisfaction.

According to the regression analysis results, it is concluded that hypotheses H2.1, H2.3, H2.5, H2.6 i H2.7 are confirmed. Hypotheses H2.2 and H2.4 are not confirmed. Altogether, the general hypothesis H2 is confirmed.

6.7 ANALYSIS OF THE DIFFERENCES BETWEEN THE ASSESSMENT OF MARKETING MIX INSTRUMENTS, THE IMAGE OF HIGHER EDUCATION INSTITUTIONS AND STUDENT SATISFACTION BY THE SUBSAMPLES FROM THE REPUBLIC OF SERBIA AND SPAIN: DESCRIPTIVE ANALYSIS AND T- INDEPENDENT SAMPLES TEST

Descriptive statistics parameters for the seven marketing mix dimensions, the image of higher education institutions and student satisfaction are presented in table 16 for each country separately. The vast majority of dimensions / instruments are distributed to both subsamples in the normal distribution range. Minor deviations are noticed in the dimensions of services and the image of the higher education institutions of the subsample of respondents from Spain. Arithmetic mean of almost all dimensions/instruments different between the subsamples from the two countries, therefore the potential differences were tested using a set of t- independent samples tests. Descriptive statistics parameters are presented in table 16 for each subsample separately.

Table 16. Descriptive statistics parameters for subsamples

Sample	Instrument		Min	Max	AM	SD	Sk	Ku
Serbia	Marketing mix instruments	Service	8.00	56.00	43.73	9.00	-0.68	0.22
		Price	8.00	56.00	36.35	13.07	-0.32	-0.79
		Distribution	8.00	56.00	47.82	8.39	-1.30	1.79
		Promotion	8.00	56.00	35.21	14.49	-0.32	-1.07
		Human factor	8.00	56.00	43.62	9.99	-0.72	-0.01
		Physical evidence	8.00	56.00	42.29	11.84	-0.89	0.24
		Service process	8.00	56.00	42.98	10.20	-0.65	-0.15
	The image of higher education institution		8.00	56.00	41.32	11.42	-0.68	-0.10
	Student satisfaction		8.00	56.00	44.17	10.97	-0.91	0.17
Spain	Marketing mix instruments	Service	11.00	56.00	39.23	5.80	-0.96	2.93
		Price	13.00	52.00	36.28	7.68	-0.31	-0.06
		Distribution	18.00	56.00	40.46	6.73	-0.40	0.22
		Promotion	8.00	56.00	39.21	8.68	-0.10	0.56
		Human factor	11.00	56.00	38.94	7.68	-0.35	0.68
		Physical evidence	9.00	56.00	44.69	7.45	-0.93	1.78
		Service process	8.00	56.00	38.35	7.35	-0.43	1.51
	The image of higher education institution		8.00	56.00	37.95	7.13	-0.32	2.23
	Student satisfaction		8.00	56.00	38.55	8.60	-0.45	1.40

Legend. Min – minimum value. Max – maximum value. AM – arithmetic mean. SD – standard deviation. Sk – skewness. Ku – kurtosis.

Regarding the arithmetic mean value of the subsample of respondents from Serbia, **distribution** (AM = 47.82), **student satisfaction** (AM = 44.17), **service** (AM = 43.73) and **human factor** (AM = 43.62) received the highest assessment grades. **Service process** (AM = 42.98), **physical evidence** (AM = 42.29) and **the image of higher education institutions** (AM = 41.32) received medium assessment grades. The lowest assessment grades are shown regarding **price** (AM = 36.35), and **promotion** (AM = 35.21).

Regarding the arithmetic mean value of the subsample of respondents from Spain, **physical evidence** (AM = 44.69) and **distribution** (AM = 40.46) received the highest assessment grades. **Service** (AM = 39.23), **promotion** (AM = 39.21), **human factor** (AM = 38.94), **student satisfaction** (AM = 38.55) and **service process** (AM = 38.35) received medium assessment grades. The lowest assessment grades are shown regarding **the image of higher education institutions** (AM = 37.95) and **price** (AM = 36.28).

As certain differences were noticed in the arithmetic means of almost all dimensions / instruments in the context of the country of origin of the faculty (Serbia and Spain), a set of t - independent samples tests was applied – tests were applied in order to analyze the significance of differences in arithmetic means between the two groups. Group membership (Serbia or Spain) is the independent (grouping) variable in all analysis, whereas the seven dimensions of marketing mix, student satisfaction and the image of higher education institutions present the dependent variable in each group. The results are presented in table 17.

Table 17. The differences between the assessment of marketing mix instruments, the image of higher education institutions and student satisfaction

Instrument		Country	N	AM	SD	T test	DF	p
Marketing mix instruments	Service	Spain	193	39.23	5.80			
		Serbia	703	**43.73**	9.00	-6.57	894	**.000**
	Price	Spain	193	36.28	7.68			
		Serbia	703	36.35	13.07	-.06	894	.946
	Distribution	Spain	193	40.46	6.73			
		Serbia	703	**47.82**	8.39	-11.22	894	**.000**
	Promotion	Spain	193	**39.21**	8.68			
		Serbia	703	35.21	14.49	3.65	894	**.000**
	Human factor	Spain	193	38.94	7.68			
		Serbia	703	**43.62**	9.99	-6.03	894	**.000**
	Physical evidence	Spain	193	**44.69**	7.45			
		Serbia	703	42.29	11.84	2.68	894	**.008**
	Service process	Spain	193	38.35	7.35			
		Serbia	703	**42.98**	10.20	-5.90	894	**.000**
The image of higher education institution		Spain	193	37.95	7.13			
		Serbia	703	**41.32**	11.42	-3.89	894	**.000**
Student satisfaction		Spain	193	38.55	8.60			
		Serbia	703	**44.17**	10.97	-6.58	894	**.000**

Legend. AM – arithmetic mean. SD – standard deviation. DF – degree of freedom. p – P value.

The following results were obtained regarding marketing mix instruments (table 17):

- ❖ Regarding the assessment of service, faculties in Serbia are notably statistically different than the faculties in Spain. The service assessment grades are significantly higher in Serbia than in Spain.
- ❖ There was no statistically significant difference between faculties in Serbia and faculties in Spain regarding the assessment of price.
- ❖ The distribution assessment grades show significant statistical difference between the faculties in Serbia and the faculties in Spain. The distribution assessment grades are significantly higher in faculties in Serbia than in faculties in Spain.

- The promotion assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The promotion assessment grades are notably higher in faculties in Spain than in faculties in Serbia.
- The human factor assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The human factor assessment grades are notably higher in faculties in Serbia than in faculties in Spain.
- The physical evidence assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The physical evidence assessment grades are notably higher in faculties in Spain than in faculties in Serbia.
- The service process assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The service process assessment grades are notably higher in faculties in Serbia than in faculties in Spain.

The following results were obtained regarding the image of higher education institutions and student satisfaction:

- The image of the faculty assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The image of the faculty assessment grades are notably higher in faculties in Serbia than in faculties in Spain.
- The student satisfaction assessment grades show significant statistical difference between the faculties in Serbia and faculties in Spain. The student satisfaction assessment grades are notably higher in faculties in Serbia than in faculties in Spain.

Therefore faculties in the Republic of Serbia are showing statistically higher scores ($p < .01$) within the following dimensions/instruments: **service, distribution, human factor, service process, as well as the image of higher education institution and student satisfaction.** Whereas the faculties in Spain are showing statistically higher scores ($p < .01$) within the following dimensions/instruments: **promotion and physical evidence.** There is no statistically significant difference between the two groups of respondents regarding the dimension of **price**.

6.8 CHAPTER SUMMARY

The segments first through fifth in this chapter present the results obtained using descriptive, correlation, and multiple regression analysis of the total sample which consists of 896 students attending faculties in the Republic of Serbia and Spain.

The sixth segment presents the results obtained using the descriptive analysis and t-independent samples tests of each separate subsample from the Republic of Serbia and Spain. These results show the similarities and differences between the observed subsamples.

The following chapter will compare the results obtained using the aforementioned analysis, with the current standpoint of the authors, regarding the correlation between independent and dependent variables, in order to test the set hypotheses and reach adequate conclusions regarding research variables.

CHAPTER 7: DISCUSSION, CONCLUSIONS, LIMITATIONS AND FUTURE LINE OF RESEARCH

7.1 INTRODUCTION

Overall, all of the sections in this dissertation are properly documented and coordinated. Introductory section provides research justification, research objectives, and scope and the significance of the study. Theoretical section focuses more on literature review and documents it accordingly. This part also introduces the research hypotheses. Empirical section discusses the research findings, and focuses on the testing of the hypotheses set in the theoretical section.

The higher education sector in general is facing pluralism, modernization and market orientation in education. When it comes to the higher education sector in the countries where the research has been conducted (the Republic of Serbia and Spain), according to the National Report Regarding the Bologna Process implementation 2012-2015, there are 18 accredited universities in the Republic of Serbia (8 public and 10 private), whereas the same report states that there are 82 registered and accredited universities in Spain (50 public and 32 private) (National Report Regarding the Bologna Process implementation (Serbia, Spain) 2012-2015, EHEA, http://www.ehea.info/). In 20 years, 11 private universities have been established in the Republic of Serbia. Five were accredited in 2011, and six more have been accredited by 2015. However, in the mid 2011, 40 faculties and vocational colleges applied for accreditation (Avramovic, 2011). Furthermore, the expansion of universities in Spain is the result of growing demand (from 170,000 students that enrolled in 1960, and 700,000 in 1980, to more than double that figure in 2014). This reflects growing modernization and democratization with tensions derived from an increase in inequalities in general, a reduction in autonomy, and trends of instrumentalization (Montané, Beltrán & Gabaldón-Estevan, (2017).

The aforementioned current state of the education market in the Republic of Serbia, Spain, and in the global market which records a growing number of faculties and universities, dictates the maketing orientation of the institutions. Therefore, the research aims to determine which marketing mix instruments correlate with the image of higher education institutions and student satisfaction the most, and which marketing mix instruments affect the image of higher education institutions and student satisfaction the most. Thus, the aim is to determine which marketing mix instruments need to be improved in order to affect the improvement of the image of higher education institutions and student satisfaction and hence, the imoprovement of the business performance and positioning of the institutions in the market. Likewise, the research offers overview of the arithmetic means for each marketing mix instrument, the image of the higher education institution and student satisfaction. These indicate the current situation and the respondents' position regarding marketing mix instruments, the image of higher education institutions and student satisfaction, as well as the insight into which instruments/dimensions need improvement.

Within the first and the second segment of this chapter, based on the results obtained and compared to the relevant authors' standpoint, the research hypotheses were confirmed and disproved. The third segment generates and discusses the conclusions reached throughout the research, in greater detail. Some of the limitations of the research together with future lines of research to come out of these results, are discussed in the last segment.

7.2 MARKETING MIX INSTRUMENTS AS FACTORS OF IMPROVEMENT IMAGE OF HIGHER EDUCATION INSTITUTIONS

The research on marketing mix instruments as factors of improvement image of higher education institutions analyzed the correlation between each marketing mix instrument and the image of higher education institutions (correlation analysis), and the effect of each marketing mix instrument on the image of higher education institutions (multiple regression analysis). These tested the validity of the **hypothesis 1 – Marketing mix instruments affect the image of institutions of higher education to a large degree (general hypothesis):**

- ❖ Testing the validity of the hypohesis 1.1 – Service quality affects the image of institutions of higher education to a large degree (specific hypothesis)

The results of the correalation analysis, presented in the previous chapter, indicate that the service has statistically significant moderate to moderately large correlation rate with the image of higher education institutions, which reflects the views of certain authors (Ljubojević, 2002; Veljković, 2009; Kotler & Fox, 1995; Osman, Saputra & Luis, 2018), presented in bibliography and theoretical sections. Thus, the research results are in line with the opinion that the image of higher education institutions is largely correlated with the service product, and that the positive product assessment depends on the image of higher education institutions (Brown & Dacin, 1997; Osman, Saputra & Luis, 2018). According to Minjung and Sung-Un (Minjung & Sung-Un, 2008) the research that analyzed the attitude of students towards the image of higher education institutions so far, were mainly focused on the four segments of the image of higher education institutions that students most often identify with. One of those segments is the practicality and simplicity in attending lectures, which is in some form present in this research, which clearly points to the strong correlation between service quality and the image of the institutions.

The results of the multiple regression analysis, used to analyse the predictor ability of marketing mix instruments for the faculty image, indicate that the service is a significant predictor, among other marketing mix instruments. The obtained results clearly confirm the effect of service on the prediction of the image of higher education institutions. From this it follows that the image of higher education institutions is strongly affected by: quality of the study program, quality of the professor lectures, quality of the teaching associates' seminars, quality of the literature used in the study program, the opportunity to perform professional practice, the possibility of international student exchange and training abroad, the contemporariness and practical applicability of the competences acquired in the faculty.

While there is not a large number of research that dealt with the correlation between the service and the image of higher education institutions, some authors emphasized the significance of this instrument and all its aspects. Sharp (Sharp, 2009) also highlights the importance of the comfort of attending classes for the building of the image of higher education institutions. On the other hand, Marginson (Marginson, 2006) points out that students don't necessarily correlate quality of the teaching process to the image of higher education institutions, and that this service aspect doesn't affect the image of the faculty. According to the obtained results which emphasise the importance of the service and everything it represents in the higher education sector, for the development of the image of higher education institutions, a large number of authors (Abubakar, Shanka & Muuka, 2010; Binsardi & Ekwulugo, 2003; Bodycott, 2009; Gatfield & Chen, 2006; Li & Bray, 2007; Maringe & Carter, 2007; Mazzarol & Soutar, 2002; McMahon, 1992; Pampaloni, 2010; Pimpa, 2005; Shanka, Quintal & Taylor, 2005; Wilkins & Huisman, 2015) within their research emphasize that students consider the image of the institution as a criterion for the selection of faculty to enroll in. The students observe the image through the academic quality of the institution, which is in fact, achieved through adequate service. Other authors as well (Arpan, Raney i Zivnuska, 2003) highlight the offer and the quality of the study programs, as one aspect of the service within this section, and consider that it is necessery that the study programs are stimulating, inovative and achievable. On the other hand, Sung and Yang (Sung i Yang, 2008) highlight the quality of the literature as an important factor for the development of the image of higher education institutions, which is another significant aspect of the service being analyzed within the research.

Determining the positive correlation between service and the image of higher education institutions and determining the effect of the service on the prediction of the image of institutions (which is established within the multiple regression analysis) point to the fact that the hypothesis 1.1 – Service quality affects the image of institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- Testing the validity of the hypohesis 1.2 – Tuition fees affect the image of institutions of higher education to a large degree (specific hypothesis)

The results of the correlation analysis, presented in the previous chapter, indicate that the tuition fees have statistically significant moderate to moderately large correlation rate with the image of higher education institutions. The significance of this marketing mix instrument for the creation of adequate image of institutions was highlighted by some authors (Kotler & Fox, 1995) which emphasise that the tuition fee is not only related to students' costs, but that it also has a pshychological effect in the sense of the studens' attidude towards the institution, i.e. the public image of the institution. On the other hand, certin authors don't view the price as an important factor for the creation of the image of higher education institution, when observed solely as one of the marketing mix instruments. They consider that it needs to be examined in synergy with other marketing mix instruments, which reduces its significance. This does not reflect the correlation analysis results, but reflects the results of multiple regression analysis. (Gajić, 2012).

The multiple regression analysis results which were used to analyze the predictor ability of marketing mix instruments for the image of faculties, indicate that the price cannot be considered as a significant predictor. The obtained results clearly indicate that the price has no effect on the prediction of the image of higher education institutions. Therefore, the image of higher education institutions cannot be improved by the tuition fee, nor by its corrections relative to the competition and what the faculty offers for the tuition fee, by terms of payment, by additional cost fees, nor by providing scholarship opportunities.

However, certain authors (Ivy, 2008) point out the significance of the adequate price by emphasising the correlation between price and the perception of and attitude towards the institution and its image among students and the public in general. Likewise, certain authors studied its correlation with the image of higher education institutions, within the context of the effect of price reduction on the attraction of students, which is related to the image of institutions, yet it does not reflect the multiple regression analysis results (Foskett & Hemsley Brown, 2001). Al-Fattal (Al-Fattal, 2010) emphasizes the importance of the correlation between price and quality in the education sector. This indicates the undeniable importance of the price aspect within higher education institutions which are related to students' direct costs. However, this is only one of its aspects within this area and it cannot directly affect the creation of the image of higher education institutions. We can conclude that the multiple regression analysis results obtained within the research are not compatible with the views of most of the cited authors. However, the authors mostly dealt with some aspects of the price, without considering everything that the price as a marketing mix instrument in higher education institutions implies. In this regard, it is necessary to point out that there is not a large number of authors who specifically studied the correlation between price and the image of higher education institutions.

While the positive correlation has been established between tution fees and the image of higher education institutions, the multiple regression analysis indicated that tuition fees do not affect the prediction of the image of higher education institutions which means that the hypothesis 1.2 – Tuition fees affect the image of institutions of higher education to a large degree (specific hypothesis) **is disproved.**

- ❖ Testing the validity of the hypohesis 1.3 – Service distribution affects the image of institutions of higher education to a large degree (specific hypothesis)

Based on the results obtained within the correlation analysis, we can conclude that service distribution has statistically significant moderate to moderately large correlation rate with the image of higher education institutions. The consclusion is in line with the views of many authors (Domino, Libraire, Lutwiller, Superczynski & Tian, 2006; Osman, Saputra & Luis, 2018) who claim that in the contemporary business, higher education institutions are compeating in many fields in order to gain a reputation and build an image and get noticed by the students. This atmosphere in the education market causes parents and students to take all aspects of the offer and distribution into consideration when selecting an institution. This approach to the service distribution inevitably creates a correlation between service distribution and the image of the institution in the public.

The multiple regression analysis results which were used to analyze the predictor ability of marketing mix instruments for the image of faculties, indicate that the service distribution cannot be considered as a significant predictor.The obtained results clearly indicate that the service distribution has no effect on the prediction of the image of higher education institutions. Accordingly, the image of higher education institutions is not affected by the availability of the information in the student service, the phone student service, or the information on the website; nor is it affected by the accuracy of the lectures, seminars, consultations or exams schedules. Therefore, the improvement of the aforementioned aspects of the distribution cannot result on the improvement of the image of higher education institutions.

However, the results are not compatible with the views of some authors. Namely, Minjung and Sung Un (Minjung i Sung Un, 2008) point out the significance of the service distribution by highlighting that the entire service distribution affects the selection process, which inevitably correlates with the creation of the faculty image in the public. Other authors as well (Lockhart, 2005; Kotler i Fox, 1995; Gajić, 2010; Ivy, 2008; Kotler i Fox, 1985) point out the importance of the complete service distribution through several other categories. They identified the service distribution in institutions such as faculties, with location, since there is a high degree of contact between service distributors and service users, within this service. On the other hand, certain authors point only to the significance of certain aspects of distribution and correlate it fragmentally with the image of higher education institutions. Kotler and Fox (Kotler & Fox, 1995) are one of them as they emphasize the importance of the modern technology application and its correlation with the improvement image and quality of the institutions. Agostino (Agostino, 2008) also pointed out the importance of modern technologies for building a positive image of a higher education institution, whereas Gajic (Gajić, 2010) highlighted the disadvantages of this service ditribution method. The disadvantages include the low degree of contact between professors and sudents, a greater need for the engagement of the professor in working with each student individually, need for a high level of self-discipline and engagement, rapid loss of motivation, etc. Gajic pointed to the lesser correlation of this aspect of distribution with the creation of the image of higher education institutions. Sharp (Sharp, 2009) also highlights the significance of messages and information offered by the institution to the target group, whereas Arpan, Raney and Zivnuska (Arpan, Raney & Zivnuska, 2003), as well as Barnett (Barnett, 2005) point to the importance of the news and information about the institution's work, all of which clearly emphasize the significance of this aspect of distribution for the achievement of the adequate image of the institution, which is not compatible with the results obtained within the multiple correlation analysis which don't confirm the effect of the distibution on the image of higher education institutions. As we can notice, the majority of the authors cited analyzed only specific aspects of distributions and their effect of the image of higher education institutions, without ful comprehension of what the service distribution in these institutions represents.

While the positive correlation has been established between service distribution and the image of higher education institutions, the multiple regression analysis indicated that service distribution does not affect the prediction of the image of higher education institutions which means that the hypothesis 1.3 – Service distribution affects the image of institutions of higher education to a large degree (specific hypothesis) **is disproved.**

- ❖ Testing the validity of the hypohesis 1.4 – Promotion affects the image of institutions of higher education to a large degree (specific hypothesis)

Based on the results obtained within the correlation analysis, we can conclude that promotion has statistically significant moderate to moderately large correlation rate with the image of higher education institutions, as indicated by Gajić (Gajić, 2012) by defining the promotion as the process used to establish communication between higher education institution and the service user, with an aim to create a positive attitude towards and a positive image of the institution, and thus make the institution a favourite among the same service institutions. This view clearly indicates the importance of the promotion for the creation of the image of higher education institutions (Osman, Saputra & Luis, 2018). Arpan, Raney and Zivnuska (Arpan, Raney & Zivnuska, 2003) state that the institutions of higher education have to develop and improve external communication, i.e. communication with all external stakeholders in order to develop a desired image, which is achieved using promotion and all of its aspects. The aforementioned authors are pointing to the correlation between promotion and the image of higher education institutions which is compatible with the research results.

The results of the multiple regression analysis, used to analyse the predictor ability of marketing mix instruments for the faculty image, indicate that promotion is a significant predictor, among other marketing mix instruments. The obtained results clearly confirm the effect of promotion on the prediction of the image of higher education institutions. Therefore, the image of higher education institutions can be improved by the improvement of the quality of promotion of the faculty using television, radio, bilboard, print media, webiste, social media, and in other institutions, and by organising engaging promotional events, seminars, congreses and conferences.

In accordance with the obtained results, Cetin (Cetin, 2003) emphasises the direct correlation between promotion and the image of higher education institutions. Based on the research conducted among students, Arpan, Ravney and Zivnuska (Arpan, Raney & Zivnuska, 2003) have determined, among other, that the general knowledge regarding the higher education institution, which includes promotion or the information about the work of the institution known to the public, is crucial element for the creation of the image of higher education institution. Barnett (Barnett, 2005) shares the same views, whereas Ivy (Ivy, 2008) also highlights some of the promotion aspects such as open days at the faculties, highereducation exhibitions, and similar manifestations as well as the presentations the faculty is organising in schools for the purpose of the imrovement of the image of the faculty. The results obtained withing the research are also compatible with the statements emphasized by Gajić (Gajić, 2012), who states that higher educations institutions have to send their messages via an effective media. The results are also compatible with the views stated by Kotler and Fox (Kotler & Fox, 1995) who point out the significance of the media presence and promotion via different type of media. Friedman, Villamil, Suriano and Egolf (Friedman, Villamil, Suriano & Egolf, 1996), and Wilkins and Huisman (Wilkins & Huisman, 2015) also point out the importance of the media as a form of promotion for the higher education institutions, as well as Sung and Yang (Sung & Yang, 2008) who measure the attractiveness of the image using three variables, one of which is the presige, which includes positive media coverage, which indicates correlation of this aspect of promotion with the image of higher education institutions. The views of the aforementioned authors, who either analyzed promotion as a whole or only some of its aspects, in most cases agree with the results obtained within the research.

Determining the positive correlation between promotion and the image of higher education institutions and determining the effect of the promotion on the prediction of the image of institutions (which is established within the multiple regression analysis) point to the fact that the hypothesis 1.4 – Promotion affects the image of institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

❖ Testing the validity of the hypohesis 1.5 – Human factor affects the image of institutions of higher education to a large degree (specific hypothesis)

Based on the results obtained within the correlation analysis, we can conclude that human factor (teaching and non-teaching staff and students) has statistically significant moderate to moderately large correlation rate with the image of higher education institutions. Acoordingly, Gajić (Gajić, 2012) highlights the correlation between the staff (teaching and non-teaching), especially ones working in the first line of service who are in direct contact with the service users, and students, within the service process of higher education institutions and the complete image of the institution. Research into the correlation between these phenomena was not dealt with by a large number of authors, however, the results that we obtained in the research are compatible with the views of the majority of authors.

The results of the multiple regression analysis, used to analyse the predictor ability of marketing mix instruments for the faculty image, indicate that human factor is a significant predictor, among other marketing mix instruments.The obtained results clearly confirm the effect of human factor on the prediction of the image of higher education institutions. Therefore, the improvement of the image of higher education institutions can be achieved by improving the professor and teaching associate lectures and seminars, by professors and teaching associates' effect on students' motivation, by kindness and quality work of non-teaching saff, as well as by the quality of students enrolled which implies their good average grades, knowledge and education level, etc.

In line with the stated results, Dobrijević (Dobrijević, 2011) pointed out the overall importance of the staff (teaching and non-teaching), by emphasising that the staff are crucial for the development of the image of higher education institutions and that consequently, the communication between them at the faculty is very important. Williams (Williams, 2010) also states that the faculty employees (teaching and non-teaching staff), need to be adequately motivated in order to provide service in an adequate manner and in order to build the desired faculty image. Certain authors (Miljković & Kovačević, 2011) have pointed out the specific significance of teaching staff for the development of the image of higher education institutions (which is also compatible with the research results). The authors claim that the teaching staff's image affect the development of the image of the faculty and the popularity of the institution among sudents. On the other hand, Brassington (Brassington, 2006) and Sung i Yang (Sung & Yang, 2008) highlight the significant role of students in the development of the image of higher education institutions. These authors claim that it is the treatment of the students by the institution and the studens' oppinion about the institution which this treatment had caused, is the determining factor for the development of the image of institutions. Kotler, Fox, Wilkins and Huisman (Kotler & Fox, 1995; Wilkins & Huisman, 2015) also claim that students' image reflects the image of the entire institution, and that the institution is responsible, according to Maringe, for the students' satisfaction with the service (Maringe, 2005). According to Gajić (Gajić, 2012), satisfied students make up the competitive advantage for the higher education institution, and as such, can be considered as a marketing instrument of the institution, and can serve as a word of mouth advertizing to increase the reputation and improve the image of the faculty, which is why they are considered "temporary employees" at the faculty. As we can notice, the results obtained within the research are compatible with the views of the majority of authors.

Determining the positive correlation between human factor and the image of higher education institutions and determining the effect of human factor on the prediction of the image of institutions (which is established within the multiple regression analysis) point to the fact that the hypothesis 1.5 – Human factor affects the image of institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- ❖ Testing the validity of the hypohesis 1.6 – Physical evidence affects the image of institutions of higher education to a large degree (specific hypothesis)

According to the results obtained within the correlation analysis, we can conclude that physical evidence has statistically significant moderate to moderately large correlation rate with the image of higher education institutions. In accordance with the statement made as a result of the conducted research among students, the authors (Veljković, 2009; Wilkins i Huisman, 2015) state that physical evidence can perform multiple functions within higher education institutions, with one of the functions being to contribute to the creation of the image of higher education institutions. This was recognized by private universities which are becoming more and more aware of the importance of the appearance of the service object and campus for the development of the adequate image. The authors also point out that the function of the physical evidence is the service packaging which affects the creation of user expectation and is an element of image building, and as such, it causes reactions and draws students' attention, which is compatible with the research results. With regard to this, Gajić (Gajić, 2010) highlights that the easiest way for an institution to diferentiate itself among competition is to use physical evidence.

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the faculty image, indicate that physical evidence is a significant predictor, among other marketing mix instruments.The obtained results clearly confirm the effect of physical evidence on the prediction of the image of higher education institutions. Therefore, the improvement of the image of higher education institutions can be achieved with the selection of adequate location for the faculty, adequate building and exterior design, adequate number of amphitheathers and classrooms, adequate interior and well-equipped faculty rooms, adequate computer equipment, functional and well-equipped library, as well as with adequate employee dresscode at the faculty.

Kotler and Fox (Kotler & Fox, 1995) also point out the importance of enterior and exterior and their correlation with the image of higher education institutions. They state that higher education institutions need to make four important decisions regarding the service object appearance. The first decision relates to the exterior of the object which has to reflect the image they want to build, emphasizing the importance of the location of the object in particular. Afterwards the decisions need to be made regarding functionality of the object, enterior, and the decision regarding the material used to create the physical evidence, which is compatible with the research results. Besides the aforementioned authors, compatible with the research results, the importance of enterior and exterior and their correlation with the faculty image, has been a subject of research for other authors as well (Zeithaml, Bitner & Gremler, 2009; Kazoleas, Kim & Mofitt, 2001) who observed the image from different angles and found that there is a strong correlation between the location, the organizational factors of the library, and the technical equipment with the image of higher education institutions. We can conclude that the obtained research results compatible with the views of the majority of authors, even though research into the correlation between these phenomena was not dealt with by a large number of authors.

Determining the positive correlation between physical evidence and the image of higher education institutions and determining the effect of physical evidence on the prediction of the image of institutions (which is established within the multiple regression analysis) point to the fact that the hypothesis 1.6 – Physical evidence affects the image of institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- Testing the validity of the hypohesis 1.7 – Flow of activities and service process quality affect the image of institutions of higher education to a large degree (specific hypothesis)

According to the correlation analysis results, we can consequently conclude that the service process has statistically significant moderate to moderately large correlation rate with the image of higher education institutions. Senić and Senić (Senić & Senić, 2008) also point out the importance of service process creation within education services. They state that it is precisely because of the fact that in these services the process of consuming and production of services takes place at the same time, students evaluate the quality of service based on the service process, which is inevitably correlated with the creation of the image of higher education institutions. Regarding the correlation between the service process within education services, and the image of higher education institutions, Kazoleas and co-authors (Kazoleas, Kim & Mofitt, 2001) considered the image of higher education institutions from different angles and approached it from different perspectives, one of which being the organisation factors which relate to, among others, to the complete service process organisation. Using these claims, authors (Wilkins i Huisman, 2015) indicate a high level of correlation between service process and the image of higher education institutions.

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the faculty image, indicate that the flow of activities and service process quality are significant predictors, among other marketing mix instruments.The obtained results clearly confirm the effect of the flow of activities and service process quality on the prediction of the image of higher education institutions. Therefore, the improvement of the image of higher education institutions can be achieved with well organised teaching process (lectures, seminars, consultations), well organised exam and coloquium process, well organised proffesional practice, organised international exchange, organised process of informing students in faculty, as well as with interactive lectures and seminars.

The research results are also compatible with Simeunovic's position (Simeunović, 2004) who highlihts the importance of teaching process, as well as Minjung and Sung Un (Minjung & Sung-Un, 2008) who stated the one of the four segments of the image of higher education institutions that students most often identify with is the teaching process itself and its organisation. Sharp agrees with this view (Sharp, 2009) as he states that teaching process is the determining factor for the selection of the institutions by the students who take the image of the faculty as the creiterion for the enrollment. Likewise, Arpan, Raney and Zivnuska (Arpan, Raney & Zivnuska, 2003) confirm that in in the research, students most often highlight academic factors related to the teaching process as the determining factors for the creation of the image of higher education institution. However, according to The California Master Plan for Higher Education – Kindergarten trough University (The California Master Plan for Higher

Education – Kindergarten trogh University, 2002) the quality and the organisation of the teaching process don't neccessarily correlate with the image of higher education insitution, which does not in accordance with the research results. Gajić (Gajić, 2012) correlates the student-teacher interaction with the adequate image of higher education institution, but more so, compatible with the obtained results, he highlights the correlation between the image of the faculty and the methods of presenting information throughout teaching process, as well as the precision and comprehenablity of information recieved through the teaching process, which are only some of the aspects of the service process. Considering the fact that only a few authors disagree with the research results, mainly because they analysed the effects of only some of the aspects of the service process on the image of higher education institutions, we can conclude that the research results are in line with the views of the majority of authors who studied this relation.

Determining the positive correlation between the flow of activities and service process quality and the image of higher education institutions and determining the effect of the flow of activities and service process quality on the prediction of the image of institutions (which is established within the multiple regression analysis) point to the fact that the hypothesis 1.7 – Flow of activities and service process quality affect the image of institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

By confirming the set hypotheses – specific hypotheses (1.1;1.4;1.5;1.6;1.7), which confirmed the positive correlation between marketing mix instruments and the image of higher education institution and determined the effect of most of the marketing mix instruments (service, promotion, human factor, physical evidence and service process) on the prediction of the image of higher education institutions (which explained the 65.4% of the variance of the faculty image) the general **hypothesis 1 is confirmed – Marketing mix instruments affect the image of institutions of higher education to a large degree.**

7.3 MARKETING MIX INSTRUMENTS AS FACTORS OF IMPROVEMENT STUDENT SATISFACTION IN HIGHER EDUCATION INSTITUTIONS

The research on marketing mix instruments as factors of improvement student satisfaction analyzed the correlation between each marketing mix instrument and the student satisfaction (correlation analysis), and the effect of each marketing mix instrument on the student satisfaction (multiple regression analysis). These tested the validity of the **hypothesis 2 –**

Marketing mix instruments affect the student satisfaction in institutions of higher education to a large degree (general hypothesis):

- Testing the validity of the hypohesis 2.1 – Service quality affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis)

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between service and the student satisfaction, which is compatible with the views mentioned in the theoretical section, one of which states that knowledge has to be translated into adequate service on order to achieve satisfaction of the service user (Gajić, 2010; Osman, Saputra & Luis, 2018).

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the student satisfaction, indicate that the service is a significant predictors, among other marketing mix instruments. The obtained results clearly confirm the effect of the service on the prediction of student satisfaction in the institutions of higher education. Therefore, student satisfaction in the institutions of higher education can be improved and enhanced by improving the quality of the study program, the quality of teachers' lectures, quality of teachers' associates' seminars, quality of literature used within the study program; by providing oportunity for profesional practice, for international exchange and trining abroad, as well as by providing contemporary and practically applicable competencies acquired in the faculty.

Gerson point out the importance of the study program quality as one of the service aspects by stating that it is necessary to conduct a market research in order to design and develop study programs. Otherwise, unexpected problems might occur, there might be little interest for certain study programs, students might be dissatisfied with the teaching process and the curricula, or they might transfer to other courses (Maringe & Gibbs, 2009). Banwet and Datta (Banwet & Datta, 2003) and Hill et al. (Hill, Lomas & MacGregor, 2003) reached equal conclusions, throughout research. Their conclusions state that student satisfaction is largely affected by the service itself, as they specifically highlighted the importance of the service quality and the teaching quality. Gruber et al. reached the same conclusions (Gruber, Fub, Voss & Glaser-Zikuda, 2010) by measuring the level of correlation between 15 different elements related to the business of higher education institution and student satisfaction, they determined that the quality and the concept of study programs are largely correlated with the student satisfaction in faculties, which is also in line with the research results. Zeithamil et al.

(Zeithaml, Bitner & Gremler, 2009) state that service quality does not solely determine the student satisfaction, rather that it is crucial that the price matches quality, which clearly indicates the importance of the price-quality ratio, which in not entirely in line with the research results. Certain authors, like Banwet and Datta (Banwet & Datta, 2003) i Hill i dr. (Hill, Lomas & MacGregor, 2003) consider that among other factors, student satisfaction is largely affected by the quality of literature, which is one of the aspects of the service in higher education institutions. These views of the authors are also in line with the research results. Based on the comparison between the research results and the views of the authors who dealt with the correlation between the service (mostly only certain aspects of it), and student satisfaction, we can conclude that the research results are in line wiht the views of the majority of authors who analysed the aforementioned relations.

Determining the positive correlation between the service and the student satisfaction in higher education institutions and determining the effect of the service on the prediction of the student satisfaction (which is established within the multiple regression analysis) point to the fact that the hypothesis 2.1 – Service quality affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- ❖ Testing the validity of the hypohesis 2.2 – Tuition fees affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis)

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between tuition feel and the student satisfaction which is compatible with the results obtained by Maričić (Maričić, 2011) within his research. The author highlighted that most often the service user dissatisfaction occurs when they don't get the expected quality upon purchasing the service. Although some authors (Zeithaml, Bitner & Gremler, 2009) state that the tuition fee is not solelly indicative of the student satisfaction, but that the price-quality matching also matters, meaning that students get certain service quality for the price they pay.

The multiple regression analysis results which were used to analyze the predictor ability of marketing mix instruments for the student satisfaction in higher education institutions, indicate that the price cannot be considered as a significant predictor.The obtained results clearly indicate that the price has no effect on the prediction of the student satisfaction in higher education institutions.Therefore, the student satisfaction isn’t affected by the tuition fee, nor by its corrections relative to the competition and what the faculty offers for the tuition fee, by terms of payment, by additional cost fees, nor by providing scholarship opportunities.

McCollough and Gremler (Gremler & McCollough, 2002; McCollough & Gremler, 1999) point out the importance of the tuition fee and service quality ratio by stating that students should get value for the tuition fee they pay, and that this is the method for achieving their satisfaction. Therefore, provided value should be proportional to the tuition fee, and in this manner, tuition fee is definitely considered as adequate. Gajić (Gajić, 2012) defines price from the economic and psychological point of view in higher education institutions by correlating it firstly with the image of institutions and references Kotler and Fox's position (Kotler i Fox, 1995) that price should reflect mission, goals and priorities of the institution, but that, at the same time, students enrolled in the faculty correlate price with all of the other marketing mix instruments, stating that tutition fees are not relevant as long as it provides value and quality through other marketing mix instruments. We can clearly see that researh results, which don't highlight price as significant factor for student satisfaction, are completely compatible with the postition of mentioned authors, who didn't attach too much importance to price and they never analyzed it solelly, only as a marketing mix instrument that can only be considered in synergy with other instruments. Therefore, authors have not analysed a lot this marketing mix.

While the positive correlation has been established between tution fees and the student satisfaction in higher education institutions, the multiple regression analysis indicated that tuition fees do not affect the prediction of the student satisfaction in higher education institutions which means that the hypothesis 2.2 – Tuition fees affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is disproved.**

- ❖ Testing the validity of the hypohesis 2.3 – Service distribution affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis)

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between service distribution and student satisfaction, which is compatible with the claim stated by Dale (Dale, 2003) that service delivery as a whole is only and exclusively important for the student satisfaction. Therefore, he hasn't analysed the singular service delivery aspects, but he viewed it as awhole and highlighted its significance for the achievement of student satisfaction.

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the student satisfaction, indicate that the service distribution is a significant predictors, among other marketing mix instruments. The obtained results clearly confirm the effect of the service distribution on the prediction of student satisfaction in the institutions of higher education. Therefore, student satisfaction in the institutions of higher education is affected by the accuracy of the lectures, seminars, consultations or exams schedules, as well as by the availability of the information in the student service, the phone student service, or the information on the website and social media channels.Therefore, the improvement of the aforementioned aspects of distribution can lead to the improvement in the student satisfaction.

Banvet and Datta (Banwet & Datta, 2003) and Hill et al. (Hill, Lomas & MacGregor, 2003) point out the importance of the service distribution. Douglas et al. (Douglas, Douglas & Barnes, 2006) state that the contemporary times require technically advanced service distribution, using technical equipment and contemporary computer technologies, which can provide the achievement of student satisfaction. Gruber et al. (Gruber, Fub, Voss & Glaser-Zikuda, 2010) by analyzing the correlation between student satisfaction and 15 different qualitative elements, came to a conclusion that there is a high level of correlation between information availability regarding the institution of higher education and the student satisfaction, which is in line with the research results. We can notice that, even though they didn't analyze the distribution as a whole, majority of authors have highlighted the importance of the service distribution in higher education institutions for the student satisfaction. Gajić (Gajić, 2012) considers distribution in higher education sector firstly using the location of the institutions as an important factor, and at the same time he stresses the importance of distance learning studying with the application of modern technology. He specifically stresses the fact that institutions have to pay attention to the service delivery methods, the atmosphere in faculty and the message they are sending in this way to the future students. This points to the extraordinary significance of this instrument for achieving student satisfaction, which is, together with the views of the majority of authors, in line with the results of the research.

Determining the positive correlation between the service distribution and student satisfaction in higher education institutions and determining the effect of the service distribution on the prediction of student satisfaction (which is established within the multiple regression analysis) point to the fact that the hypothesis 2.3 – Service distribution affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

❖ Testing the validity of the hypohesis 2.4 – Promotion affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis)

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between promotion and student satisfaction, which corresponds to the view that effective comminication includes undertanding the wants and needs to students and that university should send their message through an effective medium, and to communicate with target groups in order to achieve student satisfaction (Gajić, 2012). On the other hand, Gajić (Gajić, 2012) states that promotion cannot be efficient nor can it achieve student satisfaction unless other instuments (product, price, distribution, people, physical evidence and process) are efficiently working. In other words, promotion cannot compensate for the shortcoming of other marketing mix instruments, which is in line with the multiple regression analysis results.

The multiple regression analysis results which were used to analyze the predictor ability of marketing mix instruments for the student satisfaction in higher education institutions, indicate that the promotion cannot be considered as a significant predictor.The obtained results clearly indicate that promotion has no effect on the prediction of the student satisfaction in higher education institutions. It follows that student satisfaction can not be improved by improving the quality of faculty promotion on television, radio, billboards, print media, in other institutions, faculty websites and social media, as well as by organizing interesting promotional events, seminars, congresses and conferences. All these aspects of the promotion can not serve as a means of improving student satisfaction.

However, certain authors still point out the significance of promotion for student satisfaction. Therefore, Kotler and Fox (Kotler & Fox, 1995) state that marketing communicator has to: identify target audience, clarify the required response, create a message, choose medium or media, choose resource attributes and collect feedback in order to achieve student satisfaction. Ivy (Ivy, 2008) highlights that promotion abounds in other tools which institutions can use in order to attract new service users and achieve student satisfaction. The author also states that it takes more than brochures or websites to address wider audience. Kotler and Fox (Kotler & Fox, 1995) claim that majority of education institutions most often use public relations, publications and propaganda in their communication. On the other hand, sertain authors highlight the online promotion activities as most efficient with students (Cheung, Yuen, Yuen & Cheng, 2010). Many authors (Friedman, Villamil, Suriano & Egolf, 1996) claim that prevailing promotional activities in private higher education institutions are also public relations, which include a numer of activities such as media relations interviews, etc. which have a role in building awareness in public about the accomplishments of the institution (Symes, Meadmore & Limerick, 1994). As we can conclude, majority of the aforementioned authors only analysed specific aspects of promotion and their effect on student satisfaction, without taking into consideration the entire effect of promotion in these type of institutions.

While the positive correlation has been established between promotion and the student satisfaction in higher education institutions, the multiple regression analysis indicated that promotion does not affect the prediction of the student satisfaction in higher education institutions which means that the hypothesis 2.4 – Promotion affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is disproved.**

- Testing the validity of the hypohesis 2.5 – The human factor affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis).

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between the human factor (teaching and non-teaching staff and students) and student satisfaction. This correlates with the position which highlights the importance of the ones providing service at the first line of service or the people who personally communicate with future service users, having in mind that the direct conntact is highly relevant as it affect the satisfaction of users of educational service. (Gajić, 2012).

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the student satisfaction, indicate that the human factor is a significant predictor, among other marketing mix instruments. The obtained results clearly confirm the effect of the human factor on the prediction of student satisfaction in the institutions of higher education. Therefore student satisfaction can be enhanced by improving professor lectures and teaching assistances' seminars, professors' efforts in motivating students, quality work by non-teaching staff, kindness of non-teaching staff, as well as by quality of enrolled students in terms of their average greades, knowledge and education level, etc.

Gruber et al. (Gruber, Fub, Voss & Glaser-Zikuda, 2010) tested the level or correlation between 15 different qualitative elements and student satisfaction and noticed high level of correlation between professors’ efforts in motivating students to learn and student satisfaction, which is in line with the obtained results. At the same time, the authors noticed a low level of correlation between the quality of enrolled students and the atmosphere among them on one, and student satisfaction on the other side, which is not in line with the results obtained within this research, however the aformentioned position analyses only certain aspects of the human factor in institutions of higher education. Hill et al. (Hill, Lomas & MacGregor, 2003) and Pozo-Munoz et al. (Pozo-Munoz, Rebolloso-Pacheco & Fernandez-Ramirez, 2000) consider that teaching staff have a key role in the business of higher education institution and that they are solely responsible for the level of student satisfaction. Voss et al. (Voss, Gruber & Szmigin, 2007) and Price et al. (Price, Matzdorf, Smith & Agahi, 2003) consider that the enrolled students affect the satisfaction of other students to a large degree, whereas Deming (Deming, 1982) in the same manner states that many students form their opinion based on the opinion of other students. By studying the role of student services in faculty, Galloway (Galloway, 1998) established that the staff at students' services, the non-teaching staff, have the direct effect on the way a faculty as an institution is perceived by students. According to his opinion it is important that the non-teaching staff be professional, appropriately dressed and always available to students, because they have a strong effect on student satisfaction, which was confirmed by the results of this research. Even though the authors spoke only about some of the aspects of the human factor and their effect on student satisfaction, majority of views are in line with the research results.

Determining the positive correlation between the human factor and student satisfaction in higher education institutions and determining the effect of the human factor on the prediction of student satisfaction (which is established within the multiple regression analysis) point to the fact that the hypothesis 2.5. – The human factor affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- Testing the validity of the hypohesis 2.6 – Physical evidence affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis)

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between physical evidence and student satisfaction which is in line with the view that the physical evidence represents a service packaging which affects the creation of expectation, i.e. represents the visual metaphor of service provided by the higher education institution, which serves to draw attention and cause and effect or a reaction with users (Veljković, 2009).

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the student satisfaction, indicate that physical evidence is a significant predictor, among other marketing mix instruments. The obtained results clearly confirm the effect of physical evidence on the prediction of student satisfaction in the institutions of higher education. Therefore, the student satisfaction is affected by the choice of adequate location for the faculty, the design of the building and of the entire exterior, adequate number of amhitheaters and calsrooms, interior and well-equipped faculty rooms, computer equipment, functional and well-equipped library, as well as the appropriate dresscode for the faculty staff.

Kotler and Fox (Kotler & Fox, 1995) also point out the importance of some of the mentioned aspects of physical evidence. They state that there are four important decisions that the institutions need to make regarding physical evidence, and one of them is that the object should be funtional and the faculty rooms should be equipped for the designed purpose, meaning that the library should be well-equipped, amphitheatre, sports halls, etc. Kotler and Fox (Kotler & Fox,1995) also point to the importance of exterior and the location of the building, wheres only 2% of students marked location as a determining factor for deciding on a higher education institution within re-search on the effect of certain aspects of physical evidence on choosing a higher education institution (Gajić, 2012). Starck, Zadeh, Ekman and Olsson (Starck, Zadeh, Ekman & Olsson, 2013) have conducted a research on Bangkok University International College, where 36% of studenats highlighted the importance of physical evidence, whereas in Webster University 40% of students responded in the same way and indicated the importance of the physical evidence for making a decision regarding the institution to attend. On the other hand, the research in Taiwan, condicted by Hsuan-Fu and Chia-Chi (Hsuan-Fu & Chia-Chi, 2008) showed a slight deviation from these results. The research conducted in several higher education institutions in Taiwan, showed important characteristics of higher education institutions which are important for students' decision regarding the higher education institution. Out of the five factors that proved to be the most important, physical evidence (in this case it implies location and campus) took fourth place as a moderately significan factor compared to other factors (service, reputation, price, strategy etc.). However, this does not undermine the effect of this instrument since it only analysed location and campus, which cannot be considered physical evidence, but only some of its aspects. Even though different, the views of the authors regarding the physical evidence and its effect on student satisfaction are mostly in line with the results obtained within this research.

Determining the positive correlation between the physical evidence and student satisfaction in higher education institutions and determining the effect of the physical evidence on the prediction of student satisfaction (which is established within the multiple regression analysis) point to the fact that the hypothesis 2.6 – The physical evidence affects the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is confirmed.**

- ❖ Testing the validity of the hypohesis 2.7 – Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis).

The results obtained within the correlation analysis, indicate the statistically significant moderate to moderately large correlation rate between service process and student satisfaction which is in line with the view that students assess the quality of the service, and that therefore, the designing of the service process, more specifically, the detailed planning of the service delivery is of utmost importance for the improvement of the educational service quality, and achieving student satisfaction at the same time. Some authors even view the service process as the true essence of the service, which we already mentioned within this chapter (Senić & Senić, 2008).

The multiple regression analysis results, used to analyse the predictor ability of marketing mix instruments for the student satisfaction, indicate that the flow of activities and the service process quality are a significant predictor, among other marketing mix instruments. The obtained results clearly confirm the effect of the flow of activities and the service process quality on the prediction of student satisfaction in the institutions of higher education. Therefore, the improvement of student satisfaction can be achieved with well-organised teaching process (lectures, seminars, consultations), well-organised exam and coloquium process, well-organised professional practice, student international exchange, well-organised faculty process for informing students, as well as with interactive lectures and seminars.

Dale (Dale, 2003) states that the most important factor for student satisfaction is the overall impression regarding the service with special emphasis on the organisation of service delivery. Banwet and Datta (Banwet & Datta, 2003) have conducted a research among students attending four different lectures with the same professor, and had different impressions regarding the lectures. The students formed their opinion among other categories (the obtained knowledge, availability of literature and course materials) based on the interactive nature of lectures and the entire lecturing process, which indicated the importance of certain aspects of service proces for for student satisfaction. Simeunovic (Simeunović, 2004) also emphasises the importance of lecturing and teaching process, and considers it should be specially highlighted. The author also states that the lecturing process should be conducted according to the clearly indicated teaching (didactic) principles, since without it, the lectures are considered incomplete. As with majority of marketing mix instruments, the authors only analyzed certain aspects of the service process, without considering it as a whole. However, most of the views are in line with the results obtained within this research.

Determining the positive correlation between the flow of activities and the service process quality and student satisfaction in higher education institutions and determining the effect of the flow of activities and the service process on the prediction of student satisfaction (which is established within the multiple regression analysis) point to the fact that the hypothesis 2.7 – Flow of activities and service process affect the student satisfaction in institutions of higher education to a large degree (specific hypothesis) **is confirmed**.

By confirming the set hypotheses – specific hypotheses (2.1;2.3;2.5;2.6;2.7), which confirmed the positive correlation between marketing mix instruments and student satisfaction and determined the effect of most of the marketing mix instruments (service, distribution, human factor, physical evidence and service process) on the prediction of student satisfaction in higher education instittutions (which explained the 67% of the variance of of student satisfaction in higher education instittutions) the general **hypothesis 2 is confirmed – Marketing mix instruments affect student satisfaction in institutions of higher education to a large degree.**

7.4 MAIN CONCLUSIONS OF THE RESEARCH

The main goal of research on the relation between marketing mix instruments and the image of higher education institutions and the relation between marketing mix instruments and student satisfaction is to determine which marketing mix instruments affect the image of higher education institutions and students satisfaction the most, in order to improve them and thereby improve the performance of higher education institutions. Therefore, the aim it to establish which marketing mix instruments represents factors for improving the image of higher education institutions and student satisfaction. The results of the research, although collected on the territory of the Republic of Serbia and Spain, overcome territorial limitations and have wide application.

Research goals (scientific and social) are entirely accomplished by reaching a series of scientific and practical findings.

The scientific goal of the research is achieved by confirming the validity of the set hypotheses, and based on the scientifically based research process, reliable data were obtained in an area that was not sufficiently explored by other authors. Namely, through a theoretical review of the literature and a discussion of the results, it has been shown that a small number of authors analysed this topic, and that there are different and contradictory attitudes about the effect of particular marketing mix instruments on the faculty image and student satisfaction, and that there is no research analysing the combined effect of marketing mix instruments on the image and student satisfaction. Therefore, the scientific purpose and justification of this research are undoubtedly proved, because it used a complex research, to provide scientific knowledge, which will be relevant for the subsequent scientific studies within this field.

Based on the research results (correlation anlysis) it has been established that the strongest correlation with the image of higher education institutions is achieved by (in this order): service process, human factor, service, physical evidence, while somewhat weaker, yet still moderatelly strong correlation is achieved by (in this order): promotion, price and distribution. A general conslusion that can be made regarding the correlation analysis results is that **all marketing mix instruments correlate with the image of higher education institutions.**

While the correlation analysis results point out the correlation between all marketing mix instruments and the image of higher education institutions, the results obtained within multiple regression analysis indicate that the image of higher education institutions is affected by: **service, promotion, human factor, physical evidence and service process**, whereas **price and distribution** don't affect the image of higher education institutions. The aforementioned analysis were used to test the specific set hypotheses (all specific hypotheses were confirmed except hypotheses H1.2. and H1.3) leading to the confirmation of the general research hypothesis. Confirmation of the general hypothesis to a large degree led to the confirmation of the effect of marketing mix instruments on the image of higher education institutions (all marketing mix instruments except the price and distribution affect the image of higher education institutions).

The multiple regression analysis results lead to a conclusion that the improvement of the image of higher education institutions can be achieved by improving the following:

- **Service** (the study program quality, the professors' lectures quality, quality of teaching assistants' seminars, quality of literature used in a study program, opportunity to perform professional practice, opportunity for international student exhange and training abroad, contemporariness and practical applicability of competencies acquired in faculty);
- **Promotion** (quality promotion on TV, radio, billboards, in print media, in other institutions, on faculty website and social media, organising interesting promotional events, seminars, congresses and conferences);
- **Human factor** (professors' lectures and teaching assistants' seminars, professors' and teaching assisstants' effort in motivating students, quality work and kindness by non-teaching staff, quality of the enrolled students regarding their average grades, knowlede and education level etc.);
- **Physical evidence** (faculty location, design of the building and entire exterioe of the faculty, number of amphitheatres and classrooms, interior and well-equipped faculty rooms, computer equipment, functional and well-equipped library, dresscode of the faculty staff);
- **Service process** (teaching process organisation - lectures, seminars and consultations, organisation process of exams and coloquiums, professional practice organisation process, international exchange organisation process, organisation process of informing sudents in faculty and providing interactive lectures and seminars).

As well as to the conslusion that the improvement of the image of higher education institutions cannot be achieved by improving the following:

- **Price** (tuition fee and the correction of tuition fee relative to the competition and what the faculty offers for the set price, terms of payments, additional study costs – application forms, certificates, course books, scholarships);
- **Distribution** (conducting lectures, seminars, consultation, exams according to the defined schedule, information avaliability at the student service, over the phone line, on webiste or social media).

Based on the research results (correlation analysis) it has been established that the strongest correlation with student satisfaction is achieved by (in this order): service process, human factor, service, while somewhat weaker, yet still moderatelly strong correlation is achieved by (in this order): physical evidence, distribution, price, promotion. A general conslusion that can be made regarding the correlation analysis results is that **all marketing mix instruments correlate with student satisfaction.**

While the correlation analysis results point out the correlation between all marketing mix instruments and student satisfaction, the results obtained within multiple regression analysis indicate that student satisfaction is affected by: **service, distribution, human factor, physical evidence and service process,** whereas **price and promotion** don’t affect student satisfaction. The aforementioned analysis were used to test the specific set hypotheses (all specific hypotheses were confirmed except hypotheses H2.2. and H2.4) leading to the confirmation of the general research hypothesis. Confirmation of the general hypothesis to a large degree led to the confirmation of the effect of marketing mix instruments on student satisfaction (all marketing mix instruments except the price and promotion affect student satisfaction).

The multiple regression analysis results lead to a conclusion that the improvement of student satisfaction can be achieved by improving the following:

- ❖ **Service** (the study program quality, the professors' lectures quality, quality of teaching assistants' seminars, quality of literature used in a study program, opportunity to perform professional practice, opportunity for international student exhange and training abroad, contemporariness and practical applicability of competencies acquired in faculty);
- ❖ **Distribution** (conducting lectures, seminars, consultation, exams according to the defined schedule, information avaliability at the student service, over the phone line, on webiste or social media).
- ❖ **Human factor** (professors' lectures and teaching assistants' seminars, professors' and teaching assisstants' effort in motivating students, quality work and kindness by non-teaching staff, quality of the enrolled students regarding their average grades, knowlede and education level etc.);
- ❖ **Physical evidence** (faculty location, design of the building and entire exterioe of the faculty, number of amphitheatres and classrooms, interior and well-equipped faculty rooms, computer equipment, functional and well-equipped library, dresscode of the faculty staff);
- ❖ **Service process** (teaching process organisation - lectures, seminars and consultations, organisation process of exams and coloquiums, professional practice organisation process, international exchange organisation process, organisation

process of informing sudents in faculty and providing interactive lectures and seminars).

As well as to the conslusion that the improvement of student satisfaction cannot be achieved by improving the following:

- ❖ **Price** (tuition fee and the correction of tuition fee relative to the competition and what the faculty offers for the set price, terms of payments, additional study costs – application forms, certificates, course books, scholarships);
- ❖ **Promotion** (quality promotion on TV, radio, billboards, in print media, in other institutions, on faculty website and social media, organising interesting promotional events, seminars, congresses and conferences);

Beisdes that, it has been shown that certain marketing mix instruments **(service, human factor, physical evidence, service process)** are marked as factors for improvement of both the image of higher education institutions ans student satisfaction, therefore those are the instruments to be focused on when it comes to improvement of the performance of higher education institutions. It follows from this that students value quality service in faculty, quality literature; opportunity to enroll in the student exchange program and to perform professional practice; opportunity to acquire certain level of knowledge and competences; to witness well-organised structure of all faculty processess; that the processed are carried out by professional teaching and non-teaching staff, that they are provided with sufficient number of clasrooms equipped with the latest computer technology for the unobstructed teaching process in a pleasing interior and exterior of the institution. Only after meeting all the above conditions, the image of the institution and student satisfaction can be at a high level. It is important to mention that **price** didn't prove to be important factor in the improvement of image of higher education institutions, nor in the improvement of student satisfaction. Therefore this marketing mix instrument shouldn't be focused on regarding the improvement of the performance of higher education institutions, because students don't regard it as an important marketing mix instrument. Therefore, tuition fee, terms of payment, scholarships and discounts don't affect the image of higher education institutions created by students, nor do they affect the student satisfaction regarding the institution.

The social goal of the research is achieved by providing practically applicable guidelines for improving image and enhancing student satisfaction in higher education institutions. According to the descriptive analysis results obtained on a complete sample, the image of higher education institutions and student satisfaction dimensions received medium, but not the highest assessment grades whic himplies that there is a need for their further improvement. Along with this, it needs to be determined what assessment rates, at the complete sample level, were given to marketing mix intruments that affect the image of higher education institutions the most, as well as those that affect student satisfaction the most. The assessment at the same time, indicates which instruments need improvement, in general, in order to further improve the image of higher education institutions and student satisfaction.

Decriptive analysis indicated medium assessment grade for all marketing mix instruments that affect **the image of higher education institution (service, human factor, physical evidence, service process)** except **promotion**, which proved to be significant for improving the image of higher education institution, and it was rated the worst grade. Therefore, according to the complete subsample, in general, there is a need for improvement in promotional activities sector in institutions of higher education. Institutions of higher education, overall, should improve quality of faculty promotion on TV, radio, billboards, in print media and other institutions, on faculty website and social media, as well as to organise more promotional events, seminars, congresess and conferences. This particular segment of business in institutions, although costly, requires improvement in order to improve the image of institution and its business at the same time, since it was assessed by students with the lowest grade of all marketing mix instruments which can affect the image of the instititution.

When it comes to marketing mix instruments which affect **student satisfaction** the most, high assessment grade was given for **distribution**, therefore it doesn't require improving in order to enhance student satisfaction, since students are satisfied with this marketing mix instrument. **Service, human factor, physical evidence** and **service process** received medium grades, which implies that there is room for improvement within these instruments in order to improve student satisfaction in institutions of higher education.

The results obtained within descriptive analysis of the complete sample are completed and upgraded with t – independent samples test of subsamples of the research, which enabled conclusions regarding which marketing mix instruments need improvement in faculties in the Republic of Serbia, and which in faculties in Spain, in order to improve the image of the institutions and student satisfaction. It also indicated similarities and differences regarding the assessment of marketing mix instruments, the image of higher education institutions and student satisfaction between faculties in the Republic of Serbia and faculties in Spain.

When it comes to faculties in the Republic of Serbia, it is noticed that there are high, medium and low assessment grades for marketing mix instruments important for the improvement of **the image of institutions of higher education.** High assessment grades are noticed for **service** and **human factor**, therefore those elements don't require improvement in faculties in the Republic of Serbia. **Service process** and **physical evidence** received medium assessment grades, which implies there is room for improvement for the purpose of improvement of the image of the higher education institutions. **Promotion** received the lowest assessment grade, which implies that there is inevitable need for improvement of the promotion quality on TV, radio, billboards, in print media, in other institutions, on faculty website and social meda; by organising interesting promotional events, seminars, congresses and conferences in order to improve the image of institutions which recieved medium assessment grades.

Faculties in the Republic of Serbia recieved high and medium assessment grades when it comes to marketing mix instruments which affect **student satisfaction**. **Service, human factor** and **distribution** recieved the highest grades, while **physical evidence** and **service process** recieved medium assessment grades. None of the marketing mix instruments which affect student satisfaction recieved low assessment grades, which is in line with the fact that student satisfaction in this region recieved high assessment grades and that there is no need for its improvement.

Faculties in Spain which were part of the research, recieved high and medium assessment grades regarding marketing mix instruments important for the improvement of **the image of higher education institutions** (no instrument recieved low grades). **Physical evidence** recieved high assessment grades, therefore there is no need for the improvement of these elements in the faculties for the purpose of improving the image of the institutions. **Service, promotion, human factor** and **service process** recieved medium assessment grades, which implies that there is a room for their improvement in order to improve the image of the faculties, considering the fact that the image of the faculties in Spain recieved low assessment grades and there is a need for its improvement.

When it comes to the assessment grades of marketing mix instruments which affect **student satisfaction**, faculties in Spain recieved high and medium assessment grades. **Physical evidence** and **distribution** recieved high assessment grades, which implies that there is no neeed for the improvement of these elements for the purpose of improvement of student satisfaction in these institutions. **Service, human factor** and **service process** recieved medium assessment grades, which leaves room for additional improvement of these instruments for the purpose of improvement of student satisfaction, considering the fact that satisfaction recieved medium assessment grade in faculties in Spain.

The application of t – independent samples tests enabled insight into significant differences in assessment of marketing mix instruments, the image of higher education institution and student satisfaction between faculties in the Republic of Serbia and in faculties in Spain. It has been noticed that **service, distribution, human factor** and **service process** recieved better assessment grades in faculties in the Republic of Serbia, whereas **promotion** and **physical evidence** recieved better assessment grades in faculties in Spain. Moreover, **the image of higher education institutions and student satisfaction** recieved better assessment grades in faculties in the Republic of Serbia than in faculties in Spain. The cause of the mentioned differences in the assessment of marketing mix instruments, the image of higher education institution and student satisfaction can be found in the differences between the tested subsamples, more precisely in the difference between the two countires which underwent completely different economic, social, cultural and educational development. The standard of life is much lower in the Republic of Serbia, compared to Spain, due to a complex political situation. Economic growth in the Republic of Serbia is at aconsiderably lower rate than in Spain. Changes and reforms in the education sector in the Republic of Serbia have started later than in Spain, and are still in its initial phases. Another important fact must be taken into account, and that is the fact that the research in the Republic of Serbia was conducted in private faculties, while in Spain, it was conducted in public faculties. All mentioned factors undiniably affect the different student expectation in the two different countires, and lead to the differences in assessment of marketing mix instruments, the image of higher education institutions and students satisfaction, which, although indicating the current situation in the mentiones faculties, need to be taken with caution due to the mentioned circumstance.

7.5 LIMITATIONS AND FUTURE LINE OF RESEARCH

The limitations that the author was facing in the process of theoretical analysis are realted to the lack of papers that explicitly deal with the correlation between the stated variables. Majority of authors discuss other relations within this field, whereas there are no research which include the unified analysis of the correlation between marketing mix instruments and the image of higher education institutions and student satisfaction in the current literature. Therefore, the limitations of theoretical analysis are reflected in the limitations in comparing the results obtained with the authors' views on the stated relations.

The limitations the author was facing in the research process are related to the size of sample. Considering the fact that data collection has been conducted in two different countries, the data collection in both the Republic of Serbia and in Spain imposed certain difficulties. In this regard, certain limitations were experienced concerning the adjustment of the questionnaire to the different teritorial, cultural, language, economic and other specificities of the two countires. Furthermore the insufficient data availability and the insufficient degree of motivation of the respondents to answer the entire set of questions, were also present throughout the research. However, the comprehensive and studious approach led to successfully overcoming any dilemma or limitation.

Taking all these factors into consideration, the autor would like to introduce some remarks for future investigations.

Considering the current situation in the education market in general, the increase in the number of institutions of higher education generates the need for further research which would improve the business performance of certain institutions and lead to winning in the market game. Due to the constant competition between public and private institutions regarding the quality and overall business, it is necessary to conduct a research which would determine the effect of marketing mix instruments on the image of higher education institutions and student satisfaction in private and public faculties in other EU and non-EU countries. Considering that the research within the dissertation had been conducted in faculties within the private University Business Academy in Novi Sad and the public Universitat Jaume I in Castellon de la Plana, there is the possibility of conducting a research which would be mostly based on the comparison which would provide insight into the similarities and differences in results obtained in public and private institutions, with emphasis on this exact correla-tion.

In order to improve the business performance of higher education institutions in general, the research on the effects of marketing mix instruments on the image of higher education institutions and student satisfaction can be conducted in universities in other countries or continents. Faculties in Europe and America, for instance, can be compared within the suggested research, which would use the comparison of the results to reach insight to be used for the scientific and practical purposes alike.

Likewise, there is a need for research dealing with other dimensions such as the ones related to the development of new, modern technologies which have changed the global business. The proposed research would investigate how the modern technologies affect the business of higher education institutions both in general and from the marketing perspective, which can also be considered as inputs for future investigations.

REFERENCES

A strong corporate reputation is increasingly a PR responsibility. (2005). Available at: http://www.prinfluences.com.au

Abubakar, B., Shanka, T., Muuka, G. N. (2010). Tertiary education: An investigation of location selection criteria and preferences by international students: The case of two Australian universities. *Journal of Marketing for Higher Education, 20* (1), 49–68.

Accreditation in higher education. (2007). Beograd: Ministarstvo prosvete i sporta Republike Srbije.

Aghaz, A., Hashemi, A., & Sharifi Atashgah, M. S. (2015). Factors contributing to university image: The postgraduate students' points of view. *Journal of Marketing for Higher Education, 25*(1), 104–126.

Agostino, D. D. (ed.) (2008). *The future of higher education: How technology will shape learning. Economist Intelligence Unit.* Available at: http://www.nmc.org/pdf/Future-of-Higher-Ed-%28NMC%29.pdf

Al-Fattal, A. (2010). *Understanding Student Choice of University an Marketing Strategies in Syrian Private Higher Education* (Doctoral disertation). Leeds: University of Leeds, School of Education.

Alibabić, Š. (2002). *Teorija organizacije obrazovanja odraslih*. Beograd: Institut za pedagogiju i andragogiju Filozofskog fakulteta.

Alipour, M., Aghamohammadi, A., Ahmadi, R., Hoseini, S. H. (2012). A new educational marketing mix: The 6ps for private school marketing in Iran. *Journal of Applied Sciences, Engineering and Technology, 4* (21), 4314–4319.

Alves, H., Raposo, M. (2010). The influence of university image on student behaviour. *International Journal of Educational Management, 24* (1), 73–85.

American Marketing Asociation (2018). Official AMA website: www.ama.org

Anderson, E. W., Fornell, C., Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing, 58* (3), 53–67.

Anderson, E. W., Sullivan, M. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science, 12* (2), 125–143.

Andreassen, T. W., Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. *International Journal of Service Industry Management, 9* (1), 7–23.

Arpan, L. M., Raney, A. A., Zivnuska, S. (2003). A cognitive approach to understanding university image. *Corporate Communications: An International Journal, 8* (2), 97–113.

Ashtari, S., & Eydgahi, A. (2017). Student perceptions of cloud applications effectiveness in higher education. *Journal of computational science, 23*, 173-180.

Assimakopoulos, C., Antoniadis, I., Kayas, O. G., & Dvizac, D. (2017). Effective social media marketing strategy: Facebook as an opportunity for universities. *International Journal of Retail & Distribution Management, 45* (5), 532-549.

Avramović, Z. (2011). Problemi modernizacije obrazovanja u Srbiji. *Nacionalni interes: časopis za državna i pravna pitanja, 7* (3), 9–31.

Babaei, D., Rahimian, A., Omar, Z., & Idris, K. (2015). Ability mediation effects in the relationship between human resource practices and service quality. *Iranian Journal of Management Studies, 8* (1), 5-25.

Babakus, E., Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research, 24* (3), 253–268.

Balzer, W. K., Brodke, M. H., & Thomas Kizhakethalackal, E. (2015). Lean higher education: successes, challenges, and realizing potential. *International Journal of Quality & Reliability Management, 32* (9), 924-933.

Banwet, D. K., Datta, B. (2003). A study of the effect of perceived lecture quality onpost-lecture intentions. *Work Study, 52* (5), 234–243.

Barnett, R. (2005). *Reshaping the university*. Maidenhead: Open University Press.

Belanger, C., Mount, J., Wilson, M. (2002). Institutional image and retention. *Tertiary Education and Management, 8* (3), 217– 230.

Belch, G. E., Belch, M. A., Kerr, G. F., Powell, I. (2008). *Advertising and promotion: An integrated marketing communications perspective.* New York: McGraw-Hill.

Bhattacharya, C. B., Sen, S. (2003). Consumer company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing, 67* (2), 76–88.

Binsardi, A., Ekwulugo, F. (2003). International marketing of British education: Research on the students' perception and the UK market penetration. *Marketing Intelligence and Planning, 21* (5), 318–327.

Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *The Journal of Marketing, 54* (2), 69–82.

Bodycott, P. (2009). Choosing a higher education study abroad destination. *Journal of Research in International Education, 8* (3), 349–373.

Bologna Declaration, (2000) Available at: https://www.eurashe.eu/library/bologna_1999_ bologna-declaration-pdf/

Bolton, R. N., Drew, J. H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research, 17* (4), 375–384.

Booms, B. H., Bitner, J. M. (1981). Marketing Strategies and Organisation Structures for Service Firm. *Marketing of services*, 47–51.

Branković, J. (2011). Obrazovanje. U J. Kronja (ur.), *Vodič kroz strategiju Evropa 2020* (str. 96–100). Beograd: Evropski pokret u Srbiji. Dostupno na: http://www.emins.org/sr/publikacije /knjige/11-vodic-kroz-evropu-2020.pdf

Brassington, F. (2006). *Principles of Marketing* (4th ed.). Harlow: FT Prentice Hall.

Brown, T. J., Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *Journal of Marketing, 61* (1), 68–84.

Brown, T. J., Dacin, P. A., Pratt, M. G., & Whetten, D. A. (2006). Identity, intended image, construed image, and reputation: An interdisciplinary framework and suggested terminology. *Journal of the academy of marketing science, 34* (2), 99–106.

Browne, B. A., Kaldenberg, D. O., Browne, W. G., Brown, D. J. (1998) Student as customer: Factors affecting satisfaction and assessments of institutional quality. *Journal of Marketing for Higher Education, 8* (3), 1–14

Bruhn, M., Georgi, D. (2006). *Service Marketing: Managing the Service Value Chain*. New Jersey: Prentice Hall.

Bryson, C. (2016). *Engagement through partnership: Students as partners in learning and teaching in higher education*, Workshop Presented at University College Cork.

Bush, V., Ferrell, O. C., Thomas Jr., J. L. (1998). Marketing the business school: An exploratory investigation. *Journal of Marketing Education, 20* (1), 16–23.

Canterbury, R. M. (2007). Higher education marketing: A challenge. *Journal of College Admission*, *9* (3), 22–30.

Casani, F., De Filippo, D., García-Zorita, C., Sanz-Casado, E. (2013). Public versus private universities: Assessment of research performance; case study of the Spanish university system. *Research evaluation, 23* (1), 48–61.

Cetin, R. (2003). Planning and implementing institutional image and promoting academic programs in higher education. *Journal of Marketing for Higher Education, 13* (1–2), 57–75.

Chen, Y. C. (2015). A study of the interrelationships among service recovery, relationship quality, and brand image in higher education industries. *The Asia-Pacific Education Researcher, 24* (1), 81-89.

Cheung, A. C., Yuen, T. W., Yuen, C. Y., Cheng, Y. C. (2010). Promoting Hong Kong's highereducation to Asian markets: Market segmentations and strategies. *International Journal of Educational Management, 24* (5), 427–447.

Cho, E., Kim, S. (2015). Cronbach's coefficient alpha: Well known but poorly understood. *Organizational Research Methods, 18* (2), 207–230.

Cian, L., & Cervai, S. (2014). Under the reputation umbrella: An integrative and multidisciplinary review for corporate image, projected image, construed image, organizational identity, and organizational culture. *Corporate Communications: An International Journal, 19* (2), 182–199.

Ćirić, M. (2007). *Upravljanje uslugama u funkciji uspešnog poslovanja saobraćajnih organizacija* (Magistarska teza). Novi Sad: Univerzitet Braća Karić

Ćirić, M. (2013). *Upravljanje odnosima sa klijentima u bankama: monografija*. Novi Sad: Fakultet za ekonomiju i inženjerski menadžment u Novom Sadu.

Ciric, M., Vapa Tankosic, J., Ilic, D. (2012). Can Serbian universities be more competitive in EHEA by being market-oriented? *Poslovna ekonomija, 6* (1), 427–441.

Collier, D. A. (1994). *The Service/Quality Solution: Using Service Management to Gain Competitive Adventage*. Milwaukee: ASQC Quality Press

Comments on the proposal of the National Program for Integration into the European Union (NPI) - education and science, (2008) Beograd: Centar za obrazovne politike.

Cronin, J. J., Taylor, A. S. (1992). Measuring service quality: A reexamination and extension. *The Journal of Marketing, 56* (July), 55–68.

Crosby's Message. (2006). Available at: http://www.dmu.ac.uk/dept/schools/business/corpo rate/tqmex/crosby.htm

Cubillo, J. M., Sanchez, J., Cervino, J. (2006). International students' decision-making process. *International Journal of Educational Management, 20* (2), 101–115

Dale, B. G. (2003). *Managing Quality* (4th ed.). Oxford: Blackwell Publishing.

Dann, S. (2008). Applying services marketing principles to postgraduate supervision. *Quality Assurance in Education, 16* (4), 333–346.

Deming, W. E. (1982). *Out of the Crisis*. Cambridge: Massachusetts Institute of Technology

Deming's Quality Points. (2006). Available at: http://www.ou.edu/class/busad4013/docs/pptch2/sld006.htm

DeShields, Jr. O. W., Kara, A., Kaynak, E. (2005). Determinants of business student satisfaction and retention in higher education: Applying Herzberg's two-factor theory. *International Journal of Educational Management, 19* (2), 128–139.

Dibb, S., Simoes, C., & Wensley, R. (2014). Establishing the scope of marketing practice: insights from practitioners. *European Journal of Marketing, 48* (1/2), 380-404.

Dmochowski, J. E., Garofalo, D., Fisher, S., Greene, A., & Gambogi, D. (2016). Integrating sustainability across the university curriculum. *International Journal of Sustainability in Higher Education, 17* (5), 652-670.

Dobrijević, G. (2011). *Poslovno komuniciranje i pregovaranje*. Beograd: Univerzitet Singidunum.

Domino, S., Libraire, T., Lutwiller, D., Superczynski, S., Tian, R. (2006). Higher education marketing concerns: Factors influence students' choice of colleges. *The Business Review, 6* (2), 101–112.

Douglas, J., Douglas, A., Barnes, B. (2006). Measuring student satisfaction at UK University. *Quality Assurance in Educationi, 14* (3), 251–267.

Dowling, G. R. (1988). Measuring corporate images: A review of alternative approaches. *Journal of Business Research, 17* (1), 27–34.

Durvasula, S., Lysonski, S. (2011). Beyond service attributes: do personal values matter?. *Journal Of Service Marketing, 25* (1), 33–46.

Electronic Statistics Textbook. (2013). Tulsa, OK: StatSoft. Available at: http://www.statsoft.com/textbook/

Elliott, K. M., Healy, M. A. (2001). Key factors influencing student satisfaction related to recruitment and retention. *Journal of Marketing for Higher Education, 10* (4), 1–11.

Elliott, K. M., Shin, D. (2002). Student Satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management, 24* (2), 197–209.

Forgas-Coll, S., Palau-Saumell, R., Sánchez-Garcia, J., & Garrigós-Simon, F.J. (2016). Comparative analysis of American and Spanish cruise passengers' behavioral intentions. *Rae, 56* (1), 87-100.

Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing, 56* (1), 6–21.

Foskett, N., Hemsley-Brown, J. (2001). *Choosing futures: young people's decision-making in education, training, and careers markets*. London: Routledge.

Friedman, S. M., Villamil, K., Suriano, R. A., Egolf, B. P. (1996). Alar and apples: Newspapers, risk and media responsibility. *Public Understanding of Science, 5* (1), 1–20.

Fuentes, J. C. R., Gurría, R. T. F., & Martínez, A. E. G. (2015). Satisfacción estudiantil sobre servicios recibidos en la universidad: percepción de egresados. *Revista Internacional Administración & Finanzas, 8* (3), 103–112.

Gajić, J. (2010). *Marketing strategija u visokom obrazovanju* (Doktorska disertacija). Beograd: Univerzitet Singidunu.

Gajić, J. (2011). Merenje satisfakcije studenata u visokom obrazovanju. *Marketing, 42* (1), 71–80.

Gajić, J. (2012). Značaj marketing miksa u visokoobrazovnim institucijama. *Singidunum Journal of Applied Sciences, 9* (1), 29–41.

Gallifa, J., & Batallé, P. (2010). Student perceptions of service quality in a multi-campus higher education system in Spain. *Quality Assurance in Education, 18* (2), 156–170.

Galloway, L. (1998). Quality perceptions of internal and external customers: a case study in educational administration. *The TQM Magazine, 10* (1), 20–26.

Galogaža, M. (2001). *Marketing psihologija motivacijskih faktora koji determinišu upravljanje tržišnim poslovanjem*. Novi Sad: Marketing Management College.

Gatfield, T., Chen, C. H. (2006). Measuring student choice criteria using the theory of planned behaviour: The case of Taiwan, Australia, UK and USA. *Journal of Marketing for Higher Education, 16* (1), 77–95.

Giese, J. L., Cote, J. A. (2000). Defining customer satisfaction. *Academy of Marketing Science Review*, 1 (1), 1–22. Available at: http://www.proserv.nu/b/Docs/Defining% 20C ustomer%20 Satisfaction.pdf

Gray, J. G. (1986). *Managing The Corporate Image: The Key to Public Trust*. Westport: Quorum Books.

Gremler, D. D., McCollough, M. A. (2002). Student satisfaction guarantees: an empirical examination of attitudes, antecedents, and consequences. *Journal of Marketing Education*, *24* (2), 150–160.

Gronroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, *18* (4), 36–44.

Gruber, T., Fub, S., Voss, R., Glaser-Zikuda, M. (2010). Examining Student Satisfaction With Higher Education Services – Using a New Measurement Tool. *International Journal of Public Sector Management*, 23 (2), 105–123.

Grunig, L. A., Grunig, J. E., Dozier, D. M. (2002). *Excellent Public Relations and Effective Organizations: A Study of Communication Management in Three Countries.* New Jersey: Lawrence Erlbaum Associates.

Guide through accredited study programs at higher education institutions in the Republic of Serbia, 2014 (2014). Beograd: Komisija za akreditaciju i proveru kvaliteta. Dostupno na: www.kapk.org

Hagstrom, R. (2005). The Warren Baffet Way. New Jersey: John Wiley & Sons.

Helgesen, O., Nesset, E. (2007). Images, satisfaction and antecedents: Drivers of student loyalty? A case study of a Norwegian university college. *Corporate Reputation Review, 10* (1), 38–59.

Herbst, D. (1999). *Interne kommunikation.* Berlin: Cornelsen Verlag.

Herbst, D. (2001). *Internet PR.* Berlin: Cornelsen Verlag.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser Jr. W. E., Schlesinger, L. A. (1994). Putting the service-profit chain to work. *Harvard Business Review,* (March-April), 164–170.

Hill, N., Alexander, J. (2003). *Handbook for Measuring Customer Satisfaction and Loyalty*, New Delhi: Infinity books.

Hill, Y., Lomas, L., MacGregor, J. (2003). Students' perceptions of quality in higher education. *Quality Assurance in Education, 11* (1), 15–20.

Hong, S. Y., Yang, S. U. (2009). Effects of reputation, relational satisfaction, and customer company identification on positive word-of-mouth intentions. *Journal of Public Relations Research, 21* (4), 381–403.

Hrnjic, A. (2016). The transformation of higher education: evaluation of CRM concept application and its impact on student satisfaction. *Eurasian Business Review, 6* (1), 53-77.

Hsuan-Fu, H., Chia-Chi, H. (2008). Marketing mix formulation for higher education: An integrated analysis employing analytic hierarchy process, cluster analysis and correspondence analysis. *International Journal of Educational Management, 22* (4), 328–340.

IBM Corp. Released 2012. IBM SPSS Statistics for Windows. Version 21.0. Armonk (2012) (NY): IBM Corp.

Ind, N. (1992). *The Corporate Image: Strategies For Effective Identity Programmes*. London: Kogan Page.

Ivy, J. (2001). Higher education institution image: A correspondence analysis approach. *International Journal of Educational Management, 15* (6), 276–282.

Ivy, J. (2008). A new higher education marketing mix: the 7Ps for MBA marketing. *International Journal of Educational Management*, *22* (4), 288–299.

Jackson, K. (2004). *Building Reputational Capital: Strategies for Integrity and Fair Play that Improve the Bottom Line*. Oxford: Oxford University Press.

Jameel, S. S. (2018). Teacher's perception on social support for students with disabilities in higher education. *Indian Journal of Health and Wellbeing, 9* (3), 419-423.

Jobber, D., Fahy, J. (2006). *Osnovi marketinga* (2. izd.). Beograd: Datastatus.

Johnson, M. D., Gustafsson, A. (2000). Improving Customer Satisfaction, Loyalty, and Profit: An Integrated Measurement and Management System. San Francisco: Jossey-Bass.

Johnson, M. D., Gustafsson, A., Andreassen, T. W., Lervik, L., Cha, J. (2001). The evolution and future of national customer satisfaction index models. *Journal of Economic Psychology, 22* (2), 217–245.

Juran's Message. (2006). Available at: http://www.dmu.ac.uk/dept/schools/business/corporate/tqmex/juran.html.

Jurkowitsch, S., Vignali, C., Kaufmann, H. R. (2006). A student satisfaction model for Australian higher education providers considering aspects of marketing communications. *Innovative Marketing, 2* (3), 9–23.

Kazoleas, D., Kim, Y., Moffitt, M. A. (2001). Institutional image: A case study. *Corporate Communications, 6* (4), 205–216.

Kilgo, C. A., Culver, K. C., Young, R. L., & Paulsen, M. B. (2017). The Relationship Betwen Students' Perceptions of "Good Practices for Undergraduate Education" and the Paradigmatic Development of Disciplines in Course-Taking Behavior. *Research in Higher Education, 58* (4), 430-448.

Kodžopeljić, J., Franceško, M. (2007). Vrednovanje kvaliteta nastavnog procesa: uporedna analiza procena studenata obuhvaćenih različitim fazama reforme. *Nastava i vaspitanje, 56* (3), 244–263.

Kostadinović, D. (2007). Quality in education: Its function and importance. *Pedagoška stvarnost*, *53* (7–8), 599–612.

Kotler, F. (1997). *Upravljanje marketingom: analiza, planiranje, primjena i kontrola*, Zagreb: Mate.

Kotler, F. (2001). *Upravljanje marketingom*. Zagreb: Mate.

Kotler, P., Fox, K. F. (1985). Strategic *Marketing for Educational Institutions.* Englewood Cliffs: Prentice-Hall.

Kotler, P., Fox, K. F. (1995). *Strategic Marketing for Educational Institutions*. Englewood Cliffs: Prentice-Hall.

Kovačić, Z. (1998). *Analiza vremenskih serija*. Beograd: Ekonomski fakultet.

Lafuente-Ruiz-de-Sabando, A., Zorrilla, P., & Forcada, J. (2018). A review of higher education image and reputation literature: Knowledge gaps and a research agenda. *European research on management and business economics*, *24* (1), 8-16.

Lamb, C. W., Hair, J. F., McDaniel, C., Boshoff, C., Terbalancle N. S. (2004). *Marketing Management* (2nd ed.). Oxford: Oxford University Press.

Lee, H., Lee, Y., Yoo, D. (2000). The Determinants of perceived service quality and its relationship with satisfaction. *Journal of Services Marketing, 14* (3), 217–231.

Levitt, T. (1980). Marketing success through differentiation-of anything. *Harvard Business Review*, (January–February), 83–91.

Li, M., Bray, M. (2007). Cross-border flows of students for higher education: Push-pull factors and motivations of mainland Chinese students in Hong Kong and Macau. *Higher Education, 53* (6), 791–818.

Ljubojević, Č. (2001). *Menadžment i marketing usluga*. Beograd: Želnid.

Ljubojević, Č. (2002). *Marketing usluga* (3. izd.). Novi Sad: Stylos.

Lockhart, M. J. (2005). *How to Market Your School: A Guide to Marketing, Communication, and Public Relations for School Administrators*. Lincoln: iUniverse Books.

Loundon, D., Della Bitta, A. J. (1988). *Consumer Behavior: Concepts and Applications*. Singapore: McGraw-Hill.

Lovelock, C. (2004). Services Marketing: People, technology, strategy (5th ed.). New Jersey: Pearson/Prentice Hall.

Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education, 52* (1), 1–39.

Maričić, B. (2011). *Ponašanje potrošača.* Beograd: Ekonomski fakultet.

Maringe, F. (2005). Interrogation the crisis in the higher education marketing: CORD model. *International Journal of Education Management, 19* (7), 564–578.

Maringe, F. (2006). University and course choice; implications for positioning, recruitment and marketing. *The International Journal of Educational Management, 20* (6), 466–474.

Maringe, F., Carter, S. (2007). International students' motivations for studying in UK HE: Insights into the choice and decision making of African students. *International Journal of Educational Management, 21* (6), 459–475.

Maringe, F., Gibbs, P. (2009). *Marketing Higher Education: Theory and Practice*, Maidenhead: McGraw Hill.

Masserini, L., Bini, M., & Pratesi, M. (2018). Do Quality of Services and Institutional Image Impact Students' Satisfaction and Loyalty in Higher Education? *Social Indicators Research*, 1–25.

Mazzarol, T., Soutar, G. N. (2002). "Push-pull" factors influencing international student destination choice. *International Journal of Educational Management, 16* (2), 82–90.

McCollough, M. A., Gremler, D. D. (1999). Guaranteeing student satisfaction: an exercise in treating students as customers. *Journal of Marketing Education, 21* (August), 118–130.

McMahon, M. E. (1992). Higher education in a world market: An historical look at the global context of international study. *Higher Education, 24* (4), 465–482.

Miladinović, S. (2011). Reforma i otpori: visoko obrazovanje između partikularnih interesa i društvenih potreba. U V. Matejić (ur.), *Tehnologija, kultura, razvoj: tematski zbornik radova XVIII naučnog skupa međunarodnog značaja „Tehnologija, kultura i razvoj“* (str. 7–17). Beograd: Udruženje „Tehnologija i društvo“.

Milisavljević, M., Maričić, B., Gligorijević, M. (2004). *Osnovi marketinga*. Beograd: Ekonomski fakultet.

Miljanović, D. B. (2009). *Uticaj komunikacione strategije na upravljanje modernim preduzećem* (Doktorska disertacija). Beograd: Fakultet Političkih nauka Univerziteta u Beogradu.

Miljković, J. (2010). Professionalization of high educational institutions marketing incontext of crisis. U S. Medić, R. Ebner, K. Popović (ur.), *Adult Education: The response to global crisis – strengths and chalenges of the profession* (str. 207–220). Beograd: IPA; EAEA; DVV.

Miljković, J., Kovačević, M. J. (2011). Elementi marketing miksa kao činioci izbora visokoobrazovne institucije. *Andragoške studije*, (1), 135–156.

Minjung, S., Sung-Un, Y. (2008). Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research, 20* (4), 357–376.

Monferrer-Tirado, D., Estrada-Guillén, M., Fandos-Roig, J. C., Moliner-Tena, M. Á., & Sanchez Garcia, J. (2016). Service quality in bank during an economic crisis. *International Journal of Bank Marketing, 34* (2), 235-259.

Montané, A., Beltrán, J., Gabaldón-Estevan, D. (2017). Higher Education in Spain. *Quality Assurance in Higher Education: A Global Perspective, 1,* 41–67.

National Agency for Quality Assessment and Accreditation of Spain, ANECA, (2012). Available at: http://www.aneca.es/eng/ANECA

National Platform for Knowledge Triangle in Serbia: Synergy of Education, Research and Innovation, (2013). [s. l.]: Tempus.

National Report Regarding the Bologna Process implementation (Serbia, Spain) 2012-2015, EHEA, http://www.ehea.info/

Naude, P., Ivy, J. (1999). The marketing strategies of universities in the United Kingdom. *The International Journal of Educational, 13* (3), 126–135.

Navarro, M. M., Iglesias, M. P., Torres, P. R. (2005). A new management element for universities: Satisfaction with the offered courses. *International Journal of Educational Management, 19* (6), 505–526.

Nell, C. E., & Cant, M. C. (2014). Determining student perceptions regarding the most important servicefeatures and overall satisfaction with the service quality of a higher education institution*. Management: Journal of Contemporary Management Issues, 19 (*2), 63–87.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17* (4), 460–469.

Oliver, R. L., DeSarbo, W. S. (1988). Response determinants in satisfaction Judgments. *Journal of Consumer Research, 14* (4), 495–507.

Oplatka, I., Hemsley-Brown, J. (2004). The research on school marketing: Current issues and future directions. *Journal of educational administration*, *42* (3), 375–400.

Osman, A., Saputra, R., & Luis, M. (2018). Exploring mediating role of institutional image through a complete structural equation modeling (sem): a perspectve of higher education. *International Journal for Quality Research, 12*, (2), 517–536.

Osman, A., Saputra, R., & Luis, M. (2018). *International Journal for Quality Research, 12*, (2), 517–536.

Palacio, A. B., Meneses, G. D., Perez, P. J. P. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration, 40* (5), 486–505.

Palmer, A. (2005). *Principles of Services Marketing* (4th ed.). London: McGraw-Hill.

Pampaloni, A. M. (2010). The influence of organizational image on college selection: What students seek in institutions of higher education. *Journal of Marketing for Higher Education, 20* (1), 19–48.

Parasuraman, A., Berry, L. L., Zeithaml, V. A. (1991). Refinement and Reassessment of the SERVQUAL Scale. *Journal of Retailing, 67* (4), 420–450.

Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1985). A conceptual model of service/quality and its implications for future research. *Journal of Marketing, 49* (4), 99–104.

Pimpa, N. (2005). Marketing Australian universities to Thai students. *Journal of Studies in International Education, 9* (2), 137–146.

Pozo-Munoz, C., Rebolloso-Pacheco, E., Fernandez-Ramirez, B. (2000). The ‘ideal teacher’: implications for student evaluation of teacher effectiveness. *Assessment and Evaluationin Higher Education, 25* (3), 253–263.

Price, I., Matzdorf, F., Smith, L., Agahi, H. (2003). The impact of facilities on student choice of university. *Facilities, 21* (10), 212–222.

Ransom, A. L., Nieto, L. E., & Korndorffer, M. L. (2017). Impact of Redesigned Anatomy Problem-Based Learning Curriculum on Student Satisfaction. *Medical Science Educator, 27*(4), 895-901.

Rawn, C. D., & Fox, J. A. (2018). Understanding the Work and Perceptions of Teaching Focused Faculty in a Changing Academic Landscape. *Research in Higher Education*, *59* (5) 591–622.

Ries, A., Trout, J. (1981). *Positionering*. Samsom: Alphen aan de Rijn.

Rodić-Lukić, V., & Lukić, N. (2016). Primena marketing miksa koncepta kod strategije regrutovanja studenata - Univerzitet u Novom Sadu, Srbija. *Megatrend revija*, *13* (3), 183-202.

Romero Sánchez, J., Juan Zornoza, J. M., Sanz Subirana, J. (2016). Higher education in Spain, Available at: https://upcommons.upc.edu/bitstream/handle/2117/86167/Higher_Education_in_Spain.pdf

Ruiz-Esparza Barajas, E., Medrano Vela, C. A., Huerta, K. Z., & Helbert, J. (2016). Exploring university teacher perceptions about out-of-class teamwork. *Profile Issues in TeachersProfessional Development*, *18* (2), 29-45.

Senić, R., Senić, V. (2008). *Menadžment i marketing usluga*. Kragujevac: Ekonomski fakultet Univerziteta u Kragujevcu.

Seth, N., Deshmukh, S. G., Vrat, P. (2005). Service quality models: a review. *International Journal of Quality & Reliability Management, 22* (9), 913–949.

Sevier, R. A. (1994). Image is everything: Strategies for measuring, changing, and maintaining your institution's Image. *College and University, 69* (2), 60–75.

Shanka, T., Quintal, V., Taylor, R. (2005). Factors influencing international students' choice of an education destination: A correspondence analysis. *Journal of Marketing for Higher Education, 15* (2), 31–46.

Sharp, J. M. (2009). *Community College Students Perceptions of University Image* (Doctoral disertation). Sakramento: California State University.

Shiv, B., Huber, J. (2000). The impact of anticipating satisfaction on consumer choice. *Journal of Consumer Research, 27* (2), 202–217.

Simeunović, Ž. (2004). Interesantnost i atraktivnost nastave kao nastavni princip. *Pedagogija, 59* (2), 59–67.

Smart, J. C. (ed.) (2004). *Higher Education: Handbook of Theory and Research: Volume XIX*. Dordrecht: Kluwer Academic Publichers.

Smith, A. M., Fischbacher, M., Wilson, F. A. (2007). New service development: from panoramas to precision. *European Management Journal, 25* (5), 370–383.

Solomon, M. R. (1994). *Consumer Behavior: buying, having, and being* (2nd ed.). Boston: Allyn and Bacon.

Standifird, S. S. (2005). Reputation among peer academic institutions: An investigation of the US News and World Report's rankings. *Corporate Reputation Review, 8* (3), 233–244.

Starck, K., Zadeh, S. H., Ekman, P., Olsson, E. M. (2013). *Marketing within higher education institutions: A case study of two private Thai universities* (Doctoral disertation). Västerås: Mälardalen University.

Strategy for Education Development in Serbia 2020, (2012). Službeni glasnik RS, br. 107/2012.

Stukalina, Y. (2014). Identifying predictors of student satisfaction and student motivation in the framework ofassuring quality in the delivery of higher education services. *Business, Management and Education, 12* (1), 127–137.

Sultan, P., & Yin Wong, H. (2014). An integrated-process model of service quality, institutional brand andbehavioural intentions. *Managing Service Quality, 24* (5), 487.

Sung, M., Yang, S. (2008). Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research, 20* (4), 357–376.

Symes, C., Meadmore, P., Limerick, B. (1994). Secondary education in queensland: Never a matter of primary concern. *Discourse, 14* (2), 92–102.-

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*, 6th ed. Boston: Pearson.

Teas, R. K. (1993). Expectations, performance evaluation, and consumer' perceptions of quality. *Journal of Marketing, 57* (4), 18–34.

The California master plan for higher education – Kindergarten through University. (2002). Sacramento: Joint Committee to Develop a Master Plan for Education.

Theus, K. T. (1993). Academic reputations: The processof formationand decay. *Public Relations Review, 19* (3), 277–291.

Treadwell, D. F., Harrison, T. M. (1994). Conceptualizing and assessing organizational image: Model images, commitment and communication. *Communication Monographs, 61* (1), 63–85.

Vaz, R. Á., Freira, D., Vernazza, E., & Alves, H. (2016). Can students' satisfaction indexes be applied the same way in different countries? *International Review on Public and Nonprofit Marketing*, *13* (2), 101-118.

Vázquez, J. L., Aza, C. L., & Lanero, A. (2016). University social responsibility as antecedent of students' satisfaction. *International Review on Public and Nonprofit Marketing, 13* (2), 137-149.

Veljić, J., Bojanović, A. (2011). Transformacija sistema visokog obrazovanja u Srbiji 2003–2010: jedna perspektiva. U A. Veselinović, P. Atanacković, Ž. Klarić (ur.), *Izgubljeno u tranziciji: kritička analiza procesa društvene transformacije* (str. 183–207). Beograd: Rosa Luxemburg Stiftung.

Veljković, S. (2006). *Marketing usluga*. Beograd: Ekonomski fakultet.

Veljković, S. (2009). *Marketing usluga*. Beograd: CID Ekonomskog fakulteta.

Veloutsou, C., Lewis, J. W., Paton, R. A. (2004). University selection: Information requirements and importance. *The International Journal of Educational Management, 18* (2–3), 160–172.

Vidal, J. (2003). Quality assurance, legal reforms and the European higher education area in Spain. *European Journal of Education, 38* (3), 301–313.

Vos, M. F. (1992). *The Corporate Image Concept*. Utrecht: Lemma.

Voss, R., Gruber, T., Szmigin, I. (2007). Service quality in higher education: the role of student expectations. *Journal of Business Research, 60* (9), 949–959.

Vračar, D. (1999). *Strategije tržišnog komuniciranja*. Beograd: Ekonomski fakultet.

Vranešević, T. (2000). *Upravljanje zadovoljstvom klijenata*. Zagreb: Golden marketing.

Vukasović, M. (2006). *Razvoj kurikuluma u visokom obrazovanju*. Beograd: Alternativna akademska obrazovna mreža.

Wang, Y., Lo, H. P. (2003). Customer-focused performance and dynamic model for competence building and leveraging. *Journal of Management Development, 22* (6), 483–526.

Weerasinghe, I. S., Lalitha, R., & Fernando, S. (2017). Students satisfaction in higher education literature review*. American Journal of Educational Research, 5* (5), 533-539.

Westbrook, R. A., Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research, 18* (1), 84–91.

Wilkins, S., & Huisman, J. (2015). Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Studies in Higher Education, 40* (7), 1256-1272.

Wilkins, S., Huisman, J. (2013). Student Attachment to International Branch Campuses. *Journal of Studies in International Education, 17* (5), 607–623.

Williams, C. (2010). *Principi menadžmenta*. Beograd: Datastatus.

Yoo, B., Donthu, N., Lee, S. (2000). An examination of selected marketing mix elements And brand equity. *Journal of the Academy of Marketing Science, 28* (2), 195–211.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing, 52* (3), 2–22.

Zeithaml, V. A., Bitner, M. J. (2000). *Service Marketing* (2nd ed.). New York: McGraw-Hill.

Zeithaml, V. A., Bitner, M. J., Gremler, D. M. (2006). *Services Marketing: Integrating Customer Focus Across the Firm* (4th ed.). Boston: McGraw-Hill/Irwin.

Zeithaml, V. A., Bitner, M. J., Gremler, D. M. (2009). *Services Marketing: Integrating Customer Focus Across the Firm* (5th ed.). Boston: McGraw-Hill.

ANNEX I. QUESTIONNAIRE

By marking one of the offered scales, please state your opinion regarding the measurement of the impact of the marketing mix instruments on the image of the higher education institution and the satisfaction of students.

Rating scales range from 1 to 7 (1- I totally disagree, 7 – I agree completely).

The survey is being conducted at the University Business Academy in Novi Sad (Serbia) and at the University of Jaume I (Spain) for the need of a doctoral dissertation and is completely anonymous.

Thank you for your cooperation.

1. GENDER: M F
2. Birth year: ______________________________
3. College you are attending: ______________________________
4. Year of study: ______________________________
5. Average grade: ______________________________

MARKETING MIX INSTRUMENTS

SERVICE

1. The study program I study is of high quality.
   1 2 3 4 5 6 7
2. The professor lectures are of high quality.
   1 2 3 4 5 6 7
3. The teaching associate seminars are of high quality.
   1 2 3 4 5 6 7
4. The literature used in the study program is of high quality.
   1 2 3 4 5 6 7
5. The faculty provides the opportunity to perform professional practice.
   1 2 3 4 5 6 7

6. The faculty offers the possibility of international student exchange and training abroad.
   1 2 3 4 5 6 7
7. The acquired competences are contemporary and practically applicable.
   1 2 3 4 5 6 7
8. The complete range of faculty services is entirely adequate.
   1 2 3 4 5 6 7

PRICE

1. The tuition fee is reasonable in regards to the standard of living in Serbia / Spain.
   1 2 3 4 5 6 7
2. The tuition fee is reasonable in regards to the competition.
   1 2 3 4 5 6 7
3. The tuition fee is reasonable in regards to what the faculty provides.
   1 2 3 4 5 6 7
4. The tuition fee payment terms (rates and deadlines) are affordable.
   1 2 3 4 5 6 7
5. Additional costs of studying (applications, certificates, and books) at the faculty are not expensive.
   1 2 3 4 5 6 7
6. The Faculty offers scholarships for best students.
   1 2 3 4 5 6 7
7. The Faculty offers discounts for best students.
   1 2 3 4 5 6 7
8. The price of faculty services is entirely adequate.
   1 2 3 4 5 6 7

DISTRIBUTION

1. Lectures are conducted regularly according to the timetable.
   1 2 3 4 5 6 7
2. Seminars are conducted regularly according to the timetable.
   1 2 3 4 5 6 7
3. Consultations are carried out according to the defined schedule.
   1 2 3 4 5 6 7
4. Examinations are conducted according to the defined timetable.
   1 2 3 4 5 6 7
5. The necessary information can be obtained from the student service.
   1 2 3 4 5 6 7

6. The necessary information can be obtained by telephone.
   1 2 3 4 5 6 7
7. The necessary information can be obtained through the website, social networks, DLS (distance learning).
   1 2 3 4 5 6 7
8. The delivery of faculty services is entirely adequate.
   1 2 3 4 5 6 7

PROMOTION

1. The faculty has a high-quality presentation on television through advertising and media appearances.
   1 2 3 4 5 6 7
2. The faculty has a high-quality radio presentation.
   1 2 3 4 5 6 7
3. The faculty has a high-quality presentation in the print media.
   1 2 3 4 5 6 7
4. The faculty has a high-quality presentation on billboards and city lights.
   1 2 3 4 5 6 7
5. The faculty organizes interesting promotional events
   (conferences, charity events, competitions, congresses, etc.)
   1 2 3 4 5 6 7
6. The faculty has a high-quality presentation in secondary schools.
   1 2 3 4 5 6 7
7. The faculty has a high-quality presentation on faculty website and social networks.
   1 2 3 4 5 6 7
8. The public is entirely adequately informed about the work of the faculty.
   1 2 3 4 5 6 7

HUMAN FACTOR

1. Professors present course materials in an interesting way.
   1 2 3 4 5 6 7
2. Professors motivate students to learn.
   1 2 3 4 5 6 7
3. Teaching associates practice course materials with students in an interesting way.
   1 2 3 4 5 6 7
4. Teaching associates motivate students to learn.
   1 2 3 4 5 6 7
5. Non-teaching staff are doing their job well.

1 2 3 4 5 6 7

6. Non-teaching staff are kind.
   1 2 3 4 5 6 7
7. The students' academic level at the faculty is entirely adequate.
   1 2 3 4 5 6 7
8. The entire human factor at the faculty (professors, associates, non-teaching staff and students) are completely adequate.
   1 2 3 4 5 6 7

PHYSICAL EVIDENCE

1. The location of the faculty is entirely adequate.
   1 2 3 4 5 6 7
2. The design of the faculty building and the complete exterior is entirely adequate.
   1 2 3 4 5 6 7
3. The faculty possesses a completely adequate number of amphitheater and classrooms for unobstructed teaching.
   1 2 3 4 5 6 7
4. Interior and equipment of the premises at the faculty is entirely adequate.
   1 2 3 4 5 6 7
5. The faculty possesses a completely adequate computer equipment for unobstructed teaching.
   1 2 3 4 5 6 7
6. The faculty possesses a functional and well equipped library.
   1 2 3 4 5 6 7
7. Faculty and staff members are dressed entirely adequately.
   1 2 3 4 5 6 7
8. The complete physical evidence at the faculty is entirely adequate.
   1 2 3 4 5 6 7

SERVICE PROCESS

1. The teaching process (lectures, seminars, consultations) is well organized.
   1 2 3 4 5 6 7
2. The colloquium exam and exam process is well organized.
   1 2 3 4 5 6 7
3. The teaching process is interactive (students actively participate in lectures).
   1 2 3 4 5 6 7
4. The seminars are interactive (students actively participate in seminars).
   1 2 3 4 5 6 7

5. The faculty provides a well-organized professional practice.
   1 2 3 4 5 6 7
6. The faculty provides a well-organized international student exchange.
   1 2 3 4 5 6 7
7. The faculty provides a well-organized student information system.
   1 2 3 4 5 6 7
8. The entire service process at the faculty is completely adequate.
   1 2 3 4 5 6 7

IMAGE OF HIGHER EDUCATION INSTITUTION

1. The faculty is renowned for the quality programs it offers.
   1 2 3 4 5 6 7
2. The faculty is renowned for its high-quality teaching staff.
   1 2 3 4 5 6 7
3. The faculty is renowned for its attentive and kind non-teaching staff.
   1 2 3 4 5 6 7
4. The faculty is renowned for its organization and student information system.
   1 2 3 4 5 6 7
5. The faculty is renowned for the practically applicable competencies it offers to its students.
   1 2 3 4 5 6 7
6. The faculty is renowned for providing its students with opportunity to easily find employment after graduation.
   1 2 3 4 5 6 7
7. The faculty is renowned for studies that are easily completed.
   1 2 3 4 5 6 7
8. The public image of the faculty is positive.
   1 2 3 4 5 6 7

STUDENT SATISFACTION

1. I am satisfied with the quality of all marketing mix elements at the faculty.
   1 2 3 4 5 6 7
2. The faculty entirely meets my needs and wants.
   1 2 3 4 5 6 7
3. The faculty entirely met the expectations I had upon enrollment.
   1 2 3 4 5 6 7
4. I am satisfied with the public image of the faculty.
   1 2 3 4 5 6 7

5. I would again decide to enroll at the same faculty.
   1 2 3 4 5 6 7
6. I would continue with the higher degree academic studies at the faculty.
   1 2 3 4 5 6 7
7. I would recommend the faculty to my friends.
   1 2 3 4 5 6 7
8. I am entirely satisfied with the faculty I study at.
   1 2 3 4 5 6 7

ABSTRACT

The main focus of the study is the analysis of the effects of marketing mix instruments in higher education institutions in building the image of higher education institutions and the satisfaction of students, all from the perspective of service users, which in turn, leads to a more successful positioning of a higher education institution in the higher education market. Therefore, the goal was to reach insight regarding marketing mix instruments which need to be improved in order to improve the image of higher education institutions and student satisfaction.

The dissertation includes a theoretical and empirical section. Overall, all of the sections in this dissertation are properly documented and coordinated. Introductory chapter within theoretical section, provides research justification, research objectives, and scope and the significance of the study, as well as the overview of the current situation in the education market in the Republic of Serbia and in Spain, where the research was conducted. Theoretical section focuses primarily on literature review which is documented accordingly. In this way, the literature and the views of relevant authors regarding research variables were presented. The beginning of the chapter presents views of the authors and literature review regarding marketing, more precisely, marketing in the higher education sector, which presents each marketing mix instrument separately as independent research variable. Following this, the literature review regarding the image of higher education institutions and student satisfaction is presented, which sets the theoretical basis for dependent research variables. This part also introduces the research hypotheses which introduced relation of research variables.

Empirical section discusses the research findings, and focuses on the testing of the hypotheses set in the theoretical section. At the beginning of empirical section the empirical research methodology was presented, with detailed outline of research variables and data collection methods. It also provided information of the questionnaire, complete research sample and subsample, as well as statistical methods used to analyze data. This served as an introduction to the chapter dealing with research results which, outlined detailed research results of the statistical methods (descriptive analysis, correlation analysis, multiple regression analysis and t- independent samples test) of the complete research sample and subsample. In the final part of the empirical section the previously set hypotheses were confirmed and disproved, and it also presented the conclusions, limitations and the future line of research in this field.

The research conducted on a complete sample from higher education institutions in the Republic of Serbia and Spain, as well as on research subsample from higher education institutions in each country, led to the results which, matched to theoretical perspectives in this area, produced very useful and widely applicable conclusions, which serve as a contribution to the scientific and practical perspective. The scientific goal of the research is achieved by confirming the validity of the set hypotheses, and based on the scientifically based research process, reliable data were obtained in an area that was not sufficiently explored by other authors. The social goal of the research is achieved by providing practically applicable guidelines for improving image and enhancing student satisfaction in higher education institutions. At the very end of the dissertation, the author introduces some remarks for future investigations, which can use this dissertation as a starting point for reaching new findings in the field of higher education and wider.

RESUMEN DE LA TESIS

El principal objetivo de esta tesis doctoral es el análisis de los efectos que las estrategias de marketing tienen en la construcción de la imagen de las instituciones de educación superior, así como la satisfacción de sus estudiantes, todo desde la perspectiva de los usuarios del servicio, lo que, a su vez, las conduce a un posicionamiento más exitoso en el mercado de la educación superior. En definiti va, el objetivo es llegar a averiguar cuáles son las estrategias de marketing que deben optimizarse para mejorar la imagen de las instituciones de educación superior y la satisfacción de los estudiantes.

La tesis incluye una sección teórica y otra empírica. En general, todas las secciones en esta tesis están debidamente documentadas y coordinadas. El capítulo introductorio dentro de la sección teórica proporciona la justificación de la investigación, sus objetivos, el alcance y la importancia del estudio, así como la visión general de la situación actual en el mercado educativo en Serbia y en España, donde se llevó a cabo la investigación. La sección teórica se centra principalmente en la revisión de la literatura. De esta manera se repasa la literatura más relevante de los autores más representativos con respecto a las variables de la investigación. El comienzo del capítulo presenta los resultados de investigación sobre el marketing, más precisamente, el marketing en el sector de la educación superior. A continuación, se presenta la revisión de la literatura sobre la imagen de las instituciones de educación superior y la satisfacción de los estudiantes, estableciendo así las bases teóricas de las variables dependientes de la investigación. En esta sección también se introducen las hipótesis de la investigación que se pondrán a prueba en la presente tesis.

En la sección empírica se discuten los resultados de la investigación y se centra en la prueba de las hipótesis establecidas en la sección teórica. Al comienzo de la sección empírica se presenta la metodología de la investigación empírica, junto con un resumen detallado de las variables de la investigación y los métodos de la recolección de datos. También se proporciona la información sobre el cuestionario utilizado para la recogida de datos, la descripción de las muestras utilizadas, así como los métodos estadísticos utilizados para el análisis de datos. Esto sirve como una introducción al capítulo que trata las conclusiones de la investigación, el cual resume detalladamente los resultados de los distintos análisis realizados (análisis descriptivo, análisis de correlación, análisis de regresión múltiple y prueba T para muestras independientes). Finalmente, en la parte final de la sección empírica se confirman y se refutan las hipótesis previamente establecidas y también se presentan las conclusiones, las limitaciones y las futuras líneas de investigación en este campo.

La investigación realizada en una muestra completa en dos instituciones de educación superior en cada uno de los dos países analizados (Serbia y España), así como en una sub-muestra de las instituciones de educación superior en cada país, ha dado resultados que, combinados con las perspectivas teóricas previas de esta área de investigación, han producido unas conclusiones que resultan útiles y ampliamente aplicables para contribuir tanto a la perspectiva científica como práctica. El objetivo científico de la investigación ha sido logrado al confirmar la validez de las hipótesis establecidas y se obtuvieron unas conclusiones fiables y consistentes en un área que no había sido suficientemente explorada por otros autores. El objetivo social de la investigación ha sido logrado al proporcionar las pautas aplicables prácticamente para mejorar la imagen y aumentar la satisfacción de los estudiantes en las instituciones de educación superior. Al final de la disertación, la autora presenta conclusiones para las futuras investigaciones, que podrán utilizar esta tesis como el punto de partida para llegar a nuevos hallazgos en el campo de la educación superior, así como en otros campos afines.