

*A scientific paper*

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## **ANALYSING INFLUENCES ON SERVICE QUALITY IN HIGHER EDUCATIONAL INSTITUTIONS: ROLE OF STUDENTS' INTRINSIC AND EXTRINSIC MOTIVATORS**

### ***ABSTRACT***

*Higher educational institutions (hereinafter HEI) to be competitive on the market should implement market orientation principles. This means that to obtain adequate information from the market, HEIs should analyse different influences on students' decision-making process while deciding about their future education. Hence, purpose of this paper is to analyse intrinsic and extrinsic motivators that shape students' expected and perceived service quality of HEI. Paper tests Chapman model (1981) and analyses different students' motivators and their relationship with expected as well as with perceived service quality. Intrinsic motivators are approached as socio-economic status, results of admission procedures, prior student experience with HEI and educational aims. Extrinsic motivators are explored as significant individuals, HEI's communication and HEI's characteristics. Research focuses on decision-making phase where students are selecting HEI to continue their education. Service quality is based on Parasuraman, Zeithaml and Berry (1988) SERVQUAL scale. Research was conducted on 250 students enrolled in 1st year of study at public HEI in Croatia. Results point out that students' extrinsic motivators are positively related to both expected and perceived service quality. While students' intrinsic motivators have mixed relationships with expected and perceived service quality. Prior student experience with HEI is positively related to expected service quality. Education of mother, family income and prior experience with HEI are positively related to perceived service quality. While results of admission procedures are negatively related to perceived service quality. Paper offers implications for HEIs policy makers, marketing and communication managers identifying motivators that are influencing positively or negatively students' decision-making while selecting HEI to continue their educational process.*

**Key words:** *service quality, students' motivators, higher educational institutions, Croatia.*

## 1. Introduction

The decision-making process of choosing the higher education institution (hereinafter, HEI) is a complex process in which future students go through. In order that HEI successfully answer the needs of the students, it is important to analyse students decision-making process of choosing the HEI. As well as all to analyse other influences that shape their decision-making process. The number of phases and characteristics of each individual phase through which students go, different authors define in various ways. Brown, Varley and Pal (2009) warn that the process of selecting the HEI depends, as is the case in any product or service selection, on the degree of the motivation in the process of searching. That is why there are potential students that have low level of motivation to find the solution and decide which HEI where they will enrol, they are passive and they feel obligated to make a decision, and the process itself does not mean a lot to them. On the other hand, there are students who are highly motivated, and they look for ways to remove the risk of making the wrong decision, also they are extremely involved in in the process of looking for information and making a decision. The process itself represents a complex life decision which is influenced by numerous factors.

This means that to obtain adequate information from the market, from future students, HEIs should analyse different influences on students' decision-making process while deciding about their future education. Various authors in different scientific fields (psychology, sociology, economy) emphasise that a student a process of choosing a HEI perceives as investing in the future. Which expectations make him to choose the HEI, and which societal role he acquires with it, etc. (Eidimtas and Juceviciene, 2014). Consumers can invest more effort and time in making their decisions, and the process itself again varies depending on the individual and current environment.

Also, different authors (eg. Mazzarol, Soutar and Thein, 2000; Sia, 2011; Furukawa, 2011) stress different motives that influence students' decision-making process upon selecting HEI. Chapman (1981) classifies these motives as extrinsic and intrinsic. Based on different motives students will behave differently and this will influence their decision-making process. Hence, purpose of this paper is to analyse intrinsic and extrinsic motivators that shape students expected and perceived service quality of HEI.

Paper is structured as follows. After introduction, a Literature review is presented and followed with methodology part. Research results is the next chapter. Paper ends with conclusion where managerial implications for HEIs are provided.

## 2. Literature review

### 2.1. Phases in the decision-making process of choosing a higher education institution

To better understand behavioural models of students while they are going through the decision-making process about choosing the HEIs, it is important to get familiar with possible phases and motivators which affect them. According to Chapman (1986) phases through which the students go through while selecting the HEIs, are as follows: (1) phase- before exploration phase, (2) phase- exploration phase, (3) phase- decision of applying to a HEI, (4) phase- making a decision of choosing a HEI, (5) phase- enrolment. Engel, Blackwell, and Miniard (1995), Schiffman and Kanuk (2007), Kotler and Keller (2009) and Perreault and McCarthy (2005), also differentiate between five different phases which future student experiences, but are differently distributed. Authors consider the first phase to be the realisation of problem, then

search for information, followed by analysing the alternatives, the choice itself, and post-selection and evaluation of decision. Hanson and Litten (1989) differentiate three phases: decision-making phase about enrolling into HEI, research phase of HEI, and phase of application and enrolment into the selected HEI.

No matter the fact that different authors divide the process into different number of phases through which students go through, it is of utmost importance to take into account of the shortness of the process of selection of the students while coming up with marketing communication of the HEI. Furthermore, Moogan, Baroon and Harris (1999) show that the selection process with the majority of students lasts about four months (from realising the need to realisation, i.e. the enrolment into HEI), which is a particularly short period of time for such a life altering decision. However, Obermeit (2012) shows that the duration of each phase, as well as the moment when it starts greatly depends on cultural phenomena. So, in US the predisposition phase as the first phase begins at the end of elementary school, while in Germany it begins two years before a decision is made. However, other authors believe that in most cultures this process begins at the last year of high school, right before enrolment into a HEI (Hossler, Braxton and Coopersmith, 1989).

## **2.2. Motives that affect students during the process of selection of higher education institution**

Authors emphasize the difference of motives which affect their choice of the preference HEI. Shen (2004) states that there are three the most important characteristics for selection of the HEI: attractive campus, friendly atmosphere and safety. And some less important characteristics are: HEI tuition fee, size and distance of the HEI, i.e. nearness of home. Sia (2011) emphasises that the most important factors in choosing the HEI are: programme (the span of the study levels, availability, flexibility of going to another level, etc.); expenses (scholarships, overall cost, payment options, etc.); location (ideal place, strategic position, practicality and availability, size and attractiveness of the campus) and highly educated personnel (advice from professors, staff or teachers, psychologists, and advisors). And less important factors are the opinions of friends and colleagues, as well visiting the campus.

Eidimtas and Juceviciene (2014) concluded that all the factors which influence decision-making about HEI can be put into the following categories: educational factors in the family and educational factors in the school (teacher's recommendations and career advisers); information factors (open days, exhibitions, mass media); financial factors (costs of higher education, career) and other factors (grades, personal skills and demographic characteristics). There are differences when private HEI are considered. That is to say, Yaacob, Osman and Bachok (2014) argument that parents, as those who finance higher education (hereinafter, HE), often have significant influence on making a decision when selecting private HEI.

According to Furukawa (2011) there are five groups of variables and a stream of factors for which the author believes that they determine the behaviour of future students. These factors are family, peers and friends, institutional characteristics, institutional communication and matching with institutional goals and core values. Telcs et al. (2015) divide four different groups of variables which they consider important in the process of selecting HEI like student background and location, family background and institutional factors. It is important to mention that Burdett (2013) differs among two types of approach when analysing variables which model the selection of the HEI. First one is traditional /social approach and it focuses on the student

and the other one is econometric approach which monitors costs and benefits. As explained, factors that influence the decision-making process are overlapping between different authors.

According to research by Okerson (2016) a big role in the process of selecting the HEI has a visit to the campus. In his research Okerson (2016) states that Chapman's (1981) model identified that the most important decisions which refer to the student background (family, demographics, financial possibilities and other personal factors). While Hansen and Litten (1989), and Hossler and Gallagher (1987) incorporated, besides the background, also outside factors such as location, expense, academic quality and the general feeling while visiting the campus. To this research of Okerson, adds Vossensteyn's (2005) model that is built on personal attributes, student characteristics, high school characteristics, environment, tuition fee, media influence, university's activities and other characteristics.

### **2.3. Chapman's model of higher education institution selection**

Chapman (1981) developed a model of HEI selection, which includes different influences that can model future student's behaviour in the phase of selection. He differentiates intrinsic characteristics of students and extrinsic influences which shape student's expectations of the HEI. Intrinsic characteristics are determined by socio-economic status, admittance exam results, educational aspirations of the student and high school experience. Besides these motivators, students' expectations are influenced by extrinsic influences that refer to important individuals from students' environment, sources of communication of the HEI and characteristics of the HEI itself.

In previous research (Rowan-Kenyon, Bell and Perna, 2008; Moogan, Baroon and Harris, 1999; Obermeit, 2012) identified that few individuals can influence the future students' choice of the HEIs and those are: parents, peers, teachers, advisers. HEIs sources of communication indicates ways in which potential students could receive information from traditional marketing sources (Grönroos, 1984). Sultan and Wong (2013) also discuss about their significance in the process of selection of the HEI. Possible sources of information about HEI (Briggs and Wilson, 2007; Obermeit, 2012) are advertising, catalogues, flyers, visiting the campus, recruitment/presentation, HEI web pages, social media, open days, festivals and so on. Prior experience in the context of HE includes prior educational experience of the student in high school, prior experience of any type of education in this or any other educational institution, and prior direct or electronic correspondence with the staff of the chosen HEI (Sultan, Wong, 2013). Expectations of students are also influenced by the characteristics of the HEI, such as scholarships and grants, location of the contents and the availability of the different educational programmes (Chapman, 1981).

### **2.4. Perceived quality of higher educational institutions**

HEIs need to secure corresponding level of quality for its students, if they want to be competitive on the educational market. Quality is defined as 'fitness for purpose' and quality assurance is defined as 'those systems, procedures, processes and actions intended to lead to the achievement, maintenance, monitoring and enhancement of quality' (Woodhouse, 1998). The undisputable is a need for and relevance of different tools that measure perceived level of quality which students experience while studying at their chosen HEI.

Perceived service quality is dominantly measured with SERQUAL (Parasuraman, Zeithaml and Berry, 1988), also in HEI context (e.g. Barnes, 2007; Leko Šimić and Čarapić, 2008; Dlačić,

Arslanagić, Kadić-Maglajić, Raspor, Marković, 2014). However, some other measures as SERVPERF and HEDPERF (Brochado, 2009) are proven to have good measurement characteristics. Service quality through SERVEQUAL measurement includes five dimensions: tangibles, reliability, responsiveness, assurance, and empathy; and consists of two (Parasuraman, Berry and Zeithaml, 1985; Parasuraman, Zeithaml, Berry, 1988) sections expected and perceived service. Service quality is analysed by observing the gap between these two dimensions. Additionally, Arslanagić- Kaladžić, Kadić- Maglajić, and Čičić (2014) point out that managing quality and related concepts cannot be simply translated from other services directly to HE. As HEI have their specifics in different staff, administrative and faculty, that serve customers i.e. students.

Interconnections of different variables with perceived level of quality was analysed by various authors. Research points out that intrinsic characteristics of students can relate to perceived level of quality (Rahman and Uddin, 2009). Furthermore, the connection between parents and other influential individuals from students' environment, and the perceived level of quality, has been established (Torquati et al., 2011). Moreover, through numerous research the connection between expense and perceived level of quality was also established (Sumaedi, Bakti and Matesari, 2011).

### 3. Conceptual model and research methodology

#### 3.1. Conceptual model

According to the previous research (Chapman, 1981), intrinsic and extrinsic characteristics of students are positively related with the students' expectations when enrolling specific HEI. Expectations are one of the main variables of determining the perceived level of quality, based on the previous theoretical background, the hypothesis is as following:

**H1: Intrinsic motivators of students are positively related with perceived service quality.**

H1a: Socio-economic status is positively related with perceived service quality.

H1b: Educational aspirations of students are positively related with perceived service quality.

H1c: The results of admissions exam are positively related with perceived service quality.

H1d: Student prior experience is positively related with perceived service quality.

Since the expectations for the received service quality on the chosen HEI are integral part of determining the perceived quality level, based on that the hypothesis is as following:

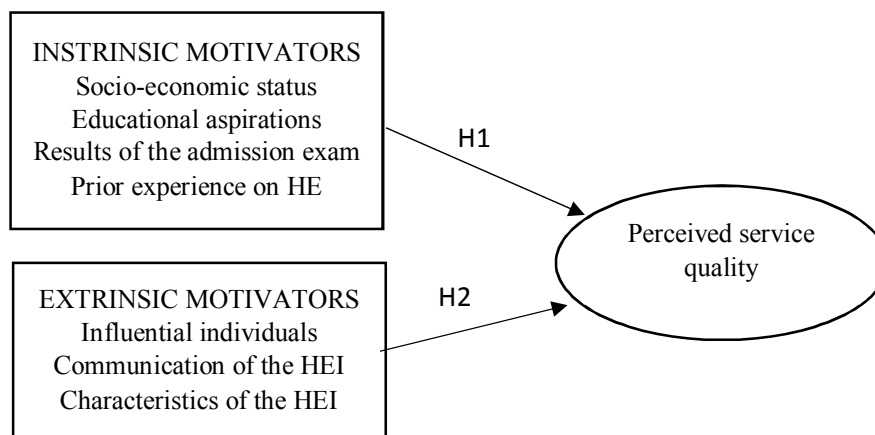
**H2: Extrinsic motivators are positively related with perceived service quality.**

H2a: Influential individuals are positively related with perceived service quality.

H2b: Communication of the HEI is positively related with perceived service quality.

H2c: Characteristics of the HEI are positively related with perceived service quality.

Based on prior research, the following conceptual model was created (Figure 1), which is tested through empirical research.

**Figure 1:** Proposed conceptual model

Source: authors

### 3.2. Research methodology

For testing proposed hypotheses and the conceptual model, scales from previous research from HEI context were used. *Intrinsic motivators* are taken from Chapman (1981) and are adjusted to the context of the HEI. The following variables are included: socio-economic status, results of the admission exam, educational aspiration and overall experience with HEI. Socio-economic and educational aspiration variables were measured with scales taken from Walpole (2003), while the results of the admission exam according to Chapman (1981) understands result achieved on the admissions exam (adjusted to today's requisites- state matura exam). Overall experience is measured with a scale taken from Sultan and Wong (2013), and it includes: high school grades, previous communication with the HEI and previous experience on HE.

*Extrinsic characteristics* according to Chapman (1981) includes the following variables: influential individuals, HEI communication and characteristics of the HEI. Influential individuals from student's environment was measured with scales taken from Rowan-Kenyon, Bell and Perna (2008), Moogan, Baroon and Harris (1999) and Obermeit (2012). HEI communication which includes information acquired from online and offline environment, was measured with scales taken from Briggs and Wilson (2007) and Obermeit (2012). Characteristics of the HEI was measured according to Chapman (1981). *Perceived service quality* was measured with SEVQUAL scale, originally created by Parasuraman, Zeithaml and Berry (1988), adjusted for the requirements of the research by Rodić Lukić and Lukić (2018) which means twenty-nine questions divided into five categories, and which refer to measuring the student's expectations before enrolling into HEI and student's received service from HEI. Student's perceived service quality of the HEI was computed by comparing student expectations and received service of the HEI. All variables used a 7- stage Likert scale. Answers were anchored at 1- Totally irrelevant to 7- Totally relevant.

Research was conducted online using Limesurvey platform during January 2019 on a public HEI with economic and business background in Republic of Croatia. The results were processed with IBM SPSS 23 programme. The results were analysed with using analysis of reliability with Cronbach alpha and for the correlation analysis Spearman's coefficient.

## 4. Research results

### 4.1. Research sample

Research sample is consisted of first year students of undergraduate university professional programme of HEI with economics and business background. Sample is comprised of 250 respondents. As from the 250 respondents not all questionnaires were complete, just 216 respondents were used in further analysis. Hence, 216 respondents form final research sample. From the research sample 74% of students were women. Majority of respondents answered that their mothers' occupation is employee in a company, while 13% have unemployed mothers, and 5,5% state that their mothers work on managerial functions. Similar situation is also found with employed fathers, where there is the biggest percentage of fathers are employed in a company (49%), then self-employed fathers (15,7%) and retirees (12,5%).

### 4.2. Research results analysis

Internal and external motivators are coded as ordinal variables. Expected service quality was gained as composite scale of variables: tangibility, reliability, responsibility, safety, and empathy. So, values are interval variable. As a starting point of the data analysis an internal consistency of the scale, Cronbach alpha, was calculated. Also, type of distribution was tested which confirmed that the Spearman coefficient should be used in the analysis.

Comparison was made between expected and received service quality, in order to identify the perceived service quality. For the analysis a comparison of arithmetic mean of the variables of tangibility, reliability, responsibility, safety and empathy was used (Table 1).

**Table 1:** Comparison of expected and received service quality

Dimension of quality	Expected service quality			Received service quality		
	Mean	Standard deviation	Cronbach Alpha	Mean	Standard deviation	Cronbach Alpha
Tangibility	5.8113	0.86829	0.817	5.5545	0.95160	0.881
Reliability	6.0914	0.96931	0.817	5.5312	1.07962	0.806
Responsibility	6.0193	1.00220	0.925	5.7045	1.09035	0.937
Safety	6.0130	1.00112	0.868	6.0130	1.00112	0.912
Empathy	5.5620	0.96190	0.794	5.5620	0.96190	0.852

*Source: authors*

Research analysis was continued with comparison of relations between socio-economic status with the service quality expectations from the HEI, where a correlation analysis was done (see Table 2). Research showed a positive correlation with all variables besides the relationship of expected service quality and family income.

**Table 2:** Correlation of the expected service quality of the HEI with socio-economic status

	Expected service quality	Mother's education	Father's education	Family income
Mother's education	-0.206**	1.000		
Father's education	-0.175*	0.553**	1.000	
Family income	-0.030	0.357**	0.347**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

*Source: authors*

Next, the relation of students’ educational aspirations and the results of the admissions exam in regard to the expected service quality that the student has from the HEI was tested. Furthermore, it confirmed that there does not exist a statistically significant positive correlation between educational plans and the end goal of education such as aspiration to finish undergraduate, graduate, post-graduate or doctoral studies. Also, results show no statistically significant correlation between the results of admissions exam with expected service quality that the student has from the HEI (Table 3).

**Table 3:** Correlation of the expected service quality of the HEI with educational plans

	Expected service quality
Educational plans	0.027
Admissions exam results	0.075

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

Analysis was continued with testing the correlation of student’s expected service quality of the HEI with student’s previous experience from the HEI. It was found out that there is statistically significant positive correlation between analysed variables (Table 4). Previous experience with HEI included: high school experience, higher education experience from this HEI or communication with the HEI (mail inquiries...).

**Table 4:** Correlation of the expected service quality of the HEI with previous experience with the HEI

	Expected service quality	High school experience	Previous HE experiences	Communication experience with this HEI
High school experience	0.277**	1.000		
Previous HE experiences	0.247**	0.802**	1.000	
Communication experience with this HEI	0.243**	0.765**	0.775**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

Analysis was continued with testing relationship of intrinsic motivators, i.e. influential individuals with the expected service quality which student has from the HEI (Table 5). Results showed that there is a statistically significant positive correlation between influential individuals with the expected service quality from the HEI in the case of parents and peers. The most significant influence is the peer influence. While measuring relationship between teachers and advisors there is no statistically significant correlation with the expected service quality from the HEI.

**Table 5:** Correlation of the expected service quality of the HEI with influential individuals

	Expected service quality	Parents	Peers	Teachers	Advisors
Parents	0.137*	1.000			
Peers	0.159*	0.820**	1.000		
Teachers	0.086	0.799**	0.882**	1.000	
Advisors	0.063	0.768**	0.820**	0.870**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors



Next, the correlation between communication of the HEI with the expected service quality which student has from HEI (Table 6) was done. Research showed a statistically significant positive correlation between some variables of the communication of the HEI with the expected service quality. The statistically significant correlation is noted between expected service quality of HEI and information from 'Postani student'<sup>1</sup> web pages, online communication with the HEI through social media and institutional web pages, and also visits made to the institution during HEI's Open days.

**Table 6:** Correlation of the expected service quality of the HEI with communication of the HEI

	Expected service quality
Information from catalogue, flyers, and brochures	0.091
Experience from visiting the campus or HEI	0.121
Recruitment by HEI employees	0.071
Information from HEI web pages	0.146*
Information from social media	0.182**
Information from mass media	0.114
Visiting Open days of the HEI	0.145*
Information from college review	0.134*
Information from 'Postani student' web page	0.259**
Information from unbiased web pages	0.111

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

*Source: authors*

When the characteristics of the HEI were tested (Table 7) and their relationship with the expected service quality, research showed a statistically significant level of correlation of all variables which measured characteristics of the HEI. The highest correlation is noted between the availability of HEI's courses and expected service quality.

**Table 7:** Correlation of the expected service quality of the HEI with characteristics of the HEI

	Expected service quality	Cost of tuition and overall cost of studying	Location of HEI	Availability of HEI courses
Cost of tuition and overall cost of studying	0.163*	1.000		
Location of HEI	0.145*	0.499**	1.000	
Availability of HEI courses	0.266**	0.215**	0.346**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

*Source: authors*

After analysis of intrinsic and extrinsic motivators with expected service quality from the HEI, the analysis continued with testing the proposed hypotheses.

### **H1: Intrinsic motivators of students are positively related with perceived quality level.**

For the purpose of testing the hypothesis H1, firstly correlation analysis between socio-economic status and student perceived service quality of the HEI was done (Table 8). Research

<sup>1</sup> An online application that coordinates applications to HEIs and helps with online enrolment.

showed that statistically significant positive correlation is noted with all variables besides with correlation between perceived service quality and finished father’s level of the education.

**Table 8:** Correlation of the perceived service quality of the HEI with socio-economic status

	Perceived service quality	Family income	Mother's education	Father's education
Family income	0.158*	1.000		
Mother's education	0.158*	0.357**	1.000	
Father's education	0.062	0.347**	0.553**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

Afterwards, the correlation between the perceived service quality and the results of the admissions exam and educational plans was done. Results indicate that correlation between admission exam and service quality was statistically significant but negative which means that if the result of the admission exam is high, students will show lower level of perceived service quality. The correlation between perceived service quality and educational plans was not statistically significant (Table 9).

**Table 9:** Correlation of the perceived service quality of the HEI with results of the admission exam and educational plans

	Perceived service quality
Admission exam	-0.134*
Educational plans	-0.028

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

The analysis of the correlation of student’s previous experience with the HEI with the perceived service quality of the HEI, showed that there is a statistically significant positive correlation between all mentioned variables (Table 10).

**Table 10:** Correlation of the perceived service quality of the HEI with previous experience with HEI

	Perceived service quality	High school experience	Previous HE experiences	Communication experience with this HEI
High school experience	0.274**	1.000		
Previous HE experiences	0.274**	0.802**	1.000	
Communication experience with this HEI	0.218**	0.765**	0.775**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

**H2: Extrinsic motivators are positively related with perceived quality level.**

In the analysis of the relation between perceived service quality and influential individuals (Table 11), a statistically significant positive correlation with parents, peers, but also teachers and advisors, was found.

**Table 11:** Correlation of the perceived service quality of the HEI with influential individuals

	Perceived service quality	Parents	Peers	Teachers	Advisors
Parents	0.245**	1.000			
Peers	0.210**	0.820**	1.000		
Teachers	0.226**	0.799**	0.882**	1.000	
Advisors	0.213**	0.768**	0.820**	0.870**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

Furthermore, the relation between communication as extrinsic motivator with perceived service quality of the HEI was tested. Between all elements of communication and perceived service quality, a statistically significant positive correlation was found (Table 12).

**Table 12:** Correlation of the perceived service quality of the HEI with communication of the HEI

	Perceived service quality
Information from catalogue, flyers, and brochures	0.200**
Experience from visiting campus or HEI	0.270**
Recruitment by HEI employees	0.233**
Information from web pages of the HEI	0.236**
Information social media of the HEI	0.211**
Information from mass media	0.203**
Visiting Open days of the HEI	0.240**
Information from HEI's fair	0.229**
Information from 'Postani student' web page	0.229**
Information from unbiased web pages	0.236**

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

Between characteristics of HEI and perceived service quality of the HEI, a statistically significant positive correlation is found with HEI location. While, correlation between perceived service quality of the HEI and tuition fees and the availability of HEI courses was not statistically significant (Table 13).

**Table 13:** Correlation of the perceived service quality of the HEI with characteristics of the HEI

	Perceived service quality	Tuition fees and overall cost of studying	HEI location	Availability of HEI courses
Tuition fees and overall cost of studying	0.062	1.000		
HEI location	0.139*	0.499**	1.000	
Availability of HEI courses	0.012	0.215**	.346**	1.000

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed); \*. Correlation is significant at the 0.05 level (2-tailed).

Source: authors

## 5. Conclusion

This article provides a theoretical overview of phases through which students go while selecting HEI, as well as variables that affect them. It is important to identify the variables which affect

the perceived service quality because the perceived service quality consequently affects the level of satisfaction with the courses and the HEI itself (Alves and Raposo, 2007).

Since it is very important, to the marketing managers at HEI, to analyse the variables which affect the perceived service quality in pre-experience phase the Chapman model (1981) was tested. The Chapman model (1981) includes both intrinsic and extrinsic motivators on the students' service quality expectations. Service quality expectations are integral part of the perceived service quality (Parasuraman, Zeithaml and Berry, 1988), hence in this research tested a model that relates intrinsic and extrinsic motivators the perception of service quality.

Focusing on internal motivators, although the socio-economic status affects students while selection a HEI (Rahman and Uddin 2009), the research shows that not all socio-economic motivators contribute to perceived service quality of the HEI. A positive relation between family income and mother's education is found. Differences based on the influence of parental education on the assessment of perceived student quality were also noted by the authors Dužević, Delić and Knežević (2017), who found that depending on the educational background of parents, there is a difference in the students' perception of HEI quality.

Also, research shows a positive relation between perceived service quality and prior experience with HEI like high school experience, previous HE experiences and communication experience with this HEI. This is consistent with findings of Okerson (2016) who emphasises that a campus visit is important factor that influences HEI enrolment.

Hence, H1 can be partially accepted, as not all sub-hypotheses are accepted. Still, this shows that internal motivators should not be taken as a group of motivators, but researchers have to focus on each intrinsic motivator itself.

The analysis of extrinsic motivators and its relationship with the expected service quality showed the following. All the influential individuals influence students' perceived service quality of the HEI. This is consistent with in the research of Omar et al. (2009) in the context of children's homes. Also, among characteristics of the HEI, only HEI location contributes to the perceived service quality. But the relationship between communication of the HEI with prospective students of the HEI revealed that all variables contribute to perceived service quality. However, it is possible that assessing the importance of location as a variable of perceived service quality also depends on the geographical location of the country and other conditions shaped by different national influences. Štimac and Leko Šimić (2012) showed that location is not at all an important variable in assessing quality for students in Croatia and Slovenia, while it was significant in Hungary. Highest relationship was noted between perceived service quality and experience from visiting campus or HEI, visiting Open days of the HEI, information from unbiased web pages and information from web pages of the HEI. Hence, authors can conclude that H2 was accepted as majority of sub-hypotheses were found to be accepted by the conducted research. Still, as noted before researchers should distinguish between different external motivators that shape perceived service quality of the HEI.

This research can be helpful in management of HEIs while creating future marketing strategies. Extrinsic motivators are more influential in shaping perceived service quality of the HEI than intrinsic motivators. Hence, HEI managers should focus on their external communication about HEI as well as on influential individuals like parents, peers, teachers and advisors. The emphasis should be focused, while creating communicational messages, on first-year students to increase their perceived service quality, as they influence prospective students. Also, using

different communication channels and media is advised with focus on Open days of the HEIs and information on web pages both HEI and unbiased and independent web pages that communicate realistic picture of studying at the HEI.

Research has certain limitations, like testing on just one group of subjects, which was only conducted on one group of 1st year undergraduate students. This represents a limitation because it was proven that the perceived service quality changes during the years of studying (O'Neill, 2003). This was also stressed by Štimac and Leko Šimić (2012), where they proved that during the first three years of study, students' perceptions of perceived level of quality changes. For further research, testing a later phase of studying is suggested as well as testing on different HEIs. It is possible that there is a difference between expectations and perceived service quality between public and private HEI, and future research is suggested to go in that direction too.

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