

# STUDENTS' PERCEPTIONS ABOUT ROLE OF FACULTY AND ADMINISTRATIVE STAFF IN BUSINESS EDUCATION SERVICE QUALITY ASSESSMENT<sup>1</sup>

## PERCEPCIJA STUDENATA O ULOZI NASTAVNOG I ADMINISTRATIVNOG OSOBLJA PRI PROCJENI KVALITETE USLUGA POSLOVNOG OBRAZOVANJA<sup>2</sup>

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### Maja Arslanagić-Kalajdžić, M. A.

School of Economics and Business, University of Sarajevo  
Trg oslobođenja - Alija Izetbegović 1, 71000 Sarajevo,  
BOSNIA AND HERZEGOVINA  
Phone: ++387 33 564 398  
E-mail: [maja.arslanagic@efsa.unsa.ba](mailto:maja.arslanagic@efsa.unsa.ba)

### Muris Čičić, Ph. D.

School of Economics and Business, University of Sarajevo  
Trg oslobođenja - Alija Izetbegović 1, 71000 Sarajevo,  
BOSNIA AND HERZEGOVINA  
Phone: ++387 33 275 902  
E-mail: [muris.cicic@efsa.unsa.ba](mailto:muris.cicic@efsa.unsa.ba)

### Selma Kadić-Maglajlić, Ph. D.

School of Economics and Business, University of Sarajevo  
Trg oslobođenja - Alija Izetbegović 1, 71000 Sarajevo,  
BOSNIA AND HERZEGOVINA  
Phone: ++387 33 275 947  
E-mail: [selma.kadic@efsa.unsa.ba](mailto:selma.kadic@efsa.unsa.ba)

### Ključne riječi:

*kvaliteta usluge, SERVQUAL, visoko obrazovanje, nastavno osoblje, administrativno osoblje*

### Key words:

*service quality, SERVQUAL, higher education, faculty members, administrative staff*

### SAŽETAK

U fokusu su ovog rada dimenzije mjerenja koncepta percipirane kvalitete usluga poslovnih škola. Predložena je modificirana SERVQUAL skala za mjerenje očekivane i percipirane kvalitete, pri čemu su zaposlenici poslovnih škola podi-

### ABSTRACT

This paper focuses on dimensions of the perceived service quality measurement for business schools. We propose an adapted SERVQUAL measure of expected and perceived quality, where employees at business schools are split into two

jeljeni u dvije grupe, tj. nastavnike i administrativno osoblje, te su te dvije grupe i ocijenjene posebno. Tako prilagođeni mjerni instrument predstavlja alat za usporedivu ocjenu kvalitete usluga na poslovnim školama. Empirijski podaci prikupljeni su od studenata preddiplomskog studija u okruženju gospodarstva u razvoju. Ukupno 282 prikupljena odgovora koristila su se za ocjenu predloženog modela i za testiranje razlika između očekivane i percipirane kvalitete usluge poslovnih škola. Rezultati idu u prilog korisnosti predložene adaptirane SERVQUAL skale. Zbog toga ovaj rad doprinosi postojećoj literaturi putem rezultata istraživanja o kvaliteti usluge u obrazovnom kontekstu.

groups: faculty and administrative staff, and assessed separately. This measure represents a tool for comparable service quality assessment at business schools. Empirical data were collected among undergraduate students in a developing economy. A total of 282 respondents were used to assess the overall fit of the proposed model and to test the differences between the expectations and the perceptions of service quality in a business school. The results support usability of the proposed adapted SERVQUAL measure. Therefore, the study contributes to the existing literature reporting the findings on service quality in an educational context.

## 1. INTRODUCTION

Education does not affect only an individual student, it also has an effect on the overall society (Dlačić, Arslanagić, Kadić-Maglajić, Marković & Raspor, 2013); therefore, the quality of education provided to students is an important topic for society as a whole. Competition among universities is growing even faster in today's society as, due to the information technologies, distance does not represent a problem for studying any more. Some countries have a high record of exporting higher education and knowledge, primarily by opening their campuses in different countries, with the need for education in that country or the specific institution-related strategic aim as the motive. Business schools are becoming "big business" themselves, and are adopting different business strategies (Jurše, 2010; Pfeffer, Jeffery & Fong, 2002). Business schools dominate by their number, compared to other schools. In such a competitive environment, developing a unique advantage becomes imperative in order to survive. Logically, quality becomes the main differentiating attribute; yet, as in most services, clients (current and future students) are having difficulties in assessing it (Zeithaml, 1981 & 1988).

Different cues may help solve this pre-purchase assessment problem, and most frequently used ones are guarantees and word of mouth. In terms of guarantees, obtaining the accreditation from one or more different national and/or international accreditation institutions (Haug, 2003) becomes the strongest quality guarantee for students (Trapnell, 2007), as well as one of the main cues students use when making their selection.

Identifying and then satisfying students' expectations is a key to competing against other institutions (Coccari & Javalgi, 1995). For these reasons, the question of what service quality means to students has emerged as a key consideration in how universities and schools should develop their offering (Durvasula, Lysonski & Madhavi, 2011).

Therefore, the aim of this paper is to offer new insights on how to improve the quality of the higher education (HE) service, by adding new knowledge about ways of measuring students' perception of the HE service quality. We highlight the importance of using pre-tested and pre-developed instruments, such as SERVQUAL (Ciunova-Shuleska, Palamidovska & Grishin, 2013; Marković, 2006), adapted to a new context – higher education in this case, by introducing faculty members and administrative staff instead of the overall "employees" items that exist in the general model. Hence, the main purpose of this study is to empirically investigate relationships between the observed and the perceived service quality (using the adapted SERVQUAL methodology), taking into account the perceptions of the faculty and those of the administrative staff, and to further validate this measure.

The contributions of this research are in: 1) adding to the theoretical substance of service quality measurement, on the specific field of higher education; 2) providing the standardized measure for quality on all business schools; and 3) understanding the perceptions of service quality through empirical evidence. The paper will open with a literature review, pointing to the main dimensions of higher education services quality and on trends in higher education, with reference to the role of staff. Then, the methodology of research will be presented, together with its results and a discussion. Finally, conclusions and recommendations will be made.

## 2. LITERATURE REVIEW

### 2.1. Higher education services quality

As international competition for students intensifies, differentiating various service offerings through quality management and building strong relationships with students has become imperative for providers of the higher education service

(Durvasula et al., 2011). Sohail and Shaikh (2004) acknowledge that, due to increased competition among universities, a higher quality of HE services has become one of the rare possessions for differentiation and gaining competitive advantage. Several scholars link students' satisfaction with service quality at universities and schools (Mizikaci, 2006). Satisfied students provide positive referrals to future students and this is what keeps the targeted student load in schools (Elliot & Shin, 2002; Temtime & Mmerekki, 2011; Ledden, Kalafatis & Mathioudakis, 2011). We may conclude that, due to intensified competition, HE institutions are growing increasingly concerned about their performance, so they are taking more care about market-based concepts, such as value perceptions, satisfaction, word of mouth etc., and research confirms a positive impact of quality on behavioral and attitudinal outcomes (Ledden et al., 2011). However, higher education institutions (HEI) are involved in much more than merely delivering course material to students, which additionally complicates measuring the HE service quality and related market-based concepts.

Quality in education is a multidimensional concept (Sahney, Banwet & Karunes, 2006) that could be conceptualized in many different ways. Definitions vary from excellence in education to meeting or exceeding students' expectations of service. This tells us that managing quality and related concepts cannot be "copy-pasted" from manufacturing or other sectors to HE services. The characteristics of higher education are the main reason for this situation. Different quality measures might be employed in HE institutions: from technical quality assessments (e.g. measuring the quality of processes), content quality assessments (self-reported studies using SERVQUAL, SERVPERF etc.), to the use of strategic management tools, such as dashboards and balanced scorecard, where quality is viewed in the function of performance (Taylor & Baines, 2012). Brochado compares five different service quality measures which are most frequently used in HE institutions (2009): service quality (SERVQUAL), importance-weighted SERVQUAL, service performance (SERVPERF), importance-weighted

SERVPERF and higher education performance (HEdPERF). She proves that SERVPERF and HEdPERF have the best measurement capability out of these proposed measures, with the limitations of the sample size and appropriateness.

One of the most frequently cited definitions of service quality is the comparison customers make between their expectations and perceptions of a service experience (Grönroos, 1982; Parasuraman, Zeithaml & Berry, 1988). According to Parasuraman et al. (1988), service quality is conceptualized as a five-dimensional concept and includes the following dimensions: tangibles, reliability, responsiveness, assurance and empathy. Tangibles refer to the appearance of personnel, equipment, physical facilities and materials used to communicate with customers. Reliability refers to the ability of the service provider to perform the service accurately and reliably. Responsiveness means providing prompt service and willingness to help customers. Assurance is defined as employees' knowledge and their ability to convey confidence and trust. Empathy refers to the level of individualized attention the service provider gives to its customers. These five dimensions represent the extensively used instrument for measuring service quality – SERVQUAL (Parasuraman et al., 1985 & 1988). It is important to stress that SERVQUAL directly compares perception to the expectations one has. Additionally, we note that if research aims at linking quality with different attitudes and behavioral outcomes, only the perceived component could be conceptualized.

Higher education is a typical high-contact service and, as such, it is characterized by intangibility, perishability, heterogeneity, inseparability of service delivery and service consumption process, customer presence during service delivery, and lack of ownership. These characteristics underline the importance of people (faculty and administrative staff), processes (whose development and strengthening influence the standardization and flexibility of an institution) and physical evidence as three additional elements of the marketing mix in services (Babić-Hodović, 2010).

In addition, Sohail and Shaikh (2004) show that "contact personnel" (interpreted as the faculty and administrative staff) represent the factor of the highest influence on students' evaluation of service quality. This factor is followed by physical evidence or the environment a service is being delivered in.

Built on service characteristics foundations, a large amount of studies explore different aspects of higher education and its quality assurance. The focus has been on service quality in terms of learning and teaching, and other attributes that influence higher education processes (Harrop & Douglas, 1996; Narasimhan, 1997; Shank, Walker & Hayes, 1995; Barnes, 2007), where most of the studies analyze students' quality evaluations (Barnes, 2007). This is also a consequence of specificities in services, where quality is assessed by consumers, in the case of HEIs by students. In the research conducted by Barnes (2007), focus was put on international students and their expectations within business universities, by implementing SERVQUAL (Parasuraman et al., 1988). This research underlines the coherence of five dimensions SERVQUAL measures, which will be analyzed in more details below.

It is also important to clearly define the service in HE institutions that is being assessed. Some studies analyze the assessments of content-related services in HE institutions – lectures in classroom (e.g. Foropon, Seiple & Laoucine, 2013) while others examine service quality of an institution (e.g. Barnes 2007). In this research, we are focused on the overall quality of the institution, encompassing both content and processes quality.

Service quality in higher education can be evaluated from different perspectives (e.g. students, faculty members, governments). However, authors such as Sander et al. (2000) regard students as the primary customers of higher education services, thus assessing service quality from their perspective is important. In accordance with a general definition of service quality, O'Neill and Palmer (2004) defined service quality in higher education as the difference between what a stu-

dent expects to receive and his/her perceptions of actual delivery.

For the purpose of this study, higher education service quality is defined as an attitude resulting from student perceptions of faculty members' performance and the performance of the administrative staff with regard to the main SERVQUAL dimensions.

## 2.2. Role of faculty members and administrative staff in new HE trends

The critical role of employees in delivering services has been a well-researched and important topic (Di Mascio, 2010; Helm, 2011; Keh, Ren, Hill & Li, 2013; Zablah, Franke, Brown & Bartholomew, 2012). As the most important for delivering the promised service, so-called frontline employees (e.g. Di Mascio, 2010) deserve special attention (Nefat & Paus, 2008). This is so because they are in direct contact with clients and because total service experience and quality assessment depends upon them. When it comes to higher education, we point to the fact that there are two completely different types of frontline employees: faculty members and the administrative staff. Faculty members are responsible for the delivery of concrete content (courses, seminars etc.), while the administrative staff is in charge of implementing different processes within the HE institution. This fact was not clearly noted in marketing literature and literature concerning service quality in HE; however, it was underlined in the human resources management literature, from which we draw our reasoning.

The main notion of classification of frontline employees to the faculty and the administrative staff comes from the studies measuring employee satisfaction in HE institutions. Johnsrud (2002) analyzed the drivers of quality of the faculty's and administrative staff's work life, and the impact this quality has on their performance and retention. A similar study was con-

ducted by Küskü (2003) in Turkey, and it found significant differences between the faculty and the administrative staff in HE institutions in Turkey. Some of the differences between these aspects of employee satisfaction were: satisfaction with colleague relations, work environment satisfaction, salary satisfaction etc. Now, we may intuitively conclude that as there are conceptual differences between these two types of frontline employees in HE institutions, they should be acknowledged when assessing the quality of the whole institution.

If we take a look at the role of each type of employees in the higher education process and in the assessment of its quality, intuitively, faculty members are a part of the substance, their characteristics affect reputation of the school; sometimes, a sole faculty member may significantly improve its reputation, while at other times, the school may lose its reputation because of a sole faculty member. Also, individual faculty members, with their interests and successes in teaching, research and practice, become important assets and a differentiating point for the school.

As much as substance is important in services and, therefore, in higher education too, processes are also what counts (Akamavi, 2005; Babić-Hodović, 2010) when it comes to a quality assessment and further attitudinal and behavioral outcomes of clients. There are a number of processes that can be identified in HE institutions: process of scheduling classes within semesters, exam registry and grade registry processes, the processes of issuing different kinds of certificates, payment process, library-related processes, extracurricular-related processes, processes related to international cooperation and many more. During these processes, and mostly through students' affairs office (but also through other administrative offices), students get in touch with different kinds of staff whom we labeled the administrative staff of higher-educational institutions. Even if an HE institution boasts top quality researchers and professors, the perception of quality and further outcomes of quality may drop because of administrative processes. Con-

versely, it is not enough to look to administrative processes alone in order to get a good quality higher-education service.

It is really hard to balance these two elements in a HE institution, and not many HE institutions have found the right way to do it. Recently, international accreditations (e.g. AACSB, EPAS, EQUIS, AMBA...) became a substitute for guarantees of the HE institution quality. We need to say that these accreditations differ by the requests with regard to process-related and content-related elements, some insisting more on the content and others on processes. For business schools this means living up to a different set of standards that assure service quality. Kelley, Tong and Choi (2010) recognized that the assessment of student learning is an important part of higher education for the foreseeable future. Views on the influence of accepting accreditation standards on a school's strategy are sometimes contrasting. There are views that these processes influence faculty shortages, increased competition, reductions in funding and, moreover, that they reduce the flexibility of the institution. On the other hand, some authors claim totally the opposite – that accreditation standards increase flexibility and that they have a positive impact on the strategic performance of the school (Romero, 2008). Other studies show that, up to some extent, faculty compensation, research productivity and teaching loads differ at accredited schools compared to non-accredited ones (Hedrick, Henson, Krieg & Wassell, 2010).

For explanation purposes, we will focus more on the AACSB accreditation in this study. Romero (2008) argued that an accreditation of the Association to Advance Collegiate Schools of Business (AACSB) provides value to numerous stakeholders and promotes advancements in business education. The AACSB accreditation evaluates schools based on the criteria defined by 21 standards. These standards were first adopted in 1919, but have been revised continually through the years in order to ensure quality and continuous improvement in collegiate business education. To become AACSB-accredited, an in-

stitution must satisfy the requirements of all accreditation standards. Standards are divided into three key areas: (1) strategic management, (2) business school participants, such as the faculty, staff and students, and (3) assurance of learning (Trapnell, 2007). Probably the most important part of AACSB standards are the standards listed under two above, that is, business school participants, such as the faculty, administrative staff and students. Therefore, seven standards (out of 21 in total) are dealing directly with the quality of faculty members and administrative staff of business schools. These standards refer to all instruction-related faculty members, including tenured, non-tenured, full-time, part-time, clinical etc., as appropriate. The AACSB strongly believes that the quality of an HEI hinges on the quality of instruction offered to students. Faculty members and administrators share joint responsibility for ensuring instructional quality through continuous improvement and innovation.

The AACSB (2013) estimated the number of business schools worldwide at 13,000, while less than 5% of those earned the AACSB Accreditation. Therefore, AACSB-accredited schools have introduced procedures for measuring business schools' service quality with a special focus on faculty members and administrative staff. However, the question is what happens with the rest of 95% of the world business schools? How do they measure HE service quality? We suggest using an adapted SERVQUAL instrument, introducing the items that concern faculty members and administrative staff.

An additional question preoccupying both practical and research agendas should not be neglected either. That is the possibility of trust in students when it comes to the quality assessment (Chatterjee, Ghosh & Bandyopadhyay, 2009) regarding the reliability and validity of their measures of teaching effectiveness and usefulness of those assessments in improving the effectiveness of teaching. However, Durvasula et al. (2011) stressed the importance of students' expectations when it comes to service quality in higher education.

## 3. RESEARCH METHODOLOGY

### 3.1. Method and measure

As already stated, the main purpose of this study is to empirically investigate SERVQUAL dimensions in the business HE context by applying the SERVQUAL instrument to the characteristics of HE. We propose that the expected and the perceived service quality in higher education services differ from the same in a general service framework. As this is an exploratory research, we propose no hypotheses, but rather aim at exploring SERVQUAL dimensions and their behavior when new specific items are introduced.

Field research was conducted at the School of Economics and Business of the University of Sarajevo, Bosnia and Herzegovina. Undergraduate students were asked for their e-mails in order to fill out a highly structured questionnaire, with printed questionnaires distributed to the students who did not provide their e-mail addresses. In total, 282 questionnaires were collected.

The original SERVQUAL instrument consists of two sections, each containing 22 items. The first 22 items relate to respondents' expectations of service excellence, while the other 22 items measure the actual performance of service provision. The level of service quality is represented by the gap between the expected and the perceived service. The 22 items represent the five service quality dimensions that have been specified as SERVQUAL dimensions: tangibles, reliability, responsiveness, assurance and empathy. Our questionnaire was designed to gather empirical data from undergraduate students and consisted of two parts. First, the perceived service quality was measured by means of an adapted SERVQUAL scale (Parasuraman et al., 1985 & 1988), using 30 instead of the original 22 items. The adapted scale refers to the "addition or deletion of items based on their supposed suitability for a particular research context" (Finn & Kayande, 2004, p. 37).

Very often, scholars adapted the SERVQUAL instrument with the main aim to improve the psychometric properties of the scale for a particular application in a particular research context (Finn & Kayande, 2004). Moreover, Parasuraman et al. (1988) stated that their 22-item SERVQUAL scale should be seen as “a basic skeleton, which when necessary, can be adapted or supplemented to fit the characteristics of specific research needs” (p. 31). We were also guided by this notion in our adaptation process. Having in mind that SERVQUAL was developed in a different cultural environment, we followed closely all the suggestions made by Douglas and Nijssen (2003) about the steps that should be undertaken before one decides to use the scales developed in one country or context in other countries or contexts. We also followed a suggestion by Maloney, Grandwich and Barber (2011) who propose a technique they call strategic item selection. Therefore, we identified core items of the SERVQUAL instrument to be kept in the scale, while adding further items following face validity criteria in order to better reflect the HE context in which the scale was used.

Additional items were introduced based on face validity. Namely, the items referring to staff quality were doubled, in order to separately evaluate the quality of two types of employees: the faculty and the administrative staff. We used a 7-point Likert-type scale, anchored with “strongly disagree”

and “strongly agree” for SERVQUAL measures. The suitability of items introduced to the regular SERVQUAL scale was examined through rigorous reliability and validity assessments that are reported in the following section. The second part of the questionnaire presented respondents’ demographic information and included items, such as gender, age, type of school finished, monthly income, place of stay, year of study, type of study, average grade. Missing data were imputed by the linear interpolation method.

### 3.2. Results and discussion

Before going into further analysis, non-response bias was assessed. Anonymity was guaranteed to all respondents, as a tool that minimizes potential bias related to confidentiality issues according to Hair et al. (2009). However, at the same time, because of anonymity it was impossible to identify non-respondents or to contact them in order to clarify the reason for their lack of response. Therefore, a time trend extrapolation test offered by Armstrong and Overton (1977) was used to examine the non-response bias. The test is conducted by comparing the first and the last quartile (according to their time of response) of respondents. Its results showed no identified significant differences, suggesting that the non-response bias was not a problem in our sample.

**Table 1:** Demographic characteristics of the sample

Characteristics			
<u>Sex</u>	<u>%</u>	<u>Previous education</u>	<u>%</u>
Female	62.4	Gymnasium	55.5
Male	37.6	Vocational school	44.1
		Art school	0.4
<u>Age</u>	<u>Year</u>	<u>Monthly household income</u>	<u>%</u>
Lowest value	1966*	Below 1,000.00 KM	31.4
Highest value	1992	From 1,000.00 to 2,000.00 KM	44.6
		More than 2,000.00 KM	24.0

Notes: \*Due to the existence of distance-learning type of study programmes, age is not limited to regular students of a certain generation.

As shown in Table 1, the majority of our research sample were females, who have mostly finished gymnasium, a grammar-school type of secondary school. We may note from the characteristics of the sample that different age groups are studying at the School of Economics and Business. However, the most frequent year of birth is 1990 (21.6%), giving the average age of students in the academic year 2011/12 as 22 years old. When comparing the sample demographic data with the total population, we see that our sample is representative.

Data analysis was conducted in two stages. First, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed on expected and perceived service quality items to identify the main dimensions of the concept. Afterwards, we compared students' expectations and perceptions using the t-test.

The EFA, principal axis factor analysis and oblique rotation with the Kaiser normalization was conducted. The KMO measure of sampling adequacy and the Bartlett sphericity test were all above the accepted level of 0.7, and significant as per Hair et al. (2009). All item loadings had values greater than 0.40, while all Cronbach's alphas for all dimensions were of acceptable values (larger than 0.7).

After running the EFA, as part of the first stage of the analysis, a theory driven CFA with the maximum likelihood (ML) estimation procedure was conducted in LISREL 8.71 program. In addition, we wanted to examine the reliability and validity of the constructs used. Having in mind that new items were added to the SERVQUAL scale, special attention was paid to the examination of validity and reliability.

All items loaded significantly on their respective constructs, and there was no evidence of

cross-loading. This is taken as evidence of convergent validity. Furthermore, Composite Reliability (CR) and Average Variance Extracted (AVE) were calculated. In calculating CR and AVE, completely standardized solutions of indicator loadings and error variances were used. AVE is calculated as the mean variance extracted for the items loading on a construct. To indicate a reliable measure, CR should be greater than 0.6 (Bagozzi & Yi, 1988), while the AVE value has to be above the 0.5 threshold (Fornell & Larcker, 1981). CR for all measures ranged between 0.772 and 0.903, which are all above the recommended cut-off criterion of 0.60 (Fornell & Larcker, 1981). As further proof of reliability of our measures, we demonstrated that the Average Variance Extracted (AVE) for most of the scales was above the .50 cut-off threshold (Bagozzi & Yi, 1988).

In the case of the model that was assessed for five dimensions of students' expectations, the model achieved acceptable fit to the data: normed chi-square ( $\chi^2$ /degrees of freedom (d.f.) = 412.1/125; root mean square error of approximation (RMSEA) = 0.09; non-normed fit index (NNFI) = 0.923; comparative fit index (CFI) = 0.937; standardized root mean square residual = 0.071. We also achieved good model fit statistics for the perceived quality of the HE service: normed chi-square ( $\chi^2$ /degrees of freedom (d.f.) = 424.8/125; RMSEA = 0.092; NNFI = 0.909; CFI = 0.926; SRMR = 0.066. Therefore, we concluded that our measure exhibited appropriate validity and reliability for further testing.

The perceived-expected service quality gap was explored by using a paired sample t-test. Items were sorted according to the already established dimensions, having in mind that two items (one for the faculty and one for the staff) had been added (A), instead of just one in the original measure (employees).

**Table 2:** Comparing students' expectations and perceptions

#	CODE	SERVQUAL (adapted) ITEM	Expectations		Perception		Gap	t-value
			Mean	SD	Mean	SD		
<i>Tangibles</i>								
1	TAN1	The School <sup>x</sup> has up-to-date equipment.	6.57	0.87	5.71	1.17	-0.87	10.44 ***
2	TAN2	The School's physical facilities are visually appealing.	5.67	1.23	5.38	1.32	-0.29	2.96 ***
3	TAN3	The School's faculty is well-dressed and appears neat. (A)	6.56	0.87	6.06	0.98	-0.49	6.97 ***
4	TAN4	The School's administrative staff is well-dressed and appears neat. (A)	6.51	0.87	5.91	1.17	-0.60	7.08 ***
5	TAN5	The appearance of the School's physical facilities is in keeping with the type of services provided.	5.75	1.35	5.21	1.40	-0.54	4.74 ***
<i>Reliability</i>								
6	REL1	When the School promises to do something by a certain time, it does so.	6.72	0.71	4.37	1.63	-2.35	21.45 ***
7	REL2	When you have problems, the School is sympathetic and reassuring.	6.42	0.95	4.26	1.74	-2.16	17.96 ***
8	REL3	The School is dependable.	6.66	0.71	5.18	1.48	-1.48	15.74 ***
9	REL4	The School provides its services at the time it promises to do so.	6.42	0.94	6.00	1.13	-0.41	5.47 ***
10	REL5	The School keeps its records accurately.	6.49	1.01	5.40	1.47	-1.09	10.79 ***
<i>Responsiveness</i>								
11	RES1	The School does not tell students when services will be performed exactly. (-)	4.02	2.17	3.43	2.05	-0.59	4.36 ***
12	RES2	You do not receive prompt service from the School's faculty. -(A)	4.09	2.04	3.54	1.85	-0.54	3.58 ***
13	RES3	You do not receive prompt service from the School's administrative staff. (-) (A)	4.02	2.04	3.72	1.79	-0.30	1.98 **
14	RES4	The School's faculty is not always willing to help students. (-) (A)	3.04	2.22	3.95	1.74	0.91	-5.85 ***
15	RES5	The School's administrative staff is not always willing to help students. (-) (A)	2.83	2.19	4.35	1.80	1.51	-9.73 ***
16	RES6	School employees are too busy to respond to student requests promptly.(-)	4.23	1.88	4.30	1.73	0.07	-0.50

Table 2. Continued

Assurance								
17	ASS1	You can trust the School's faculty. (A)	6.30	1.08	5.28	1.39	-1.02	10.20 ***
18	ASS2	You can trust the School's administrative staff. (A)	6.05	1.23	4.71	1.65	-1.33	11.14 ***
19	ASS3	You feel safe in your transactions with School employees.	6.29	1.03	4.53	1.68	-1.77	15.46 ***
20	ASS4	The School's faculty is polite.	6.58	0.89	5.35	1.27	-1.23	14.23 ***
21	ASS5	The School's administrative staff is polite.	6.65	0.83	3.95	1.85	-2.70	22.14 ***
22	ASS6	The Faculty gets adequate support from the School to do their jobs well.	6.50	0.84	4.99	1.43	-1.51	16.71 ***
23	ASS7	The administrative staff gets adequate support from the School to do their jobs well.	6.44	0.89	4.76	1.47	-1.68	17.68 ***
Empathy								
24	EMP1	The School does not give you individual attention. (-)	4.18	1.86	4.41	1.77	0.24	-1.61 *
25	EMP2	The School's faculty does not give you personal attention. -(A)	3.88	1.92	4.07	1.78	0.19	-1.37
26	EMP3	The School's administrative staff does not give you personal attention. -(A)	3.89	1.99	4.40	1.85	0.51	-3.44 ***
27	EMP4	The School's faculty does not know what your needs are. -(A)	4.18	1.99	3.92	1.79	-0.26	1.61 *
28	EMP5	The School's administrative staff does not know what your needs are. -(A)	4.06	1.99	4.21	1.85	0.15	-0.95
29	EMP6	The School does not have your best interest at heart. (-)	2.74	1.99	4.27	1.86	1.53	-10.21 ***
30	EMP7	The School does not have operating hours convenient to all their students. (-)	3.98	2.07	3.68	1.93	-0.30	1.76 *

Notes: <sup>x</sup> The terms "faculty" and "administrative staff" are used consistently in the paper; however, in the perceived SERVQUAL scale, we introduced "School/School's" prior to these terms in order to direct respondents to their own school; (A) Adapted item – due to the classification of employees as the faculty and administrative staff; (-) Reverse item; t-test (2-tailed Sig.), \*\*\* $p < 0.001$ , \*\* $p < 0.05$ , \* $p < 0.1$

We proceeded with the analysis and a discussion of the gaps between the expectations and the perceptions for each of the five adapted SERVQUAL dimensions, and then for the instrument overall. The first element that was analyzed is tangibles. The intangibility of services re-

presents one of the main managerial problems (Babić-Hodović, 2010); yet, by managing tangible dimensions of the offer, these problems could be overcome. We observe that all gaps in this dimension are statistically significant and negative. This shows that the perceptions related to the

tangible offer of the school are lower than respective expectations. We may also see that tangibles may be divided into the ones concerning the physical environment (TAN1, TAN2 and TAN5) and the ones concerning the employees (TAN3 and TAN4). Interestingly, we see differences in the gaps for the faculty and the staff, according to which the faculty manages to deliver upon the expectations better than does the contact staff. The largest discrepancy between expectations and perceptions concerns the equipment, with the average gap for this dimension at -0.56.

The second dimension explains the reliability of the school. This dimension was not altered, due to the fact that items in it are not related to concrete frontline employees, but to the school overall. All the gaps in this construct are also statistically significant and negative, which again points to the fact that students' expectations are not satisfied. The biggest problem in this concrete assessment is with the gap concerning the delivery of what is promised. It is -2.35, and represents the second largest gap in the instrument. The average gap for reliability is -1.49.

Responsiveness is the third dimension observed in the model. Here we have a mix of results regarding the significance and the sign of the gaps. Namely, for item RES6 - School employees are too busy to respond to student requests promptly, perceptions are equal to expectations. It is important to note that all items in this dimension are reverse items. Hence, the negative sign actually represents the prevalence of the perceived over the expected. This is true for RES1, RES2, RES3 related to the overall impression of the timing and promptness of service delivered by the faculty and by the staff. Basically, the observed school ranks better on these items, compared to the general expectations. However, this is not true of the helpfulness of either the school's administrative staff or its faculty. Additionally, we still may see that there are differences in the observations of the faculty and the administrative staff. Interestingly, the administrative staff is assessed to be more prompt but less willing to help than the faculty. This dimension has the lowest average gap of 0.17.

The fourth dimension of the SERVQUAL model is assurance. Trust, politeness, safety and perception of the relation between the management and frontline employees are observed in this dimension. All gaps are statistically significant and negative, which again indicates a failed delivery to the expectations. The highest gap in the whole instrument concerns the politeness of the administrative staff. It points to the weakest link in the whole quality system of the observed institution. We also may see that the gap for the faculty on this same item is not that large – it stands below the average for this dimension (-1.61).

Finally, we discuss the fifth dimension of the instrument – empathy. This construct consists of reverse items, and there is a mix of results when it comes to the significance and the sign of the gaps. Here, we also observe that there are differences in gaps for the faculty and for the administrative staff. For example, when it comes to knowing the needs of students, the faculty exceeded the expectations, while the administrative staff lagged behind. The average gap for the dimension of empathy is 0.29.

Overall, we may say that expectations are seldom reached in the concrete observed case. Also, we can see that there are differences between the perceptions students have of the administrative staff and of the faculty, and that their perceptions also differ when it comes to service delivery. This justifies the need for adjusting the SERVQUAL scale according to the type of frontline employees. The overall average gap for the whole measure is -0.61.

## 4. CONCLUSION

The quality of higher education remains an important concern in both research and practice. As the international competition intensifies, which is particularly the case with business schools across the globe, the quality of the offering and guarantees of that quality become a substantial concern for the schools themselves. On the

other hand, finding the "right" way to measure service quality in general has been a subject of academic debate for a long time.

The present study has significant implications when it comes to the area of service quality in business schools and in higher education institutions. Namely, its results may broaden the knowledge of the importance of quality measurements in services and in business education, as well as the knowledge of the importance of differentiating between the types of frontline employees. This means that strict difference should be made between the services offered by the faculty (who deliver the core service) and those offered by the administrative staff (who facilitate the process). For example, a school may have a top quality schedule for an MBA course (faculty-related), but if the timing of the course is not announced in advance (administrative staff-related), the course may be a failure (poor turnout of students appearing in the class). Therefore, both the faculty and the administrative staff contribute to the perception of quality, and since they do so in different ways, they should be aligned and managed. Nevertheless, they may not be observed as one when employing a concrete measure and/or standard.

We found that our proposed adapted SERVQUAL scale has a good measurement model fit, which confirmed its validity and reliability. This makes it a dependable instrument for further research on service quality and gaps in expectations and perceptions, as well as for examining interdependences between the quality of services in business schools and other higher educational institutions, and other related constructs (such as

value, satisfaction, loyalty and behavioral intentions). Our empirical findings provided us with a greater understanding when it comes to new items in the model. We confirmed that there are differences between the assessment of the two types of staff.

This research has treated perceived service quality from the students' perspective. Future research could be directed at investigating perceived service quality from a perspective of the business environment or other stakeholders. This would allow a comparison of the expectations among different stakeholder groups. Additionally, future research should relate quality perceptions with other variables of interest, such as value, loyalty and behavioral intentions. Also, it would be interesting to include more higher education institutions, and to compare the accredited ones with those still undergoing the accreditation procedure and/or others that are not involved in the accreditation procedure at all.

A limitation of the present study lies in the fact that a generalization of its results is questionable. Therefore, any attempt to generalize the research findings must be undertaken with caution. Further replication and usage of the instrument is needed to improve its validity and reliability. It would be advisable to replicate the conceptual model with different samples corresponding to the samples used in the present study. We advise to start replication in culturally similar contexts, such as Croatia and Serbia. In addition to that, respondents in the research were local students. In order to increase generalizability, it would be advisable to expand the present study involving international students in order to validate the results it yielded.

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## Endnotes

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