

Groundwork for higher educational institutions – Assessing perceived service quality

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Abstract

Today's competitive environment is similarly omnipresent in education. The focus on providing superior service quality became imperative for higher educational institutions as competition intensified, internationalisation is ubiquitous and top-quality higher educational institutions implement international accreditation standards. Students perspective on institutional performance related to service quality is becoming relevant as they are considered as higher educational institutions primary stakeholders. Therefore, the purpose of this research is to explore perceived service quality in a HEI from a student perspective. Research was done on a sample of 368 students from a public higher educational institution in Croatia. It applies SERVQUAL scale to assess perceived service quality and approaches the employees by distinguishing between faculty and administrative staff. Research results point out that there is a need to differentiate between faculty and administrative staff in assessing perceived service quality. This is based on research results that point out the difference among perception of several service characteristics between faculty and administrative staff. Following on that, paper also offers managerial implications for HEI management practices.

Keywords: *Perceived service quality, Higher educational institutions, SERVQUAL, Faculty members, Administrative staff, Croatia.*

1. Introduction

Quality of education has never been so profoundly stressed as important or relevant for future of education. Adherence to specific standards of quality for higher educational institutions (HEIs) is important, relevant and assures continuous improvement. Still, many focus on quality issues, but only a few are ready to commit themselves to achieving that goal throughout the institution, and to constantly improve. Consistent with afore mentioned, is a number that roughly includes 1- 5% of business schools in the world that hold either AACSB or EQUIS accreditation [1], [2], [3]. However, if we take into account triple crown institutions (holding AACSB, EQUIS and AMBA accreditation) there are less than 1% of these HEIs in the world [4]. These institutions are committed to improving service quality in different aspects.

Moreover, this research topic is also highlighted in the academia. Abdullah [5] points out that focus on service quality is becoming an important competitive trend and a key strategic issue. This is also manifested in educational context, as Teeroovengadum, Kamalanabhan and Seebaluck [6] stress that focus on service quality is a necessity for HEIs as internationalisation is present, the number of private HEIs is growing, and state funding is diminishing. Consequently, focus on service quality at HEIs is becoming more than a necessity as it provides unique advantage compared to their competitors, both between private, and public sector HEIs. Therefore, HEIs focus their attention on exploring perceived service quality [7]. Before stating a change, the management of the HEI should be aware of the current level of perceived service quality, and to measure it after applying specific practices to enhance it. In this way a measurable starting point is set. Therefore, aim of this research is to understand current level of HEI's service quality before management decision to approach top business schools, as well as focus on continuous improvement of service quality.

There are different stakeholders of the HEIs. A traditional approach [8] emphasizes government, students, and academic community as HEIs stakeholders or more widely HEIs stakeholders are scientific community, business, government, the public sector and the general public [9]. Also, Benneworth and Jongbloed [8 according to Burrows, 1999) point out that HEIs should focus on a variety of stakeholders that are grouped into

several categories among whom are clientele (students, employers...), employees (faculty, administrative staff, support staff) and others. Hence, exploring service quality at HEI could focus on different stakeholders. Students are considered as primary customers of the HEIs [5], and consequently they could be also considered as the primary or the most important stakeholders of the HEIs. Therefore, the purpose of this research is to explore perceived service quality in a HEI from a student perspective.

Since, Parasuraman, Zeithaml and Berry [10] and Parasuraman, Berry and Zeithaml [11] have developed service quality SERVQUAL measure, different research directions have emerged related to service quality. This extends also to the HEI context [12], [5]. One stream of research focuses on exploring service quality by assessing expected, and perceived service quality, therefore, continuing Parasuraman, Zeithaml and Berry [10] work by adapting items to specific HEI context. Second stream of research extends SERVPERF scale to the HEI context by focusing on work by Cronin and Taylor [13], and the perceptions of service quality. Third stream applies evaluated performance (EP) scale [14], and measures the gap between perceived performance, and the ideal amount of a service feature. Fourth stream of the research on service quality is related to developing different measures of service quality by developing new scales in HEI context such as HEdPERF [5] or HEDQUAL [15]. As SERVQUAL scale captures different dimensions of services also in the HEI context, and it is proven and reliable in different service contexts [16] this research will apply SERVQUAL scale to student perspective on service quality, and it will extend the original scale in order to distinguishing faculty and administrative staff. It follows the guidelines found in AACSB 2020 standards [17] and EQUIS 2020 standards and criteria [18] which emphasise the need to separately evaluate faculty and administrative staff. Following that reasoning, the research question is, does distinguishing between these two groups of employees; faculty and administrative staff, give additional insight in HEIs service quality when using SERVQUAL scale.

2. Empirical research

2.1. Research methodology

With aim to explore posited research question; analysis was conducted on a purposive sample of students from Faculty of economics and business, University of Rijeka during 2012. A structured questionnaire, and paper and pencil method were used to collect the data. A total of 368 fully answered questionnaires was collected. Questionnaire consisted of questions related to socio-demographic profile of the respondents, and questions applying previously established SERVQUAL scale [10] [11]. In order to gain additional insight about perceived quality of the HEI's staff quality, the original SERVQUAL scale was adapted to the HEI context. Hence, doubling the items related to employees, in order to separately evaluate the quality of teaching and non-teaching service quality of the HEI, therefore, consequently distinguish between faculty and administrative staff. Moreover, the original scale of 22 items was expanded to 30 items. In the questionnaire when referring to SERVQUAL dimensions on perceived items we used HEI name to make it more clear to the respondents that this set of questions they should focus on HEI they are attending, and in the expected section we made it clear to the respondents that they should focus their answers on business schools in general. Scale used a 7-point Likert-type scale, anchored with "strongly disagree" (1) and "strongly agree" (7).

Descriptive statistics and bivariate statistics were used to describe the pattern and characteristics of HEI quality as well to describe the research sample using SPSS ver 26.

2.2. Research sample

Research sample consists of 368 respondents, whose demographic characteristics are presented in Table 1.

Table 1. Sample demographic characteristics

Characteristic	Description	Frequency	Percentage (%)
Gender	Female	286	77.7
	Male	82	22.3
Study status	Full-time	304	82.6
	Part-time	64	17.4
Education	Secondary school gymnasium	160	43.5

	Secondary professional school	208	56.5
Household income	Lower than 800 EUR	131	35.6
	Between 800 and 1300 EUR	153	41.6
	Above 1300 EUR	84	22.8
Year of the study	2 nd undergraduate	2	0.5
	3 rd undergraduate	107	29.1
	1 st graduate	75	20.4
	2 nd graduate	184	50

Source: Author

Profile of the typical respondent is female (77.7%). Studying full-time at HEI (82.6%) at 2nd graduate study year (50%), comes from professional secondary school (56.5%), and with an average household income between 800 and 1300 EUR (41.6%).

2.3. Analysis of the research results

To achieve paper's purpose perceived-expected analysis of the perceived service quality elements at HEI paired samples t-test was used. In the following Table 2 dimensions of the SERVQUAL scales are presented and the items are grouped in following dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Items that were doubled due to distinction between two levels of service employees at HEI, administrative staff and faculty, are presented in their already established dimensions. Added items that were used instead of original SERVQUAL scale employees, are noted with (A).

Table 2: Perceived-expected analysis of perceived service quality elements

Items	Perceived		Expected		Difference	T-value
	Mean	SD	Mean	SD		
Tangibles						
T1 - School has to have up-to-date equipment.	4.13	1.328	6.37	1.033	-2.236	-26.131
T2 - School's physical facilities should be visually appealing.	4.23	1.370	5.26	1.340	-1.037	-10.468
T3 - School's faculty should be well dressed and appear neat. (A)	5.62	1.230	6.18	1.156	-0.56	-7.060
T4 - School's administrative staff should be well dressed and appear neat. (A)	5.60	1.201	6.09	1.151	-0.485	-6.231
T5 - The appearance of the physical facilities of School should be in keeping with the type of services provided.	4.77	1.418	5.78	1.311	-1.005	-10.301
Reliability						
REL1 - When School promises to do something by a certain time, it should do so.	4.05	1.429	6.61	0.922	-2.561	-30.312
REL2 - When you have problems, School should be sympathetic and reassuring.	3.91	1.637	6.3	1.077	-2.386	-23.091
REL3 - School should be dependable.	4.34	1.461	6.39	1.003	-2.045	-23.766
REL4 - School should provide its services at the time it promises to do so.	5.49	1.405	6.32	1.129	-0.835	-9.725
REL5 - School should keep its records accurately.	4.69	1.566	6.52	0.971	-1.832	-20.667
Responsiveness						
RES1 - It is not necessary for School to tell students exactly when services will be performed. (-)	4.42	1.861	4.09	2.017	0.328	2.946**
RES2 - It is not necessary to receive prompt service from School's faculty. (-) (A)	4.54	1.681	3.98	1.919	0.56	4.163
RES3 - It is not necessary to receive prompt service from School's administrative staff. (-) (A)	4.31	1.730	4.01	1.872	0.293	2.099**

RES4 - School faculty is not always willing to help students. (-) (A)	4.45	1.665	5.47	1.851	-1.021	-8.339
RES5 - School administrative staff is not always willing to help students. (-) (A)	4.08	1.764	5.63	1.835	-1.555	-12.526
RES6 - Employees of School are too busy to respond to students requests promptly.(-)	4.06	1.562	3.62	1.754	0.437	3.666
Assurance						
A1 - You can trust School faculty. (A)	5.01	1.326	6.33	1.038	-1.323	-16.679
A2 - You can trust School administrative staff. (A)	4.53	1.534	6.1	1.211	-1.571	-17.227
A3 - You feel safe in your transactions with School's employees.	4.5	1.587	6.32	1.120	-1.819	-18.430
A4 - School faculty is polite. (A)	5.07	1.375	6.57	0.950	-1.504	-18.257
A5 - School administrative staff is polite. (A)	4.15	1.762	6.63	0.898	-2.472	-23.626
A6 - Faculty gets adequate support from School to do their jobs well. (A)	4.47	1.258	6.29	1.103	-1.816	-23.433
A7 - Administrative staff gets adequate support from School to do their jobs well. (A)	4.49	1.273	6.21	1.144	-1.715	-20.656
Empathy						
E1 - School does not give you individual attention. (-)	3.73	1.647	4.39	1.738	-0.667	-5.434
E2 - School faculty does not give you personal attention. (-) (A)	3.87	1.653	4.68	1.746	-0.808	-6.422
E3 - School administrative staff does not give you personal attention. (-) (A)	3.92	1.653	4.7	1.775	-0.781	-6.376
E4 - Faculty of the School do not know what your needs are. (-) (A)	4.33	1.600	4.24	1.749	0.093	0.760*
E5 - School administrative staff do not know what your needs are. (-) (A)	4.02	1.619	4.22	1.754	-0.195	-1.627**
E6 - School does not have your best interest at heart. (-)	4.34	1.692	5.56	1.754	-1.213	-9.890
E7 - suSchool does not have operating hours convenient to all their students. (-)	4.93	1.654	4.38	1.954	0.557	4.274

Notes: (-) Items were coded in reverse; (A) Items added to the original scale when distinguishing between administrative staff and faculty; * Difference is not statistically significant; ** Difference is statistically significant at $p < 0.05$; All other pairs have differences statistically significant at $p < 0.001$.

Source: Author

Analysis show that in the first service quality dimension, Tangibles, all the items have statistically significant difference between perceived and expected values. All the items have higher expected than perceived values. The highest difference between perceived and expected values is in the item "School has to have up-to-date equipment", indicating that novelty of the equipment is perceived lower than expected. The lowest difference between perceived and expected is noted in the physical appearance of the faculty and administrative staff. Difference between values of faculty ($M(p)=5.62$ and $M(e)=6.18$) and administrative staff ($M(p)=5.60$ and $M(e)=6.09$) is noted, but it is not substantial. The average gap for Tangibles is 1.065.

In the second dimension, Reliability, all the items are related to HEI in general, and do not include employees. Moreover, all the items have statistically significant difference between perceived and expected values. All the identified gaps are going in the same direction, indicating that expected values are higher than perceived ones. The highest difference between perceived and expected values is in the item "When School promises to do something by a certain time, it should do so.". And the lowest difference between perceived and expected values is noted in the item "School should provide its services at the time it promises to do so.". The average gap for reliability is 1.932. As it is larger than Tangibles it indicates that HEI is performing lower in this dimension.

Third service quality dimension, Responsiveness, focuses on employees. All the items have statistically significant difference between perceived and expected values. Difference between two items is statistically

significant at $p < 0.05$. The greatest difference between perceived and expected values is in the item “School administrative staff is not always willing to help students.” where expected value is greater than perceived ($M(p) = 4.08$ and $M(e) = 5.63$). And the lowest difference between perceived and expected values is noted in the item “It is not necessary to receive prompt service from School’s administrative staff.”. Difference between values of faculty and administrative staff is noted. It is present both between perceived and expected values of the following items: “It is not necessary to receive prompt service from School’s faculty/administrative staff.” (perceived values ($M(p/faculty) = 4.54$ and $M(p/administrative\ staff) = 4.31$) and expected values ($M(e/faculty) = 3.98$ and $M(p/administrative\ staff) = 4.01$)) and item “School faculty/administrative staff is not always willing to help students.” (perceived values ($M(p/faculty) = 4.45$ and $M(p/administrative\ staff) = 4.08$) and expected values ($M(e/faculty) = 5.47$ and $M(p/administrative\ staff) = 5.63$)). For the item “It is not necessary to receive prompt service from School’s faculty/administrative staff.” in expected values difference is present, but it is not substantial. The average gap for Responsiveness is 0.699, hence lower than average gap for Tangibles and Reliability.

In Assurance, as the fourth service quality dimension, all the items have statistically significant difference between perceived and expected values. Items in the Assurance factor are all in the same direction, indicating that respondents have greater expectations than what are the perceived values. The highest difference between perceived and expected values is in the item “School administrative staff is polite”, and the lowest difference between perceived and expected values is noted in the item “You can trust School faculty”. Difference between values of faculty and administrative staff is noted. It is present both between perceived and expected values of all the items distinguishing between these two groups of employees: “You can trust School faculty/administrative staff.” (perceived values ($M(p/faculty) = 5.01$ and $M(p/administrative\ staff) = 4.53$) and expected values ($M(e/faculty) = 6.33$ and $M(p/administrative\ staff) = 6.01$)) and “School faculty/administrative staff is polite.” (perceived values ($M(p/faculty) = 5.07$ and $M(p/administrative\ staff) = 4.15$) and expected values ($M(e/faculty) = 6.57$ and $M(p/administrative\ staff) = 6.63$)). Moreover, for the item “Faculty/administrative staff gets adequate support from School to do their jobs well.” it is that in expected as well as in perceived values, difference is present, but it is not substantial. The average gap for Assurance is 1.746 and it is lower than Reliability. This indicates that HEI is performing better in Assurance dimension than in Reliability but lower than Tangibles and Responsiveness dimensions.

Empathy as the fifth service quality dimension focuses on employees and School in general. Majority of the items have statistically significant difference between perceived and expected values, except for item “Faculty of the School do not know what your needs are.” Also, in this item higher value is in perceived than in expected item but is statistically not significant. Additionally, one item more have higher perceived than expected values. This item is “School does not have operating hours convenient to all their students” but difference here between perceived and expected values is statistically significant. The highest difference between perceived and expected values is in item “School does not have your best interest at heart.”, and the lowest difference between perceived and expected values, if we take into account only statistically significant differences, is noted in item “School administrative staff do not know what your needs are.”. Difference between values of faculty and administrative staff is noted. It is present both between perceived and expected values of all the items distinguishing between these two groups of employees: “Faculty/administrative staff of the School do not know what your needs are.” (perceived values ($M(p/faculty) = 4.33$ and $M(p/administrative\ staff) = 4.02$) and expected values ($M(e/faculty) = 4.24$ and $M(p/administrative\ staff) = 4.22$)). Where for item “School faculty/administrative staff does not give you personal attention.” in expected as well as in perceived values difference is present, but it is not substantial. The average gap for Empathy is 0.616, hence being the lowest difference between all the average gaps in different service quality dimensions.

As from the analysis can be observed, differences are present among both perceived and expected items for faculty and administrative staff. Hence, indicating that this distinction is present and worthwhile observing. This was also noted by several authors [19] [6] and likewise AACSB Accreditation standards and EQUIS Standards and criteria stress that faculty and administrative staff should be analysed separately (cf. Standard 3 2020 AACSB standards [17]; Chapter 4 and 7, EQUIS 2020 standards and criteria [18]). For five items related to this differentiation between two groups of employees (RES2/RES3, RES4/RES5, A1/A2, A4/A5, E4/E5) analysis show that difference between average values in items between faculty and administrative staff is present and substantial. While in three items (T3/T4, A6/A7, E1/E2) difference is present but it is not considerable. Therefore, results point out that differences between these two groups of employees are present and that there is a need to approach them separately when evaluating service quality of HEIs.

3. Conclusion

This research contributes to service quality research in the following ways. Firstly, it stresses the need to distinguish between different groups of the employees at the same HEI. Therefore, separately assessing the perceived and expected service quality of the faculty and administrative staff helps HEI management to reveal on what features to focus when improving service quality. It stresses that distinguishing between two groups of employees helps HEI management to identify several different gaps where they can focus on to efficiently improve overall institutional service quality. Secondly, research also stresses the need to consider separately all groups of employees as they are not equally contributing to all service quality dimensions. This helps HEI management to focus their efforts on improving service quality more efficiently especially as some practices are providing results for faculty but are not at all relevant for improving performance of administrative staff. Thirdly, by exploring perceived service quality at the beginning of the process to implement international accreditation standards it helps HEIs to set a groundwork for future measurements and to control this process from the beginning. As accreditation standards represent an outline that guarantee constant level of quality for HEI's students [20], management focus on approaching top business schools by implementing international accreditation standards for service quality signals to students that HEI is taking seriously the quality of education. Students, HEIs primary stakeholders, are nowadays, more than before aware of the need, if they want to get high quality education, to enrol into universities and business schools that align their education with AACSB or EQUIS standards. Finally, research results show that distinguishing between these two groups of employees, faculty, and administrative staff, gives additional insight to the HEI management about current level of perceived and expected service quality by assessing SERVQUAL dimensions.

Research also offers managerial implications for HEI management. Service quality measurement should consider assessing separately to contribution of the faculty and administrative staff to overall perceived service quality of the HEI. This could be done at the end of the academic year by implementing a student questionnaire for assessing level of service quality in both faculty, and administrative staff. Faculty is dominantly assessed on their teaching performance, but this research shows that their contribution to institution's service quality should be taken into account. Administrative staff is seldomly researched in their impact to institution's service quality. So, including them into student assessment could reveal some weak points and suggestions how to improve service quality in dimensions related to administrative staff. Also, conducting in depth interviews with student representatives could shed a light on what to improve from the administrative point of view to improve overall institutional service quality.

Limitations of this research are found in narrow focus on only one HEI. This can be resolved by focusing the further research on different HEIs both private and public. Also, it would be beneficial to explore HEIs in different countries or with different levels of acceptance of both AACSB and EQUIS standards and to compare the results. As this research is done in one-time frame, the further research could focus on assessing the service quality in the same HEI after applying quality measures oriented towards approaching top business schools. This would help HEI to use additional instruments in assessing service quality, and if already measured service quality at the beginning of the process, to re-assess while it progresses towards the set goal.

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