

Higher Education Service Quality for International Students: A Literature Review

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Abstract

The paper addresses higher education (HE) service quality in China with respect to higher public education institution using the HESQUAL model. It has identified literature sources of five dimensions in the HESQUAL model and presented the HESQUAL model with 48 attributes in five dimensions based on the foregoing research. The researcher concluded the paper by investigating that for decades China's research on service quality of international students and based on the analysis of literature review from the research on service quality of international students. The researcher has found that the theoretical research was more conducted in the higher education sector than empirical research, and there were gaps between service quality and the perceptions of international students.

Keywords

HESQUAL, International Students, Literature Review, Service Quality

1. Introduction

Higher Education (HE) service quality is getting more and more attention by researchers in China, but fewer Chinese researchers conduct the kind of service quality research in the Chinese atmosphere (Hong, 2018). (Mortari & Ubbiali, 2021) put that, "there are some instruments to assess the service quality in higher education". The purpose of the paper is to assess the quality of service for Higher Public Education Institution using the HESQUAL model, developed by (Teeroovengadum et al., 2016). Service quality in the higher education sector is increasingly recognized as a research field, and this puts a greater emphasis on meeting the expectations and needs of its participating customers who are the students (Chen & Chen, 2010). Most studies consider students as primary cus-

tomers (e.g., Bhuian, 2016).

2. HESQUAL Model in Higher Education Sector

(Icli & Anil, 2014) proposed a new scale, called HEDQUAL (Higher Education Quality), which has only been assessed in Master of Business Administration (MBA) programmes. As key dimensions, the scale focuses on academic quality, administrative service quality, library service quality, quality of providing career opportunities and supporting services (Icli & Anil, 2014). In the quest for international ranking and accreditation in higher education, quality must remain at the centre of the future research agenda. Future studies should delve into the notion of quality in education from a multidimensional model that incorporates quality, access, investment and relevance (Blanco-Ramírez & Berger, 2014). Higher educational institutions, like any other service establishment, should strive to achieve excellence in service quality (Yousapronpaiboon, 2014) (Table 1 is HESQUAL model and Table 2 is the five dimensions in HESQUAL model).

Table 1. HESQUAL model.

Author (s)	Model	Factor (s)/Findings
(Teeroovengadum et al., 2016)	HESQUAL	Administrative quality, Physical environment quality, Core educational quality, Support facilities quality, Transformative quality

Table 2. The literature sources of five dimensions in HESQUAL model.

Dimensions identified	Literature source	Sample statements from interviews/focus groups
Administrative quality	(Narang, 2012)	“There should not be much bureaucracy”; “Procedures should be clearly stated”; “Administrative staffs should always be willing to help students out”.
Physical environment quality	(Narang, 2012), (Wong et al., 2012)	“A nice sports complex is important”; “Lecture rooms must be well equipped”.
Core educational quality	(Narang, 2012)	“Knowledge of academics”; “Ability of lecturers to transmit enthusiasm”; “Up-to-date in their field”; “Encourage participation of students in their learning process”; “A culture of sharing and collaboration”; “Faculty members are willing to help”; “Course designed based in requirements of the students”.
Support Facilities Quality	(Sultan & Wong, 2012)	“Adequate cafeteria”; “Opportunities for extracurricular activities”; “Computer laboratories available”; “Photocopy and printing services”.
Transformative quality	(Lomas, 2007), (Srikanthan & Dalrymple, 2007)	“Learning how to deal with emotions”; “Developing critical thinking”; “Acquiring job-related skills and knowledge”; “Conduct research”.

Source: Adapted from (Teeroovengadum, 2016).

Table 3. HESQUAL model with 48 attributes in five dimensions.

Factors	Service quality dimensions and attributes
Administrative quality: - Attitude and behavior including attributes No. 1 - 4; - Administrative processes including attributes No. 5 - 7.	1. Willingness of administrative staff members to help students; 2. Ability of administrative staff members to solve students' problems; 3. Politeness of administrative staffs; 4. Behaviour of administrative staff members imparting confidence in students; 5. Well standardized administrative processes so that there is not much bureaucracy and useless difficulties; 6. Administrative procedures are clear and well structured so that service delivery times are minimum; 7. Transparency of official procedures and regulations.
Physical environmental quality: - Support infrastructure attributes including No. 8 - 11; - Learning setting attributes including No. 12 - 14; - General infrastructure attributes including No. 15 - 17.	8. Availability of adequate cafeteria infrastructure; 9. Availability of adequate library infrastructure; 10. Availability of adequate recreational infrastructure; 11. Availability of adequate sports infrastructure; 12. Having adequate lecture rooms; 13. Having quiet places to study within campus; 14. Availability of adequate teaching tools and equipment (e.g. Projector, White boards); 15. Favourable ambient conditions (ventilation, noise, odour, etc.) prevailing within the campus; 16. Safety on campus; 17. Appearance of buildings and grounds.
Core educational quality: - Attitude and behavior attributes including No. 18 - 23; - Curriculum attributes including No. 24 - 27; - Pedagogy attributes including No. 28 - 31; - Competence attributes including No. 32 - 34.	18. Lecturers understanding students' needs; 19. Lectures giving personal attention to students; 20. Availability of lecturers to guide and advise students; 21. Prevalence of a culture of sharing and collaboration among lecturers; 22. Behaviour of lecturers instilling confidence in students; 23. Lecturers appearing to have students' best interest at heart; 24. Clearly defined course content and course objectives; 25. Usefulness of module content and design to cater for the personal needs of students; 26. Challenging academic standards of programs to ensure students' overall development; 27. Relevance of course content to the future/current job of students; 28. Use of multimedia in teaching (e.g. use of overhead projector, power-point presentations); 29. Active participation of students in their learning process; 30. Provision of regular feedback to students with respect to their academic performance; 31. Well designed examinations and continuous assignment to promote the enhancement of knowledge skills; 32. Theoretical knowledge, qualifications and practical knowledge of lecturers; 33. Communication skills of lecturers; 34. Lecturers are up-to-date in their area of expertise.

Continued

<p>Support facilities quality: - Support facilities attributes including No. 35 - 40.</p>	<p>35. Reasonable pricing and quality of food and refreshments on campus; 36. Availability of adequate IT facilities; 37. Availability and adequacy of photocopy and printing facilities; 38. Availability of transport facilities; 39. Amount of opportunity for sports and recreational facilities; 40. Availability and adequacy of extracurricular activities including those through clubs and societies.</p>
<p>Transformative quality: - Transformative attributes including No. 41 - 48.</p>	<p>41. Enabling students to be emotionally stable; 42. Increase in self-confidence of students; 43. Development in students' critical thinking; 44. Increase in self-awareness of students; 45. Development of problem-solving skills with respect to their field of study; 46. Enabling students to transcend their prejudices; 47. Acquiring adequate knowledge and skills to perform future job; 48. Increase in knowledge, abilities and skills of students.</p>

Table 4. Past researches for service quality in higher education.

Author (s) and publication	Finding (s)	Research place
(LeBlanc & Nguyen, 1997)	<ul style="list-style-type: none"> - Reputation, faculty, administrative personnel had a significant relationship with perceived service quality; - Curriculum, physical evidence, responsiveness and access to facilities as additional factors influencing perceived service quality. 	Canada
(Joseph & Joseph, 1997)	<ul style="list-style-type: none"> - Program, academic reputation, and career opportunities had a relationship with service quality; - Physical aspects, location, and time didn't have a direct relationship with service quality. 	New Zealand
(Gatfield et al., 1999)	<ul style="list-style-type: none"> - Adopted assessment method had a significant relationship with students' satisfaction; - There was a significant difference on satisfaction with students' work experience; - Age and gender had no relationship with students' satisfaction. 	Australia
(Yildiz & Kara, 2009)	<ul style="list-style-type: none"> - To develop a measurement for service quality in higher education. 	Turkey
(Rojas-Méndez, Vasquez-Parraga, Kara & Cerda-Urrutia, 2009)	<ul style="list-style-type: none"> - Students' satisfaction and perceived service quality did not have a direct relationship with loyalty. 	Chile
(Ibrahim, Wang, & Hassan, 2013)	<ul style="list-style-type: none"> - There was a gap between perceived service quality and expectation. 	Glasgow, Strathclyde, Stirling, West of Scotland
(Jain et al., 2013)	<ul style="list-style-type: none"> - Developing a model including program quality: curriculum, industry interaction, input quality, academic facilities; and quality of life: non-academic processes, support facilities, campus and interaction quality. 	India

Continued

(Garba & Sentosa, 2015)	<ul style="list-style-type: none"> - A strongly significant relationship between the reliability, assurance and empathy with satisfaction; - An insignificant relationship between tangibility and responsiveness with satisfaction of students. 	Malaysia
(Teeroovengadam et al., 2016)	<ul style="list-style-type: none"> - Developing a five-dimension HESQUAL model with 48 attributes. 	Mauritius
(Ingaldi, 2018)	<ul style="list-style-type: none"> - Overview of main methods of service quality analysis. 	Poland
(Lu & Pitchayadejanant, 2017)	<ul style="list-style-type: none"> - To identify accuracy information, fulfilling, tailed advice, willing assistance, recommendation for the university to friends, and recommendation for friends to study in Thailand. 	Thailand
(Khalaf & Khourshed, 2017)	<ul style="list-style-type: none"> - Tangibles (Physical Environment) affect, course content essential, Academic staff efficiency the most important, Responsiveness and empathy, economic side and reputation. 	Egypt
(Saduov, Madiyarova, Jempeissova, Selezneva, Shtiller, & Fursova, 2018)	<ul style="list-style-type: none"> - Computer facilities, library facilities, academic courses and future job prospects had a significant relationship with perceived service quality. - The importance of investing in IT facilities by universities in order to improve students' satisfaction. 	Kazakhstan
(Sokoli, Koren, & Gutierrez, 2018)	<ul style="list-style-type: none"> - Curricula had a relationship with students' satisfaction; - Academic and non-academic qualities had a relationship with satisfaction. 	U.S.A
(Sokoli, Koren, & Shala, 2019)	<ul style="list-style-type: none"> - Using HESQUAL model to measure and improve service quality in higher education. 	Slovenia
(Munshi, 2019)	<ul style="list-style-type: none"> - To develop a HESQUAL model based on SERVQUAL model. 	India
(Osman & Saputra, 2019)	<ul style="list-style-type: none"> - Institutional image had a strongly significant impact on students' satisfaction; - Program quality had a significant relationship with service quality. 	Bangladesh
(Asnawi & Setyaningsih, 2020)	<ul style="list-style-type: none"> - Factors influence the perceived quality of students during the learning process. 	Indonesian
(Sameena, 2020)	<ul style="list-style-type: none"> - Core and value-added service quality. 	UAE
(Lima-Vargas, Obaya, Lima-Vargas, Rosales-Soriano, 2021)	<ul style="list-style-type: none"> - The impact of students' perception of quality towards their institution (teachers and administrators) on their academic performance and gender differences. 	USA
(Mortari & Ubbiali, 2021)	<ul style="list-style-type: none"> - Service learning is an interesting model that would allow for this and would guide practices that support a democratic education informed by virtue and ethics. 	Italy

3. The Development of Attributes in HESQUAL Model

The researcher presented HESQUAL model with 48 attributes in five dimensions based on the foregoing research as in **Table 3**.

4. Past Researches Concerning HESQUAL Model

Based on the foregoing cases of different countries using HESQUAL in analyzing the results between customers' expectations and perceptions, the researcher will

produce a table containing the dimensions of service quality in higher education as in **Table 4**.

5. Conclusion and Future Research

For decades, China's research on service quality of international students has been based on the analysis of literature review, and the researcher has found that the theoretical research was more conducted in the higher education sector than empirical research. Also, there were gaps between service quality and the perceptions of international students.

A large number of empirical studies have shown that the evaluation of customer (student) satisfaction should be based on the characteristics of the organization and customers, and it is difficult to find a unified evaluation scale.

Compared with the quality of higher education services, relevant research on the quality of education services for international students at home and abroad is not sufficient. Whether there are considerable deficiencies in both theoretical and empirical research, China's international student service quality management research has paid too much attention to the research of theories but ignored the empirical research. The specific performances are as follows: 1) the lack of a united definition of international students education services; 2) the relevant research on the quality of international students' educational services is not sufficient, and the quality characteristics of the education services of international students in China are not clear; 3) due to the limitations of the extant relevant research on the small sample, with the lack of representativeness of students' source, the small scope of the investigation, and an insufficient test of validity; 4) the lack of research on student satisfaction and the lack of research on the cross-culture factors, the different learning objectives of international students, the perception of quality service, and the influence of satisfaction and loyalty; 5) there has been little research on the service quality concerning international students and evaluation systems in Guizhou province, China (Zhang, 2018; Zhang et al., 2007; Song, 2018; Yang, 2009; Yun & Chen, 2019).

For future research concerning service quality for the perceptions of international students, the research should be paid more attention to the empirical research more than theory research, and the respondents should include higher education sectors both in the public and private (Ren et al., 2019).

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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