

# Factors Relating to Student Satisfaction with Service Quality: A Systematic Review

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## Abstract

**Purpose:** This study aims to systematically summarize the factors relating to Student Satisfaction (SS) with Service Quality (SQ) from the literature.

**Design/methodology/approach:** This study analyse and systematically examines sixteen most relevant to keywords peer-reviewed research articles, spanning five years from 2017 to 2021, and summarizes the factors that influence SS with SQ.

**Findings:** The review of the literature reveals that the literature on SS and SQ constitutes all the empirical research literature. The most influential factors are SQ, Perceived Value, Student Loyalty, Trust, and Word-of-Mouth. After the COVID-19 outbreak, all empirical research on SS and SQ combined with e-learning instruction in 2021.

**Research limitations/implications:** Limited by the availability of literature on SS with SQ, this review summarizes the available work for academics and organizations to leverage this knowledge and target only SS with SQ. Additionally, the review emphasizes the research opportunities available to researchers interested in furthering studies in this field.

**Practical implications:** The conclusions of this review may assist future researchers in better understanding the elements driving SS and complexities and determining the optimal technique for maximizing the SS effect.

**Originality/value:** The study summarizes the factors that influence SS with SQ.

**Keywords:** *Loyalty, Perceived Value, Student Satisfaction, Service Quality, Trust, Word-of-Mouth*

## Introduction

According to Lin et al. (2008), the ultimate objective of any product or service is satisfaction. Satisfaction is a perception that substantially impacts the quality of service, loyalty, perceived value, trust, and word-of-mouth (Alwi, 2019; Chandra, 2018; Muhammad, 2013; Sindwani, 2016). Past studies have provided important information on two widely recognized forms of

contentment: customer satisfaction and student satisfaction (SS). Thus, through the well-acknowledged satisfaction framework in the academic community, both customer satisfaction and SS will affect service quality (SQ), loyalty, perceived value, trust, and word-of-mouth (Cheng, 2020; Dreheeb, 2016; Hoai, 2021; Khan, 2015, 2018; Misaii, 2019).

Satisfaction is the most widely accepted indicator of the quality and effectiveness of any type of education and learning (Wu et al., 2010). Weerasinghe et al. (2017) describe "SS as a short-term attitude coming from an appraisal of services, students' educational experience, and facilities." The capacity to create and use measurements could be utilized to improve the quality of courses, SS, and dropout rates (Udo et al., 2011).

SS is critical and must be considered while evaluating the course's efficacy (Dziuban, 2015; Gray, 2016; Basuony, 2021; Rajabalee, 2021). Allen et al. (2002) noted that numerous factors contribute to SS, including the learner's degree of digital literacy, social and professional engagements, learner support system, helpful academic advice, and course design. She et al. (2021) discovered that various interactivities could be critical for students to increase satisfaction with e-learning and learning outcomes in an online learning environment. An appropriate multi-factorial and personalized strategy of quality online education includes access to digital devices and software (Weldon, 2021).

According to Nadiri and Hussain (2005)'s, SQ contributes to customer satisfaction by inspiring referrals and increasing the intention to return. Khattab (2019) defined SQ as customers' evaluation of whether a service met, surpassed, or failed to meet predetermined expectations. Based on these definitions, SQ was developed as a SERVQUAL model (Parasuraman et al., 1988).

The definition of SQ in higher education is extensively discussed in the literature (Annamdevula & Bellamkonda, 2016; Brochado, 2009; O'Neill & Palmer, 2004; Schijns, 2021; Sultan & Wong, 2010). Several academics took the effort to define the SQ of higher education in own words. The quality of higher education has been characterized as the sum of excellence, exclusion, fitness for purpose, cost-effectiveness, and transformative potential (Harvey and Knight, 1996; Yousapronpaiboon, 2014). This means that factors of higher education SQ can be measured in a variety of ways (Li et al., 2021).

A few research showed a significant association between learner interaction quantity, quality, and satisfaction while emphasizing the importance of SS and involvement in learning experiences (Dziuban, 2015; Rajabalee, 2021; She, 2021). Vö. (2021) discovered a substantial link between SQ parameters and student loyalty. Students are more likely to be satisfied with the university if the service offered meets or exceeds expectations. On the other hand, students are often unsatisfied with the university when SQ falls below expectations, which results in bad perceptions spreading among peers, friends, and family (Petrzellis et al., 2006).

The goal of this research is to review and summarize the factors that impact SS with SQ in the literature. This paper is divided into three sections. Section 2 summarizes the findings of an evaluation of 16 peer-reviewed research articles published between 2012 and 2021 on SS and SQ topics. Finally, Section 3 concludes the study.

## **Literature Review**

This study filtered 104 articles from 2012 to 2021 by doing a Scopus search on SS and SQ, using keywords SS, SQ, and high education. Figure 1 illustrates the line chart of the number of articles by year. Focus is placed on business, management, and accounting areas. The majority of these peer-reviewed articles were published in prestigious journals such as *Journal of Marketing for Higher Education* (16), *International Journal of Educational Management* (14), *Total Quality Management and Business Excellence* (5), *Services Marketing Quarterly* (4), and *Tertiary Education and Management* (4), among others. From the 104 articles, this study

systematically examines sixteen articles. Seven articles published in 2021 plus nine articles with the highest click-through rates from 2017 to 2020.

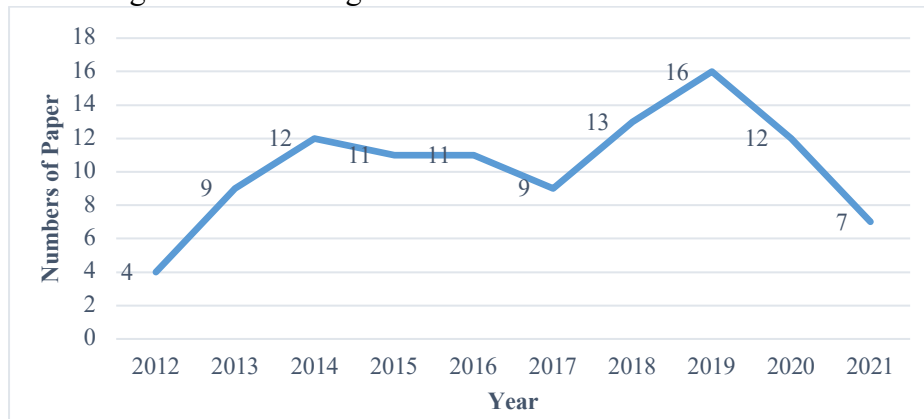


Figure 1 Number of papers in a yearly view

Table 1 shows the list of factors for 16 articles from 2017 to 2021. The literature review reveals that all the literature on SS and SQ is empirical research literature. From the Table 1 summary table, the most influential factors are Student Loyalty, Perceived Value, Trust, and Word-of-Mouth. After the COVID -19 outbreak, practically all empirical research on SS and SQ are combined with e-learning in 2021.

Table 1 Literature Summary Factors Influencing the SS and SQ

No	Year	Authors	Country	Type of Study				Factor			
				Face-to-Face	e-Learning	Blended Learning	SL	PV	T	WoM	Other
1	2021	Giantari et al.	Indonesia		√			√		√	
2		García-Rodríguez et al.	Spain	√			√			√	
3		Rajabalee et al.	Mauritius		√					√	
4		Santoso	Indonesia		√					√	
5		Schijns	Netherlands		√					√	
6		She et al.	Malaysia		√					√	
7	2020	Võ	Philippines	√			√				
8		Alsheyadi et al.	Oman	√						√	
9		Kaushal et al.	India	√			√			√	
10		Singh et al.	India	√					√	√	
11		Appuhamilage et al.	Sri Lanka	√			√	√		√	
12		Ghobehei et al.	Iran	√			√		√	√	√

13	Çelik et al.	Turkey	√			√
2018						
14	Chandra et al.	Indonesia	√		√	
15	Abdel-Jaber	Saudi Arabia		√		√
2017						
16	Diep et al.	Belgium		√	√	√

Note: SL = Student Loyalty, PV = Perceived Value, T = Trust, WoM = Word-of-Mouth

### ***Face-to-Face, e-Learning, and Blended Learning***

Blended learning (BL) is frequently defined as a method of education that mixes face-to-face and e-learning (Diep et al., 2017; Garrison et al., 2004; Wu et al., 2010). In medical education, online education cannot replace face-to-face instruction even with innovative approaches. While traditional face-to-face and BL programs could provide equivalent results in student learning and satisfaction, Diep et al. (2017) found that BL programs occasionally outperformed traditional face-to-face programs.

The analysis discovered that six out of seven of the literature published in 2021 explored the influencing factors of SS and SQ in the context of e-learning, and the research findings consistently demonstrate that e-learning education has an impact on SS (Abdel-Jaber, 2021; Giantari et al., 2021; Rajabalee et al., 2021; Santoso, 2021; Schijns, 2021; She et al., 2021). Whereas, most of the research on the impact factors of SS and SQ before 2021 concentrated on face-to-face courses (Alsheyadi et al., 2020; Appuhamilage et al., 2019; Çelik et al., 2018; Chandra et al., 2018; Kaushal et al., 2020; García-Rodríguez et al., 2021; Ghobehei et al., 2019; Singh et al., 2020; Vö, 2021), much of the literature on SS and SQ ignores the blended learning context. In 2017, literature showed the influencing factors of SS and SQ in the context of BL (Diep et al., 2017). To the best of the authors' knowledge, no literature explores the factors affecting SS and SQ in the context of blended learning modes during COVID-19.

### ***Student Loyalty***

Loyalty is an expression of consistent repurchase (Oliver, 1999). In contrast to Oliver, McMullan et al. (2008) argue that situational loyalty is distinct from proactive loyalty and is influenced by the most attractive seasonal discounts offered from shopping malls. Oliver's (1999) work on loyalty is complemented by Faizan et al.'s (2016) study that loyalty encompasses behavioral and attitudinal loyalty. Ghobehei et al. (2019) argue that student loyalty contains the criteria mentioned above and attitudinal and behavioral components.

According to the comprehensive review of the literature, most research demonstrate that SS and SQ have a favorable effect on student loyalty (Appuhamilage, 2019; Chandra et al., 2018; Kaushal et al., 2020; Garca-Rodriguez et al., 2021). Garca-Rodriguez (2021) assesses a model with a robust predictive capacity for SL in a medium-sized European educational institution. The findings indicate that satisfaction and reputation are significant predictors of loyalty. Satisfaction is an essential factor for students, while reputation is more important for social organizations. However, Garca-Rodriguez (2021) did not differentiate between different types of students. Kaushal et al. (2020) explore the relationship between brand attachment of university, university reputation, university brand personality, SS, and student loyalty. Kaushal et al. (2020) discover that higher education reputation affects student loyalty behavior directly and indirectly via SS. The age of student, seniority, and the availability of financial help in scholarships have varying degrees of influence on satisfaction relationships. A survey of 1,000 students in Indonesia higher university revealed that while service quality has a beneficial effect on SS by Chandra et al. (2018), there is no association between student quality and

student loyalty. Satisfaction with students has a beneficial effect on student loyalty (Chandra et al., 2018).

Other research indicates no association between student loyalty, SS, and SQ (Ghobehei et al., 2019; Vö., 2021). Vö. (2021) examines the connection between SQ parameters and SS using a quantitative method to collect data through a questionnaire. The results showed that SS was significantly influenced by reputation, access, and academic factors. Whereas academic, reputational, and administrative considerations contributed to student loyalty motivation. Satisfaction makes no apparent difference in terms of loyalty. A study among higher students in Iran's higher education institutions (HEIs) found that the effect of the perceived service quality on loyalty was rejected (Ghobehei et al., 2019). Unlike other researchers, however, Appuhamilage's (2019) survey provides a piece of excellent information about SS and loyalty to the university showing that satisfaction and loyalty are a two-way positive impact.

### ***Perceived Value***

The pleasant sensation customers experience due to their consumption is a perceived value (Asih et al., 2020; Giantari et al., 2021). Perceived value is determined by the consumers' subjective consciousness and is influenced by consumption's internal and external environment (Suki, 2016). Perceived value is a factor in both SS and SQ. Temizer and Turkyilmaz (2012) make a similar point in the study of developing an SS measure model for the Higher University that incorporates perceived value and the other four factors. Additionally, research indicates that perceived value has a beneficial effect on both SS and SQ with Goh et al. (2017) agreeing with this finding.

In this study, the finding of perceived value influencing SS and SQ are those of Giantari et al. (2021), Appuhamilage et al. (2019), and Diep et al. (2017). According to Giantari et al. (2021)'s research, SS moderates the impact of perceived value on word-of-mouth. Additionally, the perceived worth has a positive and significant effect on non-student satisfaction and SS. Numerous elements must be included, including the internet system, the quality, and future ease of use of online media. Giantari et al. (2021) recommend separating non-student satisfaction and SS. Appuhamilage (2019) concludes that satisfaction directly affects the services and financial support supplied by the university. Perceived value has a favorable effect on SS, which in turn affects loyalty. On perceived value, Appuhamilage (2019) concludes a new influencing factor which is financial support. In Diep et al. (2017)'s research, the author builds a model to predict SS with BL programs to investigate the interaction impact of teacher competence and the LMS on SS across various BL modes. The finding is that perceived value (students' perceived task value) is the most significant factor in successfully implementing BL programs. The LMS has an indirect impact on SS based on the BL model. Students will place a premium on the LMS's functionality, convenience of use, and design. Diep et al. (2017)'s analysis of LMS does not consider the Course Website's influence.

### ***Trust***

Trust is critical in forming relationships (people to people, people to companies, and companies to companies) (Morgan et al., 1994; Sampaio et al., 2012). A university's brand influence can affect parents' and students' trust (Beerli Palacio et al., 2002). Hennig-Thurau et al. (2001) mentioned that one of the important factors of SQ is students' trust. Singh et al. (2020) examine the moderating influence of perceived trust on SS in Indian institutions of higher management education. Singh et al. (2020)'s findings indicated that instructor, staff competency, reputation, and access substantially affect SS. However, general teacher abilities and staff attitude have little impact on SS. Singh et al. (2020)'s study is the first of its kind to examine the academic and non-academic links between SS and SQ. Singh et al. (2020) discover significant disparities in the academic and non-academic sectors' influence on SS and SQ. According to Ghobehei et

al. (2019), perceived brand orientation has a favorable effect on trust, one of four factors (trust, loyalty, satisfaction, and word-of-mouth).

### ***Word-of-Mouth***

Throughout the literature on SS and SQ, the role of word-of-mouth are highlighted. Consumers' purchase intentions are significantly influenced by word-of-mouth (Arndt, 1967; Kundu et al., 2017; Richins, 1983). One of the benefits of word-of-mouth marketing is that products recommended by friends are more likely preferred (Cheema et al., 2012; Kundu et al., 2017; Rosen, 2002). Word-of-mouth is a more effective strategy than advertising (Moliner-Velazquez et al., 2015). Historically, research investigating the factors associated with word-of-mouth focused on SS, SQ, perceived value, students' perceptions, students' orientation, and students' decisions (Bruce & Edgington, 2008; Carter, 2009; Macintosh, 2007; Ghobehei et al., 2019; Giantari et al., 2021; Shue & Falahat, 2017). By far, the most thorough account of word-of-mouth is found in the work of Kundu et al. (2017), Huete-Alcocer (2017), and Verma et al. (2021). Student satisfaction has a substantial positive impact on word-of-mouth (Giantari et al., 2021). Similarly, Ghobehei et al. (2019) found that perceived service quality has a significant favorable effect on students' trust, satisfaction, and word-of-mouth.

### ***Other Factors***

Different studies have shown that there are many other factors influencing SS and SQ. Overall, these studies indicate that in addition to the four often used elements, perceived value, student loyalty, trust, and word-of-mouth, there are numerous other contributing factors for research options. These additional elements are mostly manifested in certain standard connections between SS and SQ in the context of e-learning.

Khan et al. (2021) emphasize that online learning saves substantial amounts of time and provides the flexibility of the class schedule. SS is critical and must be considered while evaluating the course's performance. Students are satisfied with an online final exam assessment since it has a significant and positive effect on satisfaction. Most students agreed that this academic pandemic has numerous positive characteristics. Khan et al. (2021) also emphasize the importance of SS with the online final exam.

Schijns (2021) provides an in-depth analysis of the work of nine out of twelve SQ factors that have a favorable impact on SS. The nine factors include acquired general skills, professors/lecturers, the information provided, content and structure of the study, quality care, study facilities, willingness to recommend, the challenging character of the study, and acquired scientific skills. The Open Universiteit (OUNL) achieves excellent marks in all SQ areas, demonstrating that the institution cannot afford to fall short in any of the SQ categories (Schijns, 2021). Schijns (2021)'s study used data from the OUNL in the Netherlands to determine the SQ determinants of SS. Therefore, generalization of the results to a larger population should be treated with caution.

Rajabalee and Santally (2021) evaluate SS and participation in an online course. The study examined the relationships between student pleasure and participation in an online class and overall performance for 844 university students from a variety of areas. The study was created with a learn-by-doing philosophy in mind, emphasizing the development of new skills and abilities. Six hundred sixty-five students' input was coded and evaluated quantitatively and qualitatively. As a result of this research, it became clear that SS and engagement are critical factors of students' learning experiences.

She et al. (2021) examine the link between interaction and satisfaction with online learning among Chinese university students during the COVID-19 pandemic. To explore the proposed association, a serial mediation model was built. The findings indicate a positive correlation

between interaction and pleasure with online learning. Chinese students who interacted more frequently during online learning reported higher levels of learning satisfaction.

Santoso (2021) performs a quantitative survey at Duta Wacana Christian University, Yogyakarta, Indonesia, from June to September 2020. The research mentions that four factors (quality of technical and information, digital readiness, quality of instructor, and adoption and attitude in e-learning) influence the students' engagement affecting SS. With these findings in mind, it is vital to obtain advanced teaching technology in order to improve SS. Both software and hardware technology must be developed as the demand for e-learning software is increasing.

In another study, final year students are more likely to recognize the positive impact of student affairs services provided by student affairs departments (Alsheyadi et al., 2020). The study demonstrates it is critical to focus on enhancing the SQ given by HEIs to increase SS. The findings are crucial for HEI's decision-making as quality evaluation is a critical and necessary process. A new factor, cross-functional teamwork, was introduced.

Yusuf et al. (2018) survey postgraduate students' overall satisfaction with the academic services they received. The findings provide important information to higher education institution decision-makers. The findings indicate that factors including age group, tuition charge, bachelor education, monthly personal income, monthly household income, and kind of graduate school relate to the quality of higher education services. Yusuf et al. (2018)'s survey show that the influence of monthly personal income and monthly household income contribute to satisfaction with academic services. The study conducted by Abdel-Jaber (2017) examines the association between college SS classes and many personal and institutional variables. Among these are students' internet self-efficacy, self-regulated learning, course & instructor engagement, and evaluation of the LMS employed. The LMS (Blackboard) used was revealed to be the most negligible influential factor affecting students' e-learning experiences.

## Methods

This study deployed a document review for analysis and systematically examines sixteen most relevant to keywords peer-reviewed research articles, spanning five years from 2017 to 2021, and summarizes the factors that influence SS and SQ. In the beginning, a literature search was conducted to select the appropriate literature. Secondly, the qualitative and quantitative historical data were analysed and obtained. Finally, the conclusion of the review in this research.

## Discussion and Conclusion

From the thorough review of literature, the quality of e-learning is discovered as a beneficial influence factor on service satisfaction during COVID-19 (Abdel-Jaber, 2017; Cheng, 2020; Giantari et al., 2021; Rajabalee & Santally, 2021; Santoso, 2021; Schijns, 2021; She et al., 2021). A positive effect was confirmed between course content quality and course design quality to satisfaction in the e-learning system (Cheng, 2020). Although this systematic review is based on a small sample of journal articles, the findings suggest that:

- (1) Perceived Value and Student Loyalty (or Loyalty) are the most frequently cited influencing factors in SS and SQ studies.
- (2) The link between SS and Word-of-Mouth in COVID-19 warrants further investigation.
- (3) Further investigation of the mediating or regulating effect of Trust as a latent variable on SS is recommended.
- (4) Further investigation could examine the effect of blended learning on SS.

With the global distribution of the COVID-19 vaccination, a new round of educational reforms is unavoidably on the horizon. As a result, this is a vibrant and expanding field of research with conceptual and empirical potential for future scholarly work.

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