

Service quality as determinant of Brand Equity and its dimensions in higher education institutions

Calidad del servicio como determinante del valor de marca y sus dimensiones en instituciones de educación superior

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Abstract

The objective of this research is to analyze the effect of service quality on the brand value and its dimensions of an educational institution located in Rioverde, San Luis Potosí. The methodology was quantitative, descriptive in scope and cross-sectional in design. The population consisted of 1329 consumers of educational services, with a sample of 302. Data were collected through a survey and the instrument was composed of twenty-nine items to calculate brand value and the SERVQUAL scale composed of twenty-two items to measure service quality. A canonical correlation was conducted where it was determined that service quality has a significant impact on brand equity ($\rho = 0.817$, $\text{sig.} = 0.000$). Likewise, the PLS Smart program was used to evaluate the hypotheses, which were accepted. It was concluded that if service quality is good, it will have a good impact on brand equity and its dimensions, since service quality has an indirect

impact on these dimensions.

Keywords: Brand Equity, Service Quality, Educational Services

JEL Codes: I20, M31

Resumen

Esta investigación tiene como objetivo analizar el efecto de la calidad del servicio en el valor de marca y sus dimensiones de una institución educativa ubicada en Rioverde, San Luis Potosí. El enfoque fue cuantitativo de alcance descriptivo y de diseño transversal. La población se integró por 1,329 consumidores de servicios educativos, con una muestra de 302. Los datos se recopilaron mediante una encuesta y el instrumento se integró por 29 ítems para calcular el valor de marca y la escala SERVQUAL compuesta por 22 ítems para calcular la calidad del servicio. Se llevó a cabo una correlación



canónica donde se determinó que la calidad del servicio impacta significativamente en el valor de marca ($p=0.817$, $\text{sig.}=0.000$). Por otro lado, se utilizó el programa PLS Smart para comprobar las hipótesis planteadas, las cuales fueron aceptadas. Se estableció que si la calidad del servicio es buena tiene repercusiones buenas en el valor de marca y en sus dimensiones, debido a que la calidad de servicio determina de forma indirecta en estas.

Palabras Clave: Valor de Marca, Calidad del Servicio, Servicios educativos

Código JEL: I20, M31

Introduction

Service quality today plays an important role, as it allows companies to improve the services they offer to their clients and thereby achieve customer satisfaction. Considering that the market is highly competitive across different sectors, service quality becomes crucial to continuously improve and meet consumers' demands—since they are the ones who decide where to make their purchases (Tinco, 2022). For this reason, companies strive to ensure high service quality, focusing on maintaining and enhancing each aspect of their service to satisfy their customers and build a relationship with them.

In the education sector, there has been intense competition among institutions. Currently, they do not only compete with those offering in-person programs, but also with those providing virtual modalities. Moreover, educational institutions face the challenge of student dropout. In Mexico, only 38% of university students graduate (Otero, 2022). A high dropout rate suggests a low quality of higher education, indicating that institutions are not able to provide students with the necessary resources to complete their studies (Garrido & Pajuelo, 2024). Due to these factors, especially higher education institutions have focused their efforts on improving service quality, aiming to address students' primary needs by planning, supporting, and enhancing the performance of their procedures effectively and efficiently, to gain competitive advantages (Hernández & Trinidad, 2021). Evaluating service quality offers a broader perspective for identifying areas perceived as deficient by students—areas that need improvement to align with their needs and expectations. That is why service quality is a key factor for organizations, as it enables them to meet consumer needs, which in turn impacts their

loyalty and, consequently, the image and market positioning of the organization (Mori & Palomino, 2021).

On the other hand, brand equity is also a key point for educational institutions. Those that have built strong brand recognition and a solid reputation hold a significant competitive advantage in a highly competitive market (Sánchez et al., 2024). Brand equity is defined by consumers based on how they perceive the service, and this perception gives value and recognition to the brand. Therefore, universities have sought to identify the factors that influence brand equity, aiming to foster student connection and loyalty toward the institution. Understanding brand equity in the educational sector is crucial due to growing competition and increased demand for higher education (Grimaldo et al., 2023).

Based on the above, the objective of this study is to determine whether the service quality of Unidad Académica Multidisciplinaria Zona Media de Rioverde, San Luis Potosí, influences brand equity. To that end, the following hypotheses were proposed:

- H1: Service quality (SQ) determines brand equity
- H2: SQ is related to the quality dimension of brand equity
- H3: SQ impacts the image dimension of brand equity
- H4: SQ correlates with the loyalty dimension of brand equity
- H5: SQ determines the awareness dimension of brand equity

Theoretical framework

Table 1 below presents the concept of service quality as defined by various authors.

Table 1. Concepts of service quality

Author(s)	Concept
Izquierdo (2021)	Service quality develops in the minds of clients and users; it is formed based on the understanding of consumer needs and the exceeding of their expectations regarding a service
Huizache et al. (2024)	It is the result of implementing competitive strategies and actions, allowing brands to differentiate themselves or provide better customer service

Source: Own elaboration.

Service quality is analyzed through the SERVQUAL model, proposed by Parasuraman et al. (1985). This model evaluates service quality through five dimensions, which are essential for optimizing service quality aspects. These dimensions are defined in the following table.

Table 2. Dimensions of service quality

Dimension	Definition
Tangibles	Refers to physical facilities, equipment, personnel, and communication tools (Yovera & Rodríguez, 2018).
Empathy	The individualized attention that the brand provides to consumers (Coronel et al., 2019).
Responsiveness	The willingness to help customers and provide prompt service (Cevallos et al., 2019).
Assurance	The knowledge, skills, and attentiveness of employees to inspire trust and credibility (Osejos & Merino, 2020).
Reliability	The ability to deliver the promised service accurately and dependably (Siavichay et al., 2023)

Source: Own elaboration.

In Table 3, various authors' conceptualizations of brand equity are presented.

Table 3. Concepts of brand equity

Author(s)	Concept
Kotler & Armstrong (2013)	It is the effect that enables differentiation through brand recognition, as a result of consumer response to its marketing or product.
Palomino et al. (2022)	It encompasses the set of characteristics associated with a brand—such as personality, values, relationships, and quality—which influence the purchasing process and reside in the consumer's mind.

Source: Own elaboration.

Brand equity was analyzed using Aaker's model (1991), which comprises four dimensions to understand how consumers perceive a brand. The definitions of these dimensions are presented in Table 4.

Table 4. Dimensions of brand equity

Dimension	Definition
Brand loyalty	A consumer's consistent behavior in choosing a specific brand, showing reluctance to switch to others (Gutiérrez et al., 2020).
Brand awareness	The effect a brand has on a consumer when it is known or recognized by its outstanding elements (Salazar & Oña, 2021).
Perceived quality	The associations a client develops after hearing about or experiencing a brand, which can enhance a company's profit margins (Alvarado & Ordoñez, 2019).
Brand image	The way a brand is perceived in the consumer's mind when they pay attention to, associate with, or refer to a brand, service, product, company, organization, or institution (Torres et al., 2020).

Source: Own elaboration.

Several authors have conducted studies on service quality and brand equity, which have contributed to understanding how the relationship between these two variables works. Some of these studies are described below.

Sarfraz et al. (2018) investigated the role of satisfaction between service quality and brand loyalty, corporate image, and perceived value in the educational sectors of Pakistan. The sample consisted of 500 students using non-probabilistic and snowball sampling. The findings concluded that service quality, brand image, and perceived value have strong effects on brand loyalty only when satisfaction serves as a mediating variable.

Esquen (2018) aimed to determine the correlation between service quality and brand equity in movie theaters such as Cinerama and Cine Star, Tarapoto – 2017. This quantitative study had a descriptive-correlational scope. The data collection instrument consisted of 14 items to assess service quality and 20 items for brand equity. The instrument was applied to a sample of 57 consumers for each movie theater. Results obtained using Pearson correlation showed a relationship between brand equity and service quality in the theaters under study.

Pérez (2019) analyzed how brand equity is determined by product quality in a chocolate

company based in Tacna. The methodology was quantitative, with a non-experimental and cross-sectional design at an explanatory level. A survey was applied to a sample of 385 consumers. The instrument was based on Garvin's theory to assess quality and Aaker's model to measure brand equity. Results established that service quality has a direct influence on brand equity.

Pinar et al. (2020) aimed to understand students' perspectives and the interactions of brand equity dimensions in developing a strong university brand in Turkey. Using a quantitative method, data were collected via a survey from 1,300 students across all academic years and faculties of the university. The PLS-SEM model revealed that brand equity dimensions significantly impact the university learning experience, thus helping develop solid university brand equity.

Pi et al. (2020) examined the factors influencing Chinese students' decision to study in Malaysia. The study was based on the theory of planned behavior, primarily used in marketing to analyze consumer behavior. The sample included third-year high school students from urban areas of four third-tier cities in Jiangxi Province, China. Simple random sampling was employed. The analysis revealed that academic expectations were not relevant to Chinese students' intentions; however, brand equity significantly influenced their decision to study in Malaysia.

Shahila and ArulPrasad (2021) conducted a study to examine the correlation between service quality dimensions and consumer brand equity in the telecommunications network market. The sample included 517 individuals selected via systematic random sampling. A survey was used as the data collection technique. Descriptive statistics, ANOVA, multiple regression, and correlation tools were employed. Findings indicated that the tangible elements and assurance dimensions of service quality significantly affect brand equity.

Agurto (2021) aimed to determine how brand equity is shaped by the service quality received by customers of a restaurant in Cercado de Lima. The study had a quantitative, non-experimental, and cross-sectional design. A survey was administered to a sample of 173 individuals. The instrument was adapted and validated using Cronbach's alpha coefficient (0.973), indicating high reliability. Results showed that service quality positively

influences brand equity dimensions.

Neyra et al. (2021) examined the relationship between expectation and perception of service quality in the National University of Education. The study used a quantitative methodology with a sample of 189 students. The SERVQUAL model was used to assess expectations and perceptions. Spearman's rho was used for correlation analysis, revealing a weak relationship between expectations and perceptions.

Dam and Dam (2021) aimed to analyze the correlation between service quality, the brand image dimension of brand equity, customer satisfaction, and loyalty. The study used a quantitative approach with a sample of 299 supermarket customers in Ho Chi Minh City, Vietnam, selected via convenience sampling. Data were analyzed using PLS-SEM. Scale reliability was examined using internal consistency and composite reliability, and discriminant validity was assessed using the Fornell-Larcker criterion. Findings showed that service quality correlates with brand image, customer satisfaction, and loyalty. Additionally, brand image affects consumer satisfaction and loyalty.

Shagui et al. (2022) studied the effects of service quality on consumer loyalty and the brand image dimension of brand equity, acting as mediating variables in major Ecuadorian fashion retail chains. Using a quantitative method, an instrument with five service quality items, and four items each for brand image and loyalty, was applied to a sample of 384 consumers. Results demonstrated that service quality significantly impacts brand image and loyalty.

Alvarez (2022) examined the correlation between service quality and brand equity among wholesale supermarket consumers in North Lima. This descriptive-correlational study used a non-experimental and cross-sectional design. A 28-item Likert scale questionnaire was applied, and data were analyzed using SPSS version 29. A moderate correlation was found between the variables, leading to the conclusion that service quality impacts brand equity.

Yusuf and Fajari (2022) studied the impact of key service quality elements on the success of various educational institutions. References included international journals indexed in Scopus, Web of Science, Index Copernicus, Google Scholar, and

others. A total of 72 publications from 2004 to 2021 were included. Results concluded that key factors directly affect service quality in educational institutions.

Mamani (2022) aimed to determine the association between gastronomic service quality and brand equity based on tourists' opinions in Tacna, Chile, during 2019. The quantitative, non-experimental, cross-sectional study surveyed 384 tourists from a population of 714,534. Spearman's rho revealed that gastronomic service quality correlates with brand equity. Elements such as reliability, responsiveness, assurance, empathy, and tangibles positively impact brand equity through brand associations, loyalty, perceived quality, and brand recognition, influencing consumer behavior.

Espinoza and Vergara (2022) analyzed service quality and brand equity in sports betting on the Te Apuesto platform by La Tinka. This non-experimental, transactional, and quantitative correlational study surveyed 205 users. The SERVQUAL scale assessed service quality, while Aaker's model evaluated brand equity. Spearman's rho was used to assess the association, which confirmed that service quality influences brand equity.

The study of Larico (2023) aimed to determine the correlation between service quality and brand equity among Veja Tacna plaza consumers in 2021. The quantitative, non-experimental, and cross-sectional study surveyed 384 consumers. Spearman's rho showed a significant direct correlation between constructs, suggesting that improving service quality enhances brand equity.

Kabanova and Vetrova (2023) evaluated students' assessment of online educational service quality at higher education institutions in Moscow. The sample included 423 students from the Moscow State University of Food Production and 350 from the Russian State Social University. Results showed that the transition to online education due to the pandemic was rapid and effective. Maintaining quality depended on student motivation, readiness, communication channels, and digital infrastructure.

Sosa et al. (2023) investigated the correlation between pedagogical management and service quality in early childhood education at the private school "Aprendo Jugando" in San Martín de Porres, Lima, Peru. This quantitative, non-experimental, correlational study used Spearman's rho to analyze

data. A strong and significant relationship was found ($r = 0.789$, $p = 0.00$), prompting changes in pedagogical management through methodological tools and increased teacher leadership and commitment.

Paredes (2024) analyzed the correlation between service quality and brand equity in face-to-face channels of telecommunications companies in Lima. This quantitative, correlational, cross-sectional study surveyed 384 consumers. The questionnaire included SERVQUAL to measure service quality across five dimensions and Aaker's model to assess brand equity, analyzing brand association through organization association and brand personification. The responsiveness dimension was excluded based on expert validation. Results showed a high positive correlation ($r = 0.896$) between service quality and brand equity. The study concluded that prioritizing service quality is essential to enhance brand equity in a competitive business market.

Özdemir and Aydın (2024) analyzed the effects of service quality (IDSQ) on brand equity (BE) and brand love (BL). Instruments were based on literature-derived scales. Consumers from Van province were surveyed using simple random sampling. Structural equation modeling (SEM) was used for analysis. Findings showed that service quality positively influences both brand equity and brand love. Brand love also affects brand equity, mediating the relationship between service quality and brand equity.

Becerra (2025) examined the effect of service quality on brand equity in the company Industrial y Comercializadora Vikingo SAC – INCOVIK SAC, a subsidiary of AW Faber Castell Peruana SA, headquartered in Germany. The quantitative methodology involved a survey administered to 89 consumers. The questionnaire was based on Utrera et al. (2022), using the SERVQUAL scale for service quality and Aaker's model for brand equity. Pearson's r showed that service quality has a continuous and positive effect on brand equity.

Mishra et al. (2025) explored the dimensions of educational service quality in online learning that foster brand equity, student commitment, and satisfaction. The quantitative study surveyed 250 students and used structural equation modeling (PLS-SEM) to analyze data. Results showed that service quality dimensions significantly affect student commitment, which positively impacts



satisfaction and strongly influences brand equity. Student commitment was found to mediate the relationship between service quality and brand equity.

On the other hand, Sah et al. (2025) analyzed the correlation between circular economy service quality and brand equity, considering the mediating roles of brand image, consumer satisfaction, and customer loyalty. This quantitative study collected data from loyal consumers of brands using circular economy practices. A questionnaire measured perceptions of service quality, satisfaction, brand image, loyalty, and brand equity. SEM analysis showed that circular economy service quality correlates with satisfaction, brand image, and loyalty. The mediating variables in the correlation between service quality and brand equity were satisfaction, loyalty, and brand image.

Method

This is a quantitative study with a descriptive, correlational, and explanatory scope and a cross-sectional design. The population consists of 1,329 students enrolled in a higher education institution in Rioverde, San Luis Potosí. The university offers eight academic programs, seven undergraduate degrees, and one higher technical degree. A stratified sampling method was used. The sample size was 302, calculated with a 95% confidence level and a 5% margin of error.

The instrument included 24 items to measure brand equity based on Aaker's model (1996), and the SERVQUAL scale by Parasuraman et al. (1980) with 22 items across five dimensions to assess service quality. Reliability of the instrument was tested using Cronbach's alpha based on the George and Mallery criteria cited in Hernandez and Pascual (2017). The reliability levels were: tangibles (0.814), reliability (0.881), responsiveness (0.845), assurance (0.892), and empathy (0.868).

Similarly, the brand equity dimensions were tested for reliability: loyalty (0.827), brand image (0.809), quality (0.905), and awareness (0.816), all showing good reliability, except for quality, which showed excellent reliability.

Table 5 presents the operationalization of sociodemographic variables used to describe the sample, including gender, age, marital status, number of children, academic program, semester,

scholarship status, and GPA.

Table 5. Operationalization of Sociodemographic Variables

Item code	Variable	Dimension	Type	Scale
VS1	Gender	Not applicable	Qualitative	Nominal dichotomus
VS2	Age	Not applicable	Qualitative	Scale
VS3	Marital status	Not applicable	Qualitative	Nominal polytomus
VS4	Children	Not applicable	Qualitative	Nominal dichotomus
VS5	Academic program	Not applicable	Qualitative	Nominal polytomus
VS6	Semester	Not applicable	Qualitative	Nominal polytomus
VS7	Scholarship	Not applicable	Qualitative	Nomina dichotomus
VS8	GPA	Not applicable	Qualitative	Scale

Source: Own elaboration

Table 6 operationalizes the variable service quality and its dimensions, showing that each item is quantitative and measured on a Likert scale.

Table 6. Operationalization of Service Quality

Item code	Variable	Dimension	Type	Scale
TAN1 TAN2 TAN3 TAN4	Service quality	Tangibles	Quantitative	Likert Scale
CON5 CON6 CON7 CON8 CON9	Service quality	Reliability	Quantitative	Likert Scale
RES10 RESP11 RESP12 RESP13	Service quality	Responsiveness	Quantitative	Likert Scale
SEG14 SEG15 SEG16 SEG17	Service quality	Assurance	Quantitative	Likert Scale
EMP18 EMP19 EMP20 EMP21 EMP22	Service quality	Empathy	Quantitative	Likert Scale

Source: Own elaboration.

Table 7 shows the operationalization of the brand equity variable with its four dimensions measured using a Likert scale.

Table 7. Operationalization of Brand Equity

Item code	Variable	Dimension	Type	Scale
L1	Brand equity	Loyalty	Quantitative	Likert Scale
L2				
L3				
L4				
I1	Brand equity	Image	Quantitative	Likert Scale
I2				
I3				
I4				
I5				
I6				
I7				
C1	Brand equity	Quality	Quantitative	Likert Scale
C2				
C3				
C4				
C5				
C6				
C7				
C8				
C9				
C10				
C11				
C12				
C13				
N1	Brand equity	Awareness	Quantitative	Likert Scale
N2				
N3				
N4				
N5				

Source: Own elaboration.

Findings

It was found that 61.7% of the respondents were female and 38.3% male. The average age was 20.55 years with a standard deviation of 2.416. Moreover, 89% were single and 96.6% had no children.

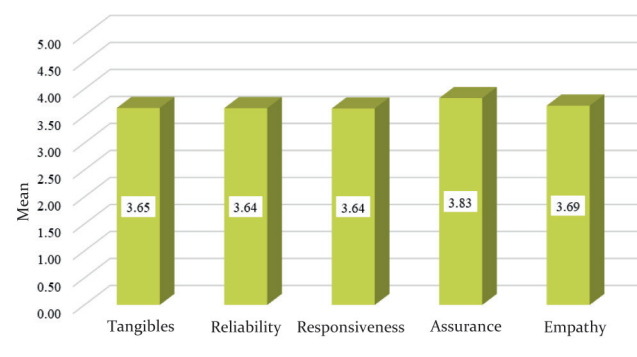
Most students were enrolled in the Bachelor of Nursing program (27.8%), followed by Civil Engineering (16.9%), Business Administration (14.6%), and Accounting and Finance (13.6%). Mechatronics Engineering accounted for 12.3%, Marketing 7.9%, Agroindustrial Engineering 6%, and the Higher Technical Degree program 1%.

Regarding semester distribution, most students were in the fifth semester (37%), followed by the seventh (27%), ninth (14.3%), first (12.7%), and third semester (9%).

A total of 94.7% of students did not have a scholarship. The average GPA was 7.77 with a

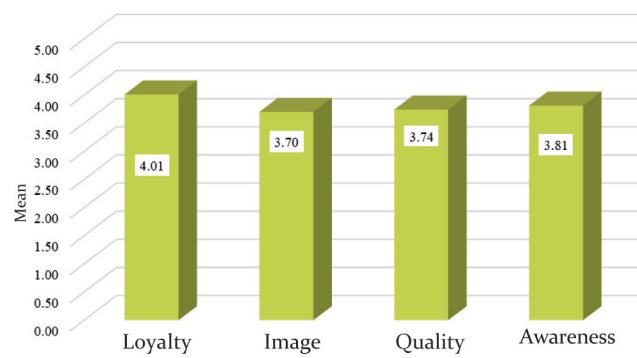
standard deviation of 0.77; the maximum grade was ten and the minimum six.

Figure 1 displays the components of service quality. The highest-rated dimension was assurance with 3.82 points, indicating the university performs well in this aspect. It was followed by empathy with 3.69 points, suggesting adequate individualized attention to students. Below the average were the dimensions of tangibles and reliability, both scoring 3.64 points, and responsiveness with 3.63 points—indicating these are the least efficient areas and require improvement to provide better service.

Figure 1. Components of service quality

Source: Own elaboration.

Figure 2 shows the dimensions of brand equity, with the highest-rated criterion being loyalty with 4.01 points, followed by awareness with 3.81 points. Lastly, quality and image scored 3.74 and 3.70 points, respectively. These last two were the lowest scores, thus indicating a need to specify strategies to improve these dimensions.

Figure 2. Dimensions of Brand Equity

Source: Own elaboration.

Correlational analysis

Table 8 shows a canonical correlation, which aimed to verify the effect that service quality has on brand

equity. The coefficient was 0.817, indicating a strong correlation.

Table 8. Canonical correlation

	Correlation	Eigenvalue	Wilks' Lambda	F	Number D.F.	Denominator D.F.	Sig.
1	0.817	2.004	0.322	19.837	20.000	972.721	0.000
2	0.163	0.027	0.966	0.856	12.000	778.142	0.592
3	0.087	0.008	0.992	0.391	6.000	590.000	0.885
4	0.019	0.000	1.000

Source: Own elaboration.

Table 9 displays the canonical loadings of service quality, showing that they load onto their own construct, with reliability being the primary dimension. Additionally, the canonical loadings for brand equity indicate a direct correlation between the construct and its dimensions, where quality stands out among the others. Regarding the cross-loadings, all dimensions share the same sign, which indicates that the correlations are significant and positive. Furthermore, the effect of service quality on brand equity is mainly explained by the reliability dimension, whose correlation level is 0.762, indicating a high value, followed by the safety dimension with 0.742, then empathy with 0.734. The tangibles dimension has a cross-loading of 0.700, and lastly, responsiveness with a value of 0.695.

As a consequence of the data in Table 9, the following canonical equations were obtained through the unstandardized coefficients that allow refining the value of the studied constructs.

$$V=f(\text{Service quality}) = -0.310X1 - 0.403X2 - 0.038X3 - 0.384X4 - 0.297X5$$

$$U=f(\text{Brand equity}) = -0.146Y1 + 0.248Y2 - 1.570Y3 - 0.126Y4$$

There is evidence to accept that service quality significantly impacts brand equity ($\rho=0.817$, $\text{sig.}=0.000$).

Table 9. Canonical set

Service quality (V) canonical set 1				
	Standardized coefficients	Unstandardized coefficients	Canonical loadings	Cross-loadings
Tangibles	-0.232	-0.310	-0.857	-0.700
Reliability	-0.309	-0.403	-0.933	-0.762
Responsiveness	-0.030	-0.038	-0.851	-0.695
Assurance	-0.310	-0.384	-0.908	-0.742
Empathy	-0.230	-0.297	-0.899	-0.734
Brand equity (U) canonical set 2				
Loyalty	-0.108	-0.146	-0.668	-0.546
Image	0.155	0.248	-0.717	-0.586
Quality	-0.982	-1.570	-0.992	-0.810
Awareness	-0.094	-0.126	-0.690	-0.563

Source: Own elaboration.

Explanatory analysis

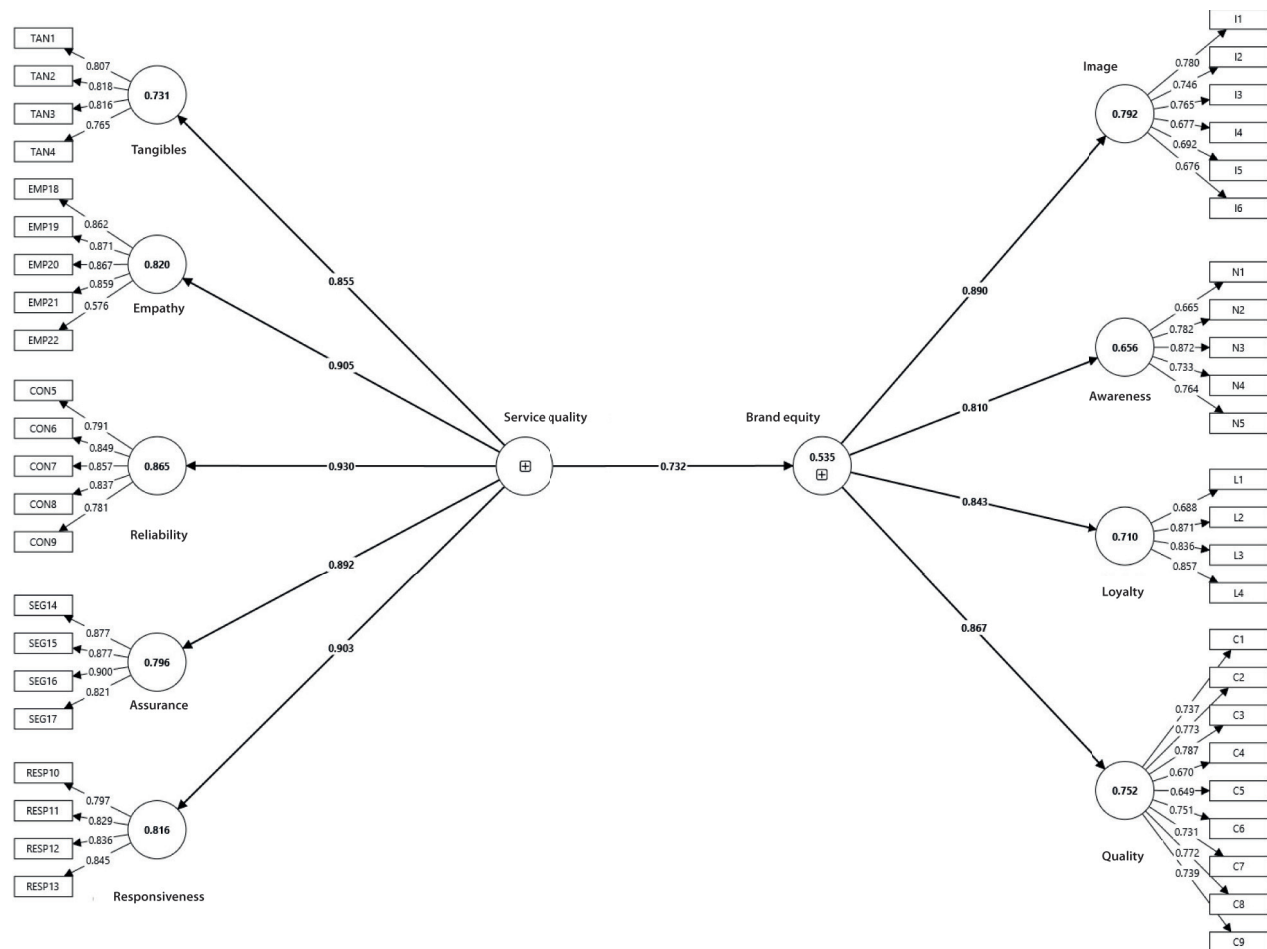
Subsequently, this correlation was analyzed using the PLS Smart software. Figure 3 shows each variable with its corresponding dimensions. Additionally, the Path coefficients, which are the values located on the arrows corresponding to the original sample, can be observed.

The five hypotheses proposed were accepted through bootstrapping, as their significance values were less than 0.05. Thus, it is established that service quality positively impacts brand equity (0.000) with a Path coefficient of 0.732. Furthermore, service quality is indirectly correlated with quality (0.000) with a Path coefficient value of 0.634. Similarly, service quality affects image (0.000) with a Path coefficient of 0.651. It was confirmed that service quality is indirectly correlated with loyalty (0.000) and awareness (0.000), having Path coefficients of 0.617 and 0.593 respectively, as shown in Table 10.

The coefficient of determination R^2 is shown in Table 11. This represents the predictive power of the model, showing the amount of variance of the endogenous construct explained by the exogenous constructs; that is, how brand equity and its dimensions are explained by service quality. Considering the above, it shows 0.752 for the quality construct, while image presents a determination coefficient of 0.792. Likewise, loyalty has a value of 0.710, awareness 0.656, and brand equity 0.535.

Additionally, Table 11 also shows the predictive relevance (Q^2) evaluated through PLSpredict/CVPAT. Values greater than zero indicate predictive relevance of exogenous constructs for endogenous ones. Based on this, it was concluded that service quality explains and has moderate predictive relevance for quality (0.592), image (0.322), loyalty (0.292), awareness (0.322), and brand equity (0.533).

Table 12 shows the f^2 value indicating the effect size that the independent variable has on the dependent variable. Considering this, it was found that service quality has a large effect on brand equity (1.153). Furthermore, brand equity has a large effect on quality (3.030), image (3.799), loyalty (2.454), and awareness (1.910).

Figure 3. Tested model

Source: Own elaboration.

Table 10. Hypotheses

	Hypothesis	Original sample	Sample mean	Standard deviation	t Statistics	P Value	Decision
H1	Service quality > Brand equity	0.732	0.731	0.030	24.638	0.000	Accepted
H2	Service quality > Quality	0.634	0.635	0.031	20.275	0.000	Accepted
H3	Service quality > Image	0.651	0.652	0.029	22.132	0.000	Accepted
H4	Service quality > Loyalty	0.617	0.030	0.030	20.287	0.000	Accepted
H5	Service quality > Awareness	0.593	0.594	0.033	18.154	0.000	Accepted

Source: Own elaboration.

**Table 11.** Coefficient of determination and predictive relevance

	R ²	Q ²
Quality	0.752	0.592
Image	0.792	0.322
Loyalty	0.710	0.292
Awareness	0.656	0.322
Brand equity	0.535	0.533

Source: Own elaboration.

Table 12. Effect size

	f ²
Service quality → Brand equity	1.153
Service quality → Quality	3.030
Service quality → Image	3.799
Service quality → Loyalty	2.454
Service quality → Awareness	1.910

Source: Own elaboration.

Discussion and conclusions

Discussion

Previous research such as Agurto (2021) and Álvarez (2022) has demonstrated that the service quality variable has significant effects on brand equity, achieving improvements in their service. Although there are studies addressing the relationship between these two variables, very few focus on the educational sector. Therefore, the present research analyzes educational service quality and brand equity, obtaining significant and consistent results with Mishra et al. (2025), establishing that for an educational institution to face a competitive market, it is necessary that students associate the brand with high value. Hence, the institution must deliver quality service, as it has been demonstrated that educational service quality influences brand equity.

Thus, service quality plays an important role, as Larico (2023) mentions: by providing quality service considering each of its dimensions, brand equity will also be enhanced due to the impact of the first variable on the latter. Similarly, Paredes (2024) concludes that service quality should always be prioritized because it is a key and fundamental element for increasing brand equity. Therefore, it is important for educational institutions to address

service deficiencies through strategies that meet all student expectations. Yusuf and Fajari (2022) mention the need to identify key institutional factors that allow service quality to increase, as these enable the development of strategies to address weaknesses. These studies are crucial due to their contributions in better understanding the problem, aligning with the conclusions presented in this study.

Conclusion

This study determined that the university's service quality significantly impacts brand equity; thus, the institution's quality must be a priority so students develop this value towards the brand. Therefore, corrective actions should be taken regarding tangibles, focusing on areas students consider needing improvement. Likewise, administrative and teaching staff should be properly trained to enhance the reliability and responsiveness dimensions, aiming to improve service quality. It is recommended that classrooms be equipped with necessary tools so students can perform activities without issues, and that laboratories be provided for each program to facilitate dynamic learning experiences. Regarding staff training, it is necessary to evaluate each instructor at the end of every semester to determine if they meet the requirements to teach effectively. Additionally, administrative personnel should be involved in courses to ensure efficient and pleasant student service.

In this way, good service quality will have immediate repercussions on brand equity and its dimensions, significantly impacting them.

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