

Article

Perceived Educational Marketing Mix and Student Satisfaction in Higher Education: An Empirical Analysis in a Latin American Emerging Economy

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Abstract

Universities increasingly compete through value propositions, service processes, and communication ecosystems rather than through program supply alone. Yet evidence remains limited on how students' perceptions of the educational marketing mix are associated with satisfaction in non-metropolitan higher education settings in Latin America. This study examines a private university branch campus in a Latin American emerging economy using a quantitative, cross-sectional, non-experimental design and a probabilistic stratified sample of 287 complete student responses. Educational marketing was operationalized as students' perceived evaluation of the educational marketing mix—product, price, place, and promotion—whereas satisfaction was measured with SERVQUAL-informed, performance-oriented service-evaluation items. The findings show a strong positive association between the perceived educational marketing mix and student satisfaction, with promotional communication emerging as the most closely related dimension. Descriptively, both constructs were concentrated at intermediate levels, indicating an acceptable but non-distinctive institutional experience and pointing to service weaknesses in security, empathy, and responsiveness. The article contributes by problematizing the use of marketing-mix logic in higher education, clarifying that satisfaction is not a proxy for educational quality or belonging, and showing how perceived value communication and service delivery are connected with students' satisfaction judgments in an emerging-economy context.

Keywords: perceived educational marketing mix; student satisfaction; student experience; service quality; higher education; Latin America; emerging economy; sense of belonging; student engagement



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1. Introduction

Higher education institutions increasingly operate in a competitive service environment in which students assess universities not only on the basis of academic content, but

also on the overall experience of studying, interacting with administrative systems, receiving support, and interpreting institutional promises. The marketing of higher education is therefore no longer reducible to recruitment campaigns or enrollment advertisements. It has evolved into a broader institutional capability that signals institutional identity, configures expectations, communicates value, and mediates how students compare promises with lived experience (Hemsley-Brown and Oplatka 2006; Ivy 2008; Khan and Hemsley-Brown 2024; Goyzueta Mejía et al. 2025; Omland et al. 2025). In the social-scientific literature on higher education, these institutional conditions also matter because student experience is closely connected to sense of belonging, participation, and engagement. Students are more likely to connect with the institution when they perceive support, recognition, coherence, and fit between institutional promises and daily experience (Tinto 1993; Kahu and Nelson 2018; Strayhorn 2018). Satisfaction has also been linked to dropout intention, institutional loyalty, and re-enrolment outcomes (Guzmán Rincón et al. 2024; Shams et al. 2024; Kayal and Billah 2026).

At the same time, the use of marketing logics in higher education is contested. Some scholars see the student-as-customer perspective as a risky oversimplification that may commodify learning, while others argue that it remains analytically useful for understanding value creation, service failures, institutional communication, and accountability in complex education markets (Goyzueta Mejía et al. 2025). The present article starts from that tension. Following a problematization logic (Alvesson and Sandberg 2011), it does not assume that importing corporate marketing categories into universities is unproblematic. Instead, it asks what can and cannot be learned when students evaluate a university through a marketing-mix lens.

This distinction is important. Educational marketing is a broad field that includes relational marketing, internal marketing, branding, reputation, digital engagement, enrollment management, and institutional identity. The present study does not claim to measure that entire field. It focuses more narrowly on students' perceived educational marketing mix: the extent to which students evaluate the institution's product, price, place, and promotion as coherent with their educational experience. In such settings, student satisfaction is treated as a proximal post-experience judgment, not as a measure of educational quality, learning, belonging, or long-term student outcomes.

The empirical setting is a private university branch campus located in a non-metropolitan area of Latin America. In this article, non-metropolitan refers to a higher education setting outside the country's principal metropolitan and administrative centers, where student recruitment, market visibility, infrastructure, and access to support services are often more localized and uneven than in capital-city systems. Table 1 reports the latest comparable institution-level enrollment series available from official national statistics for the focal private university and two private competitors with a presence in the wider regional market. Between 2019 and 2024, total enrollment at the focal university declined from 24,949 to 18,351, whereas competing universities A and B increased to 80,274 and 7384, respectively. These figures refer to institution-wide enrollment, not enrollment at the focal branch campus or within the regional catchment alone; they are included solely to document the broader competitive environment and must not be interpreted as evidence that satisfaction caused enrollment change.

Against this background, the study addresses the following research question: how are students' perceptions of the educational marketing mix associated with student satisfaction in a non-metropolitan branch-campus setting in Latin America? The study contributes in four ways. First, it clarifies the scope of the construct by distinguishing the perceived educational marketing mix from educational marketing as a broader field. Second, it brings evidence from an underrepresented Latin American branch-campus context using

a probabilistic stratified sample rather than a purely convenience design. Third, it links marketing-mix perceptions to satisfaction through expectation configuration, perceived value, and service-experience interpretation rather than through an assumed direct managerial effect. Fourth, it translates the findings into institutional priorities while explicitly avoiding claims about causality, educational quality, belonging, or engagement beyond what the data can support.

Table 1. Competitive institution-level enrollment context, 2019–2024.

University	2019	2020	2021	2022	2023	2024	Change 2019–2024
Focal private university	24,949	18,797	19,969	18,611	18,361	18,351	–26.4%
Private competitor A	33,506	41,128	53,972	62,835	72,480	80,274	+139.6%
Private competitor B	4754	4537	6193	6601	7026	7384	+55.3%

Source: Instituto Nacional de Estadística e Informática (INEI n.d.), Number of students enrolled in private universities, 2017–2024. Figures are institution-wide and are included for contextual interpretation only.

The article is organized as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 presents the materials and methods. Section 4 reports the empirical results. Section 5 discusses the findings in light of recent higher education research and derives institutional implications. Section 6 concludes with the main contributions, limitations, and directions for future work.

2. Theoretical Framework and Hypothesis Development

2.1. Perceived Educational Marketing Mix as a Value Configuration in Higher Education

Educational marketing emerged from the recognition that educational institutions do not merely deliver knowledge; they also design, position, and communicate complex service offerings to multiple audiences. Early higher education marketing scholarship emphasized the need for institutions to analyze demand, segment target groups, and articulate a value proposition that links academic offerings to student aspirations (Kotler and Fox 1995; Hemsley-Brown and Oplatka 2006). More recent work has moved beyond simple promotion toward broader questions of institutional identity, marketization, value co-creation, expectations, and the student’s lived experience of institutional promises (Khan and Hemsley-Brown 2024; Goyzueta Mejía et al. 2025; Omland et al. 2025).

Within this broader field, the educational marketing mix remains analytically useful when adapted to the service nature of higher education, but it should not be confused with the whole of educational marketing. The product is not limited to a degree certificate; it includes employability signals, curricular quality, support services, social recognition, and symbolic benefits attached to belonging to a university. Price is not only tuition; it also includes time, effort, stress, transport, food, housing, and other material and non-material sacrifices. Place refers to the physical and virtual channels through which the educational service is delivered. Promotion encompasses institutional communication, digital marketing, telemarketing, reputation signals, and word of mouth (Ivy 2008; Zapata 2012; Muñoz and Sanclemente 2022).

Because higher education is a service-intensive context, the extended services marketing mix adds people, process, and physical evidence to the traditional 4Ps (Ivy 2008; Zeithaml et al. 2024). These additional elements are especially relevant to student-facing interactions, administrative procedures, and the visible service environment. The present study nevertheless retains the 4P structure because the archived instrument was designed around product, price, place, and promotion. Although the satisfaction instrument includes evaluations of staff behavior, procedures, and tangibility, these items are not equivalent to direct measures of people, process, and physical evidence as marketing-mix dimensions.

Future research should therefore test an integrated 7P specification rather than infer the additional service dimensions from satisfaction items.

For non-metropolitan branch campuses, these dimensions are especially intertwined. A university may promote employability but fail to support that promise with labor-market linkages; it may charge affordable tuition while imposing high hidden access costs; or it may maintain physical facilities while underinvesting in digital channels that mediate current student experience. The theoretical issue is therefore not whether marketing should be imported uncritically into higher education, but how students interpret institutional promises, sacrifices, access channels, and service encounters as part of their experience of the university.

2.2. Student Satisfaction as a Service Evaluation in Higher Education

Student satisfaction is usually defined as an evaluative response arising from the comparison between expectations and perceived performance. In service research, this means that satisfaction is associated both with what the organization offers and with how the service encounter is experienced (Grönroos 1984; Parasuraman et al. 1988; Cronin and Taylor 1992; Zeithaml et al. 2024). In higher education, satisfaction is particularly complex because students assess academic content, administrative efficiency, social integration, infrastructure, employability prospects, and institutional behavior at the same time. A consistent finding in recent higher education research is that satisfaction rarely depends on a single factor. Instead, it emerges from a bundle of academic and service conditions, including institutional image, service quality, perceived value, career prospects, communication quality, and perceived goal attainment (Kanwar and Sanjeeva 2022; Seitova et al. 2024; Seow and Hussain 2024; Yan et al. 2025).

The satisfaction instrument used in this study is SERVQUAL-informed, but it is not a classic SERVQUAL gap-score instrument. SERVQUAL originally compares expectations and perceptions, and using SERVQUAL dimensions as direct satisfaction items can be problematic if that distinction is ignored (Parasuraman et al. 1988; Souca 2011). For this reason, the present article treats the items as performance-oriented, satisfaction-related service evaluations across reliability, responsiveness, security, empathy, and tangibility. From a student-experience perspective, satisfaction is not synonymous with belonging or engagement, but it intersects with both. Students who encounter reliable services, responsive procedures, trustworthy guidance, empathetic attention, and supportive environments may be more likely to interpret the institution as a place where they matter and can invest effort meaningfully (Tinto 1993; Kahu and Nelson 2018; Strayhorn 2018).

2.3. Why Educational Marketing Should Relate to Student Satisfaction

The theoretical link between the perceived educational marketing mix and student satisfaction can be explained through three mechanisms. First, the marketing mix configures expectations: institutional messages shape what students believe they will receive in terms of employability, service quality, support, and identity. Second, the marketing mix expresses perceived value: product and price evaluations reflect whether the educational offer appears worth the sacrifices required. Third, the marketing mix provides cues for interpreting service experience: communication quality, physical and digital access, and the coherence of the service environment affect how students make sense of daily interactions and service incidents (Khan and Hemsley-Brown 2024; Kairat et al. 2024; Ghorbanzadeh et al. 2024; Li et al. 2025; Pérez-Encinas et al. 2025).

However, not all dimensions are expected to matter in the same way. In some contexts, the core product may be more salient because students emphasize employability and program usefulness. In others, promotion may be more closely linked to satisfaction because

information quality, expectation management, and institutional signaling compensate for uncertainty. Price may be relevant where students make substantial material and psychological sacrifices, while place may be especially important in branch or hybrid settings where access depends on physical and digital channels. Figure 1 summarizes the conceptual model used to guide the hypotheses.

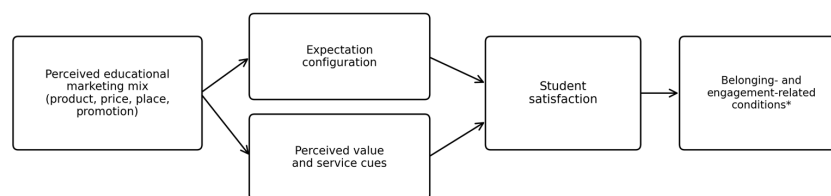


Figure 1. Conceptual model linking perceived educational marketing mix to student satisfaction and student-experience conditions. Note: The model is conceptual and associational. Student engagement and sense of belonging are discussed as theoretically related conditions, not as measured outcomes. The asterisk (*) indicates that belonging- and engagement-related conditions are theoretically discussed but not measured outcomes.

2.4. Research Hypotheses

Based on the above, the study proposes one general hypothesis and four dimension-specific hypotheses. Table 2 summarizes the analytical model. The hypotheses are associational rather than causal, in line with the cross-sectional and non-experimental design.

Table 2. Research hypotheses and theoretical anchors.

Hypothesis	Theoretical Anchor
H1. <i>Students' perceived educational marketing mix is positively associated with student satisfaction.</i>	Marketing-mix perceptions are associated with expectations, perceived value, and the interpretation of service encounters (Hemsley-Brown and Oplatka 2006; Khan and Hemsley-Brown 2024; Kairat et al. 2024).
H1a. <i>Product perceptions are positively associated with student satisfaction.</i>	Students evaluate higher education through employability, prestige, holistic development, and future benefits (Kotler and Fox 1995; Ivy 2008; Iskandar et al. 2024; Yan et al. 2025).
H1b. <i>Price perceptions are positively associated with student satisfaction.</i>	Perceived fairness of tuition and non-monetary sacrifice is associated with satisfaction judgments (Khan and Hemsley-Brown 2024; Chong et al. 2024; Iskandar et al. 2024).
H1c. <i>Place perceptions are positively associated with student satisfaction.</i>	Physical and virtual delivery channels are associated with access, convenience, and the usability of the service (Ivy 2008; Zeithaml et al. 2024; Yan et al. 2025).
H1d. <i>Promotion perceptions are positively associated with student satisfaction.</i>	Institutional communication, digital visibility, and promise coherence are associated with trust and expectation management (Pawar 2024; Li et al. 2025; Seow and Hussain 2024).

3. Materials and Methods

3.1. Study Design and Setting

The study follows a quantitative, cross-sectional, non-experimental, correlational design. Data were collected at a private university branch campus located in a non-metropolitan area of a Latin American emerging economy. The design is appropriate because the aim is not to estimate causal effects or test an intervention, but to determine whether students who report more favorable evaluations of the perceived educational marketing mix also report higher levels of satisfaction. The study focuses on students who

had already accumulated some experience with the institution. Therefore, the population was defined as students enrolled from the second semester onward. First-semester students were excluded because they had not yet experienced the full range of academic and administrative services. Newly opened programs were also excluded in order to maintain a stable analytical frame.

3.2. Population and Sample

The study population comprised 1130 enrolled students distributed across four established degree programs: Administration and Systems, Accounting and Finance, Law, and Civil Engineering. A probabilistic stratified sampling design was applied so that each program was represented proportionally in the sample. The final analytic dataset contained 287 complete valid questionnaires, matching the planned sample size, with no missing item-level responses. Because the archived dataset does not contain a separate register of refusals or unusable questionnaires, the article reports the number of complete valid cases rather than a conventional response rate. Given the known finite population and the proportional stratified design, the sample size was estimated with the finite-population correction and then allocated across strata according to each degree program's weight in the population. Equations (1) and (2) summarize this procedure for transparency and reproducibility.

$$n = \frac{Z^2 p q N}{E^2(N-1) + Z^2 p q} \quad (1)$$

$$n_h = \frac{N_h}{N} n \quad (2)$$

In these expressions, n is the total sample size, N the population size, Z the standard normal value for the selected confidence level, E the admissible error, p and q the expected proportions, and N_h and n_h the population and sample sizes in stratum h , respectively. The notation used in all equations is summarized in Appendix B. The sample distribution closely mirrors the population structure, which improves internal consistency for descriptive interpretation within the campus. Table 3 reports both the population frame and the analytic sample.

Table 3. Population frame and stratified sample.

Degree Program	Population (N)	Population Share	Sample (n)	Sample Share
Administration and Systems	324	28.67%	82	28.57%
Accounting and Finance	239	21.15%	61	21.25%
Law	394	34.87%	100	34.84%
Civil Engineering	173	15.31%	44	15.33%
Total	1130	100.00%	287	100.00%

Source: Study database.

3.3. Data Collection Procedure

Data collection was conducted in a single cross-sectional wave during the 2024–2025 project period. In accordance with the proportional stratified sampling plan, eligible students from the four degree programs were approached on campus. The two questionnaires were administered face to face in paper-and-pencil format, completed individually, and returned directly to the research team. Participants received information about the study and signed the informed-consent form before answering; no direct personal identifiers were entered into the analytic database. The archived research materials contain the 287 complete questionnaires used in the analysis but do not preserve a day-by-day field-

work log or a separate record of refusals and unusable questionnaires. Consequently, the article reports the verifiable project period, administration mode, and recruitment channel, but cannot provide exact administration dates or a conventional response rate.

3.4. Measures and Operationalization

Perceived educational marketing mix was measured with a 22-item questionnaire derived from the educational marketing approach proposed by Zapata (2012), but the construct is reported here more precisely as students' perceived educational marketing mix. The instrument operationalizes four dimensions: product, price, place, and promotion. Student satisfaction was measured with a 24-item questionnaire informed by Zeithaml and Bitner's service perspective and SERVQUAL-type dimensions: reliability, responsiveness, security, empathy, and tangibility. Both instruments used a five-point Likert-type response format ranging from strongly disagree to strongly agree. The educational marketing instrument captures how students evaluate the value proposition communicated and delivered by the university. Product items reflect benefits associated with employability, quality of life, infrastructure, prestige, and belonging. Price items capture both monetary and non-monetary sacrifices, including time, effort, and stress. Place measures physical and virtual channels of service delivery, while promotion addresses institutional communication, digital channels, and persuasive signals. The student satisfaction instrument captures performance-oriented service evaluations linked to whether the institution keeps promises, resolves procedures, inspires trust, offers personalized treatment, and provides a supportive tangible environment. Table 4 summarizes the measurement architecture. To facilitate auditability and reuse, Appendix A provides the full construct-dimension-indicator-item matrix in English, preserving the logic of the original instrument design while presenting the items in a standardized scholarly format.

Table 4. Measurement architecture of the two constructs.

Construct	Dimension	Indicative Content	Items	Score Range
Perceived educational marketing mix	Product	Employability, quality of life, infrastructure, prestige, belonging	8	8–40
	Price	Tuition and non-tuition sacrifice: money, time, effort, stress	5	5–25
	Place	Physical and virtual channels of delivery	3	3–15
	Promotion	Institutional communication, publicity, word of mouth, digital marketing	6	6–30
Student satisfaction	Reliability	Fulfillment of promises and complementary services	6	6–30
	Responsiveness	Attention to procedures and complaints	6	6–30
	Security	Trust, confidence, and uncertainty reduction	3	3–15
	Empathy	Personalized attention and relationship quality	3	3–15
	Tangibility	Infrastructure, equipment, information resources, qualified personnel	6	6–30

The educational marketing instrument contained 22 items and the student satisfaction instrument 24 items. For descriptive interpretation, summed scores were classified using the predefined cutoffs applied in the study. Overall perceived educational marketing mix was interpreted as deficient (22–51), regular (52–81), and optimal (82–110), whereas overall student satisfaction was interpreted as low (24–56), medium (57–89), and high (90–120). Dimension-level cutoffs were product (8–18/19–29/30–40), price (5–11/12–18/19–25), place (3–7/8–12/13–15), promotion (6–14/15–23/24–30), reliability (6–14/15–23/24–30), responsiveness (6–14/15–23/24–30), security (3–7/8–12/13–15), empathy (3–7/8–12/13–15), and tangibility (6–14/15–23/24–30).

3.5. Reliability, Validity, and Data Analysis

Content validity was established through expert judgment prior to field deployment. In addition, both instruments were pilot-tested on 20 respondents. Pilot reliability was satisfactory (Cronbach's alpha = 0.831 for perceived educational marketing mix and 0.821 for student satisfaction). To strengthen measurement transparency, internal consistency was re-estimated in the final analytic sample ($n = 287$), yielding Cronbach's alpha values of 0.926

for perceived educational marketing mix and 0.943 for student satisfaction. Because both independent and dependent variables were obtained from the same respondents through self-report questionnaires, common method bias was considered. Procedurally, the survey was anonymous, participation was voluntary, and items were presented as evaluations of institutional services rather than as socially desirable behaviors. Statistically, Harman's single-factor test was performed on the 46 items. The first unrotated factor explained 39.20% of total variance, below the commonly used 50% threshold, suggesting that a single common factor was unlikely to account for the observed associations (Podsakoff et al. 2003).

The data analysis combined descriptive and inferential procedures. For descriptive analysis, the predefined ordinal classifications were retained and complemented with respondent-level mean item scores on the common 1–5 scale and sample standard deviations for each construct and dimension. This dual presentation preserves the original threshold-based interpretation while providing distribution-sensitive summaries that can be compared across dimensions. The normality of the aggregate distributions was then tested with the Kolmogorov–Smirnov statistic. Because both variables deviated from normality, hypothesis testing relied on Spearman's rho with a 5% significance threshold. Given the ordinal nature of the Likert-type responses, a Kendall's tau-b robustness check was also computed to verify whether the pattern of association was stable under a more conservative rank-based coefficient (Table 5). Data processing was conducted with Microsoft Excel for Microsoft 365 (Version 2505; Microsoft Corporation, Redmond, WA, USA) and IBM, SPSS Statistics (Version 27.0; IBM Corp., Armonk, NY, USA), and supplementary calculations from the archived item-level dataset.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum s_i^2}{s_T^2} \right) \quad (3)$$

$$\rho_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} \quad (4)$$

where k denotes the number of items, s_i^2 the variance of item i , s_T^2 the variance of the summed score, and d_i the rank difference for paired observations. Appendix B compiles the acronyms, abbreviations, and statistical notation used throughout the formulas, tables, and text.

Table 5. Instrument quality and analysis pathway.

Analytical Component	Result or Decision	Interpretive Note
Response format	Five-point Likert scale	Both instruments used ordered response categories from disagreement to agreement.
Content validity	Expert judgment	Expert review was documented before field deployment.
Pilot sample	20 respondents	Pilot testing preceded the full application.
Final analytic sample	287 respondents	Full field sample used for descriptive and inferential analysis.
Pilot reliability of educational marketing instrument	Cronbach's alpha = 0.831	Adequate internal consistency at the pretest stage.
Pilot reliability of student satisfaction instrument	Cronbach's alpha = 0.821	Adequate internal consistency at the pretest stage.
Final-sample reliability of educational marketing instrument	Cronbach's alpha = 0.926	High internal consistency in the field application.
Final-sample reliability of student satisfaction instrument	Cronbach's alpha = 0.943	High internal consistency in the field application.

Table 5. *Cont.*

Analytical Component	Result or Decision	Interpretive Note
Normality test for educational marketing	K-S = 0.156; $p < 0.001$	Distribution departed from normality.
Normality test for student satisfaction	K-S = 0.212; $p < 0.001$	Distribution departed from normality.
Hypothesis test	Spearman's rho	Appropriate for non-normal ordered data.
Software	Excel 365; SPSS 27	Used for data processing and statistical analysis.
Complete valid cases in archived dataset	287	Target sample achieved; no incomplete records retained in the analytic file.
Missing item-level values	0	All 46 survey items were complete for all valid cases.
Common method bias diagnostic	Harman single-factor test = 39.20% variance explained by first unrotated factor	Below the 50% rule-of-thumb threshold; common method bias is unlikely to fully explain the associations.
Robustness check	Kendall's tau-b	Used as a conservative ordinal association check alongside Spearman's rho.

4. Results

4.1. Descriptive Profile of the Educational Marketing Mix

Before examining the correlations, it is useful to consider the descriptive profile of students' perceptions of the educational marketing mix. The overall mean item score was 2.88 ($SD = 0.64$). At dimension level, place had the highest mean ($M = 3.12$, $SD = 0.80$), followed by product ($M = 3.00$, $SD = 0.74$), price ($M = 2.78$, $SD = 0.70$), and promotion ($M = 2.70$, $SD = 0.82$). The mean and threshold-based summaries are complementary rather than identical: place had the highest average score, whereas product had the largest proportion of optimal classifications. As shown in Table 6, 73.52% of respondents classified the educational marketing mix at a regular level and only 9.06% at an optimal level. Product showed the highest share of optimal evaluations (16.72%), while promotion combined the lowest mean with the weakest categorical profile: 28.57% rated it deficient and only 4.53% optimal. The results therefore describe an institutional offer that is broadly acceptable but not strongly differentiated from the students' perspective.

Table 6. Perceived levels of the educational marketing mix and its dimensions.

Educational Marketing Mix Dimension	Deficient	Regular	Optimal	Mean $\pm$ SD (1–5)	Reading
Overall perceived educational marketing mix	17.42%	73.52%	9.06%	2.88 $\pm$ 0.64	Predominantly acceptable but not distinctive.
Product	13.24%	70.03%	16.72%	3.00 $\pm$ 0.74	Highest share of optimal classifications.
Price	18.82%	74.56%	6.62%	2.78 $\pm$ 0.70	Mostly regular; perceived fairness remains moderate.
Place	18.12%	72.47%	9.41%	3.12 $\pm$ 0.80	Highest mean item score, but still mostly regular.
Promotion	28.57%	66.90%	4.53%	2.70 $\pm$ 0.82	Lowest mean and weakest categorical profile; communication gap likely.

Note: Mean $\pm$ SD refers to respondent-level mean item scores on the five-point response scale.

4.2. Descriptive Profile of Student Satisfaction

The dimension-level profile of satisfaction is even more revealing. Overall student satisfaction had a mean item score of 2.74 ($SD = 0.69$). Reliability ($M = 2.80$, $SD = 0.83$) and empathy ($M = 2.80$, $SD = 0.93$) recorded the highest means, followed by tangibility ($M = 2.75$, $SD = 0.72$), security ($M = 2.71$, $SD = 0.73$), and responsiveness ($M = 2.64$, $SD = 0.84$). The comparatively large dispersion for empathy helps explain why it also had

the highest proportion of low classifications (35.19%) despite a mean close to the scale midpoint. As Table 7 shows, 72.13% of respondents located overall satisfaction at a medium level, 23.69% at a low level, and only 4.18% at a high level. One-third rated security as low, and no respondent placed that dimension in the high category. Tangibility was mostly rated medium, but only 1.39% rated it high, indicating that infrastructure and visible service cues were not functioning as strong differentiators.

Table 7. Perceived levels of student satisfaction and its dimensions.

Student Satisfaction Dimension	Low	Medium	High	Mean $\pm$ SD (1–5)	Reading
Overall student satisfaction	23.69%	72.13%	4.18%	2.74 $\pm$ 0.69	Predominantly medium satisfaction.
Reliability	24.74%	68.29%	6.97%	2.80 $\pm$ 0.83	Comparatively higher mean, but promises only partially matched by experience.
Responsiveness	32.06%	63.41%	4.53%	2.64 $\pm$ 0.84	Lowest mean; procedural and complaint-handling weaknesses.
Security	33.10%	66.90%	0.00%	2.71 $\pm$ 0.73	No high classifications; trust and confidence remain weak.
Empathy	35.19%	59.58%	5.23%	2.80 $\pm$ 0.93	Largest dispersion and highest share of low classifications.
Tangibility	22.65%	75.96%	1.39%	2.75 $\pm$ 0.72	Moderate mean, but very few high classifications.

Note: Mean $\pm$ SD refers to respondent-level mean item scores on the five-point response scale.

Taken together, the categorical distributions and mean item scores converge on an ‘acceptable but non-distinctive’ institutional experience. The means remain close to the scale midpoint, while the threshold distributions show that high or optimal evaluations are uncommon. From an institutional standpoint, moderate assessments may be sufficient to maintain routine functioning, but they do not create strong differentiation or advocacy among students.

4.3. Hypothesis Testing

The inferential results are summarized in Table 8. The Kolmogorov–Smirnov test indicated non-normal distributions for both perceived educational marketing mix and student satisfaction, which justified the use of a non-parametric correlation coefficient. The general hypothesis was supported: perceived educational marketing mix was strongly and positively associated with student satisfaction ($\rho = 0.792$, $p < 0.001$). All four specific hypotheses were also supported. Promotion displayed the highest association with satisfaction ($\rho = 0.718$), followed by product ($\rho = 0.604$), price ($\rho = 0.568$), and place ($\rho = 0.504$). A Kendall’s tau-b robustness check preserved the same substantive pattern: overall perceived educational marketing mix (tau-b = 0.619), product (tau-b = 0.450), price (tau-b = 0.427), place (tau-b = 0.378), and promotion (tau-b = 0.543) were all positively associated with satisfaction (all $p < 0.001$). These findings indicate systematic positive associations, not causal effects. The ranking of coefficients is theoretically meaningful because promotion emerges as both the strongest correlate of satisfaction and the weakest dimension descriptively.

Table 8. Hypothesis testing results.

Hypothesis	Relationship Tested	rho	p-Value	Interpretation	Decision
H1	Perceived educational marketing mix—student satisfaction	0.792	<0.001	Strong positive association	Supported
H1a	Product—student satisfaction	0.604	<0.001	Moderate-to-strong positive association	Supported
H1b	Price—student satisfaction	0.568	<0.001	Moderate positive association	Supported
H1c	Place—student satisfaction	0.504	<0.001	Moderate positive association	Supported
H1d	Promotion—student satisfaction	0.718	<0.001	Strong positive association	Supported

All coefficients were estimated with Spearman's rho (n = 287).

4.4. From Statistical Results to Institutional Priorities

To move from statistical interpretation to institutional prioritization, Table 9 combines the percentage of deficient ratings with the strength of the correlation for each educational marketing dimension. The logic is simple: a dimension deserves more immediate attention when it is both weak descriptively and strongly associated with satisfaction. Under this criterion, promotion is the clearest immediate priority. It is the weakest dimension in descriptive terms and the strongest in inferential terms.

Table 9. Priority matrix for perceived educational marketing mix dimensions.

Marketing Dimension	Deficient Ratings	Association with Satisfaction (rho)	Managerial Reading	Suggested Priority
Promotion	28.57%	0.718	Largest descriptive weakness and strongest inferential leverage; expectation management is the most urgent front.	Immediate
Price	18.82%	0.568	Students judge fairness through tuition plus time, effort, and stress; clarify total value and reduce hidden burdens.	High
Product	13.24%	0.604	Core value proposition is comparatively stronger, but still central to satisfaction and institutional reputation.	High
Place	18.12%	0.504	Physical and virtual access matter, although they appear more as enabling conditions than main differentiators.	Medium

Table 10 performs a similar synthesis for the five satisfaction dimensions. The dimensions with the highest shares of low ratings are empathy, security, and responsiveness. These results indicate that students do not mainly complain about the symbolic idea of the university; they are dissatisfied with how the institution makes them feel guided, trusted, and attended in routine service encounters.

Table 10. Satisfaction hotspots and operational implications.

Satisfaction Hotspot	Low Ratings	High Ratings	Operational Meaning	Immediate Administrative Response
Empathy	35.19%	5.23%	Students do not consistently feel treated as unique cases.	Frontline service training and personalized advising.
Security	33.10%	0.00%	Trust, certainty, and future-oriented guidance are weak.	Career support, clearer information, and trust-building procedures.
Responsiveness	32.06%	4.53%	Administrative processes and complaint handling are perceived as slow or incomplete.	Response-time standards and digital tracking of procedures.
Reliability	24.74%	6.97%	Students perceive partial gaps between promises and actual delivery.	Service charters and alignment of promises with delivered services.
Tangibility	22.65%	1.39%	Infrastructure and visible service cues do not create strong positive differentiation.	Selective physical and digital environment upgrades.

5. Discussion

5.1. Overall Relationship Between Educational Marketing and Student Satisfaction

The main finding is that students' perceived educational marketing mix is strongly associated with student satisfaction in the analyzed branch-campus setting. This result is consistent with higher education research that treats marketing, service quality, institutional image, perceived value, and expectations as interdependent rather than separate organizational domains (Khan and Hemsley-Brown 2024; Kairat et al. 2024; Seow and Hussain 2024; Melean Romero et al. 2024; Ghorbanzadeh et al. 2024). The study strengthens that perspective by showing that the association also appears in an underrepresented Latin American branch-campus context using a probabilistic stratified sample. The magnitude of the overall association is notable, but it must be interpreted carefully: the cross-sectional design cannot show that marketing perceptions cause satisfaction. What the result does show is that students who evaluate the institution's value proposition, cost-sacrifice balance, delivery channels, and communication more favorably also report markedly higher satisfaction.

5.2. What the Dimension-Level Pattern Reveals

A second contribution lies in the dimension-specific pattern. Promotion was the strongest correlate of satisfaction and also the weakest dimension in descriptive terms. This combination matters because promotion in higher education should not be reduced to publicity. It also acts as expectation management: students interpret whether institutional communication is complete, credible, and aligned with lived experience. When communication is vague, exaggerated, or weakly connected to actual services, dissatisfaction may intensify because the gap between promise and delivery becomes more visible. This interpretation is compatible with recent work on expectations, student satisfaction, social media communication, brand image, and recommendation intention in higher education (Khan and Hemsley-Brown 2024; Pawar 2024; Li et al. 2025; Pérez-Encinas et al. 2025).

Product and price also require a nuanced reading. Product was the second-strongest correlate of satisfaction, which is theoretically plausible because higher education remains a future-oriented service. Students evaluate universities partly through anticipated employability, status, confidence, and personal advancement. Price mattered as well, but price in this study includes more than tuition: it also captures time, effort, stress, and other non-monetary sacrifices. This is particularly relevant in non-metropolitan settings, where commuting, opportunity costs, and family budgets can shape educational choice. These

findings align with studies that treat perceived value and overall service quality as relevant to satisfaction in emerging and cost-sensitive higher education markets (Bahadur et al. 2024; Chong et al. 2024; Iskandar et al. 2024; Dangaiso and Tsvere 2025).

Place was the weakest but still a significant correlate. This should not be read as evidence that physical and virtual channels are unimportant. Rather, it suggests that delivery channels may function as necessary but not sufficient conditions for satisfaction in this context. Students expect a minimum standard of infrastructure, classrooms, and virtual access. Once that threshold is crossed, differences in communication quality, perceived value, and administrative responsiveness may become more salient.

5.3. Service Hotspots and the Student Experience

The satisfaction profile adds operational depth to the correlation results. Security, empathy, and responsiveness emerged as the clearest service hotspots. This finding shifts attention away from a simplistic ‘marketing versus academics’ opposition. Students are not only reacting to brand or image; they are evaluating whether the institution reduces uncertainty, treats them as persons, and resolves procedures in a timely manner. The fact that security received no high ratings is especially important. It suggests a trust deficit related to labor-market orientation, institutional guidance, complaint handling, or service confidence. This pattern resonates with research showing that satisfaction is associated with perceived service reliability, competence acquisition, infrastructure, and trust in institutional processes (Seitova et al. 2024; Yan et al. 2025). It also reinforces a key caution: satisfaction is not the same as educational quality or long-term learning. It is a student evaluation of experience, and it can coexist with stronger or weaker academic outcomes.

5.4. Institutional Implications for Student Experience, Engagement, and Belonging in Regional Higher Education Settings

From an institutional perspective, the practical implications are concrete, but they should be understood as experience-management priorities rather than causal prescriptions. First, the campus should redesign promotion around evidence-based communication: accurate information on employability, services, schedules, complaint channels, and administrative procedures. Second, service responsiveness should be improved through clearly published response times, digital tracking of procedures, and student-facing service standards. Third, the low ratings in empathy and security suggest the need for frontline staff training, advisory systems, and visible career-support mechanisms that reduce uncertainty. Fourth, the university should treat tangibility as supportive rather than sufficient: infrastructure improvements matter, but they will not compensate for weak communication and weak service responsiveness. From a broader student-experience perspective, these actions can be interpreted as interventions aimed at strengthening the institutional conditions under which students feel informed, recognized, supported, and more able to engage with the university (Tables 11 and 12).

Table 11. Selected recent literature used to interpret the present findings.

Study	Core Finding	Relevance for the Present Article
Kairat et al. (2024)	Student satisfaction and recommendation intention in private higher institutions depend on value- and service-related perceptions.	Supports the claim that satisfaction is tied to perceived institutional offer and not just academic content.
Seitova et al. (2024)	Perceived service quality is significantly associated with student satisfaction in a Kazakhstani university.	Confirms the relevance of service dimensions in higher education settings outside core Anglophone markets.

Table 11. *Cont.*

Study	Core Finding	Relevance for the Present Article
Seow and Hussain (2024)	Institutional image is linked to student satisfaction and loyalty.	Helps interpret why communication and value signaling matter for students' overall evaluation.
Melean Romero et al. (2024)	Service quality, loyalty, and institutional image are jointly related in a Peruvian university context.	Provides Latin American evidence that complements the present branch-campus case.
Cook et al. (2024)	Student dissatisfaction can be captured through composite, multidimensional indicators.	Reinforces the importance of looking beyond average satisfaction scores.
Watson et al. (2025)	Student dissatisfaction varies with institutional conditions and structural arrangements.	Suggests that moderate aggregate satisfaction can conceal important pockets of discontent.
Yan et al. (2025)	Perceived goal attainment shapes student satisfaction through competence acquisition and infrastructure.	Supports the relevance of product and tangible support dimensions.
Li et al. (2025)	Social media communication and brand image influence international students' enrollment intentions.	Strengthens the interpretation of promotion as expectation management rather than pure publicity.
Khan and Hemsley-Brown (2024)	Student satisfaction is linked to expectations and the perceived burden of fees.	Supports the mechanism connecting price, expectations, perceived value, and satisfaction.
Podsakoff et al. (2003)	Same-source survey designs may be affected by common method bias and require procedural or statistical checks.	Justifies the common-method diagnostic added to the analysis.
Souca (2011)	SERVQUAL should be used carefully because service quality and satisfaction are related but not identical.	Supports the revised interpretation of the satisfaction instrument as SERVQUAL-informed rather than a classic gap-score measure.

Table 12. Institutional action roadmap derived from the study.

Managerial Line	Short-Term Action	Time Horizon	Evidence Base in This Study
Communication and promotion	Audit institutional messages, eliminate overpromising, and align promotional content with real services and employability evidence.	0–6 months	Promotion is the strongest correlate of satisfaction and the weakest descriptive dimension.
Student service operations	Publish response times for procedures and complaints, and implement digital follow-up for student requests.	0–6 months	Responsiveness shows a high share of low ratings.
Trust and security	Create visible advisory and employability support mechanisms, including information on internships, agreements, and career pathways.	0–9 months	Security has zero high ratings and one-third low ratings.
Empathy and service culture	Train administrative and student-facing staff in personalized attention and respectful communication.	0–9 months	Empathy is the highest dissatisfaction hotspot.
Value proposition	Reinforce curricular and extra-curricular elements that make future benefits tangible to students.	6–12 months	Product remains a strong correlate of satisfaction.
Monitoring system	Track satisfaction indicators by program and semester to identify whether improvements are uniform or concentrated.	Ongoing	Most evaluations are clustered in the middle category; averages alone may hide service pockets.

5.5. From Satisfaction Evidence to Belonging- and Engagement-Related Conditions

A cautious interpretive bridge from satisfaction to belonging- and engagement-related conditions is warranted, provided its limits are explicit. The present study did not measure student engagement or sense of belonging directly, so it cannot claim statistical effects on those constructs. Even so, the empirical pattern (Table 13) identifies institutional conditions that higher education literature repeatedly associates with participation, identification, and persistence: clear communication, responsive support, trust, personalized attention, and coherent delivery of institutional promises (Tinto 1993; Kahu and Nelson 2018; Strayhorn 2018). In this sense, the article contributes not by replacing belonging or engagement with

satisfaction, but by identifying service and communication conditions through which those outcomes may plausibly be facilitated or hindered in a branch-campus context.

Table 13. Interpreting the present findings in relation to engagement- and belonging-related conditions.

Empirical Signal	Student Experience Reading	Potential Engagement-Related Implication *	Potential Belonging-Related Implication *
Weak promotion profile and strongest correlation with satisfaction	Communication and expectation management are decisive for how students interpret the institution.	Students may disengage from institutional channels when promises seem vague, exaggerated, or weakly connected to lived experience.	Incoherent communication can weaken identification with the university and reduce the sense that the institution understands student needs.
Low security ratings	Students report uncertainty about trust, guidance, and future-oriented support.	Perceived uncertainty may reduce confident participation, help-seeking, and commitment to institutional opportunities.	Students may struggle to experience the university as a dependable place in which they can project themselves.
Low empathy ratings	Students do not consistently feel treated as unique cases or personally recognized.	Weak relational recognition can reduce everyday participation and willingness to invest discretionary effort.	Feeling unseen or interchangeable can directly erode the sense of mattering that underpins belonging.
Low responsiveness ratings	Administrative friction shapes whether students experience the institution as supportive or obstructive.	Slow or opaque procedures can generate frustration and administrative disengagement.	When routine interactions become alienating, students may feel institutionally distant even if they remain enrolled.
Predominantly medium overall evaluations	The campus is experienced as acceptable but not distinctive.	Students may comply with requirements without developing strong institutional commitment or advocacy.	Moderate satisfaction may coexist with thin attachment and only partial identification with the institution.

* These are theoretically informed interpretations drawn from the student experience and higher education literature; engagement and belonging were not directly measured in this study.

Accordingly, the manuscript contributes by showing how an apparently managerial issue—the perceived educational marketing mix—is embedded in the social organization of student experience. When institutional signals are coherent and services are reliable, students may encounter the university as supportive and intelligible; when communication, empathy, and trust are weak, the institution risks producing routine dissatisfaction and thinner forms of attachment. This interpretation remains theoretical rather than causal, but it connects the empirical findings to broader debates on marketization, belonging, and engagement in higher education.

6. Conclusions

This study examined the relationship between students' perceived educational marketing mix and student satisfaction in a private university branch campus located in a Latin American emerging economy. Using a probabilistic stratified sample of 287 complete valid responses, the study found a strong and statistically significant positive association between both constructs. All four marketing-mix dimensions were also positively associated with satisfaction, with promotion showing the highest coefficient, followed by product, price, and place. The findings support three conclusions. First, the educational marketing mix should not be treated narrowly as recruitment communication; students appear to evaluate it as part of a broader configuration of promises, sacrifices, access channels, and service encounters. Second, the campus analyzed in this study appears to function at an acceptable but non-distinctive level, with most evaluations concentrated in the middle category for both marketing perceptions and satisfaction. Third, the most urgent institutional challenge lies in closing the gap between communication and lived service experience, especially in areas linked to security, empathy, and responsiveness. The study also has limitations. It is cross-sectional, based on self-reported perceptions, and limited to one branch campus. The design does not permit causal inference, the archived dataset does not provide a separate

refusal register or additional demographic controls, and the study does not directly measure educational quality, engagement, sense of belonging, loyalty, or dropout intention. The 4P instrument also does not directly operationalize people, process, or physical evidence as marketing-mix dimensions; future studies should compare 4P and 7P specifications in higher education service settings. Although procedural and statistical checks suggest that common method bias is unlikely to fully account for the findings, same-source self-report data remain a limitation. Future research should examine multiple campuses, incorporate institutional image, perceived value, trust, loyalty, dropout intention, engagement, and sense of belonging as additional variables, and use multivariate or longitudinal designs to test more complex explanatory models. Another promising direction is to examine whether GenAI-enabled advising, academic support, and personalized learning tools become part of the perceived educational product and whether they are associated with student satisfaction, engagement, and belonging. Despite its limitations, the study offers analytically coherent and practically useful evidence for regional higher education institutions. In settings where competitive pressure is increasing and resources are uneven, the quality of what is promised, what is delivered, and how students are treated remains central not only to satisfaction, but also to the institutional conditions under which students connect with the university.

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Abbreviations

The following abbreviations are used in this manuscript; statistical symbols are listed separately in Appendix B.

HEI	Higher education institution
K-S	Kolmogorov–Smirnov test
SERVQUAL	Service-quality measurement scale
TUPA	Single Text of Administrative Procedures
CMB	Common method bias
tau-b	Kendall’s tau-b rank correlation coefficient

Appendix A. Instrument Construction Matrix

Tables A1 and A2 present the English version of the original instrument-construction matrix used in the study. The translation preserves the original analytical structure (variable, dimension, indicator, and item) so that reviewers can assess construct coverage and item wording.

Table A1. Instrument construction matrix (1/2).

Construct	Dimension	Indicator	Item
Variable 1: Educational marketing	Product	Material benefits	1. After completing professional training, students will be able to access better employment opportunities. 2. After completing professional training, students will be able to improve their quality of life. 3. After completing professional training, students will substantially improve their income levels.
		Time benefits	4. The university handles requests and administrative procedures quickly and effectively.
		Physical benefits	5. During university studies, the university provides modern infrastructure and visually attractive equipment.
		Social benefits	6. Belonging to the university gives students social recognition because of the university’s prestige. 7. University graduates enjoy status in society because of the university’s prestige.
		Psychological benefits	8. Students feel proud to belong to the university because society and their surrounding environment recognize them for it.
	Price	Material sacrifices	9. The tuition charged by the university is consistent with the services provided. 10. The investment in food, transportation, photocopies, housing, and other expenses is consistent with the future benefits expected from the education received.
		Time sacrifices	11. The time devoted to professional training is proportional to its future benefits.
		Physical sacrifices	12. Academic demands are strong, but they are consistent with what is expected from a professional.
		Psychological sacrifices	13. The stress students face is acceptable because, in the future, their professional training will improve their prospects.
	Place	Physical locations	14. Classes are offered in academic spaces that are appropriate for teaching.
		Virtual locations	15. The university offers virtual classrooms as a complement to face-to-face teaching, thereby improving the academic training offered. 16. The university offers distance or blended-learning programs using educational platforms that meet high quality standards.
	Promotion	Mailing and telemarketing	17. The university contacts potential applicants through personalized phone calls that explain the benefits of its educational service. 18. The university contacts potential applicants through personalized e-mails that explain the benefits of its educational service.
		Institutional advertising	19. The university’s advertising provides complete and reliable information about the educational service. 20. Advertising delivered through physical and virtual media helps persuade potential applicants to choose the university over other educational institutions.
		Sales promotion	21. The behavior of teachers, administrative staff, and other employees encourages students to recommend the university, thereby generating word-of-mouth promotion.
		Digital marketing	22. The university uses virtual channels such as social media and websites to promote its educational offering.

Table A2. Instrument construction matrix (2/2).

Construct	Dimension	Indicator	Item
Variable 2: Student satisfaction	Reliability	Promise fulfillment	1. The university offers an integrated and holistic educational service built on the cognitive, procedural, and job-related competencies demanded by the professional labor market. 2. The university offers programs with high labor-market demand, as stated in its advertising. 3. The university respects the dates established in the academic calendar for the start and completion of classes.
		Complementary services	4. The university offers complementary services, such as culture, sports, and artistic activities, which support students' holistic development. 5. The university provides psycho-pedagogical services to accompany and support students during their university stage. 6. The university provides primary medical care services in order to deliver timely attention and safeguard student well-being.
	Responsiveness	Administrative procedures	7. Through the TUPA, the university clearly and accurately communicates the administrative procedures within the institution, including fees and other requirements. 8. The university processes administrative procedures within the established deadlines, or even earlier. 9. The university facilitates the tracking of administrative procedures by providing information on their status through an electronic platform.
		Complaint handling	10. The university handles complaints in a timely manner. 11. The university proposes solution alternatives for the complaints received. 12. University staff address students' complaints and concerns in a kind and courteous manner.
	Security	Reduction in uncertainty	13. The academic programs reduce the uncertainty experienced by students and prepare them to face the labor market. 14. The job-placement programs reduce the fear students experience regarding their future employment. 15. Current university partnership agreements facilitate labor-market insertion for current students as well as graduates.
	Empathy	Personalized service	16. University staff provide cordial service to students in all administrative areas. 17. University staff provide personalized attention to each student according to individual needs. 18. There is a positive and lasting relationship between the university and students because of the good attention provided by institutional staff.
	Tangibility	Physical representation of the service	19. The infrastructure provided by the university is visually attractive to students. 20. The equipment offered to the different degree programs is visually attractive and up to date. 21. Facilities such as libraries and virtual databases allow students to access reliable and up-to-date academic sources.
		Qualified personnel	22. The university's administrative staff are trained to perform their duties efficiently. 23. The teaching staff have the professional experience and academic degrees required to deliver high-quality classes and train professionals in line with market and societal needs. 24. Security-service staff perform their duties in an optimal and respectful manner.

Appendix B

Table A3 summarizes the symbols and terms used in the manuscript. The distinction between p as a sample-proportion parameter and p -value as a significance probability is made explicit to avoid ambiguity.

Table A3. Statistical notation and formula nomenclature.

Symbol/Term	Meaning	Context of Use
n	Total sample size	Finite-population sample-size formula and Spearman correlation expression.
N	Population size	Finite-population sample-size formula.
n_h	Sample size in stratum h	Proportional allocation across degree programs.
N_h	Population size in stratum h	Proportional allocation across degree programs.
Z	Critical value of the standard normal distribution	Confidence-level component in Equation (1).
E	Admissible sampling error	Finite-population sample-size formula.
p	Expected proportion of occurrence (set at 0.5)	Finite-population sample-size formula in Equation (1).
q	Complement of p ($1 - p$)	Finite-population sample-size formula in Equation (1).
α	Cronbach's alpha	Internal-consistency coefficient reported for the pilot and final-sample reliability checks.

Table A3. Cont.

Symbol/Term	Meaning	Context of Use
k	Number of items	Cronbach's alpha formula in Equation (3).
s_i^2	Variance of item i	Cronbach's alpha formula in Equation (3).
s_T^2	Variance of the total summed score	Cronbach's alpha formula in Equation (3).
ρ_s	Spearman rank-order correlation coefficient	Main inferential estimator for the study hypotheses.
d_i	Difference between paired ranks for case i	Spearman's rho formula in Equation (4).
p -value	Observed significance probability	Hypothesis testing and decision rules reported in the results tables.
tau-b	Kendall's tau-b rank correlation coefficient	Robustness check for ordinal association.
CMB	Common method bias	Potential inflation of associations due to common measurement source.

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