

A conceptual model for advancing university branding: Focusing on cognitive dimensions

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Abstract

Purpose: This study aims to develop a conceptual model for enhancing university branding by examining the role of key cognitive components. It provides practical insights for academic institutions to strengthen their brand positioning in a competitive educational landscape.

Research Methodology: This study adopted an applied research design utilizing a descriptive survey method. Data were collected from faculty members and students at a public university in Tehran through standardized questionnaires. Structural Equation Modeling (SEM) was implemented using Smart PLS software to examine relationships between cognitive components including brand image, trust, communication, service quality and loyalty and their influence on university branding.

Results: The results revealed that brand loyalty and brand communication are the most influential factors in university branding. Brand loyalty had the highest impact, followed by communication. The study confirmed that strengthening cognitive elements significantly improves brand positioning and interested party engagement.

Conclusions: Cognitive components, particularly brand loyalty, communication, trust and service quality, play a critical role in university branding. Strategic efforts to build positive perceptions, foster trust and maintain consistent communication are essential for enhancing brand reputation and attracting students.

Limitations: The study was confined to a single university in Tehran, Iran and relied on self-reported data, potentially introducing bias. It also excluded emotional and behavioral factors and its cross-sectional design limits longitudinal insights.

Contribution: The study offers a validated model demonstrating how cognitive factors enhance university branding, providing actionable strategies for academic institutions.

Keywords: *Brand Communication, Brand Loyalty, Cognitive Components, Higher Education, University Branding*

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1. Introduction

The global higher education sector is undergoing a profound transformation driven by intensified market competition, reduced public funding, and declining enrollment rates. These dynamics have compelled universities to elevate branding from peripheral concern to strategic priority. As highlighted by Vo, Le, and Duong (2024), Zhang (2020), and Mourad, Meshreki, and Sarofim (2020), effective branding is vital not only for attracting students but also for protecting institutional reputation, fostering stakeholder trust, and ensuring long-term sustainability. Together, these cognitive components influence vital behavioral outcomes, such as student loyalty, brand advocacy, and ongoing engagement.

These outcomes contribute to institutional competitiveness and enhance resilience and stakeholder alignment. To address this critical area, this study proposes and validates a comprehensive conceptual framework that focuses on the cognitive drivers of university branding.

By examining the relationships among brand image, service quality, communication effectiveness, institutional trust, and student loyalty, this study offers an evidence-based model that explains how branding functions as a strategic asset in higher education. This study is situated in the context of a major public university in Tehran, Iran, reflecting the challenges faced by institutions in emerging economies that are increasingly exposed to global academic standards and market expectations. Employing structural equation modeling, this study identifies the cognitive components that have the most significant influence on brand development. The goal is to deliver practical insights for institutional leaders, policymakers, and academic researchers who seek to build strong, sustainable, and stakeholder-driven university brands.

To ensure conceptual clarity, this study follows a logical progression from theoretical foundations to problem identification. Drawing on existing branding theories and empirical evidence, this study first reviews cognitive branding concepts and then identifies gaps in the literature concerning their application in higher-education institutions. This led to the formulation of the study's conceptual model, which maps the causal relationships among brand image, service quality, communication, trust, and loyalty. This structured flow ensures theoretical coherence and contextual relevance of the study. Furthermore, the transformation of higher education is not only structural but also deeply cognitive and symbolic. In a digitized, globally interconnected academic environment, institutional reputation increasingly transcends these physical boundaries. The rise of online education, digital credentials, and international student mobility has reshaped university evaluation. Stakeholders now assess institutions not solely based on academic output or rankings but also on perceived intellectual value, online presence, and emotional resonance (Panda & Kaur, 2023).

Simultaneously, universities are under mounting pressure to demonstrate mission clarity, operational transparency, and alignment with societal values. In this evolving landscape, branding has become more than just a marketing activity. It serves as a vehicle for expressing institutional authenticity, cultivating relational trust, and shaping the identity of stakeholders. The way students experience, remember, and communicate their academic journeys plays a pivotal role in shaping a university's brand equity. Given this complexity, particularly in developing regions, there is a clear need for robust conceptual models that account for the cognitive, emotional, and symbolic dimensions of brand development. This study responds to this need by presenting a validated framework that links institutional attributes with stakeholder perceptions and behavioral intentions. This study offers both theoretical and practical contributions to the field of higher education branding and provides a strategic roadmap for universities seeking to create enduring and meaningful brand identities.

Recent studies have highlighted the strong connection between cognitive branding, trust, and service quality in shaping stakeholder perceptions within higher education. Cognitive branding influences how students evaluate academic services and form trust in the institution, while trust serves as a key mediator that transforms perceptions of service quality into loyalty and positive brand behavior. As demonstrated by Tessema, Yesilada, Aghaei, and Ahmed (2025) and Seitova, Temirbekova, Kazykhankyzy, Khalmatova, and Çelik (2024), consistent communication, transparency, and reliability in academic services significantly strengthen institutional trust and brand reputation. Moreover, emerging evidence from Sarder and Mustaqeem (2024) confirms that perceived service quality and trust jointly enhance students' satisfaction and long-term commitment to university brands.

2. Literature Review

University branding has evolved into a sophisticated cognitive-affective construct, where institutional constituents' perceptions of educational quality and academic prestige play a fundamental role (O'Sullivan et al., 2024). This paradigm shift reveals that output quality directly influences client satisfaction (Hsu, Chen, & Feng, 2024). Contemporary research, including Fahim, Al Mamun, Hossain,

Chakma, and Hassan (2022), demonstrates that adverse cognitive perceptions may engender oppositional behaviors, analogous to how economically disadvantaged consumers employ counterfeit goods to manifest antipathy toward international brands. These insights hold particular relevance for academic institutions, as they suggest that reinforcing cognitive elements among faculty and administrative personnel can cultivate brand-advocating conduct, mirroring findings from both financial services (Muhammad, Salleh, and Yusr (2020) and the automotive sector (Hsu et al., 2024).

Academic brand development necessitates creating comprehensive training initiatives that instill a deep comprehension of institutional purpose while implementing robust quality monitoring frameworks. This imperative requires sensitivity to perceptual variations among university affiliates and the establishment of corrective mechanisms for negative impressions (Fahim et al., 2022). Just as demographic factors shape quality assessments (Hsu et al., 2024), higher education environments must accommodate cultural and cognitive diversity across their various constituency groups.

Cross-sectoral evidence indicates that effective branding requires the harmonious integration of rational and emotional dimensions. For universities, this involves formulating models that simultaneously advance scholarly excellence and nurture meaningful connections with all the institutional participants. Empirical studies confirm that such an integrated approach facilitates the development of a distinguished, enduring brand identity - one grounded in substantive cognitive foundations while capable of inspiring genuine allegiance throughout the academic community.

2.1 University Branding and Cognitive Factors

Branding in higher education transcends mere visual identity or promotional tactics and constitutes a complex psychological process rooted in cognitive engagement. As Waqas (2022) emphasizes, robust university brands emerge from how students, faculty, alumni, and broader academic communities mentally process institutional cues. These cognitive mechanisms, which encompass brand awareness, brand image, perceived quality, and perceived value (Saputra, 2022), collectively shape mental representations of the institution and directly influence critical outcomes such as trust, loyalty, and advocacy behaviors.

Central to this framework is brand image, a multidimensional construct that captures students' holistic perceptions and emotional evaluations of institutional identity. Del Río-Rama, Álvarez-García, Mun, and Durán-Sánchez (2021) elucidate that this integrates rational assessments of academic excellence and faculty reputation with affective responses to campus culture and learning environments. Crucially, trust in a university brand materializes not through marketing claims but through demonstrable alignment between institutional promises and tangible performance in service delivery, pedagogical quality, and administrative integrity (Truong, 2021). When students perceive consistency in this alignment, they gain confidence in the institution's credibility. This fosters deep emotional bonds that catalyze enduring commitment. As Snijders, Wijnia, Kuiper, Rikers, and Loyens (2022) corroborate, such relational dynamics transform transient satisfaction into resilient institutional loyalty, where students evolve into active advocates who champion the university within their personal and professional networks.

Recent studies emphasize the close connection between cognitive branding, trust, and service quality in shaping the perceptions of stakeholders. Cognitive branding affects how students evaluate their service experiences and develop trust in an institution. Trust serves as a bridge that transforms perceptions of service quality into loyalty and positive brand attitudes. Research by Wang and Yang (2025), Ghorbanzadeh, Rahehagh, and Najarzadeh (2024), and Panda and Kaur (2023) supports this interaction, showing that clear communication, reliable performance, and consistent service quality strengthen trust and enhance university brand reputation.

2.2 Role of Brand Loyalty and Brand Communication

Brand loyalty represents a sustained commitment to repurchase services or actively endorse an institution, and constitutes a critical success metric in contemporary higher-education ecosystems. As Ghorbanzadeh et al. (2024) emphasize, this loyalty manifests concretely through student ambassadors

who fuel enrollment pipelines via word-of-mouth advocacy, pursue advanced degrees within their alma mater, and transition into engaged alumni providing financial and reputational capital. Such durable allegiance emerges not incidentally but through the deliberate cultivation of three interconnected pillars: brand trust reflecting institutional reliability, brand satisfaction stemming from educational experience quality, and emotional engagement fostering psychological ownership (Todea, Davidescu, Pop, & Stamule, 2022).

Complementing these relational foundations, strategic brand communication serves as a vital conduit for shaping institutional narratives. This comprehensive framework encompasses all messages, interactions, and touchpoints through which universities articulate their values, offerings, and distinctive identities to student audiences, faculty, and the broader academic community. Effective communication extends beyond simple information dissemination. It establishes clarity of purpose, ensures narrative consistency across platforms, and builds perceptual coherence among diverse campus constituencies (Naheen & Elsharnouby, 2024). When institutions demonstrate transparency in their operations and responsiveness to community needs, these communicative practices actively reinforce trust while deepening key partners' investments. Ultimately, this synergy transforms passive audiences into active participants who internalize institutional identity as part of their academic journey.

2.3 Service Quality in Higher Education

Perceived service quality, especially in academic service delivery, is a foundational determinant of students' holistic evaluations of a university brand. This perceptual metric extends beyond superficial interactions to encompass the entire educational experience, positioning service quality as a critical antecedent of institutional trust and loyalty. Grounded in the established SERVQUAL framework, service quality assessment operationalizes five core dimensions as follows:

- Tangibility (physical facilities, learning technologies and campus aesthetics),
- Reliability (consistency in delivering academic promises and administrative outcomes),
- Responsiveness (timeliness in addressing student needs and academic inquiries),
- Assurance (competence and credibility conveyed through faculty expertise and institutional processes),
- Empathy (individualized attention and understanding of diverse learner requirements) (Twum & Peprah, 2020).

These dimensions acquire heightened significance within higher education institutions, where the caliber of teaching methodologies, adequacy of research infrastructure, effectiveness of administrative systems, and depth of student-faculty pedagogical relationships collectively shape students' cognitive and affective brand associations. As Moslehpour, Chau, Zheng, Hanjani, and Hoang (2020) demonstrate, deficiencies in any dimension trigger cascading effects: suboptimal academic support erodes perceived value, while excellence in service delivery amplifies brand image strength and cultivates profound satisfaction. Consequently, service quality functions as both a diagnostic tool for institutional improvement and a strategic lever for competitive differentiation in increasingly student-centered academic markets.

2.4 Theoretical Framework and Hypotheses

This research builds on a strong theoretical and empirical foundation, incorporating key studies such as Tammubua (2021) on institutional identity formation, ur Rahman, Manzoor, Yasmin, Yaqub, and Ali (2024) on cross-cultural student loyalty drivers and Bui et al. (2023) on trust-commitment paradigms in education. It proposes a comprehensive conceptual model that maps the causal pathways through which cognitive brand elements drive measurable brand-enhancement outcomes in university ecosystems. The proposed framework synthesizes consumer behavior theory and strategic brand management principles to articulate a series of logically derived propositions that collectively illuminate the psychological architecture underlying institutional brand development.

Central to this model is the posited sequence of influences: First, brand image functions as a primary antecedent to brand trust, where favorable mental representations of institutional prestige and

educational quality strengthen the perceived credibility. Second, service quality, which is manifested through academic rigor, administrative efficiency, and campus resources, directly cultivates trust by demonstrating institutional reliability. Third, brand communication fosters trust through the consistent articulation of institutional values and mission alignment across diverse academic constituencies. Fourth, brand trust generates profound psychological commitment that translates into sustained behavioral loyalty among the students. Fifth, such loyalty operates as a catalytic force for holistic brand enhancement through organic advocacy and institutional reinvestments. Sixth, cognitive brand dimensions, which include awareness, perceived value, and quality assessments, mediate the relationship between service delivery systems and loyalty formation. This reveals the subconscious translation mechanism through which experiential inputs are transformed into relational outcomes. The hypotheses are summarized as follows:

Based on the proposed conceptual model, the following hypotheses were formulated:

1. Brand image has a positive effect on brand trust.
2. Service quality has a positive influence on brand trust.
3. Brand communication has a positive effect on brand trust.
4. Brand trust has a positive influence on brand loyalty.
5. Brand loyalty contributes significantly to university brand enhancement.
6. Cognitive brand elements mediate the relationship between service quality and brand loyalty.

This research model integrates cognitive theories of consumer behavior with strategic brand management in higher education and seeks to empirically validate the relationships among key variables using structural equation modeling (SEM).

3. Research Methodology

3.1 Research Design

This study employs a quantitative research approach with applied and explanatory objectives designed to systematically investigate the interrelationships among cognitive branding components in higher education institutions. The research methodology combines descriptive survey techniques with advanced analytical procedures to achieve its dual purpose of model development and empirical validation. This study utilized structural equation modeling (SEM) as its primary analytical framework, enabling the simultaneous examination of multiple causal pathways while accounting for measurement errors in latent constructs.

The SEM approach is particularly appropriate for this investigation as it allows for a comprehensive analysis of complex variable relationships while accommodating the measurement of abstract psychological constructs inherent in branding research. By adopting this methodological framework, this study provides robust empirical evidence to support strategic decision-making in higher-education branding while contributing to theoretical advancement in the field of institutional marketing. The analytical sophistication of SEM enables research to move beyond simple correlation analysis, offering a nuanced understanding of how various cognitive branding elements interact to shape overall institutional brand equity.

The study's external validity is supported by the inclusion of diverse academic disciplines and respondent demographics, which reflect the structure of public universities in Iran. Tehran universities were selected as the study context because they represent the country's leading academic institutions with diverse student and faculty populations, providing a realistic setting for examining university branding in developing countries. However, as the research focuses on a single metropolitan region, the findings should be generalized with caution to universities in other regions or private institutions.

3.2 Population and Sampling

The target population of this study comprised faculty members and enrolled students at a prominent public university located in Tehran, Iran, selected as a representative case of major higher education institutions in developing economies. The sampling strategy employed a stratified random approach based on Morgan's table recommendations to ensure proportional representation across key subgroups. The data collection process yielded 177 complete and valid responses after quality screening, achieving a balanced representation across critical demographic variables, including gender distribution, age

groups, and all major academic disciplines. This sample size provides adequate statistical power for the planned analyses while maintaining the natural stratification of the population. Comprehensive demographic profiles detailing the participants' characteristics across these variables are presented in Tables 1 and 2, enabling readers to evaluate the sample's composition and representativeness.

Table 1. Gender Distribution

Gender	Frequency	Frequency percentage
Male	90	50.8
Female	87	49.2
Total	177	100

Table 2. Age Distribution

Age group	Frequency	Frequency percentage
Under 30	37	20.9
31 - 35	67	37.9
36 - 40	62	35
Over 41	11	6.2
Total	177	100

3.3 Measurement Instruments

The measurement instrument for this study consisted of a carefully designed, structured questionnaire incorporating validated scale items adapted from established empirical studies in the fields of higher education branding and consumer behavior research. All construct measures utilized a five-point Likert-type response format, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), to capture respondents' level of agreement with each statement. This standardized scaling approach ensures consistency in response interpretation while maintaining sensitivity to gradations in participants' perceptions. A complete listing of all measurement items, their corresponding constructs, and original scholarly sources appears in Table 3 (Measurement Items and Sources), providing full transparency regarding the study's operationalization of theoretical concepts.

Table 3. Measurement Items and Sources

Items	Dimension	Question items	Question	Source
Brand Image	Cognitive dimension	6	1-6	Tammubua (2021)
	Affective dimension	7	7-13	
	Behavioral dimension	9	14-22	
Service Quality	Tangibility	4	23-26	SERVQUAL model (Twum & Peprah, 2020)
	Reliability	4	27-30	
	Responsiveness	4	31-34	
	Assurance	4	35-38	
	Empathy	4	39-42	
Brand Trust	-	3	43-45	Truong (2021)
Brand Communication	-	5	46-50	ur Rahman et al. (2024)
Brand Loyalty	-	6	51-56	Bui et al. (2023)

3.4 Validity and Reliability

The measurement instrument underwent rigorous validation procedures to ensure its robust psychometric properties. Content validity was established through evaluation by a panel of academic experts who assessed item relevance, clarity, and coverage of theoretical constructs. Their feedback led to refinements in the wording and measurement structure to enhance the conceptual alignment. Construct validity was assessed using convergent validity ($AVE > 0.5$) and discriminant validity

(Fornell-Larcker criterion) tests. Reliability was verified using Cronbach's alpha and composite reliability (CR), both of which exceeded the acceptable threshold of 0.7. The related results, comprehensively presented in Table 4 (Reliability and Validity Results), substantially exceed the recommended thresholds and confirm the instrument's psychometric soundness.

Table 4. Reliability and Validity Results

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Brand Image	0.891	0.893	0.821
Service Quality	0.939	0.943	0.804
Brand Trust	0.903	0.909	0.838
Brand Communication	0.952	0.955	0.838
Brand Loyalty	0.945	0.946	0.786

3.5 Data Collection and Analysis Tools

The data collection process incorporated both online and paper-based survey methods to ensure comprehensive participation across different segments of the university's population. Online surveys were distributed through institutional communication channels, including university email systems and learning management platforms, while paper questionnaires were administered in classroom settings to accommodate varied respondent preferences and maximize response rates. This dual-mode approach enhanced the representativeness of the sample while minimizing potential response bias associated with single-method data collection. For data analysis, we employed a sequential analytical approach using complementary statistical software tools.

Initial data processing and descriptive statistical analyses, including the computation of means, standard deviations, and frequency distributions, were conducted using SPSS Statistics software. The analysis then progressed to more sophisticated multivariate techniques implemented in SmartPLS 3.0, beginning with a confirmatory factor analysis to validate the measurement model. The structural equation modeling phase utilized partial least squares (PLS) algorithms to examine path coefficients and test the hypothesized relationships, with particular attention to model fit indices, such as the SRMR and predictive relevance metrics. The choice of PLS-SEM was particularly appropriate given its advantages in handling complex models with smaller sample sizes while simultaneously accounting for measurement errors in latent variables. This comprehensive analytical strategy ensured a rigorous examination of both the measurement properties and structural relationships specified in the conceptual model.

The analysis workflow systematically progressed from basic descriptive statistics to advanced causal modeling, with each phase building upon the previous one to provide increasingly sophisticated insights into the cognitive branding dynamics being investigated. All analytical procedures adhered to established guidelines for PLS-SEM applications in social science research, with particular attention to the evaluation of reliability, convergent validity, and discriminant validity at the measurement level before proceeding to structural model testing. This methodological rigor supports the validity and reliability of the study's findings while providing a robust foundation for theoretical and practical conclusions.

3.6 Model Assessment

The analytical validation process followed established methodological protocols, beginning with a comprehensive evaluation of the measurement model using critical psychometric indicators. Specifically, individual factor loadings, average variance extracted (AVE) values, and composite reliability (CR) coefficients were systematically examined to confirm robust measurement properties. Subsequently, the structural model was rigorously assessed by analyzing the path coefficients and their corresponding t-values to determine statistical significance, as shown in Figure 1. Further diagnostic evaluation incorporated the calculation of R² coefficients to quantify the explained variance, Q² statistics to assess predictive relevance, and goodness-of-fit (GOF) indices to determine the overall

model adequacy. These multifaceted validation metrics collectively determine the model's explanatory power and theoretical plausibility, and the comprehensive results are documented in Table 5.

Table 5. Goodness of Fit (GOF) index for Overall Model Evaluation

Latent Variable	R ²	Communality
Brand Development	0.767	1.000
Brand Image	-	0.604
Service Quality	-	0.696
Brand Trust	-	0.633
Brand Communication	-	0.746
Brand Loyalty	-	0.695

The model fit assessment results collectively demonstrate an acceptable level of goodness-of-fit and satisfactory predictive validity, thereby confirming the fundamental robustness of the proposed structural framework. This comprehensive validation supports the model's theoretical coherence and empirical adequacy in explaining the investigated relationships within the university branding context.

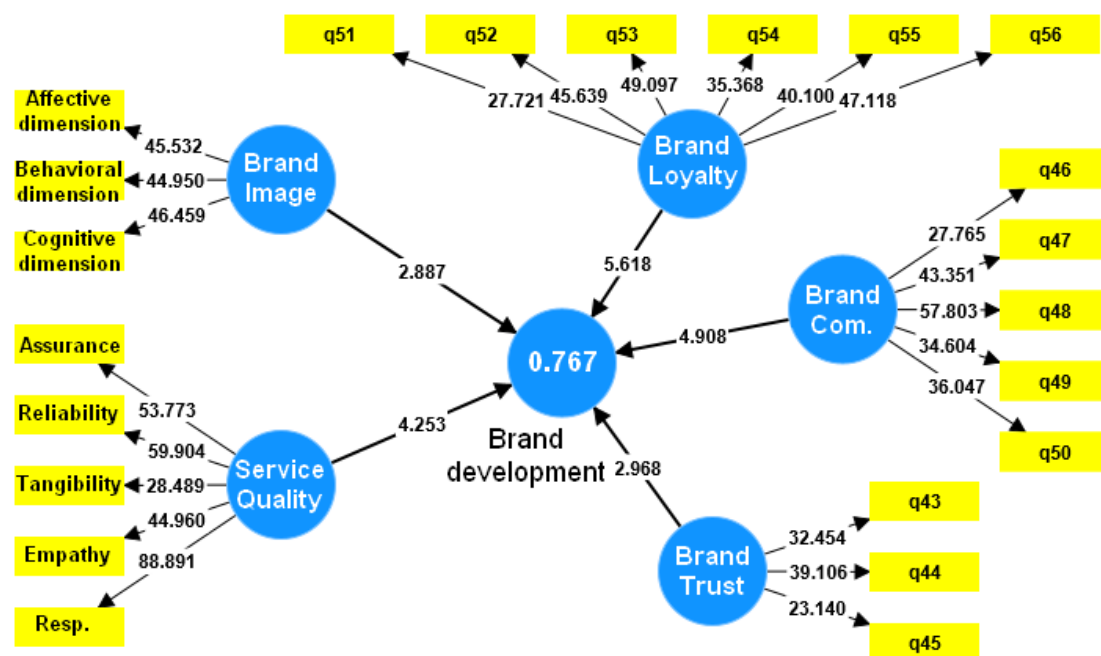


Figure 1. Structural Model (T-values)

3.7 Ethical Considerations

Participation in this research study was strictly voluntary at all stages, with all respondents explicitly informed of their unconditional right to withdraw without consequences. Comprehensive assurances regarding the protection of participant anonymity and strict confidentiality of all collected data were formally communicated and institutionally guaranteed throughout the research process. The investigation was conducted in full adherence to the formally established ethical research standards mandated by the host university, with all methodological procedures undergoing prior review to ensure alignment with the core principles of academic integrity, participant welfare, and responsible data stewardship.

4. Results and Discussions

4.1 Descriptive Statistics

The analytical process commenced with a comprehensive descriptive analysis of all principal constructs to establish a foundational understanding of the dataset. The final sample comprised 177 validated responses, including faculty members and students from diverse academic departments, forming the empirical basis for this investigation. As systematically documented in Tables 1 and 2, the participant

profile demonstrated relative equilibrium across key demographic characteristics, including gender and age distribution classifications. The calculated mean scores and corresponding standard deviations across the measurement constructs revealed consistently favorable evaluative tendencies among respondents, with measured perceptions of brand image, service quality, brand trust, and brand loyalty all registering positively within the established measurement framework. This preliminary characterization provides essential context for subsequent inferential analyses while confirming the dataset's suitability for advanced statistical examinations.

4.2 Measurement Model Evaluation

The psychometric adequacy of the measurement model was rigorously established through a two-phase assessment process. First, the statistical significance and strength of the factor loadings were evaluated. All standardized factor loadings were significant at the 95% confidence level ($p < 0.05$), with values exceeding the 0.50 threshold. This confirms that each indicator reliably reflects its intended latent construct (shared construct-item variance > measurement error variance), convergent validity is established ($AVE > 0.50$), and items with loadings below 0.50 were systematically revised/removed (see Figure 2). Second, the reliability and validity metrics were comprehensively examined. As documented in Table 4, Cronbach's alpha ($\alpha > 0.7$) and Composite Reliability (CR > 0.7) confirmed internal consistency, while AVE variance extracted (> 0.5) further validated convergent validity. Collectively, these results establish a robust measurement foundation for structural analysis, with all retained items meeting stringent psychometric criteria (Henseler, Ringle, & Sarstedt, 2015).

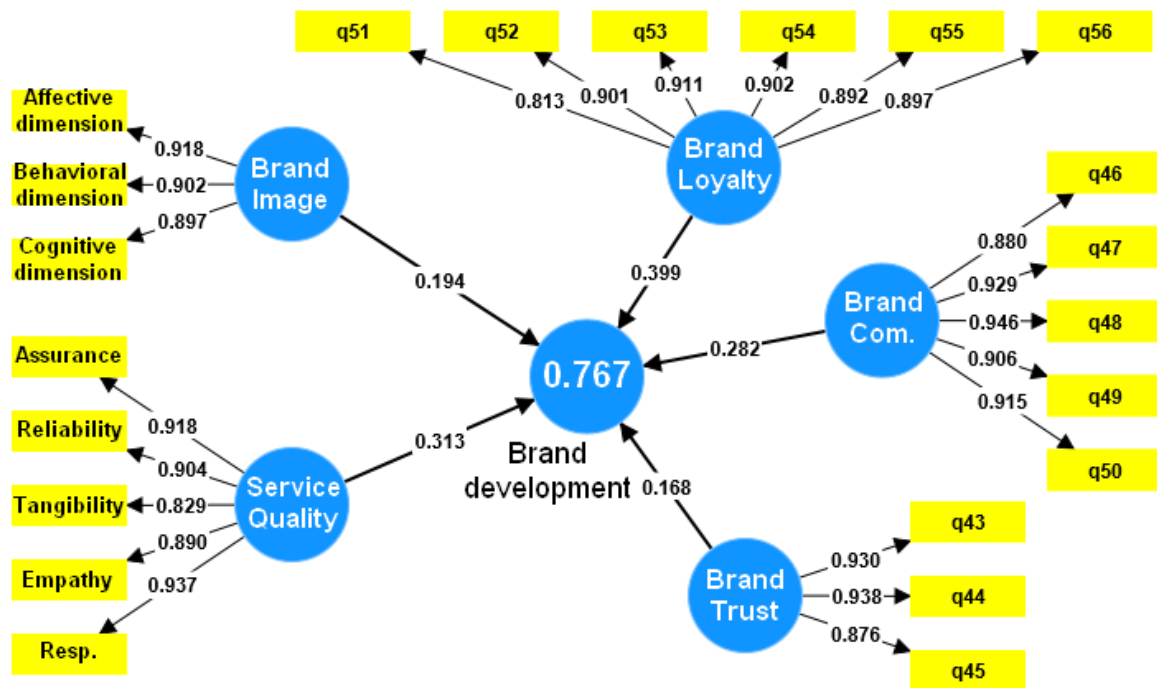


Figure 2. standardized path coefficients (P-values)

4.3 Structural Model Results

Using SmartPLS 3.0, a structural equation model was estimated to test the hypothesized relationships among constructs. Figure 1 illustrates the path model with t-values, and Figure 2 displays the model with standardized path coefficients. The R^2 values for the endogenous constructs indicate a high level of explanatory power. The model's Goodness of Fit (GOF) index was calculated as 0.767 (see Table 5), which exceeds the threshold of 0.36, indicating a strong model fit (Hair, Risher, Sarstedt, & Ringle, 2019).

4.4 Hypothesis Testing

The results of the hypothesis testing are presented in Table 6.

Table 6. Hypothesis Testing Results and Path Coefficients

Hypothesis	Path	β (Beta)	t-value	Result
H1	Brand Image → Brand Trust	0.436	7.653	Supported
H2	Service Quality → Brand Trust	0.362	6.150	Supported
H3	Brand Communication → Brand Trust	0.257	3.947	Supported
H4	Brand Trust → Brand Loyalty	0.787	23.420	Strongly Supported
H5	Brand Loyalty → Brand Development	0.872	38.471	Strongly Supported

The structural equation modeling analysis revealed consistently positive and statistically significant path coefficients across all hypothesized relationships, with t-values exceeding the critical threshold of 1.96 ($p < 0.05$), thereby substantiating each proposed linkage within the framework. Particularly noteworthy is the pivotal mediating function of brand trust, which demonstrably facilitates the influence of antecedent variables, specifically brand image, service quality, and communication, on the development of brand loyalty. This established mediation pattern aligns with the empirical evidence documented in prior research by Truong (2021) and Han et al. (2018), confirming the critical intermediary role of trust in converting institutional attributes into sustained student allegiance. To further contextualize the findings, a comparison of the present results with those of prior studies is presented in Table 7, which summarizes the consistency of key relationships across the literature.

Table 7. Comparison of Key Findings with Prior Studies

Relationship	Present Study Finding	Supporting Prior Studies	Consistency
Brand Image → Brand Trust	Positive, significant	Tammubua (2021); Truong (2021)	Consistent
Service Quality → Brand Trust	Positive, significant	Moslehpour et al. (2020); Ghorbanzadeh et al. (2024)	Consistent
Brand Communication → Brand Trust	Positive, moderate effect	Naheen and Elsharnouby (2024)	Consistent
Brand Trust → Brand Loyalty	Strong positive effect	Bui et al. (2023); Snijders et al. (2022)	Consistent
Brand Loyalty → Brand Development	Strongest effect ($\beta = 0.872$)	Wang and Yang (2025); Zhu and Kerdpitak (2023)	Reinforced

Source: Compiled by the authors based on the current findings and related literature.

4.5 Discussion

The findings of this study underscore the vital role of cognitive dimensions in shaping the development of institutional brands in higher education. The analysis identified brand image and service quality as the most influential antecedents of brand trust. Together, these elements serve as foundational drivers that help establish institutional credibility among stakeholders. This cultivated trust then operates as a psychological mechanism that significantly enhances brand loyalty among academics. Importantly, brand loyalty emerged as the strongest predictor of comprehensive university brand enhancement, demonstrating greater explanatory power than any other variable within the model.

From a managerial perspective, this finding highlights that strengthening student and faculty loyalty yields the highest return on brand efforts. Therefore, universities should prioritize initiatives that enhance emotional connections, alumni engagement, and consistent service experiences to sustain long-term brand growth. These results are consistent with existing research in commercial and educational contexts. They reinforce theoretical frameworks that suggest that long-term brand commitment is achieved through a sequence of mediated processes. In such processes, emotional engagement and institutional trust work together to transform perceptions of service quality into a sustained institutional

attachment. This phenomenon is supported by previous empirical studies, including those by Bui et al. (2023) and Zhu and Kerdpitak (2023), which highlight the importance of trust and emotional resonance in cultivating lasting stakeholder loyalty.

From a strategic perspective, these insights translate into clear and actionable priorities for university leaders. Institutions should focus on improving the delivery of academic services, carefully crafting a distinct and coherent brand image, and implementing transparent and interactive communication across platforms. These initiatives are essential for fostering stronger loyalty among students and faculty, ultimately leading to an improved reputation, higher retention rates, and more active alumni networks. Together, these outcomes contribute to long-term institutional success in an increasingly competitive and global educational environment. Beyond these core findings, this study also presents opportunities for further reflection. The significant influence of brand image and service quality on brand trust suggests that students form perceptions not only based on academic credentials but also on how those credentials are communicated and experienced in practice.

Interestingly, brand image demonstrated a slightly stronger effect than expected, underscoring the importance of symbolic meaning and mental associations in shaping students' perceptions of trustworthiness. The demographic characteristics of the sample provided additional layers for interpretation. Preliminary observations indicated that older respondents, particularly those aged thirty-six and above, evaluated service quality and institutional trust somewhat differently from their younger counterparts under the age of 30. These variations may be linked to differing educational expectations or prior university experiences of the students. In terms of gender, both male and female participants reported comparable brand loyalty levels. However, female respondents scored slightly higher on the trust-related indicators. This aligns with Snijders et al. 's (2022) findings Snijders et al. (2022), who observed nuanced gender-based differences in relationship quality within higher education contexts.

Although brand communication was statistically significant in predicting trust, it had a relatively lower influence than the other cognitive factors. This may reflect the need for more personalized and responsive communication strategies within academic institutions. Conventional forms of communication, such as announcements, bulletins, or formal newsletters, may not sufficiently establish deep and lasting trust, especially among students who expect interactive and real-time engagement. Universities may benefit from adopting more inclusive and participatory approaches that allow students to feel acknowledged and involved in the institutional dialogue.

Finally, from a structural perspective, brand loyalty had the most substantial impact on brand development, confirming its role as a central driver within the model. In this context, loyalty is not simply a result of satisfaction but rather an outcome of emotional investment and identification with the university's mission and identity. To nurture such loyalty, universities must ensure consistent brand experiences, visible commitment from faculty and staff, and meaningful rituals, such as commencement ceremonies, alumni engagement events, and storytelling practices, that reinforce a sense of pride and belonging within the academic community.

5. Conclusion

5.1 Conclusion

This study developed and validated a conceptual model explaining how cognitive components, including brand image, service quality, trust, communication, and loyalty, influence university brand development. Using SEM-PLS analysis with data collected from a major public university in Tehran, the results confirmed that brand trust mediates the effects of cognitive factors on brand loyalty and that brand loyalty has the strongest impact on overall brand enhancement. The findings provide evidence that strengthening cognitive factors can significantly improve universities' strategic positioning and reputation.

5.2 Theoretical Implications

This study contributes to cognitive branding theory by extending its application to the higher education context. This shows that cognitive elements such as brand image, service quality, and communication

collectively influence trust, which subsequently strengthens loyalty and overall brand development. Integrating consumer-brand cognition theory into the academic environment provides a new understanding of how cognitive processes shape stakeholder perceptions and institutional reputation. The validated model also offers a foundation for future studies exploring the cognitive and emotional aspects of university branding in diverse cultural and institutional contexts.

5.2 Practical Implications

From a managerial perspective, the results offer clear guidance for university administrators. Key strategies for enhancing student and faculty loyalty include improving service quality, maintaining transparent communication, and building institutional trust. Universities should invest in consistent academic services, open communication channels and active alumni engagement to promote long-term brand growth. These actions are especially valuable for institutions in developing economies, where limited resources and global competition require strategic brand management to ensure sustainability and differentiation.

5.4 Limitation

This study had some limitations. First, the data were collected from a single public university in Tehran, which may limit the generalizability of the results to other institutions or cultural contexts. Second, the cross-sectional research design restricts the ability to draw causal inferences from the variables. Third, the study relied on self-reported perceptions, which may be subject to response biases. Future research could address these limitations by using longitudinal designs, multiple data sources, and comparative samples from different higher-education systems.

5.5 Suggestion

Future studies should expand the current model by incorporating the emotional and behavioral dimensions of university brand experience. Researchers should examine diverse institutional settings and cross-cultural contexts to enhance the external validity of the findings. In addition, applying longitudinal and mixed-method approaches could provide deeper insights into how cognitive and emotional factors jointly influence brand loyalty and development in higher-education institutions.

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References

- Bui, H. T. T., Bui, Q. T. T., Nguyen, T. T. P., Cao, Q. H., Phung, T. V., & Nguyen, H. T. (2023). Assessing the relationship between service quality, satisfaction and loyalty: the Vietnamese higher education experience. *Quality Assurance in Education*, 31(2), 197-214. doi:<https://doi.org/10.1108/QAE-01-2022-0015>
- Del Río-Rama, M. d. I. C., Álvarez-García, J., Mun, N. K., & Durán-Sánchez, A. (2021). Influence of the quality perceived of service of a higher education center on the loyalty of students. *Frontiers in Psychology*, 12. doi:<https://doi.org/10.3389/fpsyg.2021.671407>
- Fahim, A. Y., Al Mamun, A., Hossain, A., Chakma, T., & Hassan, E. M. (2022). Unpacking Brand Imperialism in Bangladesh: Emerging Market Perspective. *International Journal of Financial, Accounting, and Management*, 4(2), 219-239. doi:<https://doi.org/10.35912/ijfam.v4i2.863>
- Ghorbanzadeh, D., Rahehagh, A., & Najarzadeh, M. (2024). Determinants of university brand loyalty in an emerging higher education market. *Journal of Applied Research in Higher Education*, 16(5), 2075-2090. doi:<https://doi.org/10.1108/JARHE-10-2023-0494>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24. doi:<https://doi.org/10.1108/EBR-11-2018-0203>

- Han, H., Nguyen, H. N., Song, H., Chua, B.-L., Lee, S., & Kim, W. (2018). Drivers of brand loyalty in the chain coffee shop industry. *International Journal of Hospitality Management*, 72, 86-97. doi:<https://doi.org/10.1016/j.ijhm.2017.12.011>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing science*, 43(1), 115-135. doi:<https://doi.org/10.1007/s11747-014-0403-8>
- Hsu, C.-c., Chen, S.-H., & Feng, X.-c. (2024). Analysis of Product Quality and Customer Satisfaction: A Case Study of the Automotive Parts Industry. *International Journal of Financial, Accounting, and Management*, 6(2), 245-259. doi:<https://doi.org/10.35912/ijfam.v6i2.2153>
- Moslehpour, M., Chau, K. Y., Zheng, J., Hanjani, A. N., & Hoang, M. (2020). The mediating role of international student satisfaction in the influence of higher education service quality on institutional reputation in Taiwan. *International Journal of Engineering Business Management*, 12. doi:<https://doi.org/10.1177/1847979020971955>
- Mourad, M., Meshreki, H., & Sarofim, S. (2020). Brand equity in higher education: comparative analysis. *Studies in Higher Education*, 45(1), 209-231. doi:<https://doi.org/10.1080/03075079.2019.1582012>
- Muhammad, S., Salleh, S., & Yusr, M. M. (2020). Understanding employee brand trust and internal Brand Communications & Training (BCT) effects on employee brand performance: a study of the banking industry. *International Journal of Financial, Accounting, and Management*, 2(2), 95-120. doi:<https://doi.org/10.35912/ijfam.v2i2.193>
- Naheen, F., & Elsharnouby, T. H. (2024). You are what you communicate: on the relationships among university brand personality, identification, student participation, and citizenship behaviour. *Journal of Marketing for Higher Education*, 34(1), 368-389. doi:<https://doi.org/10.1080/08841241.2021.1992814>
- Panda, S., & Kaur, N. (2023). Beyond degrees: Navigating the digital frontier in higher education credentialing. *University News*, 61(43), 43-53. doi:<https://doi.org/10.5281/zenodo.10052788>
- Saputra, S. (2022). The influence of brand awareness, brand image, perceived quality and brand loyalty on brand equity in banking sector. *Journal Of Business Studies And Mangement Review*, 5(2), 319-326. doi:<https://doi.org/10.22437/jbsmr.v5i2.17576>
- Sarder, M. A. U., & Mustaqeem, K. M. (2024). The Role of Social Media Marketing in Shaping Educational Institution Branding. *International Journal of Research and Innovation in Social Science*, 8(3S), 4574-4588. doi:<https://doi.org/10.47772/ijriss.2024.803333s>
- Seitova, M., Temirbekova, Z., Kazykhankyzy, L., Khalmatova, Z., & Çelik, H. E. (2024). *Perceived service quality and student satisfaction: a case study at Khoja Akhmet Yassawi University, Kazakhstan*. Paper presented at the Frontiers in Education.
- Snijders, I., Wijnia, L., Kuiper, R. M., Rikers, R. M., & Loyens, S. M. (2022). Relationship quality in higher education and the interplay with student engagement and loyalty. *British Journal of Educational Psychology*, 92(2), 425-446. doi:<https://doi.org/10.1111/bjep.12455>
- Tammubua, M. H. (2021). Do brand image and brand trust mediate the effect of service quality on brand loyalty? Lessons from higher education sector. *Britain International of Humanities and Social Sciences (BIOHS) Journal*, 3(2), 302-315. doi:<https://doi.org/10.33258/biohs.v3i2.452>
- Tessema, D. H., Yesilada, F., Aghaei, I., & Ahmed, J. N. (2025). Influence of perceived service quality on word-of-mouth: the mediating role of brand trust and student satisfaction. *Journal of Applied Research in Higher Education*, 17(6), 2293-2306. doi:<https://doi.org/10.1108/JARHE-06-2024-0299>
- Todea, S., Davidescu, A. A., Pop, N. A., & Stamule, T. (2022). Determinants of student loyalty in higher education: A structural equation approach for the Bucharest University of economic studies, Romania. *International journal of environmental research and public health*, 19(9). doi:<https://doi.org/10.3390/ijerph19095527>
- Trường, N. V. T. (2021). The Factors Effect On Brand Equity In Higher Education. *Journal of Science and Technology-IUH*, 51(3). doi:<https://doi.org/10.46242/jstiuh.v51i03.3750>
- Twum, F. O., & Peprah, W. K. (2020). The impact of service quality on students' satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 10(10), 169-181. doi:<https://doi.org/10.6007/IJARBS/v10-i10/7923>

- ur Rahman, A., Manzoor, W., Yasmin, N., Yaqub, R. M. S., & Ali, M. S. (2024). From service quality to brand loyalty: The mediating effect of student satisfaction in public sector universities. *Pakistan Journal of Humanities and Social Sciences*, 12(2), 1225–1240. doi:<https://doi.org/10.52131/pjhss.2024.v12i2.2215>
- Vo, T.-T., Le, Q. H., & Duong, L. N. (2024). Promoting university brand through student co-creation behaviors: the role of online brand posts. *Journal of Trade Science*, 12(1), 60-79. doi:<https://doi.org/10.1108/JTS-11-2023-0026>
- Wang, Z., & Yang, X. (2025). Building brand loyalty through value co-creation practices in brand communities: the role of affective commitment and psychological brand ownership. *Journal of Research in Interactive Marketing*, 19(2), 201-220. doi:<https://doi.org/10.1108/JRIM-10-2023-0359>
- Waqas, M. (2022). The role of brand experience and student engagement in the creation of brand equity in a higher education context. *Journal of Nonprofit & Public Sector Marketing*, 34(4), 451-474. doi:<https://doi.org/10.1080/10495142.2021.1902905>
- Zhang, X. (2020). The influences of brand awareness on consumers' cognitive process: An event-related potentials study. *Frontiers in Neuroscience*, 14, 549. doi:<https://doi.org/10.3389/fnins.2020.00549>
- Zhu, W., & Kerdpitak, C. (2023). *The Influence Of Trust, Service Quality, And University Image Toward Undergraduate Students'loyalty In China*. Paper presented at the International Academic Multidisciplinary Research Conference In Zurich 2023.