# Analysis of the factors that affect students' satisfaction with how private colleges and universities build their brand images

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***Abstract:*** Private universities now use the development of their brand image as a key strategy for creating competitive differentiation in the higher education industry. In order to examine student satisfaction with the brand image construction of private universities and to suggest ideas for the brand image construction of private universities, this paper publishes a survey on the satisfaction of the brand image construction of private universities from the perspective of students in Guangdong Province.

## 1. Introduction

Higher education in China has advanced significantly since the beginning of the century. On the one hand, the hardware, the establishment of disciplines, the scope of training, the capability of teachers, etc. have all seen rapid improvements. On the other hand, given the profound impact that market forces have on higher education in the modern economy and society, competition among private universities for "application-oriented" and "comprehensive" degrees has gotten more serious [1]. This is because there are only so many high-quality students, teaching assistants, and research assistants available in the market. Considering the Matthew effect in the higher education sector, combining brand management theory with local university branding was an innovative notion for private universities that was put forth by Professor Zongwei Zhang [2]. Building universities' brand reputations is a necessary step in the branding of higher education [3]. The degree to which school students are acknowledged as vital stakeholders in the brand image of universities is a key tenet in the actual brand culture building of private universities.

## 2. Literature Review

The brand image of a university is the specific characteristics of the university brand, the brand is defined by the American marketing guru Philip Kotler as follows: A brand is a name, word, mark, logo, or combination of these things that allows a seller or group of sellers to identify and distinguish their goods from those of rivals [4]. Bell describes brand image as the total of all connections of a brand in consumers' memory and believes that the brand image is a subjective reflection of the brand by consumers made up of a collection of attributes and related associations [5], Dong defines the

university brand image as the comprehensive assessment of the internal characteristics and public manifestations of universities, which is a mix of the behavioral characteristics and internal concepts of universities in the process of sustainable development [6]. Stakeholder management was originally discussed from a business management perspective in 1963. Stakeholder theory's central tenet is that an organization should incorporate the interests of all of its stakeholders rather than concentrating only on increasing shareholder value [7]. Freeman defined a broad description of stakeholders that includes: organizations or people who have an impact on the accomplishment of organizational goals and benefit from the organization [8]. Stakeholder interactions are the context in which brands exist, and interactions between a firm and its stakeholders must have a substantial impact on brand equity and relationships with stakeholders [9]. Rosowski introduced the concept of stakeholders to the higher education sector. Based on their relative importance, he divided the stakeholders in higher education into four groups: the most crucial group, the critical group, the partial owners, and the minor group [10], Baldrige thinks that because there are several interest groups in university, there will inevitably be disputes between groups [11]. Private universities need to take lessons from corporate governance mechanisms and pay attention to stakeholders' roles in school governance, but previous studies by scholars have shown that students do not have a voice when it comes to important school governance issues [12-13]. Private universities have marketability as their primary characteristic, pursue reasonable returns, and have the characteristics of running a business. Higher education institutions, including higher vocational institutions, build and maintain their brand identities very differently than businesses do [14]. Private universities, which are non-profit organizations, are in charge of managing and educating students as well as providing for their needs. The essence of a university's branding is the result of a number of behavioral activities, including teaching, learning, and management, carried out by the community of interests, including "students" and "teachers," which are recognized by the public and receive high satisfaction and evaluation, leaving positive impressions and marks in the public's minds [15]. What academics refer to as "student consumerism," which sees the interaction between students and institutions as a customer and seller in the marketplace, has grown in the higher education sector [16]. When students, as clients of school education services, contrast what they have acquired from obtaining school education services with their expectations, they may experience psychological contentment, pleasure, or disappointment [17]. The essence of what is required to create and improve competitive advantage is brand image and student satisfaction [18].

In conclusion, a university's brand image is a multifaceted idea drawn from marketing science. However, it differs from businesses' focus on making a profit. A university's brand image should be built around education with the goal of enhancing its cultural legacy and boosting its influence. In China, the idea of student pleasure is starting to get more attention. In order to fulfill the development of the brand image construction of private universities, it is imperative that they define their attractiveness, combine their characteristics to protect the rights of pertinent stakeholders, and transform the satisfaction of students' value needs and expectations into their brand assets.

## 3. Questionnaire Survey and Empirical Study on Satisfaction with Brand Image of Private Universities

### 3.1. Sample and data description

Based on Ma Shiting's "Research on the Dimensions and Measurement System of the Brand Image of Colleges and Universities" [19], which is cited in this paper, the final questionnaire was created by combining the unique characteristics of private universities, making adaptive and extended adjustments, and then the questionnaire was confirmed using an expert survey method. The expert group, which created Likert's five-level scale, was made up of one minister from the education department of private universities, one advisor from the education department of private universities,

one director from the admissions and employment office of private universities, and one director from the brand and strategic development department of the private university. The questionnaire was administered online, and some of the questions were adjusted through pre-survey to students in private universities in Guangdong Province. 513 questionnaires were collected, of which 501 were valid, and the sample characteristics are shown in Table 1.

Table 1: Characteristics of school students in the survey on satisfaction with brand image building of private

| | Age | | Grade | | | | Major | | | Education Level | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Male | Female | First-Year | Second-Year | Third-Year | Fourth-Year | science | Liberal Arts | Arts | Bachelor | Adult Bachelor | Diploma |
| N | 269 | 232 | 153 | 127 | 193 | 28 | 256 | 189 | 56 | 427 | 34 | 40 |
| % | 53.7 | 463 | 30.5 | 25.3 | 38.5 | 5.6 | 51.1 | 37.7 | 11.2 | 85.2 | 6.8 | 8.0 |

## 3.2. Reliability and validity tests

The KMO test and Bartlett's spherical test were used, and the KMO value was 0.855, so the data set was suitable for principal component factor analysis. The results of the statistical analysis using SPSS 25 for the Cronbach's coefficient showed that the coefficient for each variable was 0.944, with the good internal consistency of the scale and high reliability; the KMO test and Bartlett's spherical test were used, and the KMO value was 0.855.

## 3.3. Principal component factor analysis

The maximum variance approach was used to spin the questionnaire items through factor analysis in order to identify the elements impacting school pupils' satisfaction with the brand image of private universities. The factor analysis yielded 6 components, with a cumulative variance contribution rate of 76.656 percent. Table 2 displays the rotated component matrix.

Table 2: Component matrix

| Factors | latent root | Variance contribution | Cumulative variance contribution |
|---|---|---|---|
| Identifying the concept of private universities | 3.886 | 14.393 | 14.393 |
| Behavioural recognition of private universities | 3.750 | 13.890 | 28.284 |
| Visual identity of private universities | 3.661 | 13.560 | 41.845 |
| Facility identification for private universities | 3.168 | 11.735 | 53.581 |
| Quality of teaching in private universities | 3.133 | 11.605 | 65.186 |
| Overall satisfaction | 3.096 | 11.469 | 76.656 |

After referring to Young's research [20], Six factors were identified as the influencing factors of school students' satisfaction with the brand image construction of private universities by factor analysis. According to the actual contents of the factors, five influencing factors were identified as identifying the concept of private universities, Behavioural Recognition of Private Universities, Visual Identity of Private Universities, Facility Identification for Private Universities and Quality of teaching in private universities.

## 3.4. Analysis of the current situation

Table 3 displays the results of descriptive statistics on the six categories that were used to examine

the current situation, where "1 is highly unsatisfied" and "5 is very satisfied." The overall evaluation of students' satisfaction with the brand image construction of private universities is average, as evidenced by the mean value of the overall satisfaction dimension in this study, which is 3.54. However, students' satisfaction with brand image construction of universities has not yet reached the desired level of satisfaction.

Table 3: Analysis of the Satisfaction Description Statistics

| Factors | N | Min-Value | Max-Value | Average-Value | Standard-Deviation |
|---|---|---|---|---|---|
| Identifying the concept of private universities | 501 | 1.00 | 5.00 | 3.65 | 1.00 |
| Behavioural recognition of private universities | 501 | 1.00 | 5.00 | 3.62 | 1.02 |
| Visual identity of private universities | 501 | 1.00 | 5.00 | 3.61 | 1.00 |
| Facility identification for private universities | 501 | 1.00 | 5.00 | 3.60 | 1.01 |
| Quality of teaching in private universities | 501 | 1.00 | 5.00 | 3.57 | 1.03 |
| Overall satisfaction | 501 | 1.00 | 5.00 | 3.54 | 1.04 |

## 3.5. Correlation analysis between dimensions

Correlations between the five influencing factors and overall satisfaction were analysed using Pearson correlation analysis and are detailed in Table 4.

Table 4: Correlation analysis by dimension

| | Identifying the concept of private universities | Behavioural Recognition of Private Universities | Visual Identity of Private Universities | Facility Identification for Private Universities | Quality of teaching in private universities | Overall satisfaction |
|---|---|---|---|---|---|---|
| Identifying the concept of private universities | 1 | | | | | |
| Behavioural Recognition of Private Universities | .327** | 1 | | | | |
| Visual Identity of Private Universities | .361** | .409** | 1 | | | |
| Facility Identification for Private Universities | .406** | .432** | .427** | 1 | | |
| Quality of teaching in private universities | .431** | .429** | .421** | .445** | 1 | |
| Overall satisfaction | .449** | .506** | .485** | .540** | .524** | 1 |

** Correlation is significant at the 0.01 level (two-tailed)

The results were significant positive correlations among the five influencing factors, with average correlation coefficients between 0.3 and 0.4 and strong relationships between 0.4 and 0.6.

## 3.6. Analysis of factors influencing students' satisfaction with the brand image construction of private universities

Five influencing factors were chosen as independent variables, and overall satisfaction was chosen as the dependent variable for regression analysis. The results of the collated analysis were Table 5, which summarizes the findings and shows the influence size of each influencing factor on the satisfaction of brand image construction of private universities.

Table 5: Linear regression analysis

| Model | Unstandardized | | Standardized coefficient Beta | t | Significance | VIF |
|---|---|---|---|---|---|---|
| | B | Standard error | | | | |
| Constant | .039 | .170 | | .231 | .817 | |
| Identifying the concept of private universities | .146 | .039 | 0.140 | 3.709 | .000 | 1.360 |
| Behavioural Recognition of Private Universities | .208 | .039 | .205 | 5.303 | .000 | 1.414 |
| Visual Identity of Private Universities | .172 | .040 | .166 | 4.297 | .000 | 1.418 |
| Facility Identification for Private Universities | .241 | .041 | .233 | 5.874 | .000 | 1.501 |
| Quality of teaching in private universities | .204 | .040 | .202 | 5.059 | .000 | 1.521 |
| | R² | | | | 0.479 | |
| | F | | | | 91.064 | |
| | P | | | | 0.001 | |

The outcomes of this operation can provide accurate and trustworthy feedback on how the five elements affect overall satisfaction, according to the fit of this linear regression model, R2=0.479. F=91.064, p0.01 indicates that the regression equation is significant. The VIF is less than 5, there is no multicollinearity among the five components, and private universities' teaching quality identification can considerably and favorably affect overall satisfaction (=0.204, P0.01).

## 4. Strategies to improve school students' satisfaction with the brand image construction of private universities

### 4.1. Simplifying the philosophy and orientation of private universities

By integrating their individual benefits and traits, private universities need to define their own positioning and develop a very identifiable educational philosophy. The application-oriented focus of regional undergraduate private universities relies on the theoretical knowledge and practical skills of pertinent majors and is based on the actual need for talents from the outside environment and social activities. The words "practical" and "innovation" should be highlighted in practical teaching activities for students. By "practical," we mean that the curriculum should be designed to be more closely aligned with real-world work requirements. Instead of sticking to formal innovation, "innovation" should concentrate on developing students' critical thinking skills.

### 4.2. Achieving balance between student management and classroom management

Private institutions struggle to strike a balance between managing and educating their students. There are distinctions between student management and teaching management in actual work as a result of the two areas of attention being different. While classroom management focuses more on "things," student management needs to pay more attention to "people." Great viewpoints, difficulties in promoting them, implementation difficulties, a lot of impact, and negative influence are frequently characteristics of student management. Private universities should control the tensions between instruction and student management, innovate the system for collecting feedback on student management data, ensure smooth feedback channels, and use surveys, interviews, and announcements to improve the relationship between organizational structures.

## 4.3. Expand on the idea of talent-boosting education

The essential requirement and key to enhancing the brand image construction of private universities is the development of abilities. In terms of teaching, the faculty creates a well-structured talent echelon with the aim of first-class disciplines, enhances the induction process for new teachers, clarifies individual training plans from the start, increases teachers' sense of accomplishment, acquisition, and belonging, and uses corresponding financial incentives as a guarantee to allow young teachers to concentrate on teaching and scientific research. In order to effectively manage teaching, administrative staff must create a friendly internal workforce circulation, minimize the detrimental effects of job solidification, and aggressively modify both horizontally and vertically as well as put employees in flexible ways. To allay the concerns of managers, roles must be actively adjusted horizontally and vertically, placed with flexibility, and evaluated for rewards and merits, promotion, and advancement using a single index.

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