

## CHAPTER 4

### DATA ANALYSIS

This chapter presents the analysis of the primary data collected for the current research study. To meet the research objectives and test the specified hypotheses, a range of statistical methods has been employed, including frequency distribution, mean, standard deviation, factor analysis, correlation, regression, and analysis of variance (ANOVA). Additionally, the chapter offers a comprehensive examination of these statistical techniques. The primary data was analyzed using IBM SPSS Statistics 21 software.

#### 4.1 DEMOGRAPHIC PROFILE OF RESPONDENTS:

*Table 4.1 (a): Respondents' Demographic Profile (Part a)*

Demographic variables	Particulars	No. of Respondents	Percentage (%)
Universities Selected for the Study	The Maharaja Sayajirao University of Baroda, Vadodara	450	32.60
	The Sardar Patel University, Anand	480	34.78
	The Veer Narmad South Gujarat University, Surat	200	14.49
	The Saurashtra University, Rajkot	250	18.11
Gender	Male	640	46.37
	Female	760	55.07
Age Group	17-20 years	856	62.02
	21-23 years	505	36.59
	Above 23 years	39	2.8
Pursuing	Graduation	923	66.88
	Post Graduation	440	31.88
	Doctoral	37	2.6
Living On/Off Campus	On Campus	459	32.78
	Off Campus	941	67.21
Residential Location	Rural	338	24.14
	Urban	1062	75.85

The study surveyed respondents from four universities: The Maharaja Sayajirao University of Baroda, Sardar Patel University Anand, Veer Narmad South Gujarat University, Surat, and Saurashtra University, Rajkot. Participation across these institutions was relatively balanced, with Sardar Patel University contributing the highest percentage of respondents at 34.78%, followed by The Maharaja Sayajirao University with 32.60%. Veer Narmad South Gujarat

University and Saurashtra University had smaller representations, with 14.49% and 18.11% of respondents, respectively.

In terms of gender distribution among the respondents, females slightly outnumbered males, comprising 55.07% of the total sample, while males represented 46.37%. The majority of respondents were in the 17-20 age group, accounting for 62.02% of the sample, followed by the 21-23 age group at 36.59%. A small proportion of respondents (2.8%) were over 23 years old.

Most respondents were enrolled in undergraduate degrees, comprising 66.88% of the sample, while 31.88% were enrolled in postgraduate programs, and a small number of students (2.6%) were pursuing their doctorate degree. Regarding the resident of students, the majority (67.21%) lived off-campus, with 32.78% were residing on campus.

The respondents were mainly from urban areas, with 75.85% reporting urban residency, while 24.14% came from rural backgrounds. This profile offers a detailed overview of the demographic and academic characteristics of the respondents, revealing a diverse yet somewhat skewed distribution across different categories.

**Table 4.1 (b): Respondents' Demographic Profile (Part b)**

<b>Demographic variables</b>	<b>Particulars</b>	<b>No. of Respondents</b>	<b>Percentage (%)</b>
Marks Secured in HSC	Less than 50%	25	1.78
	51 to 75%	675	48.21
	76 to 100%	679	48.5
Employed	Yes	130	9.28
	No	1270	90.71
Fathers Education	SSC or below	447	31.92
	Studied High School or HSC	311	22.21
	Graduation	435	31.14
	Post Graduation	207	14.78
Mothers Education	SSC or below	586	41.85
	Studied High School or HSC	279	19.92
	Graduation	351	25.07
	Post Graduation	184	13.14

The analysis of the respondents' academic performance, employment status, and parental education provides a detailed view of their backgrounds. A significant majority of respondents demonstrated strong academic achievement in their Higher Secondary Certificate (HSC) exams, with 48.5% securing between 76% and 100%, and 48.21% scoring between 51% and 75%. Only a small minority (1.78%) scored less than 50%.

When it comes to employment, a large number of respondents (90.71%) were not employed, while 9.28% reported being employed, suggesting that the majority were likely to focus on their studies rather than working.

Regarding the educational background of the respondents' parents, the data shows a diverse range of educational attainment. Among fathers, 31.92% had completed SSC or below, 22.21% had studied up to High School or HSC, 31.14% had graduated, and 14.78% had pursued postgraduate studies. Similarly, among mothers, 41.85% had completed SSC or below, 19.92% had studied up to High School or HSC, 25.07% had graduated, and 13.14% had attained a postgraduate degree.

**Table 4.1 (c): Respondents' Demographic Profile (Part c)**

Demographic variables	Particulars	No. of Respondents	Percentage (%)
Respondents Annual Income	Less than Rs 150000	1262	90.1
	150000 to 300000	45	3.21
	300001 to 450000	50	3.57
	More than Rs 450001	43	3.07
Parents Annual Income	Less than Rs 150000	675	48.21
	150000 to 300000	290	20.71
	300001 to 450000	223	15.92
	More than Rs 450001	212	15.14
Are you the First High Schooler in your family	Yes	445	31.78
	No	955	68.21
Are you the First Graduate in your family	Yes	381	27.21
	No	1019	72.78
Are you the First Postgraduate in your family	Yes	503	35.92
	No	897	64.07

The analysis of respondents' income, their parents' income, and family education levels shows some clear patterns. Most respondents (90.1%) have an annual income of less than Rs 150,000, indicating that most come from low-income backgrounds. Only a small percentage fall into higher income brackets, with 3.21% earning between Rs 150,000 and Rs 300,000, 3.57% earning between Rs 300,001 and Rs 450,000, and 3.07% earning more than Rs 450,001 annually.

When looking at their parents' income, the distribution is a bit more even but still tends toward lower levels. Nearly half (48.21%) of the respondents' parents earn less than Rs 150,000 a year. About 20.71% earn between Rs 150,000 and Rs 300,000, 15.92% earn between Rs 300,001 and Rs 450,000, and 15.14% have an annual income above Rs 450,001.

In terms of education, many respondents are the first in their families to achieve certain milestones. Around 31.78% are the first to finish high school, while 68.21% have family individuals who had completed high school before them. Additionally, 27.21% are the first graduates in their families, and 35.92% are the first to earn postgraduate degrees. This indicates that a significant number of respondents are paving the way for higher education in their families.

## 4.2 RELIABILITY AND VALIDITY OF THE RESEARCH INSTRUMENT:

### 4.2.1: Reliability Check of the Questionnaire

The reliability test is performed to determine whether the scale used for the survey offers consistent and reliable results. The reliability test determines the level of variance in each scale and reports the results derived by putting one variable against another. "Cronbach's alpha assesses internal consistency, which indicates the degree to which a set of items is closely related as a group." It is a measure of scale reliability. Cronbach's alpha is a way of assessing reliability by comparing the amount of shared variance, or covariance, among the items making up an instrument to the amount of overall variance. The concept is that if the instrument is reliable, there should be a great deal of covariance among the items relative to the variance. Cronbach alpha values range from 0 to 1. The closer the Cronbach alpha is to one, the higher is the reliability. The higher the value, the greater the covariance and correlation between the examined variables.

*Table 4.2: Reliability Check of the Questionnaire*

Sr. No	Construct / Subconstruct	No. of Items	Cronbach's Alpha
	<b>1. Factors Influencing Choice of University</b>	21	.951
	<b>2. Brand Awareness</b>		
	2.1 Overall Brand Awareness	8	.875
	2.2 Promotional Activities	13	.916
	2.3 Word of Mouth	4	.847
	<b>3. Brand Image</b>		
	<b>3.1 Service Attributes</b>		
	3.1.1. Perceived Price	4	.812

	<b>3.1.2. Perceived Quality of Service</b>		
	<b>3.1.2. (a) Administrative Quality</b>		
	Attitude and Behaviour	5	.912
	Administrative Process	4	.805
	<b>3.1.2. (b) Physical Environment Quality</b>		
	Support Infrastructure	5	.832
	Learning Setting	6	.895
	General Infrastructure	3	.772
	<b>3.1.2. (c) Core Educational Quality</b>		
	Attitude and Behaviour	6	.910
	Curriculum	5	.729
	Pedagogy	4	.861
	Competence	4	.901
	<b>3.1.2 (d) Support Facilities Quality</b>		
	Core Cells and Committees	5	.890
	Other facilities	5	.840
	<b>3.1.2 (e) Transformative Quality</b>	8	.933
	<b>3.1.3 Service Benefits</b>		
	3.1.3 (a) Employability	6	.900
	3.1.3 (b) Personal Development	9	.948
	3.1.3 (c) Pursue my Passion	4	.903
	3.1.3 (d) Sociability and Networking	6	.917
	<b>3.1.4 After sales service</b>	8	.951
<b>3.2</b>	<b>Provider Attributes</b>		
	3.2.1 Location	3	.864
	3.2.2 Size	6	.911
	3.2.3 University Reputation	8	.936
<b>3.3</b>	<b>Symbolic Attributes</b>		
	3.3.1 Perceived Social Image	9	.937
	3.3.2 Perceived Brand Positioning	8	.919
	3.3.3 Perceived Brand Personality	6	.917
	<b>4. Brand Heritage</b>		

	4.1 Track Record	5	.909
	4.2 Longevity	11	.951
	4.3 Core Values	10	.957
	4.4 Use of Symbols	5	.924
	4.5 History	7	.951
<b>5.0</b>	<b>Students Perceived Value Dimensions</b>		
	5.1 Affective Value	7	.935
	5.2 Economic Value	6	.901
	5.3 Functional Value	9	.944
	5.4 Social Value	5	.914

The Cronbach Alpha values for each construct and items within, was calculated and it was found that all values were above 0.72 which indicates strong reliability of the scale. Each item within the constructs demonstrates a high level of internal consistency.

#### **4.2.2: Content Validity Check of the Research Instrument - Questionnaire**

Content validity is crucial for ensuring that an instrument accurately measures the variables it is intended to assess. It is also referred to by several other names, including content-related validity, intrinsic validity, relevance validity, representative validity, and logical or sampling validity. This type of validity focuses on the adequacy of the content domain covered by an instrument, ensuring that the items in a questionnaire are representative and comprehensive. Evaluating instruments for content validity was defined by Lawshe (1975) as “the extent to which communality or overlap exists between (a) performance on the test under investigation and (b) ability to function in the defined job performance domain” (p. 566). To Put simply, content validity assesses the extent to which instruments measure the vital aspects of the job. Instruments that can be tested with the Lawshe approach include “the items on a test, questions in an interview, or elements of a set of accreditation standards” (Wilson, Pan, & Schumsky, 2012, p. 197). To test content validity using the Lawshe approach, one selects an expert panel (Content Evaluation Panel) on the subject to review the instrument. The experts have advanced knowledge of the aspects of performing the job well.

Typically, a Content Evaluation Panel of 5-10 members is acceptable; although content validity can be calculated with up to 40 panel members, greater than 10 members is typically unnecessary (Lynn, 1986).

Content validity measures the consensus of the experts agreeing that items on the instrument are essential to measuring constructs. The Content Evaluation Panel members are provided a copy of the instrument in question and then rate each of the items on the instrument with a Lawshe rating scale. For each item, they mark one of three scale points, according to whether the item represents a knowledge or skill essential for the job function or cognitive task it is intended to measure. They may mark each item as Essential; Useful, but not Essential; or Not Necessary. If there is a consensus among experts that the item is essential for measuring what the item intends, the item is said to have some level of content validity. If they disagree, the content validity of the item would be in question. The more disagreement about the essentialness of an item, the less valid the item may be (Lawshe, 1975).

To check the content validity of each item on an instrument, a formula was proposed by Lawshe (1975) and confirmed by later researchers as a generally accurate method of calculating and interpreting content validity results (Ayre & Scally, 2014). The value is called the Content Validity Ratio (CVR), which is a direct linear transformation of the number of raters agreeing an item is Essential. The results of the CVR can assist in identifying which items should be revised or removed from the instrument. The formula is:

$$\text{Content Validity Ratio (CVR)} = (\text{ne} - \text{N}/2) / (\text{N}/2)$$

where:

- **ne** = number of experts/panelists indicating an item is essential
- **N** = total number of experts/panelists

This formula may be computed using a calculator, but for instruments with many items, and/or Content Evaluation Panels with a large number of members, it is a time-consuming process with opportunities for calculation errors. In examples provided by Lawshe (1975), there may be hundreds of items on a single observation instrument for job performance.

Another component of content validity in the Lawshe approach is Proportions Agreeing Essential (PAE). The PAE represents the proportion of the experts who rated an item as Essential compared to the total number who evaluated the item. Although it is not as strong an indicator of content validity as CVR, it may give some indication of the content validity of items. It is calculated using the formula (Lawshe, 1975):

**Proportions Agreeing Essential (PAE) =  $ne/N$**

- $ne$  = number of experts/panelists indicating an item is essential
- $N$  = total number of experts/panelists

A final statistic, and sometimes the only statistic, that is reported when using the Lawshe approach is the Critical Validity Index (CVI). The CVI is the estimated content validity of all combined items (i.e., the entire instrument). Lawshe (1975) operationally defined it as, “the average percentage of overlap between the test items and the job performance domain” (p. 569). To put it another way, it is the overlap between the tasks required to perform a job well and the tasks of the job as measured by the instrument. Lawshe and others (such as Gilbert & Prion, 2016) recommended calculating CVI using the mean CVR of all final items included on the instrument. The CVI of instruments can be calculated as:

**CVI =  $\bar{x}(ICVR)$**

This formula represents the mean ( $\bar{x}$ ) of all individual item CVRs (*ICVR*).

It is crucial to highlight that in the Lawshe approach, weighting of items may not be necessary. Each item is a discrete rating; whether a task on an instrument represents only a small portion of the total job, if it is still an essential task, the CVI is typically calculated without weighting (Lawshe, 1975). This formula, if computed by hand, is often an arduous task, due to inputting each item CVR in a calculator, which are in decimal form and typically rounded to the hundredths place.

There is no entirely objective method for determining the content validity of an instrument, nor is there a purely statistical approach (Polit, 1991; Dempsey, 1986). While content validity is crucial for identifying what a measure is intended to assess, by itself, it does not ensure that the instrument effectively measures

what it aims to. Findings related to content validity can, however, support the construct validity of an instrument.

### **Content Validity Check of the Questionnaire for the Current Study:**

For the current study, the researcher had decided to check the content validity through literature review and experts. The researcher addressed content validity with the beginning of the instrument development itself.

The first step of the instrument development was to identify ‘what domain of construct’ should be measured. The researcher has identified three major domains for the current study: Brand Awareness, Brand Image, Brand Heritage. An extensive literature review related to these three major domains of study was undertaken by the researcher. Scales proposed by known researchers in the past studies were identified and the relevance of these scales was established keeping in mind the objectives and scope of the research study. Required modifications in some of the items of the scales was done. Further, the research instrument i.e., the questionnaire was mailed to eight different experts, four belonging to academia and 4 belonging to the industry. Professors having an expertise in the domain of marketing of reputed higher education institutes and senior professionals holding the position of not less than a Vice-president (Marketing) of reputed corporates were consulted. The researcher mailed a copy of the questionnaire consisting of close ended questions and various constructs focusing on the three major domains of the research along with the focus on the purpose and objectives of the study to each of them individually. The questionnaire mailed was also supplemented with a copy of the research proposal.

For determining content validity of items, CVR values can be compared against established thresholds by generally accepted literature sources. Validity guidelines established by CAEP (Chepko, 2016) and Lawshe (1975) support the claim that any item with over 50% reviewer agreement of an *Essential* rating (or, PAE = .50) does maintain some level of content validity. Nonetheless, more advanced statistical analyses has concluded that the CVR value is a more accurate measurement of content validity.

The CVR values range from  $-1$ , which represents a perfect disagreement (or, no panel members mark an item as *Essential*) to  $+1$ , which is a perfect agreement (all panel members mark an item as *Essential*). Ayre and Scally (2014) constructed a

table of acceptable CVR values, similar to that originally proposed by Lawshe (1975), which may be used as a comparison for acceptable item CVR according to the number of experts on the Content Evaluation Panel (see their publications for the complete tables).

The number of Content Evaluation Panel members determines the level of acceptable CVR values. If using up to seven Content Evaluation Panel members, all members must agree that an item is essential for it to demonstrate acceptable content validity (PAE = 1, CVR = 1.00; Ayres & Scally, 2014). However, if using 20 panel members, only 15 must agree that an item is essential to meet the content validity criteria (PAE = .75, CVR = .500; Ayres & Scally, 2014). This is simply explained because it is far more difficult to get larger groups of experts to agree on a single concept than it is a smaller group.

After calculating the item CVRs, any items that do not meet the threshold should be revised and retested or removed from the final instrument. Once items that have not demonstrated CVR are deleted, the mean of individual item CVRs is then calculated to determine the CVI. Some recommend that an acceptable CVI for an instrument is .70 or greater (Tilden, Nelson, & May, 1990). Some scholars, such as Polit, Beck, and Owen (2007) recommend that any CVI value of .78 demonstrates instrument validity, or more stringent thresholds estimate an acceptable CVI as .80 (Davis, 1992). Obviously, a greater CVI is preferred, although if using a small panel of seven or fewer members, the CVI must theoretically be close to 1.00 to be considered valid (since any individual item with a CVI less than that should have been deleted), while a panel with 20 members would demonstrate a lower CVI, but still be considered valid, due to the lower CVR threshold requirement with larger panels.

*(P.T.O)*

To compute the content validity, refer to the following table for the purpose of providing an example of the formula calculations using the Excel formulas.

*Content Validity - Item ratings for an Individual Construct (Example)*

	For The Same Programme, Tuition Fees Charged by My University Are Affordable as Compared to the Fees Charged by Other Universities			Tuition Fees Charged Are Fair in Accordance with The Programme Offered			Overall, Fees Charged Match with The Quality of The Programmes Offered			Am Willing to Pay a Premium Price for Reputed/Flagship Programmes of This University			"The university's fees include access to exclusive extracurricular activities."		
Rater	ER1	UR1	NR1	ER2	UR2	NR2	ER3	UR3	NR3	ER4	UR4	NR4	ER5	UR5	NR5
Rater 1	1			1					1	1			1		
Rater 2	1			1			1			1				1	
Rater 3	1			1			1			1			1		
Rater 4	1					1	1			1			1		
Rater 5	1			1			1			1			1		
Rater 6	1			1			1			1			1		
Rater 7	1			1			1					1	1		
Rater 8	1			1			1				1		1		
<b>TOTAL</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>0</b>

The “Rater” heading consists of item-level data of each rater.

ER stands for Essential Rating; UR stands for Useful, but not Essential Rating, and NR stands for Not Essential Rating.

Likewise, other sets are also created (ER2, UR2, NR2), which represent the second item. We have taken five items in this construct as an example.

Hence the last three columns of the data set are (ER5, UR5, NR5)

**Content Validity – CVR & PAE of values an Individual Construct (Example)**

<b>CONSTRUCT – Perceived Price</b>					
<b>Description of Item</b>	<b>Essential</b>	<b>Useful but Not Essential</b>	<b>Not Essential</b>	<b>CVR</b>	<b>PAE</b>
For The Same Programme, Tuition Fees Charged by My University Are Affordable as Compared to the Fees Charged by Other Universities	8	0	0	1	1
Tuition Fees Charged Are Fair in Accordance with The Programme Offered	7	0	1	0.75	0.875
Overall, Fees Charged Match with The Quality of The Programmes Offered	7	0	1	0.75	0.875
Am Willing to Pay a Premium Price for Reputed/Flagship Programmes of This University	7	1	0	0.75	0.875
"The university's fees include access to exclusive extracurricular activities."	6	1	1	0.5	0.75
<b>TOTAL</b>	<b>35</b>	<b>2</b>	<b>3</b>	<b>CVI = 0.75</b>	<b>PAE = 0.875</b>

<b>CONSTRUCT – Perceived Price</b>						
<b>Items Within the Construct Retained / Discarded</b>						
Item	Ne	Nu	Nn	CVR	PAE	Ayre and Scally
For The Same Programme, Tuition Fees Charged by My University Are Affordable as Compared to the Fees Charged by Other Universities	8	-	-	1	1	Met & Retained
Tuition Fees Charged Are Fair in Accordance with The Programme Offered	7	-	1	0.75	0.875	Met & Retained
Overall, Fees Charged Match with The Quality of The Programmes Offered	7	-	1	0.75	0.875	Met & Retained
Am Willing to Pay a Premium Price for Reputed/Flagship Programmes of This University	7	1	-	0.75	0.875	Met & Retained
"The university's fees include access to exclusive extracurricular activities."	6	1	1	0.5	0.75	Not Met & Discarded

The researcher analyzed the results of the content validity of the scale. The Content Validity Ratio (CVR) for each item of every construct in the questionnaire was calculated.

Further, Content Validity Index (CVI) was computed for each construct by taking the average of CVR scores of all items within a given construct. Thus, CVI was calculated for all constructs of the questionnaire. The CVI score of each construct was compared with the critical value of 8 experts (0.75). The items of constructs having a CVI score more than 0.75 were retained and the rest were discarded. Further, the retained items were modified according to the experts' opinion.

On similar line, content validity check was conducted for all items of all constructs of preliminary questionnaire and items of constructs having CVI more than 0.75 were retained for the final questionnaire. Due to space limitation (in context of large number of items viz., around 13 items in the construct of Marketing activities (Promotional Activities), the same could not be shown in the thesis.

#### 4.3 FREQUENCY DISTRIBUTION & DESCRIPTIVE STATISTICS:

*Table 4.3: Factors affecting Choice of University*

Factors affecting Choice of University									
Sr. No	Factors	Level of Importance (1 – Least Important, 2- Somewhat Important, 3- Important, 4 – Very Important, 5 – Extremely Important)					Mean	S. D	
		Frequency Count							
		1	2	3	4	5			
COU1	Geographic Location from Home	174	261	493	251	200	3.03	1.20	
COU2	Programmes On Offer	78	193	322	423	363	3.58	1.17	
COU3	Core Academic Quality	40	157	251	351	580	3.92	1.14	
COU4	Brand Name of The University	61	115	166	397	640	4.04	1.14	
COU5	Location Of the University	67	180	402	374	356	3.56	1.14	
COU6	Administrative Quality	45	175	285	424	450	3.76	1.13	
COU7	Infrastructural Facilities	74	108	388	453	356	3.65	1.10	
COU8	Fees Of Programme and Overall Cost	99	123	274	394	489	3.76	1.22	
COU9	Campus Safety	72	84	200	290	733	4.10	1.17	
COU10	On-Campus Facilities and Amenities	81	196	232	437	433	3.68	1.21	
COU11	Hostel Accommodation & Other Facilities	176	179	311	315	398	3.42	1.35	
COU12	Accreditation By National Bodies (NAAC /NIRF/ SIRF) & International Bodies	97	206	295	337	444	3.59	1.26	
COU13	University Image	37	107	229	374	632	4.05	1.08	

COU14	University Heritage	82	167	313	353	464	3.68	1.21
COU15	University Culture	53	122	275	430	499	3.87	1.11
COU16	Campus Placements	48	126	180	257	768	4.13	1.16
COU17	Career/Employment Opportunities	35	116	138	263	827	4.25	1.09
COU18	Corporate Collaboration	52	202	236	446	443	3.74	1.16
COU19	Distinguished Alumni	94	307	372	354	252	3.26	1.18
COU20	Strategic Alliances with National and International Universities	83	200	321	368	407	3.59	1.21
COU21	Membership of professional bodies University	90	205	305	373	406	3.58	1.23

- **CONSTRUCTS OF BRAND AWARENESS**  
(Overall Brand awareness and Marketing activities)

*Table 4.4: Overall Brand Awareness*

Sr. No	OVERALL BRAND AWARENESS	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
BA1	The University Is Well-Known	89	17	91	385	797	4.29	1.09
BA2	The University Is Among the First to Come to Mind When One Thinks of All Universities in Gujarat	63	37	168	542	569	4.12	1.05
BA3	The University's Logo Is Instantly Recognizable	65	39	247	484	544	4.01	1.05
BA4	The University's Song Is Instantly Recognizable	92	147	452	397	291	3.47	1.13
BA5	The University Is Known to Offer Specialized and Unique Programs and Courses	66	49	191	429	644	4.11	1.07
BA6	The University's Degree and Post-Graduate Degree Programs Are Well-Known	66	39	162	471	641	4.14	1.05
BA7	I Can Recognize This University from Amongst Other Competing Universities in Gujarat	57	50	232	392	648	4.10	1.07
BA8	I Know All the Services Provided by This University	61	116	400	444	358	3.66	1.08

**Table 4.5: Marketing Activities (Promotional activities & Word-of-Mouth)**

Sr. No	MARKETING ACTIVITIES	Level of Frequency 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Always					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>Marketing Activities (Promotional Activities)</b>								
PA1	Effective University Website	86	129	463	222	479	3.63	1.21
PA2	Advertising Through Different Media (Like: Television, Radio, Newspaper, Magazine)	222	258	338	193	368	3.16	1.41
PA3	Campaign Activities in social media Like Facebook, Twitter, You Tube, Instagram Etc.	112	160	393	275	439	3.55	1.26
PA4	Sponsorship Of Various Events, Competitions, Educational Fairs, Shows, etc.	111	168	415	285	400	3.50	1.24
PA5	Hosting Various Events, Competitions, Educational Fairs, Shows, etc.	65	114	370	276	554	3.82	1.18
PA6	University Actively Promote Their Institution by Visiting Schools	288	232	448	202	209	2.86	1.31
PA7	Outdoor Hoardings, Billboards Etc.	271	229	430	239	210	2.91	1.31
PA8	Public Relations	108	165	403	231	472	3.57	1.28
PA9	Mails From the University to Students and Parents	177	146	351	274	431	3.46	1.36
PA10	Special Articles About the University Rankings in Various Media	117	143	355	280	484	3.63	1.28
PA11	University Booklet, Posters, Flyers Etc.	158	179	462	268	312	3.28	1.26
PA12	Published Blog Articles	150	172	491	258	308	3.29	1.24
<b>Marketing Activities (Word-of -Mouth)</b>								
WM1	My Family’s Recommendation	75	41	216	420	627	4.07	1.10
WM2	My Friends’ Recommendation	92	126	304	450	407	3.69	1.17
WM3	My Relatives’ Recommendation	119	144	344	354	418	3.58	1.25
WM4	An Alumnus Recommendation of This University	159	85	479	317	339	3.42	1.24

- **CONSTRUCTS OF BRAND IMAGE**  
(Service attributes, Provider attributes, and Symbolic attributes)

*Table 4.6: Service Attributes*

Sr. No	PERCEIVED PRICE	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
PP1	For The Same Programme, Tuition Fees Charged by My University Are Affordable as Compared to the Fees Charged by Other Universities	53	93	328	413	492	3.86	1.09
PP2	Tuition Fees Charged Are Fair in Accordance with The Programme Offered	36	130	362	469	382	3.74	1.04
PP3	Overall, Fees Charged Match with The Quality of The Programmes Offered	64	120	389	450	356	3.66	1.09
PP4	Am Willing to Pay a Premium Price for Reputed/Flagship Programmes of This University	66	177	569	331	236	3.35	1.05

Sr. No	PERCEIVED QUALITY OF SERVICE	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>ADMINISTRATIVE QUALITY</b>								
<b>(Attitude and Behavior)</b>								
AB1	Administrative Staff Members Are Always Willing to Help Students	80	98	332	525	344	3.69	1.09
AB2	Administrative Staff Members Have the Ability to Solve Students' Problems	69	85	287	620	318	3.74	1.03
AB3	Administrative Staffs Are Polite and Empathetic	77	81	415	513	293	3.62	1.05
AB4	Behavior Of Administrative Staff Members Impart Confidence in Students	68	107	332	486	386	3.73	1.09
AB5	Administrative Staff Offers	77	94	373	520	315	3.65	1.07

	Reliable Services							
<b>(Administrative Process)</b>								
AP1	My University Has Well-Standardized Administrative Processes	82	77	403	553	264	3.60	1.04
AP2	My University Has Low Level of Bureaucracy	107	164	674	317	117	3.12	0.99
AP3	Administrative Procedures in My University Are Clear and Well Structured So That Service Delivery Times Are Minimum	85	120	515	419	240	3.44	1.06
AP4	My University Follows Transparency of Official Procedures and Regulations	57	71	521	441	289	3.60	1.00
<b>PHYSICAL ENVIRONMENT QUALITY</b>								
<b>(Support Infrastructure)</b>								
SI1	Adequate Availability of Hostel Accommodations and Facilities	105	103	449	534	188	3.43	1.06
SI2	Adequate Availability of Library Infrastructure	39	101	335	504	400	3.81	1.02
SI3	Adequate Availability of Cafeteria Infrastructure	144	161	412	424	238	3.32	1.19
SI4	Adequate Availability of Recreational Infrastructure	70	89	507	461	252	3.53	1.02
SI5	Adequate Availability of Sports Infrastructure	55	73	335	482	434	3.84	1.05
<b>(Learning Setting)</b>								
LS1	Adequate And Well-equipped Lecture Rooms	93	114	373	508	291	3.57	1.11
LS2	Adequate And Well-equipped Computer Labs	127	246	421	376	209	3.21	1.17
LS3	Adequate And Well-equipped Research Labs / Practical Rooms	117	186	463	400	213	3.29	1.13
LS4	Adequate And Well-equipped Language Labs	101	190	500	359	229	3.30	1.12
LS5	Sufficient Quiet Study Areas on Campus	78	130	386	470	315	3.59	1.10
LS6	Adequate Teaching Tools and Equipment's (E.G. Projector, White Boards)	158	162	354	357	348	3.41	1.29
<b>(General Infrastructure)</b>								
GI1	Pleasant Environmental	54	109	497	479	240	3.53	0.99

	Conditions (Ventilation, Noise Levels, Odors, etc.) on Campus							
GI2	Adequate Safety Measures on Campus	21	45	268	610	435	4.01	0.88
GI3	Well-Maintained Buildings and Grounds	70	53	305	530	421	3.85	1.05
<b>CORE EDUCATIONAL QUALITY</b>								
<b>(Attitude and Behavior)</b>								
AB1	Teaching Faculties Understand Students' Needs	37	42	321	574	405	3.92	0.94
AB2	Teaching Faculties Give Individual Attention Given to Students	35	92	348	544	360	3.79	0.98
AB3	Teaching staff are consistently available to guide and advise students.	42	64	278	513	482	3.96	1.00
AB4	Presence of a Culture of Sharing and Collaboration Among Lecturers	19	47	364	589	360	3.88	0.87
AB5	Behavior Of Teaching Faculties Instill Confidence in Students	52	55	312	532	428	3.89	1.01
AB6	Teaching Faculties Appear to Have Students' Best Interest at Heart	31	61	406	465	416	3.85	0.97
<b>(Curriculum)</b>								
CI1	Well-Defined Course Content and Objectives	69	58	369	586	297	3.71	1.01
CI2	Relevance of Module Content and Design in Addressing the Personal Needs of Students	46	102	396	526	309	3.68	1.00
CI3	Provision for Internship / Project Work in Selective Courses / Programmes	181	217	356	380	245	3.21	1.27
CI4	Rigorous Academic Standards in Programs to Promote Students' Overall Development	135	150	358	453	283	3.43	1.20
CI5	Applicability of Course Content to Students' Future or Current Jobs	63	48	373	609	286	3.73	0.97
<b>(Pedagogy)</b>								
P1	Incorporation of Multimedia in Teaching (e.g., Overhead Projectors, PowerPoint Presentations)	168	207	351	389	264	3.27	1.27
P2	Engagement of Students in	58	101	369	538	313	3.68	1.03

	Their Learning Process							
P3	Offering Regular Feedback to Students on Their Academic Performance	60	111	407	508	293	3.62	1.04
P4	Effectively Designed Examinations and Continuous Assignments to Enhance Knowledge and Skills	59	101	422	439	358	3.67	1.06
<b>(Competence)</b>								
C1	Theoretical Knowledge, Credentials, and Practical Experience of Teaching Faculty	47	64	315	605	348	3.82	0.97
C2	High Research Profile of Teaching Faculties	65	65	374	509	366	3.75	1.04
C3	Teaching Faculty's Communication Skills	47	61	272	547	452	3.94	1.00
C4	Teaching Faculties Are Up-To-Date in Their Area of Expertise	58	70	300	535	416	3.85	1.03
<b>SUPPORT FACILITIES QUALITY</b>								
<b>(Core Cells and Committees)</b>								
CCC1	Existence Of Active Internal Quality Assurance Cell	33	109	659	431	147	3.39	0.86
CCC2	Existence Of Active Career Counselling and Placement Cell	50	169	504	466	190	3.41	0.99
CCC3	Existence Of Active Alumni Cell	44	180	568	434	153	3.34	0.94
CCC4	Existence Of Active Research and Consultancy Cell	29	204	544	441	161	3.36	0.94
CCC5	Existence Of Various Statutory Students' Committees (Like Grievance Redressal, Anti-Ragging, etc.)	52	126	483	509	209	3.50	0.98
<b>(Other Facilities)</b>								
OF1	Fair Pricing and Quality of Food and Refreshments on Campus	107	193	439	466	174	3.29	1.09
OF2	Availability of Sufficient IT Facilities	86	214	549	377	153	3.21	1.03
OF3	Availability of Sufficient Photocopying and Printing Facilities	90	130	363	522	274	3.55	1.10
OF4	Availability Of Adequate Transport Facilities Provided by The University	202	304	431	284	158	2.92	1.21

OF5	Availability Of Adequate Extracurricular Activities Including Those Through Departmental, Faculty, and Union Students' Association	55	158	446	476	244	3.50	1.03
<b>TRANSFORMATIVE QUALITY</b>								
TQ1	Enabling Students to Be Emotionally Stable	85	105	578	428	183	3.37	1.01
TQ2	Increase In Self-Confidence of Students	32	107	366	586	288	3.71	0.95
TQ3	Development In Students' Critical Thinking	42	76	414	558	289	3.70	0.95
TQ4	Increase In Self-Awareness of Students	26	108	333	573	339	3.79	0.96
TQ5	Development Of Problem-Solving Skills with Respect to Their Field of Study	55	60	366	566	332	3.76	0.99
TQ6	Enabling Students to Transcend Their Prejudices	37	110	476	485	271	3.61	0.97
TQ7	Acquiring Adequate Knowledge and Skills to Perform Future Job	44	87	425	523	300	3.68	0.98
TQ8	Increase In Knowledge, Abilities and Skills of Students	26	79	381	516	377	3.82	0.95

Sr. No.	SERVICE BENEFITS	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>(Employability)</b>								
E1	Qualifications From This University Have High Recognition	47	31	339	600	362	3.86	0.94
E2	Employers Think Highly of Graduates / Post-Graduates from This University	32	47	465	471	364	3.78	0.95
E3	The Degree from This University Is Superior in The Labor Market	47	80	481	490	281	3.63	0.97
E4	Students Of This University Get Absorbed in Reputed / Known Organizations	17	72	496	438	356	3.75	0.93
E5	Students Of This University Get Good Jobs	24	76	436	483	360	3.78	0.95
E6	Students Of This University	34	95	525	393	332	3.64	0.99

	Are Offered Attractive Salary Packages							
<b>(Personal Development)</b>								
PD1	Have Acquired Job-Related Skills and Knowledge	37	94	462	494	292	3.66	0.97
PD2	Have Improved Upon My Job Performance	23	116	547	421	272	3.58	0.95
PD3	Able To Manage My Time Much Better	47	73	471	521	267	3.64	0.99
PD4	Able To Manage My Talent Much Better	39	76	430	504	330	3.73	0.97
PD5	Can Communicate More Effectively	24	55	418	529	353	3.82	0.95
PD6	Have Discovered / Identified New Skills in Self	33	62	426	532	326	3.76	0.96
PD7	Have Expanded Upon My Existing Skills	37	76	396	494	376	3.79	0.99
PD8	Have Developed / Improved Upon My Critical Thinking Skills	31	47	465	484	352	3.78	0.94
PD9	Have Developed a Greater Sense of Discipline	50	61	381	567	320	3.75	0.97
<b>(Pursue My Passion)</b>								
PP1	Helps Me Immerse Myself in The Areas of My Passion	35	90	474	521	259	3.63	0.94
PP2	Helps Me Explore New Passion / New Areas of Interest Within My Field of Study	24	96	432	544	283	3.70	0.92
PP3	Gives Me A Huge Sense of Accomplishment	38	85	490	501	265	3.63	0.95
PP4	Gives Me the Confidence Needed to Go Out into The World	40	72	425	536	306	3.72	0.96
<b>(Sociability and Networking)</b>								
SN1	Get Space and Opportunity to Meet Like-Minded People	44	63	441	579	252	3.67	0.93
SN2	Meet Leaders in Their Field Through Programmes Organized by The University	48	108	416	540	267	3.63	0.99
SN3	Meet Top Professionals in Their Field Through Programmes Organized by The University	37	104	501	463	274	3.60	0.97
SN4	Opportunity To Make Contacts	36	61	430	572	280	3.72	0.92

SN5	The faculty/staff-student interactions are warm	42	50	395	584	308	3.77	0.93
SN6	Student relationships are characterized as warm and friendly	7	54	429	557	332	3.83	0.85

Sr. No	AFTER SALES SERVICE	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
ASS1	My University Has an Active Alumni Association / Cell	58	77	598	397	249	3.50	0.98
ASS2	Maintains A Proper Database of Alumni Living Within and Outside the Country	28	73	576	483	219	3.57	0.88
ASS3	Regularly Updates the Database of Alumni	44	74	642	386	233	3.50	0.94
ASS4	Shares Information with The Alumni Regarding the Latest Initiatives of The Institution	33	93	597	446	210	3.51	0.91
ASS5	Invite Alumni for The Participation in Various Academic & Non-Academic Programmes	52	89	527	498	213	3.53	0.95
ASS6	Regularly Organizes Networking Get-Togethers	48	126	569	418	218	3.45	0.97
ASS7	Honor Distinguished Alumni for Their Contribution to The College / University	42	94	569	446	228	3.52	0.94
ASS8	Conducts Research Regarding the Impact of Alumni on The College / University	40	100	564	486	189	3.49	0.91

**Table 4.7: Provider Attributes**

Sr. No	PROVIDER ATTRIBUTES	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>(Location)</b>								
L1	My College/University location is convenient	50	55	230	590	454	3.97	0.99
L2	My College/University Is Located in An Area That Is Physically Safe	30	50	239	548	512	4.06	0.93
L3	My College/University Is Located in A Geographical Area That Has a Cosmopolitan Culture	32	34	297	577	439	3.98	0.91
<b>(Size)</b>								
S1	I Get a Feel of Strong Sense of Community	31	46	405	621	276	3.77	0.88
S2	I Get Many Social Opportunities	16	91	395	598	279	3.74	0.89
S3	I Could Easily Involve Myself in On-Campus Activities	37	55	383	568	336	3.80	0.94
S4	I Could Build Close Relationships in The Classroom	30	48	400	577	324	3.81	0.90
S5	I Could Build Strong Relationships with My Professors	27	77	379	558	338	3.80	0.93
S6	Overall, My Classroom Experience Is Enriching	26	68	377	542	366	3.83	0.93
<b>(University Reputation)</b>								
UR1	High Academic Standards	28	37	334	602	378	3.91	0.89
UR2	High Academic Competitiveness	26	37	289	631	396	3.96	0.87
UR3	Variety Of Programmes and Courses Offered	15	30	271	594	469	4.06	0.84
UR4	Uniqueness Of Programmes and Courses Offered	48	35	342	513	441	3.91	0.98
UR5	Has Distinguished and Successful Alumni	36	44	451	481	367	3.79	0.95
UR6	Known For Its Dynamic and Vibrant On-Campus Life	41	44	425	535	334	3.78	0.94
UR7	The Graduates of The	57	67	546	409	300	3.60	1.01

	University Earn Higher Incomes Than Industry Average							
UR8	Companies Prefer Recruiting the University's Graduates	48	64	442	491	334	3.72	0.99

*Table 4.8: Symbolic Attributes*

Sr. No	SYMBOLIC ATTRIBUTES	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>(Perceived Social Image)</b>								
SI1	Is A Credible and Reliable University	19	27	349	621	363	3.93	0.84
SI2	Has A Rich Legacy of Royal Family	22	76	412	526	343	3.79	0.93
SI3	Delivers High Quality Education	23	30	350	623	353	3.90	0.85
SI4	Provides Excellent Services to Students	30	40	460	524	325	3.77	0.91
SI5	Makes Lot of Contribution to The Society	16	49	464	547	303	3.77	0.86
SI6	Good Image in The Mind of Students	39	43	381	580	336	3.82	0.93
SI7	Good Image in The Mind of Corporates	14	51	390	560	364	3.87	0.87
SI8	Has A Better Image Than Other Competing Universities	41	47	346	582	363	3.85	0.94
SI9	Overall, My University Is Viewed Positively	17	36	280	593	453	4.03	0.86
<b>(Perceived Brand Positioning)</b>								
MP1	Internationalization	50	99	461	500	269	3.60	0.99
MP2	Academic achievements	25	70	323	620	341	3.85	0.90
MP3	Job opportunities	39	54	359	620	307	3.79	0.92
MP4	Scholarship and Hostel facilities	30	98	343	564	344	3.79	0.96
MP5	Training systems	45	86	449	540	259	3.64	0.92
MP6	Social and Sporting facilities	31	64	372	579	333	3.81	0.92
MP7	Physical facilities	41	94	419	510	315	3.69	0.99
MP8	Rooted history	13	104	391	496	375	3.80	0.95
<b>(Perceived Brand Personality)</b>								
BP1	Demonstrates highest academic sincerity	24	42	470	584	259	3.73	0.85

BP2	Demonstrates highest academic honesty	36	57	420	591	275	3.73	0.91
BP3	All stakeholders of the community take pride in my university's identity	27	60	441	530	321	3.76	0.92
BP4	Employs state-of-the-art technology in educating its students	52	62	514	507	244	3.60	0.95
BP5	Students have trust in the education they are receiving /received from the university	53	55	380	567	324	3.76	0.98
BP6	Faculty emphasize ethical values in their courses	48	56	403	542	330	3.76	0.97

- **CONSTRUCTS OF BRAND HERITAGE**  
(Track Record, Longevity, Core values, Use of Symbols, and History)

*Table 4.9: Brand Heritage*

Sr. No	Brand Heritage	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>(Track Record)</b>								
TR1	Continuously Synonymous with Quality Education	38	54	428	581	278	3.73	0.91
TR2	Always Lived Up to The Expectations of All Its Stakeholders	22	68	584	463	242	3.60	0.88
TR3	Consistently Delivered Student Satisfaction	44	56	438	537	304	3.72	0.95
TR4	Large Number and Strong Base of Distinguished Alumnus	34	48	502	472	323	3.72	0.94
TR5	Always Believed and Practiced Its Core Values	32	54	411	551	331	3.79	0.92
<b>(Longevity)</b>								
L1	Very Continuous	32	46	382	548	371	3.85	0.93
L2	Always Embraced Change	12	61	438	607	261	3.75	0.83
L3	Successfully Sustained Competition	29	50	386	544	370	3.85	0.92
L4	Consistent In Offering New Programmes and Courses	33	59	405	549	333	3.79	0.93
L5	Flexible Enough to Adopt New Systems and Processes	38	60	448	504	329	3.74	0.95
L6	Periodically Upgraded Its IT	52	90	470	524	319	3.65	1.01

	Infrastructure and Facilities							
L7	Developed Its Ability to Learn and Adopt	27	39	470	524	319	3.77	0.90
L8	Built A Community and A Persona for Itself	44	55	442	544	294	3.71	0.94
L9	Ability to Foster Positive Relationships with Other Entities Within	23	59	451	517	329	3.77	0.91
L10	Ability to Develop Positive Relationships with External Entities	27	53	448	518	333	3.78	0.92
L11	Developed The Ability to Govern Its Own Growth & Evolution Effectively	30	63	444	517	325	3.75	0.93
<b>(Core Values)</b>								
CV1	Academic Excellence and Success	44	68	388	559	320	3.75	0.96
CV2	Value And Outcome-Based Education	29	66	379	578	327	3.80	0.92
CV3	Transformational Learning and Holistic Development	47	81	391	547	313	3.72	0.98
CV4	Continuous Improvement	23	74	357	596	329	3.82	0.91
CV5	Environmental Sustainability	38	70	361	565	345	3.80	0.96
CV6	Academic Freedom of Its All Stakeholders	22	79	484	472	322	3.72	0.93
CV7	Institutional Autonomy (Degree of Self-Governance)	36	60	471	526	286	3.70	0.93
CV8	Accountability (To All Stakeholders and Society At Large)	26	73	497	516	267	3.67	0.90
CV9	Equitable Access of Education to All	30	79	365	571	334	3.79	0.94
CV10	Social Responsibility	35	74	357	574	339	3.80	0.95
<b>(Use of Symbols)</b>								
US1	My university makes appropriate use of words, images, symbols, logo, university song in all its communication, within and outside	58	27	324	553	417	3.90	0.99
US2	I believe that words, images, symbols, logo, and my university song instill pride	18	34	359	591	377	3.92	0.86
US3	I believe that words, images, symbols, logo, and my university song reflect campus culture	33	33	353	555	405	3.91	0.92
US4	I believe that words, images,	27	20	378	561	393	3.92	0.88

	symbols, logo, and my university expresses its core values							
US5	I believe that words, images, symbols, logo, and my university song helps building a credible marketing message	46	23	381	540	389	3.87	0.95
	<b>(History)</b>							
HIS1	This is one of the oldest universities in Gujarat	46	41	221	475	596	4.11	0.99
HIS2	My university reflects a unique identity	28	40	244	501	566	4.11	0.93
HIS3	My university's success story makes it the most preferred choice for higher education	23	40	285	505	526	4.06	0.92
HIS4	The history of my university represents a depth of experience	26	41	316	485	511	4.02	0.94
HIS5	The history of my university represents a sense of permanence	47	22	328	510	472	3.97	0.97
HIS6	The history of my university has been able to maintain brand loyalty over generations	40	42	298	487	512	4.00	0.98
HIS7	Over years, the success story of my university has allowed it to retain its attractiveness	23	35	292	511	518	4.06	0.91

- **CONSTRUCTS OF STUDENTS PERCEIVED VALUE DIMENSIONS**  
(Affective value, Economic value, Functional value, and Social value)

*Table 4.10: Students' Perceived Value Dimensions*

Sr. No	STUDENTS PERCEIVED VALUE DIMENSIONS	Level of Agreement (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)					Mean	S. D
		Frequency Count						
		1	2	3	4	5		
<b>(Affective Value)</b>								
AV1	This University Creates Positive Feelings	44	43	301	619	372	3.89	0.94
AV2	This University Evokes Positive Perceptions	15	57	308	681	318	3.89	0.84
AV3	I prefer this university over any other in Gujarat.	31	84	410	470	384	3.79	0.98
AV4	I Am Glad to Pursue My Higher Education from This University	31	52	337	545	414	3.91	0.94
AV5	I feel proud to be a student of this university	21	55	349	530	424	3.92	0.92

AV6	I feel a strong emotional connection to this university.	53	72	415	499	340	3.72	1.01
AV7	The Programme That I Am Pursuing from This University Is Very Interesting	12	85	350	527	405	3.89	0.92
<b>(Economic Value)</b>								
EV1	For The Programme That I Am Currently Pursuing, This University Offers a Lot for Its Fees	61	185	446	431	256	3.46	1.07
EV2	For The Programme That I Am Currently Pursuing, This University Is Worth Its Fees	22	108	426	536	287	3.69	0.93
EV3	For The Programme That I Am Currently Pursuing, Fees Charged by This University Are Affordable As Compared to The Fees Charged by Other Universities	29	71	385	530	364	3.81	0.95
EV4	Overall, Fees Charged Match with The Quality of The Programmes Offered	30	78	419	519	333	3.75	0.95
EV5	Acquiring A Degree from This University Demands Huge Efforts	47	47	483	500	302	3.69	0.96
EV6	I Don't Regret for Pursuing My Higher Education from This University	30	81	402	511	355	3.78	0.96
<b>(Functional Value)</b>								
FV1	This university represents high-quality education in terms of knowledge.	31	45	382	549	372	3.86	0.93
FV2	This University Offers Variety of Courses and Programmes	24	63	328	577	387	3.89	0.92
FV3	This University Offers Unique / Flagship Programmes	25	57	413	506	378	3.83	0.93
FV4	The Programmes Offered by This University Are Very Suitable	23	37	341	589	389	3.93	0.88
FV5	After Completing My Higher Education from This University, I Am Confident of Getting Self-Employed	22	43	474	479	361	3.80	0.91
FV6	After Completing My Higher Education from This University, I Am Confident of Getting Employed	25	59	399	549	347	3.82	0.91
FV7	After Completing My Higher Education from This University, I Am Confident of Getting a Job with Attractive Salary Package	42	49	480	470	338	3.73	0.96
FV8	After Completing My Higher Education from This University, I Am Confident of Enhanced Employment Opportunities	31	56	423	547	322	3.77	0.92
FV9	After Completing My Higher	23	75	425	497	359	3.79	0.94

	Education from This University, I Am Confident of Enhanced Career Advancement Opportunities							
<b>(Social Value)</b>								
SV1	Students Holding a Degree from This University Are Seen in A Positive Light	30	66	375	541	367	3.83	0.94
SV2	Students Holding a Degree from This University Are Positively Accepted by Others	12	78	394	549	346	3.82	0.90
SV3	Qualifications From This University Have National and International Reputation	32	73	419	459	396	3.80	0.98
SV4	Overall, This University Has a Good Reputation and Positive Social Image	21	63	362	532	401	3.89	0.92
SV5	Holding A Degree from This University Gives Me A Sense of Pride	39	74	357	510	399	3.83	0.99

#### 4.4 ANALYSIS OF OBJECTIVES OF THE STUDY

##### **STUDY 1: CONSUMER-BASED BRAND EQUITY DIMENSIONS IN HIGHER EDUCATION INSTITUTES**

###### ***Objective 1:***

***To identify various dimensions of Consumer-Based Brand Equity in Higher Education Institutes.***

The researcher conducted an extensive investigation of various academic sources relevant to the research topic. Around 158 research articles focusing on the major determinants of consumer-based brand equity of higher education institutes were reviewed. This comprehensive review included a wide range of published materials such as research papers and articles, scholarly publications, industry reports, state and national government survey reports, and conference proceedings. By critically analysing peer-reviewed journal articles and other authoritative publications, the researcher was able to draft a well-rounded literature review. Some excerpts from related major studies are presented below.

###### **Defining ‘Brand’ and ‘Brand Equity’**

Aaker (1991a) describes a brand as a logo, name or even a package that differentiates the products or services of different providers. However, Marconi (1993) stressed that the brand is not just a name because the name is created to identify the product whereas the brand is created to add value to the product and give it a personality.

Other researchers have provided similar definitions, emphasizing that buyers must perceive a brand as having a unique image and added value (De Chernatony, 1993b; De Chernatony & Riley, 1999; McWilliam & Dumas, 1997; Ambler & Styles, 1996). De Chernatony and McWilliam (1989) sought to conceptualize a brand through two dimensions: performance needs (functionality) and personal expression needs (representation). Later, De Chernatony (1993b) empirically tested this model in both product and service markets, showing that these two dimensions can effectively conceptualize a brand in both types of markets. According to Harris and De Chernatony (2001), branding literature has shifted from focusing on brand image—how consumers perceive brand differentiation—to brand identity, which emphasizes the brand's distinctiveness (Kapferer, 1997). Understanding the concept of a brand is crucial for grasping brand equity.

Aaker (1991a, p. 4) defines brand equity as "a set of assets such as name awareness, loyal customers, perceived quality, and associations linked to the brand that add value to the product or service." Conversely, Keller (1993) describes brand equity as the impact of the brand on consumer responses to marketing activities related to a specific product. These definitions illustrate that "brand equity is a multi-dimensional concept" (De Chernatony & McDonald, 1998, p. 396) and can be viewed from various perspectives, including financial markets, consumers, firms, employees, and communication channels (Kim et al., 2003; Va'zquez et al., 2002; Supornpraditchai et al., 2007).

### **Perspectives to the concept of 'Brand Equity'**

The financial perspective on brand equity highlights the brand as a valuable asset for an organization due to its potential to generate future earnings or cash flow (Shocker & Weitz, 1988; De Chernatony & McDonald, 1998; Kim et al., 2003).

From a consumer's perspective, brand equity encompasses attributes such as superior product performance, enhanced risk reduction, lower information costs, and a positive product image. It represents the added value a brand provides to consumers and can be defined as "the overall utility that consumers associate with the use and consumption of the brand, including both functional and symbolic benefits" (Va'zquez et al., 2002, p. 28) (Farquhar, 1989).

From a firm's viewpoint, brand equity includes attributes like reduced financial risk, increased cash flow, higher rental income, greater entry barriers, lower marketing and distribution costs for extensions, and protection against imitation through trade marking (De Mooij, 1993). It can

also lead to stronger customer loyalty, reduced price sensitivity, enhanced marketing effectiveness, opportunities for licensing and brand extensions, and a stronger competitive position (Keller, 2001).

Finally, employee-based brand equity (EBBE) focuses on how employees perceive the organization's brand. EBBE reflects aspects such as the uniqueness of brand associations, brand consistency, brand credibility, and brand clarity (Supornpraditchai et al., 2007, p. 1728).

### **Models of Brand Equity**

Brand equity has been conceptualized in various ways, but empirical studies in service contexts remain relatively scarce. Aaker (1991a) proposed the first comprehensive brand equity model, identifying five key dimensions: brand name awareness, brand associations, perceived quality, brand loyalty, and proprietary assets such as patents, channel relationships, and trademarks.

Keller (1993) developed a customer-based brand equity model that focuses on brand familiarity, awareness, and strong, unique brand associations. He argued that brand equity is primarily determined by brand knowledge, which encompasses awareness, attributes, benefits, images, thoughts, feelings, attitudes, and experiences.

These and other models have been tested in different contexts. Faircloth et al. (2001) explored the connections between brand image, brand attitude, and brand equity using Aaker's (1991a) and Keller's (1993) models. Their findings supported both models, showing that brand image and attitude contribute to brand equity, although the role of brand awareness was not specifically assessed.

Yoo and Donthu (2001) created a "multidimensional consumer-based brand equity scale (MBE)" based on Aaker's and Keller's frameworks, focusing on brand awareness, perceived quality, associations, and loyalty. Their study provided a generalized measure of brand equity and highlighted the differing impacts of various dimensions.

Cobb-Walgren et al. (1995) conducted a comparative study on how key consumer-based brand equity dimensions affect purchase intent, using Aaker's and Keller's models.

In the service industry, Muller (1998) identified product quality, service delivery, and symbolic image as primary determinants of brand equity in the restaurant sector. In the hotel industry, Prasad and Dev (2000) explored brand performance and awareness, developing a hotel brand

equity index. Mackay (2001) applied a "hierarchy of effects model" in financial services, focusing on market share as a brand equity indicator. Kim et al. (2003) used Aaker's model in the hotel industry, finding that brand loyalty, perceived quality, and image were more critical to brand equity than brand awareness.

In Higher Education (HE), brand image is crucial for reducing the perceived risk associated with the service, as quality is assessed only after consumption (Byron, 1995; Binsardi & Ekwulugo, 2003; Chen, 2008). A strong brand mitigates risk and simplifies decision-making for prospective students (Erdem & Swait, 1998; Chen, 2008). The brand serves as a differentiator that guides consumers during their decision-making process (Temple, 2006; Lockwood & Hadd, 2007; Chen, 2008).

Several factors influence the evaluation of educational quality and, consequently, the perception of a university's brand, including the quality of staff, location, size, history, and international agreements (Kurz et al., 2008; Mazzarol & Soutar, 2008; Binsardi & Ekwulugo, 2003; Chen, 2008; El Mahdy & Mourad, 2008; Mourad, 2010). Many universities use brand management strategies to improve their market ranking (Brunzel, 2007). Finally, the social image of an educational institution and its market position significantly affect the HE brand and influence the selection process (Paden & Stell, 2006).

Research on brand equity shows some commonalities in its drivers, but there are inconsistencies and overlaps regarding the relationships between key variables and the structuring of models, particularly in distinguishing between determinants and dimensions.

Through this review process, several key factors emerged as essential to understanding the consumer-based brand equity of higher education institutions. Among these, brand awareness—the extent to which a brand is recognized by potential students and stakeholders—was identified as a foundational element. Brand image, which encompasses the perceptions and associations the public holds about the institution, was also recognized as a significant factor.

Perceived quality, reflecting the public's assessment of the institution's offerings, was identified as another critical component of brand equity. This factor not only influences the institution's reputation but also its appeal to prospective students and collaborators. Brand heritage, which refers to the institution's history, traditions, and established reputation, was further acknowledged as a vital dimension that can enhance the perceived value of the brand.

These dimensions—brand awareness, brand image, perceived quality, and brand heritage—were identified through the literature review as central to consumer-based brand equity in the context of higher education institutions. The findings from the review included studies conducted at both; national and international levels, highlighting the importance of these factors in shaping the brand equity of educational institutions across different regions and contexts.

**Objective 2:**

***To test the proposed conceptual model of Consumer-Based Brand Equity in Higher Education Institutes.***

The conceptual model proposed for the current study was tested using multiple regression analysis for the whole sample, with constructs related to the major determinants of consumer-based brand equity and various sub-constructs within.

***Table 4.4.1: Model Summary of the Proposed Conceptual Model***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.968 <sup>a</sup>	.923	.923	.14592	.923	6817.756	3	1375	.000	1.832

The model summary reveals a highly significant estimated regression equation, with an R Square value of .923, demonstrating a strong correlation between the predictors—Brand Awareness, Brand Heritage, and Brand Image and the dependent variable - Measured Consumer-Based Brand Equity. The R Square value of .923 indicates that these predictors account for 92.3% of the variance in Consumer-Based Brand Equity. The Adjusted R Square, also .923, reinforces the model's reliability. A standard error of the estimate at .14592 suggests a low level of prediction error. The F Change statistic of 6817.756, along with a Sig. F Change of .000, underscores the model's statistical significance. Moreover, the Durbin-Watson value of 1.832 shows no significant autocorrelation in the residuals, confirming that the model's assumptions are sound.

***Table 4.4.2: ANOVA – Proposed Conceptual Model***

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	435.487	3	145.162	6817.756	.000 <sup>b</sup>
Residual	29.276	1375	.021		
Total	464.763	1378			

a. Dependent Variable: Measured Consumer Based Brand Equity

b. Predictors: (Constant), Brand Awareness, Brand Heritage, Brand Image

The ANOVA table shows that the regression model is highly significant in predicting Measured Consumer-Based Brand Equity. The model accounts for a substantial portion of the variance, with a Sum of Squares of 435.487 and a Mean Square of 145.162 over 3 degrees of freedom. The F statistic of 6817.756, along with a p-value of .000, underscores the model's significance, indicating that the predictors—Brand Awareness, Brand Heritage, and Brand Image—have a strong collective influence on Consumer-Based Brand Equity. The residual Sum of Squares, at 29.276 across 1375 degrees of freedom, further supports the model's effectiveness in explaining the variance in the dependent variable.

**Table 4.4.3: Coefficients – Proposed Conceptual Model**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.173	.026		6.603	.000		
1 Brand Heritage	.315	.012	.382	26.953	.000	.227	4.396
Brand Image	.463	.014	.499	34.104	.000	.214	4.681
Brand Awareness	.161	.005	.223	29.711	.000	.817	1.224

a. Dependent Variable: Measured Consumer Based Brand Equity

The coefficients analysis shows that all three predictors—Brand Heritage, Brand Image, and Brand Awareness—significantly contribute to Measured Consumer-Based Brand Equity, with p-values of .000. Brand Image has the strongest impact (Beta = .499), followed by Brand Heritage (Beta = .382) and Brand Awareness (Beta = .223). The Variance Inflation Factor (VIF) values indicate that multicollinearity is present but remains within acceptable limits, ensuring the reliability of the regression model.

**Objective 3:**

*To investigate inter-relationships/causal relationships among the Consumer-Based Brand Equity dimensions of the Higher Education Institutes.*

**Table 4.4.4: Correlation between Brand Awareness and Brand Image**

		Brand Awareness	Brand Image
Brand Awareness	Pearson Correlation	1	.0711**
	Sig. (2-tailed)		.000
	N	1380	1380
Brand Image	Pearson Correlation	.0711**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The statistical analysis of the relationship between Brand Awareness and Brand Image reveals a strong positive correlation. The Pearson correlation coefficient (r) between Brand Awareness and Brand Image is 0.711, indicating a significant positive relationship. This value suggests that as Brand Awareness increases, Brand Image tends to improve as well, and vice versa. The correlation is statistically significant, as evidenced by a p-value of 0.000, which is well below the 0.01 threshold. This means that the likelihood of this correlation occurring by chance is extremely low, providing strong evidence to support the association between these two variables. The sample size (N) for this analysis is 1,380, which further enhances the reliability of these findings.

**Table 4.4.5: Correlation between Brand Awareness and Brand Heritage**

		Brand Awareness	Brand Heritage
Brand Awareness	Pearson Correlation	1	.666**
	Sig. (2-tailed)		.000
	N	1380	1380
Brand Heritage	Pearson Correlation	.666**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Analysis of the relationship between Brand Awareness and Brand Heritage reveals a strong positive correlation. The Pearson correlation coefficient (r) of 0.666 indicates a significant positive link between these two variables, meaning that higher Brand Awareness is associated with stronger perceptions of Brand Heritage, and vice versa. The correlation is statistically significant, with a p-value of 0.000, well below the 0.01 threshold, suggesting that the likelihood of this relationship occurring by chance is extremely low. This analysis is based on substantial data, with a sample size of 1380 for Brand Awareness and Brand Heritage. These results imply that increasing Brand Awareness is likely to enhance perceptions of Brand Heritage, highlighting the importance of emphasizing a brand's history and legacy in broader branding strategies.

**Table 4.4.6: Correlation between Brand Heritage and Brand Image**

		Brand Heritage	Brand Image
Brand Heritage	Pearson Correlation	1	.879**
	Sig. (2-tailed)		.000
	N	1380	1380
Brand Image	Pearson Correlation	.879**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The analysis of the relationship between Brand Heritage and Brand Image reveals a very strong positive correlation. The Pearson correlation coefficient (r) of 0.879 indicates an exceptionally strong connection between these two variables, meaning that as perceptions of Brand Heritage increase, Brand Image also tends to improve significantly, and vice versa. The correlation is highly significant, with a p-value of 0.000, which is far below the 0.01 significance level, suggesting that the likelihood of this correlation occurring by chance is extremely low. With a sample size of 1,380 for both Brand Heritage and Brand Image, the reliability of these findings is further reinforced. These results underscore the importance of Brand Heritage in shaping Brand Image, highlighting the value of leveraging a brand's history and legacy to enhance its overall perception among consumers.

**Objective 4:**

*To determine the relative importance of Consumer-Based Brand Equity dimensions in creating a strong university brand.*

**Table 4.4.7: Mean Scores of Consumer Based Brand Equity Dimensions**

<b>Dimensions</b>	<b>Mean</b>	<b>Standard Deviation</b>
Brand Awareness	3.89	.6258458
Brand Image	3.89	.7059482
Brand Heritage	3.83	.6642143

**Table 4.4.8: Mean Scores of Constructs and Sub-constructs of CBBE Dimensions**

<b>Sr. No</b>	<b>Constructs / Subconstructs</b>	<b>Mean Score</b>
<b>1.</b>	<b>BRAND AWARENESS</b>	3.89
1.1	Overall Brand Awareness	4.11
1.2	Promotional Activities	3.66
1.3	Word of Mouth	3.91
<b>2.</b>	<b>BRAND IMAGE</b>	3.89
2.1	<b>Service Attributes</b>	
2.1.1	<b>Perceived Price</b>	3.92
2.1.2	<b>Perceived Quality of Service</b>	3.79
2.1.2(a)	<b>Administrative Quality</b>	3.76
	Attitude and Behavior	3.80
	Administrative Process	3.72
2.1.2(b)	<b>Physical Environment Quality</b>	3.78
	Support Infrastructure	3.83
	Learning Setting	3.62
	General Infrastructure	3.91
2.1.2 (c)	<b>Core Educational Quality</b>	3.83
	Attitude and Behavior	4.00
	Curriculum	3.69
	Pedagogy	3.70
	Competence	3.95
2.1.2 (d)	<b>Support Facilities Quality</b>	3.72
	Core Cells and Committees	3.76
	Other facilities	3.54

2.1.2 (e)	<b>Transformative Quality</b>	3.86
2.1.3	<b>Service Benefits</b>	3.91
2.1.3(a)	Employability	4.00
2.1.3(b)	Personal Development	3.94
2.1.3(c)	Pursue my Passion	3.86
2.1.3(d)	Sociability and Networking	3.87
2.1.4	<b>After sales service</b>	3.96
2.2	<b>Provider Attributes</b>	
2.2.1	Location	4.10
2.2.2	Size	3.94
2.2.3	University Reputation	4.05
2.3	<b>Symbolic Attributes</b>	
2.3.1	Perceived Social Image	4.08
2.3.2	Perceived Brand Positioning	3.98
2.3.3	Perceived Brand Personality	3.95
<b>3.</b>	<b>BRAND HERITAGE</b>	<b>3.83</b>
4.1	Track Record	3.71
4.2	Longevity	3.76
4.3	Core Values	3.76
4.4	Use of Symbols	3.90
4.5	History	4.05

The analysis of the average mean scores across various constructs and subconstructs provides valuable insights into the relative importance of the Consumer-Based Brand Equity (CBBE) dimensions—Brand awareness, Brand image, and Brand heritage in shaping a strong university brand. The mean scores of all the three dimensions are very much same thereby leading to a conclusion that Brand Awareness, Brand image, and Brand heritage all play a critical role in determining the brand equity of higher educational institutes.

Brand Awareness emerges as a crucial dimension, with high scores in overall brand awareness (4.11) and significant influence from word-of-mouth (3.91). These findings suggest that a university's visibility and the perceptions shared among the community are vital in establishing its brand strength. Promotional activities, though slightly lower (3.66), still play an essential role in building brand awareness.

Brand Image is a multifaceted dimension, further divided into service attributes, provider attributes, and symbolic attributes. Among service attributes, perceived price (3.92) and employability (4.00) stand out, indicating that students highly value the affordability of education and its potential return on investment in terms of job prospects. Quality of service, especially in core educational quality—such as competence (3.95) and pedagogy (3.70) also significantly contribute to the brand image. Provider attributes, such as location (4.10) and university reputation (4.05), are particularly influential, underscoring the importance of the university’s reputation and geographical positioning. Symbolic attributes, including perceived social image (4.08) and perceived brand positioning (3.98), further reinforce the university's brand by aligning it with social and cultural expectations.

Brand Heritage also plays a substantial role in defining a university's brand. Scores like history (4.05), use of symbols (3.90), and core values (3.76) reflect the importance of a university’s historical legacy and long-standing traditions in shaping its identity and appeal. The track record (3.71) and longevity (3.76) contribute to the perception of reliability and stability, which are critical for a strong brand heritage.

In summary, all three CBBE dimensions—brand awareness, brand image, and brand heritage—are essential in creating a strong university brand. Brand awareness and brand image appears to be relatively a bit more significant dimension as compared to brand heritage. Wide variety of factors ranging from service quality to symbolic attributes, have a direct impact on students' perceptions and choices. Thus, we conclude that brand awareness, brand image, and brand heritage all three contribute equally and significantly, with awareness driving initial attraction and heritage reinforcing long-term credibility and reputation.

**Objective 5:**

***To investigate the individual impact of Consumer-Based Brand Equity dimensions on the perceived overall brand equity of Higher Education Institutes.***

***Table 4.4.9: Correlation between Brand Awareness & Perceived Overall Brand Equity of HEIs***

	Brand Awareness	Perceived Overall Brand Equity of HEIs
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Brand Awareness	Pearson Correlation	1	.770**
	Sig. (2-tailed)		.000
	N	1380	1380
Perceived Overall Brand Equity of HEIs	Pearson Correlation	.770**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation analysis between Brand Awareness and Perceived Overall Brand Equity of HEIs shows a strong positive relationship, with a correlation coefficient of 0.770. This indicates that an increase in brand awareness is significantly associated with an increase in brand equity. The correlation is statistically significant at the 0.01 level, with a p-value of 0.000. With a sample size of 1380, the findings strongly suggest that higher brand awareness is linked to greater brand equity, underscoring the importance of awareness in boosting a brand's overall value.

**Table 4.4.10: Correlation between Brand Image & Perceived Overall Brand Equity of HEIs**

		Brand Image	Perceived Overall Brand Equity of HEIs
Brand Image	Pearson Correlation	1	.929**
	Sig. (2-tailed)		.000
	N	1380	1380
Perceived Overall Brand Equity of HEIs	Pearson Correlation	.929*	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation analysis between Brand Image and Perceived Overall Brand Equity of HEIs reveals a very strong positive correlation, with a coefficient of 0.929. This suggests that improvements in brand image are significantly linked to increases in brand equity. The correlation is statistically significant, with a p-value of 0.000, underscoring the reliability of this association. With a sample size of 1380, the findings indicate that a favorable brand image is closely connected to greater brand equity, emphasizing the crucial role of brand image in enhancing overall brand value.

**Table 4.4.11: Correlation between Brand Heritage & Perceived Overall Brand Equity of HEIs**

		Brand Heritage	Perceived Overall Brand Equity of HEIs
Brand Heritage	Pearson Correlation	1	.903**
	Sig. (2-tailed)		.000
	N	1380	1380
Perceived Overall Brand Equity of HEIs	Pearson Correlation	.903**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation analysis between Brand Heritage and Perceived Overall Brand Equity of HEIs shows a very strong positive correlation, with a coefficient of 0.903. This indicates a significant association between brand heritage and brand equity, meaning that as brand heritage improves, brand equity tends to increase correspondingly. The correlation is statistically significant at the 0.01 level, as evidenced by the p-value of 0.000, reinforcing the reliability of this association. With a sample size of 1380, the results robustly suggest that a strong brand heritage is closely linked to higher brand equity, highlighting the important role of heritage in enhancing a brand's overall value.

## **STUDY 2: CONSUMER ATTRIBUTES AND BRAND EQUITY IN HIGHER EDUCATION INSTITUTES**

### **Objective 1:**

***To determine the role and impact of Consumer Attributes on Brand Equity of Higher Education Institutes.***

[Please refer Section 4.5 – Hypothesis Testing (HO5a, HO5b, HO5c, HO5d, and HO5e) on Page ]

## **STUDY 3: BRAND HERITAGE AND CONSUMER-BASED BRAND EQUITY OF HIGHER EDUCATION INSTITUTES**

**Objective 1:**

*To explore the Perception of respondents as to whether and to what extent Heritage is present or potentially found in Higher Education Institutes as a Brand*

**Objective 2:**

*To determine the impact of Brand Heritage on the Perceived value of the Higher Education Institutes.*

[Please refer Section 4.5 – Hypothesis Testing (HO6a, HO6b, HO6c, and HO6d) on Page ]

**4.5 HYPOTHESIS TESTING:**

**STUDY 1: CONSUMER-BASED BRAND EQUITY DIMENSIONS IN HIGHER EDUCATION INSTITUTES**

**4.5.1 RELATIONSHIP BETWEEN BRAND AWARENESS AND CONSUMER BASED BRAND EQUITY**

**(Brand Awareness: Promotional activities and Word-of-Mouth)**

*HO1a: Promotional activities do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.*

*Table 4.5.1.1: Promotional Activities and Consumer Based Brand Equity*

	<b>Consumer Based Brand Equity</b>	
<b>Promotional Activities</b>	Pearson's Correlation	0.584
	Sig. (2 tailed)	0.000
	N	1380

The null hypothesis, which states that "Promotional activities do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes," is rejected and alternative hypothesis is accepted. The significant positive correlation (Pearson's correlation of 0.584) and the p-value of 0.000, which is far below the standard threshold of 0.05, indicate that there is a statistically significant impact of promotional activities on consumer-based brand equity. Therefore, the findings suggest that promotional activities indeed play a significant role in shaping consumer perceptions of brand equity in higher education institutes.

Further, to find out how these two variables and its sub-dimensions are related, regression analysis technique as applied.

**Table 4.5.1.2: Model Summary for Promotional Activities and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584 <sup>a</sup>	.341	.341	.47154

Above table shows the coefficient of determination (R Square) 0.341, which means 34.1% variation in dependent variable (Consumer Based Brand Equity) is explained by independent variable (Promotional activities).

**Table 4.5.1.3: ANOVA for Promotional Activities and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	158.590	1	158.590	713.253	.000 <sup>b</sup>
Residual	306.173	1377	.222		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Promotional Activities

The ANOVA results for the relationship between Consumer-Based Brand Equity and Promotional Activities show that the regression model is statistically significant, with an F-

value of 713.253 and a p-value of 0.000, well below the threshold of 0.05. This indicates that Promotional Activities significantly predict Consumer-Based Brand Equity.

**Table 4.5.1.4: Coefficients for Promotional Activities and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.312	.048		48.421	.000
(PA) Effective University Website	.122	.012	.257	10.054	.000
(PA) Advertising Through Different Media (Like: Television, Radio, Newspaper, Magazine)	-.018	.012	-.044	-1.492	.136
(PA) Campaign Activities In Social Media Like Facebook, Twitter, You Tube, Instagram Etc.	.021	.013	.045	1.582	.114
(PA) Sponsorship Of Various Events, Competitions, Educational Fairs, Shows, Etc.	.004	.015	.010	.295	.768
(PA) Hosting Various Events, Competitions, Educational Fairs, Shows, etc.	.102	.016	.207	6.465	.000
(PA) University Actively Promote Their Institution By Visiting Schools	-.029	.013	-.067	-2.213	.027
(PA) Outdoor Hoardings, Billboards Etc.	-.021	.014	-.048	-1.543	.123
(PA) Public Relations	.076	.013	.167	5.742	.000
(PA) Mails from The University to Students and Parents	-.006	.012	-.013	-.476	.634
(PA) Special Articles About the University Rankings in Various Media	.055	.014	.122	4.081	.000
(PA) University Booklet, Posters, Flyers etc	.056	.014	.121	3.894	.000
(PA) Published Blog Articles	.029	.014	.062	2.037	.042
a. Dependent Variable: Consumer Based Brand Equity					

The coefficient analysis reveals that several promotional activities significantly influence Consumer-Based Brand Equity. Specifically, an effective university website, hosting various

events, public relations, special articles about university rankings, university booklets, and published blog articles all have positive and statistically significant impacts on brand equity, as indicated by their positive Beta values and p-values below 0.05. Conversely, activities such as advertising through different media, social media campaigns, sponsorships, and outdoor hoardings did not show a significant impact. Notably, university visits to schools have a small but significant negative impact.

***H01b: Word-of-Mouth does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

***Table 4.5.1.5: Coefficients for Word-of-Mouth and Consumer Based Brand Equity***

	<b>Consumer Based Brand Equity</b>	
<b>Word of mouth</b>	Pearson's Correlation	0.563
	Sig. (2 tailed)	0.000
	N	1380

The null hypothesis, which states that "Word-of-Mouth does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes," is rejected and alternative hypothesis is accepted. The Pearson's correlation of 0.563 indicates a moderate positive relationship, and the p-value of 0.000 confirms that this correlation is statistically significant. Therefore, Word-of-Mouth does have a significant impact on Consumer-Based Brand Equity.

Further, to find out how these two variables and its sub-dimensions are related, regression analysis is carried

***Table 4.5.1.6: Model Summary for Word of Mouth and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.563 <sup>a</sup>	.317	.316	.48030

The analysis shows that Word-of-Mouth, as the independent variable, explains approximately 31.7% of the variance in Consumer-Based Brand Equity ( $R^2 = 0.317$ ). The Adjusted R Square value of 0.316 further supports this, indicating that the model is a good fit. The standard error of the estimate is 0.48030, suggesting a moderate level of prediction accuracy. Overall, Word-of-Mouth plays a significant role in influencing Consumer-Based Brand Equity.

**Table 4.5.1.7: ANOVA for Word of Mouth and Consumer Based Brand Equity**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	147.105	1	147.105	637.680	.000 <sup>b</sup>
Residual	317.658	1377	.231		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Word of Mouth

The ANOVA results indicate that the regression model, where Word-of-Mouth predicts Consumer-Based Brand Equity, is highly significant, with an F-value of 637.680 and a p-value of 0.000. This suggests that Word-of-Mouth has a significant impact on Consumer-Based Brand Equity, thereby accounting for a substantial portion of the total variance in the dependent variable.

**Table 4.5.1.8: Coefficients for Word of Mouth and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.509	.053		47.735	.000
My Family's Recommendation	.122	.016	.231	7.715	.000
My Friends' Recommendation	.069	.016	.140	4.238	.000
My Relatives' Recommendation	.065	.015	.140	4.191	.000
An Alumnus Recommendation of This University	.079	.014	.170	5.782	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficients analysis reveals that all aspects of Word-of-Mouth (WOM) have a significant positive impact on Consumer-Based Brand Equity. Recommendations from family, friends, and relatives, as well as alumni, each contribute positively, with p-values well below 0.05. Specifically, family recommendations have the strongest effect (Beta = 0.231), followed by alumni recommendations (Beta = 0.170). This indicates that personal recommendations from

various sources are crucial in enhancing the perceived brand equity of higher education institutions.

#### 4.5.2 RELATIONSHIP BETWEEN BRAND IMAGE AND CONSUMER BASED BRAND EQUITY

**(Brand Image: Service attributes, Symbolic attributes, and Provider attributes)**

**Service Attributes – Perceived Price, Perceived Quality, and After-Sales-Service**

*HO2a: Perceived price does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.*

*Table 4.5.2.1: Perceived Price and Consumer Based Brand Equity*

	Consumer Based Brand Equity	
Perceived Price	Pearson's Correlation	0.534
	Sig. (2 tailed)	0.000
	N	1380

The Pearson's correlation of 0.534 between Perceived Price and Consumer-Based Brand Equity shows a moderate positive relationship. This means that as the perceived price of higher education rises, consumer-based brand equity also tends to increase. The p-value of 0.000 confirms that this relationship is statistically significant, highlighting that perceived price significantly influences consumer perceptions of brand equity.

*Table 4.5.2.2: Model Summary for Perceived Price and Consumer Based Brand Equity*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534 <sup>a</sup>	.285	.285	.49123

The model shows that Perceived Price explains 28.5% of the variance in Consumer-Based Brand Equity ( $R^2 = 0.285$ ). The standard error of 0.49123 reflects the average prediction deviation. This indicates a moderate impact of Perceived Price on brand equity with a reasonable prediction accuracy.

*Table 4.5.2.3: ANOVA for Perceived Price and Consumer Based Brand Equity*

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	132.487	1	132.487	549.048	.000 <sup>b</sup>
	Residual	332.276	1377	.241		

Total	464.763	1378			
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a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Perceived Price

The ANOVA results show a significant effect of Perceived Price on Consumer-Based Brand Equity, with an F-value of 549.048 and a p-value of 0.000. The model accounts for a substantial portion of the variance, as indicated by the Sum of Squares for Regression (132.487) and Residual (332.276), confirming its effectiveness in predicting brand equity.

**Table 4.5.2.4: Coefficients for Perceived Price and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.436	.058		42.141	.000
For the Same Programme, Tuition Fees Charged by My University Are Affordable as Compared to The Fees Charged by Other Universities	.150	.017	.282	9.017	.000
Tuition Fees Charged Are Fair in Accordance with The Programme Offered	.022	.020	.039	1.071	.285
Overall, Fees Charged Match with The Quality of The Programmes Offered	.084	.019	.158	4.485	.000
Am Willing to Pay a Premium Price for Reputed/Flagship Programmes of This University	.107	.015	.195	7.246	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis shows that several aspects of Perceived Price significantly impact Consumer-Based Brand Equity. Specifically, the affordability of tuition fees compared to other universities (Beta = 0.282) and the willingness to pay a premium for flagship programs (Beta = 0.195) have the strongest positive effects, both with p-values below 0.000. The perception that overall fees match the program quality also significantly influences brand equity (Beta = 0.158,  $p < 0.000$ ). However, the fairness of tuition fees in relation to the program offered does not have a significant impact ( $p = 0.285$ ).

***H02b: Perceived Quality of Service do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

***Table 4.5.2.5: Perceived Quality of Service and Consumer Based Brand Equity***

Perceived Quality of Service	Consumer Based Brand Equity	
	Pearson's Correlation	0.081
	Sig. (2 tailed)	0.002
	N	1380

The Pearson's correlation of 0.081 between Perceived Quality of Service and Consumer-Based Brand Equity indicates a weak positive relationship. Despite the statistical significance of the correlation (p-value = 0.002), the low correlation coefficient suggests that Perceived Quality of Service has a minimal or a very negligible impact on Consumer-Based Brand Equity. Given the weak strength of the relationship, we reject null hypothesis and accept alternative hypothesis with a weak correlation coefficient.

***Table 4.5.2.6: Model Summary for Perceived Quality of Service and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.845 <sup>a</sup>	.714	.713	.31136

Predictors: (Constant) Administrative Quality, Physical environment Quality, Core educational quality, Support facilities quality, Transformative Quality

The model shows a strong fit, with an R value of 0.845 and an R<sup>2</sup> of 0.714, meaning Perceived Quality of Service explains about 71.4% of the variance in Consumer-Based Brand Equity. This high R<sup>2</sup> value, along with an Adjusted R Square of 0.713, indicates the model's robustness. The standard error of 0.31136 further suggests that the model provides accurate predictions.

***Table 4.5.2.7: ANOVA for Perceived Quality of Service and Consumer Based Brand Equity***

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	331.654	5	66.331	684.191	.000 <sup>b</sup>
1 Residual	133.109	1373	.097		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

- b. Predictors: (Constant) Administrative Quality, Physical environment Quality, Core educational quality, Support facilities quality, Transformative Quality

The ANOVA results indicate that the regression model, which includes Administrative Quality, Physical Environment Quality, Core Educational Quality, Support Facilities Quality, and Transformative Quality as predictors, is highly significant with an F-value of 684.191 and a p-value of 0.000. This suggests that these predictors collectively have a substantial effect on Consumer-Based Brand Equity. The Sum of Squares for the Regression is 331.654, while the Residual Sum of Squares is 133.109, highlighting the model's strong explanatory power.

**Table 4.5.2.8: Coefficients for Perceived Quality of Service and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.048	.050		21.110	.000
Administrative Quality	.078	.012	.109	6.691	.000
Physical environment Quality	.114	.019	.145	6.000	.000
Core educational Quality	.284	.020	.371	14.215	.000
Support facilities Quality	.087	.017	.112	5.210	.000
Transformative Quality	.185	.016	.261	11.459	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis shows that all quality dimensions significantly impact Consumer-Based Brand Equity. Core Educational Quality has the strongest effect with a Beta of 0.371 and a p-value of 0.000. Transformative Quality (Beta = 0.261) and Physical Environment Quality (Beta = 0.145) also have notable positive impacts, both with p-values of 0.000. Administrative Quality (Beta = 0.109) and Support Facilities Quality (Beta = 0.112) also significantly influence brand equity but with slightly smaller effects. All predictors are statistically significant, confirming their contributions to consumer-based brand equity.

***H02c: After-Sales-Services do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

**Table 4.5.2.9: After Sales Service and Consumer Based Brand Equity**

	<b>Consumer Based Brand Equity</b>	
<b>After Sales Service</b>	Pearson's Correlation	0.713
	Sig. (2 tailed)	.000
	N	1380

Pearson's correlation of 0.713 between After Sales Service and Consumer-Based Brand Equity is strong and statistically significant, with a p-value of 0.000, which is well below the 0.05 threshold. This indicates a robust positive relationship, showing that better after-sales service is strongly associated with higher consumer-based brand equity.

**Table 4.5.2.10: Model Summary for After Sales Service and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.713 <sup>a</sup>	.508	.507	.40756

Predictors: (Constant) After Sales Service

The above model shows a strong fit with an R<sup>2</sup> of 0.508, meaning After Sales Service explains about 50.8% of the variance in Consumer-Based Brand Equity. The Adjusted R Square of 0.507 and standard error of 0.40756 indicate good prediction accuracy, confirming the significance of After Sales Service in predicting brand equity.

**Table 4.5.2.11: ANOVA for After Sales Service and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	236.032	1	236.032	1420.959	.000 <sup>b</sup>
Residual	228.731	1377	.166		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), After Sales Service

The ANOVA results show that the regression model with After Sales Service as the predictor is highly significant, with an F-value of 1420.959 and a p-value of 0.000. This indicates that After Sales Service has a substantial effect on Consumer-Based Brand Equity. The Sum of Squares for Regression is 236.032, while the Residual Sum of Squares is 228.731, highlighting the model's strong explanatory power.

**Table 4.5.2.12: Coefficients for After Sales Service and Consumer Based Brand Equity**

a. Dependent Variable: Consumer Based Brand Equity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.029	.049		41.263	.000
My University Has an Active Alumni Association / Cell	.158	.020	.269	7.843	.000
Maintains A Proper Database of Alumni Living Within and Outside the Country	-.023	.020	-.036	-1.150	.250
Regularly Updates the Database of Alumni	.104	.021	.169	4.854	.000
Shares Information with The Alumni Regarding the Latest Initiatives of The Institution	.057	.020	.090	2.906	.004
Invite Alumni for The Participation in Various Academic & Non-Academic Programmes	.075	.020	.123	3.797	.000
Regularly Organizes Networking Get-Togethers	.069	.020	.117	3.492	.000
Honour Distinguished Alumni for Their Contribution to The College / University	.098	.021	.160	4.688	.000
Conducts Research Regarding the Impact of Alumni on The College / University	-.043	.021	-.067	-1.982	.048

The coefficient analysis shows that several aspects of After Sales Service have a significant impact on Consumer-Based Brand Equity. Specifically, having an active alumni association (Beta = 0.269), regularly updating the alumni database (Beta = 0.169), sharing information with alumni about new initiatives (Beta = 0.090), and organizing networking events (Beta = 0.117) all positively influence brand equity, with p-values under 0.05. Maintaining a proper alumni database does not significantly affect brand equity (p = 0.250). Additionally, conducting research on the impact of alumni (Beta = -0.067, p = 0.048) has a small but significant negative effect.

**Symbolic Attributes – Perceived Brand Personality, Perceived Social Image, and Perceived Brand Positioning**

***H03a: Perceived Brand Personality does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

***Table 4.5.2.13: Perceived Brand Personality and Consumer Based Brand Equity***

Perceived Brand Personality	Consumer Based Brand Equity	
	Pearson's Correlation	.822
	Sig. (2 tailed)	.000
N	1380	

Pearson's correlation of 0.822 between Perceived Brand Personality and Consumer-Based Brand Equity reflects a strong positive relationship. With a p-value of 0.000—well below the 0.05 threshold—this correlation is statistically significant. This indicates that Perceived Brand Personality significantly influences Consumer-Based Brand Equity. Therefore, the null hypothesis, which claims that Brand Personality does not significantly impact Consumer-Based Brand Equity, should be rejected.

***Table 4.5.2.14: Model Summary for Perceived Brand Personality and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.822 <sup>a</sup>	.676	.675	.33089

a. Predictors: (Constant), Perceived Brand Personality

The model summary demonstrates a strong connection between Perceived Brand Personality and Consumer-Based Brand Equity, reflected by an R value of 0.822. An R<sup>2</sup> of 0.676 indicates that Perceived Brand Personality accounts for 67.6% of the variance in Consumer-Based Brand Equity. The Adjusted R Square of 0.675 further confirms the model's strength, while the standard error of 0.33089 suggests a high level of prediction accuracy.

***Table 4.5.2.15: ANOVA for Perceived Brand Personality and Consumer Based Brand Equity***

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	313.998	1	313.998	2867.889	.000 <sup>b</sup>
Residual	150.764	1377	.109		

Total	464.763	1378		
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- a. Dependent Variable: Consumer Based Brand Equity  
b. Predictors: (Constant), Perceived Brand Personality

The ANOVA results show that the regression model with Perceived Brand Personality as the predictor is highly significant, with an F-value of 2867.889 and a p-value of 0.000. This indicates that Perceived Brand Personality has a substantial impact on Consumer-Based Brand Equity. The Regression Sum of Squares is 313.998, while the Residual Sum of Squares is 150.764, highlighting the model's strong capacity to explain the variance in brand equity.

**Table 4.5.2.16: Coefficients for Perceived Brand Personality and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.514	.044		34.797	.000
Demonstrates highest academic sincerity	.127	.018	.188	7.027	.000
Demonstrates highest academic honesty	.056	.017	.087	3.326	.001
All stakeholders of the community take pride in my university's identity	.085	.015	.135	5.543	.000
<sup>1</sup> Employs state-of-the-art technology in educating its students	.099	.015	.163	6.484	.000
Students have trust in the education they are receiving /received from the university	.116	.016	.195	7.448	.000
Faculty emphasize ethical values in their courses	.121	.015	.203	7.892	.000

- a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis reveals that several aspects of Perceived Brand Personality significantly impact Consumer-Based Brand Equity. Specifically, the traits of

demonstrating highest academic sincerity (Beta = 0.188, p = 0.000), fostering trust among students in the education received (Beta = 0.195, p = 0.000), and faculty emphasis on ethical values in courses (Beta = 0.203, p = 0.000) have the strongest positive effects. Other factors such as employing state-of-the-art technology (Beta = 0.163, p = 0.000), stakeholders' pride in the university's identity (Beta = 0.135, p = 0.000), and academic honesty (Beta = 0.087, p = 0.001) also contribute positively, though to a lesser extent. All these variables show significant p-values below 0.05, indicating that they play a crucial role in enhancing Consumer-Based Brand Equity.

***H03b: Perceived Social Image of the brand does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes***

***Table 4.5.2.17: Perceived Social Image and Consumer Based Brand Equity***

	<b>Consumer Based Brand Equity</b>	
<b>Perceived Social Image</b>	Pearson's Correlation	.815
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.815 between Perceived Social Image and Consumer-Based Brand Equity shows a strong positive relationship. With a p-value of 0.000, which is well below the 0.05 threshold, the correlation is statistically significant. This indicates that Perceived Social Image significantly impacts Consumer-Based Brand Equity. Consequently, the null hypothesis, which states that Social Image does not have a significant impact on Consumer-Based Brand Equity, is rejected and alternative hypothesis is accepted.

***Table 4.5.2.18: Model Summary for Perceived Social Image and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815 <sup>a</sup>	.665	.664	.33648

a. Predictors: (Constant), Perceived Social Image

The model summary reveals a strong fit between Perceived Social Image and Consumer-Based Brand Equity, with an R value of 0.815. The R<sup>2</sup> of 0.665 indicates that 66.5% of the variance in Consumer-Based Brand Equity is explained by Perceived Social Image. The Adjusted R Square of 0.664 supports the model's robustness, while the standard error of 0.33648 reflects a good level of prediction accuracy.

**Table 4.5.2.19: ANNOVA for Perceived Social Image and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	308.858	1	308.858	2727.927	.000 <sup>b</sup>
Residual	155.905	1377	.113		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Perceived Social Image

**Table 4.5.2.20: Coefficients for Perceived Social Image and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.209	.050		24.098	.000
Is A Credible and Reliable University	.157	.016	.229	10.058	.000
Has A Rich Legacy of Royal Family	-.004	.012	-.006	-.328	.743
Delivers High Quality Education	.078	.017	.115	4.611	.000
Provides Excellent Services to Students	.104	.016	.164	6.562	.000
<sup>1</sup> Makes Lot of Contribution to The Society	.083	.016	.124	5.060	.000
Good Image in The Mind of Students	.041	.017	.066	2.395	.017
Good Image in The Mind of Corporates	.045	.019	.067	2.311	.021
Has A Better Image Than Other Competing Universities	.068	.016	.111	4.225	.000
Overall, My University Is Viewed Positively	.086	.017	.129	5.004	.000

a. Dependent Variable: Consumer Based Brand Equity

The ANOVA results show a highly significant regression model with Perceived Social Image as the predictor, indicated by an F-value of 2727.927 and a p-value of 0.000,

demonstrating a substantial impact on Consumer-Based Brand Equity. The Regression Sum of Squares is 308.858, compared to the Residual Sum of Squares of 155.905, reflecting the model's strong explanatory power.

The coefficients analysis reveals that several aspects of Perceived Social Image significantly affect Consumer-Based Brand Equity. Key significant predictors include the university's credibility and reliability (Beta = 0.229), high-quality education (Beta = 0.115), excellent student services (Beta = 0.164), societal contributions (Beta = 0.124), and a positive overall image (Beta = 0.129), all with p-values below 0.05. Variables related to a royal legacy and specific corporate images did not show significant impact.

***H03c: Brand Positioning does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

***Table 4.5.2.21: Perceived Brand Positioning and Consumer Based Brand Equity***

Perceived Brand Positioning	Consumer Based Brand Equity	
	Pearson's Correlation	.814
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.814 between Perceived Brand Positioning and Consumer-Based Brand Equity indicates a strong positive relationship, with a p-value of 0.000, which is much lower than the 0.05 significance level. This confirms that Perceived Brand Positioning has a significant impact on Consumer-Based Brand Equity. Therefore, the null hypothesis, which asserts that Brand Positioning does not have any significant impact, is rejected.

***Table 4.5.2.22: Model Summary for Perceived Brand Positioning and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814 <sup>a</sup>	.663	.662	.33746

a. Predictors: (Constant), Perceived Brand Positioning

The model summary shows a strong relationship between Perceived Brand Positioning and Consumer-Based Brand Equity, with an R value of 0.814. The R<sup>2</sup> of 0.663 indicates that 66.3% of the variance in Consumer-Based Brand Equity is explained by Perceived Brand

Positioning. The Adjusted R Square of 0.662 supports the model's robustness, and the standard error of 0.33746 reflects a good level of prediction accuracy.

**Table 4.5.2.23: ANOVA for Perceived Brand Positioning and Consumer Based Brand**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	307.953	1	307.953	2704.233	.000 <sup>b</sup>
Residual	156.810	1377	.114		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Perceived Brand Positioning

The ANOVA results for the regression model with Perceived Brand Positioning as the predictor show a highly significant model, with an F-value of 2704.233 and a p-value of 0.000. This indicates that Perceived Brand Positioning has a significant impact on Consumer-Based Brand Equity. The Regression Sum of Squares is 307.953, while the Residual Sum of Squares is 156.810, demonstrating the model's strong capability to explain the variance in Consumer-Based Brand Equity.

**Table 4.5.2.24: Coefficients for Perceived Brand Positioning and Consumer Based Brand**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.461	.047		31.065	.000
Internationalization	.115	.013	.197	8.744	.000
Academic achievements	.109	.016	.171	6.898	.000
Job opportunities	.042	.015	.067	2.854	.004
Scholarship and Hostel facilities	.076	.014	.127	5.246	.000
Training systems	.102	.016	.169	6.371	.000
Social and Sporting facilities	.030	.015	.049	2.053	.040
Physical facilities	.090	.015	.154	6.079	.000

Rooted history	.052	.013	.085	4.140	.000
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a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis reveals that various aspects of Perceived Brand Positioning significantly impact Consumer-Based Brand Equity. Notable predictors include internationalization (Beta = 0.197), academic achievements (Beta = 0.171), and training systems (Beta = 0.169), all with p-values below 0.001, indicating strong positive effects. Job opportunities (Beta = 0.067) and social and sporting facilities (Beta = 0.049) also contribute significantly, though to a lesser extent. All predictors show statistical significance with p-values below 0.05, demonstrating their importance in enhancing Consumer-Based Brand Equity.

### **Provider attributes - Location, Size, and University reputation**

***H04a: Quality of Teaching staff does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes.***

**Table 4.5.2.25: Correlation between Quality of Teaching Staff and Consumer Based Brand Equity**

		Competence (Quality of teaching staff)	Consumer Based Brand Equity
Competence (Quality of teaching staff)	Pearson Correlation	1	.739**
	Sig. (2-tailed)		.000
	N	1380	1380
Consumer Based Brand Equity	Pearson Correlation	.739**	1
	Sig. (2-tailed)	.000	
	N	1380	1380

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis demonstrates a robust positive relationship between Competence (Quality of Teaching Staff) and Consumer-Based Brand Equity in Higher Education Institutes, with a Pearson correlation coefficient of 0.739. This finding indicates that an increase in the perceived quality of teaching staff is closely associated with an increase in

the institution's brand equity. The significance level of 0.000 confirms that this correlation is statistically significant at the 0.01 level (2-tailed). These results underscore the importance of teaching staff competence as a key contributor to strengthening the brand equity of educational institutions.

**Table 4.5.2.26: Model Summary - Quality of Teaching Staff and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.739 <sup>a</sup>	.546	.546	.39131	.546	1658.228	1	1377	.000

a. Predictors: (Constant), Competence (Quality of teaching staff)

The model summary reveals that Quality of Teaching Staff (Competence) accounts for 54.6% of the variance in Consumer-Based Brand Equity in Higher Education Institutes, as indicated by an R Square value of 0.546. The model demonstrates high significance, with an F Change of 1658.228 and a significance level of 0.000, reinforcing that the competence of teaching staff is a strong predictor of brand equity. Additionally, the Adjusted R Square remains at 0.546, suggesting that the model's explanatory power remains strong even when adjusted for the number of predictors.

**Table 4.5.2.27: ANOVA - Quality of Teaching Staff and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	253.913	1	253.913	1658.228	.000 <sup>b</sup>
1 Residual	210.850	1377	.153		
Total	464.763	1378			

a. Dependent Variable: Measured Consumer Based Brand Equity

b. Predictors: (Constant), Competence (Quality of teaching staff)

The ANOVA results confirm that the model is statistically significant, with an F value of 1658.228 and a significance level of 0.000. The regression model, featuring Competence (Quality of Teaching Staff) as the predictor, accounts for a substantial portion of the variance in Consumer-Based Brand Equity. This is evident from the higher Sum of Squares for the regression (253.913) compared to the residual (210.850).

**Table 4.5.2.28: Coefficients - Quality of Teaching Staff and Consumer Based Brand**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.930	.047		41.480	.000
1 Competence - Theoretical Knowledge, Qualifications and Practical Knowledge Of Teaching Faculties	.139	.019	.233	7.232	.000
Competence - High Research Profile Of Teaching Faculties	.090	.018	.162	4.891	.000
Competence - Communication Skills Of Teaching Faculties	.132	.018	.228	7.259	.000
Competence - Teaching Faculties Are Up-To-Date In Their Area Of Expertise	.114	.016	.205	7.144	.000

a. Dependent Variable: Measured Consumer Based Brand Equity

The coefficients analysis shows that all aspects of Competence (Quality of Teaching Staff) significantly contribute to Consumer-Based Brand Equity, as indicated by their respective t-values and p-values (all 0.000). Specifically, the strongest predictors are the Communication Skills of Teaching Faculties ( $\beta = 0.228$ ,  $t = 7.259$ ) and Theoretical Knowledge, Qualifications, and Practical Knowledge ( $\beta = 0.233$ ,  $t = 7.232$ ).

***HO4b: Quality of Relationship of Teaching staff with Customers does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

**Table 4.5.2.29: Correlation between Quality of Relationship of Teaching Staff with Customers and Consumer Based Brand Equity**

		Consumer Based Brand Equity	Attitude and Behaviour
Consumer Based Brand Equity	Pearson Correlation	1	.689**
	Sig. (2-tailed)		.000
	N	1379	1379
Attitude and Behaviour	Pearson Correlation	.689**	1
	Sig. (2-tailed)	.000	
	N	1379	1379

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis indicates a strong positive relationship between Attitude and Behavior (independent variable) and Consumer-Based Brand Equity (dependent variable) in Higher Education Institutes, with a Pearson correlation coefficient of 0.689. This suggests that more positive attitudes and behaviors are associated with higher brand equity. The relationship is statistically significant at the 0.01 level (2-tailed), with a p-value of 0.000, highlighting the importance of favorable attitudes and behaviors in enhancing the brand equity of educational institutions.

**Table 4.5.2.30: Model Summary - Quality of Relationship of Teaching Staff with Customers and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.689 <sup>a</sup>	.474	.474	.42124	.474	1242.276	1	1377	.000

a. Predictors: (Constant), Attitude and Behaviour

The model summary reveals that Attitude and Behavior account for 47.4% of the variance in Consumer-Based Brand Equity, as evidenced by an R Square value of 0.474. The model is highly significant, with an F Change of 1242.276 and a p-value of 0.000, indicating that Attitude and Behavior are significant predictors of brand equity in Higher Education Institutes. The Adjusted R Square of 0.474 confirms that the model's explanatory power remains stable.

**Table 4.5.2.31: ANOVA - Quality of Relationship of Teaching Staff with Customers and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	220.429	1	220.429	1242.276	.000 <sup>b</sup>
1 Residual	244.334	1377	.177		
Total	464.763	1378			

a. Dependent Variable: Measured Consumer Based Brand Equity

b. Predictors: (Constant), Attitude and Behaviour

The ANOVA results show that the model is statistically significant, with an F value of 1242.276 and a p-value of 0.000. The regression model, which includes Attitude and Behavior as predictors, explains a substantial portion of the variance in Consumer-Based Brand Equity, as

indicated by the Sum of Squares for the regression (220.429) compared to the residual (244.334).

**Table 4.5.2.32: Coefficients - Quality of Relationship of Teaching Staff with Customers and Consumer Based Brand**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.864	.056		33.555	.000
Attitude and Behavior-Teaching Faculties Understand Students' Needs	.142	.021	.230	6.728	.000
Attitude and Behavior-Teaching Faculties Give Personal Attention To Students	.053	.020	.090	2.720	.007
Attitude and Behavior-Teaching Faculties Are Always Available To Guide And Advise Students	.049	.019	.084	2.590	.010
Attitude and Behavior-Prevalence Of A Culture Of Sharing And Collaboration Among Lecturers	.095	.021	.144	4.583	.000
Attitude and Behavior-Behaviour Of Teaching Faculties Instil Confidence In Students	.054	.018	.094	2.950	.003
Attitude and Behavior-Teaching Faculties Appear To Have Students' Best Interest At Heart	.095	.018	.160	5.216	.000

a. Dependent Variable: Measured Consumer Based Brand Equity

The coefficients analysis reveals that all aspects of Attitude and Behavior significantly impact Consumer-Based Brand Equity. The strongest predictors are Teaching Faculties Understanding Students' Needs ( $\beta = 0.230$ ,  $t = 6.728$ ) and Teaching Faculties Appearing to Have Students' Best Interest at Heart ( $\beta = 0.160$ ,  $t = 5.216$ ), both with p-values of 0.000. Other significant predictors include Personal Attention to Students ( $\beta = 0.090$ ,  $t = 2.720$ ,  $p = 0.007$ ) and Behavior Instilling Confidence ( $\beta = 0.094$ ,  $t = 2.950$ ,  $p = 0.003$ ). These results underscore the importance of various positive attitudes and behaviors of teaching staff in enhancing the brand equity of Higher Education Institutes.

**HO4c: Quality of relationship of Non-teaching staff with Customers does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.**

**Table 4.5.2.33: Correlation between Quality of Relationship of Non-teaching Staff with Customers and Consumer Based Brand Equity**

		Consumer Based brand Equity	Attitude and Behaviour
Consumer Based Brand Equity	Pearson Correlation	1	.417**
	Sig. (2-tailed)		.000
	N	1379	1379
Attitude and Behaviour	Pearson Correlation	.417**	1
	Sig. (2-tailed)	.000	
	N	1379	1379

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis indicates a moderate positive relationship between Attitude and Behavior and Consumer-Based Brand Equity, with a Pearson correlation coefficient of 0.417. This suggests that positive attitudes and behaviors are associated with higher brand equity. The correlation is statistically significant at the 0.01 level (2-tailed), with a p-value of 0.000, highlighting the relevance of attitudes and behaviors in influencing the brand equity of Higher Education Institutes.

**Table 4.5.2.34: Model Summary - Quality of Relationship of Non-teaching Staff with Customers and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.417 <sup>a</sup>	.174	.174	.52797	.174	290.313	1	1377	.000

a. Predictors: (Constant), Attitude and Behaviour

The model summary indicates that Attitude and Behaviour account for 17.4% of the variance in Consumer-Based Brand Equity, as reflected by an R Square value of 0.174. The model is statistically significant, with an F Change of 290.313 and a p-value of 0.000, validating that Attitude and Behaviour are important predictors of brand equity. The Adjusted R Square of 0.174 confirms that the model's explanatory power is stable even when adjusting for the number of predictors.

**Table 4.5.2.35: ANOVA - Quality of Relationship of Non-teaching Staff with Customers and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	80.925	1	80.925	290.313	.000 <sup>b</sup>
Residual	383.838	1377	.279		
Total	464.763	1378			

a. Dependent Variable: Measured Consumer Based Brand Equity

b. Predictors: (Constant), Attitude and Behaviour

The ANOVA results indicate that the regression model is highly significant, with an F value of 290.313 and a p-value of 0.000. The Sum of Squares for the regression is 80.925, while the residual is 383.838, highlighting the model's effectiveness in explaining variance in Consumer-Based Brand Equity.

**Table 4.5.2.36: Coefficients - Quality of Relationship of Non-teaching Staff with Customers and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.562	.053		48.107	.000
Attitude and Behaviour - Administrative Staff Members Are Always Willing to Help Students	.074	.023	.141	3.273	.001
Attitude and Behaviour - Administrative Staff Members Have the Ability to Solve Students' Problems	.121	.023	.216	5.252	.000
1 Attitude and Behaviour - Administrative Staffs Are Polite and Empathetic	.004	.022	.008	.205	.837
Attitude and Behaviour - Behaviour of Administrative Staff Members Impart Confidence in Students	.008	.020	.016	.425	.671
Attitude and Behaviour - Administrative Staff Offers Reliable Services	.116	.021	.215	5.499	.000

a. Dependent Variable: Measured Consumer Based Brand Equity

The coefficients analysis reveals that certain aspects of Administrative Staff's Attitude and Behavior have a significant impact on Consumer-Based Brand Equity. The most significant predictors are Administrative Staff Members' Ability to Solve Students' Problems ( $\beta = 0.216$ ,  $t = 5.252$ ,  $p = 0.000$ ) and Administrative Staff Offering Reliable Services ( $\beta = 0.215$ ,  $t = 5.499$ ,  $p = 0.000$ ). In contrast, Politeness and Empathy ( $\beta = 0.008$ ,  $t = 0.205$ ,  $p = 0.837$ ) and Behavior Imparting Confidence ( $\beta = 0.016$ ,  $t = 0.425$ ,  $p = 0.671$ ) do not have a significant effect on brand equity.

***H04d: Location does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes***

***Table 4.5.2.37: Location and Consumer Based Brand Equity***

	<b>Consumer Based Brand Equity</b>	
<b>Location</b>	Pearson's Correlation	.634
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.634 between Location and Consumer-Based Brand Equity indicates a strong positive relationship, with a p-value of 0.000 demonstrating statistical significance. This means that Location has a significant impact on Consumer-Based Brand Equity. As a result, the null hypothesis, which asserts that location does not significantly affect Consumer-Based Brand Equity, is rejected.

***Table 4.5.2.38: Model Summary for Location and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.634 <sup>a</sup>	.402	.402	.44920

a. Predictors: (Constant), Location

The model summary shows a strong fit with an R value of 0.634 and an R<sup>2</sup> of 0.402, indicating that Location explains approximately 40.2% of the variance in Consumer-Based Brand Equity. The Adjusted R Square of 0.402 confirms the model's robustness, and the standard error of 0.44920 suggests a good level of prediction accuracy.

**Table 4.5.2.39: Model Summary for Location and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	186.917	1	186.917	926.357	.000 <sup>b</sup>
Residual	277.846	1377	.202		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Location

The ANOVA results show that the regression model with Location as the predictor is highly significant, with an F-value of 926.357 and a p-value of 0.000. This indicates that Location has a substantial effect on Consumer-Based Brand Equity.

**Table 4.5.2.40: Coefficients for Location and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.035	.058		34.999	.000
My College/University location is convenient	.193	.017	.330	11.101	.000
My College/University Is Located in An Area That Is Physically Safe	.074	.021	.119	3.471	.001
My College/University Is Located in A Geographical Area That Has a Cosmopolitan Culture	.166	.021	.262	7.720	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis reveals that all aspects of Location significantly impact Consumer-Based Brand Equity. The convenience of the university location (Beta = 0.330) and the presence of a cosmopolitan culture (Beta = 0.262) have the strongest positive effects, both with p-values of 0.000. The safety of the location (Beta = 0.119) also positively influences brand equity, with a p-value of 0.001. These results underscore the significant role that various location attributes play in shaping consumer perceptions of brand equity.

***H04e: Size does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.***

***Table 4.5.2.41: Size and Consumer Based Brand Equity***

	<b>Consumer Based Brand Equity</b>	
<b>Size</b>	Pearson's Correlation	.759
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.759 between Size and Consumer-Based Brand Equity indicates a strong positive relationship, with a p-value of 0.000 confirming statistical significance. This suggests that Size significantly impacts Consumer-Based Brand Equity. Therefore, the null hypothesis, which asserts that Size does not have any significant impact on Consumer-Based Brand Equity, is rejected.

***Table 4.5.2.42: Model Summary for Size and Consumer Based Brand Equity***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 <sup>a</sup>	.576	.575	.37847

a. Predictors: (Constant), Size

The model summary indicates a strong fit, with an R value of 0.759 and an R<sup>2</sup> of 0.576, meaning that Size accounts for about 57.6% of the variance in Consumer-Based Brand Equity. The Adjusted R Square of 0.575 confirms the model's reliability, and the standard error of 0.37847 shows good prediction accuracy. This highlights the significant role of Size in predicting Consumer-Based Brand Equity.

***Table 4.5.2.43: ANOVA for Size and Consumer Based Brand Equity***

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	267.527	1	267.527	1867.731	.000 <sup>b</sup>
Residual	197.236	1377	.143		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), Size

The ANOVA results reveal that the regression model with Size as the predictor is highly significant, evidenced by an F-value of 1867.731 and a p-value of 0.000. This indicates that Size has a major impact on Consumer-Based Brand Equity. The Regression Sum of Squares

is 267.527, compared to a Residual Sum of Squares of 197.236, highlighting the model's strong ability to explain the variance in brand equity.

**Table 4.5.2.44: Coefficients for Size and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.594	.050		31.590	.000
I Get a Feel of Strong Sense of Community	.193	.018	.293	10.574	.000
I Get Many Social Opportunities	.014	.019	.022	.731	.465
I Could Easily Involve Myself in On-Campus Activities	.046	.018	.075	2.555	.011
I Could Build Close Relationships in The Classroom	.062	.017	.096	3.586	.000
I Could Build Strong Relationships with My Professors	.137	.018	.222	7.760	.000
Overall, My Classroom Experience Is Enriching	.119	.018	.192	6.746	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis indicates that several aspects of Size significantly influence Consumer-Based Brand Equity. The perception of a strong sense of community (Beta = 0.293), the ability to build strong relationships with professors (Beta = 0.222), and an enriching classroom experience (Beta = 0.192) all have significant positive effects, with p-values of 0.000. Involvement in on-campus activities (Beta = 0.075) also has a positive impact with a p-value of 0.011. However, social opportunities (Beta = 0.022) do not significantly affect brand equity (p = 0.465).

**HO4f: University reputation does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes**

**Table 4.5.2.45: University Reputation and Consumer Based Brand Equity**

Consumer Based Brand Equity	
Pearson's Correlation	.823

<b>University Reputation</b>	Sig. (2 tailed)	.000
	N	1380

The Pearson’s correlation of 0.823 between University Reputation and Consumer-Based Brand Equity indicates a strong positive relationship, with a p-value of 0.000, which is well below the 0.05 threshold. This shows that University Reputation has a significant impact on Consumer-Based Brand Equity. Therefore, the null hypothesis, which asserts that University Reputation does not have any significant impact on Consumer-Based Brand Equity, is rejected.

**Table 4.5.2.46: Model Summary for University Reputation and Consumer Based Brand Equity**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823 <sup>a</sup>	.677	.677	.32997

a. Predictors: (Constant), University Reputation

The model summary shows a strong fit, with an R value of 0.823 and an R<sup>2</sup> of 0.677. This indicates that University Reputation explains approximately 67.7% of the variance in Consumer-Based Brand Equity. The Adjusted R Square of 0.677 confirms the model’s robustness, and the standard error of 0.32997 suggests a reasonable level of prediction accuracy.

**Table 4.5.2.47: ANOVA for University Reputation and Consumer Based Brand Equity**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	314.837	1	314.837	2891.639	.000 <sup>b</sup>
1 Residual	149.926	1377	.109		
Total	464.763	1378			

a. Dependent Variable: Consumer Based Brand Equity

b. Predictors: (Constant), University Reputation

The ANOVA results show that the regression model, with an F-value of 2891.639 and a p-value of 0.000, is highly significant and well below the 0.05 threshold. This demonstrates a strong impact of University Reputation on Consumer-Based Brand Equity. The model accounts for a substantial portion of the variance, with a Regression Sum of Squares of 314.837 and a Residual Sum of Squares of 149.926, highlighting its effectiveness in explaining changes in brand equity.

**Table 4.5.2.48: Coefficients for University Reputation and Consumer Based Brand Equity**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.376	.046		30.074	.000
High Academic Standards	.133	.021	.205	6.459	.000
High Academic Competitiveness	.155	.018	.235	8.413	.000
Variety of Programmes and Courses Offered	.054	.018	.079	3.038	.002
Uniqueness of Programmes and Courses Offered	.006	.016	.011	.385	.701
1 Has Distinguished and Successful Alumni	.076	.014	.126	5.332	.000
Known for Its Dynamic and Vibrant On-Campus Life	.086	.016	.140	5.354	.000
The Graduates of The University Earn Higher Incomes Than Industry Average	.041	.015	.072	2.699	.007
Companies Prefer Recruiting the University's Graduates	.065	.016	.111	4.042	.000

a. Dependent Variable: Consumer Based Brand Equity

The coefficient analysis shows that several aspects of University Reputation significantly influence Consumer-Based Brand Equity. High Academic Competitiveness (Beta = 0.235) and High Academic Standards (Beta = 0.205) have the most substantial positive impacts, both with p-values of 0.000. Other significant factors include the university's distinguished alumni, vibrant on-campus life, and employer preference for graduates, all with positive Beta values and p-values well below 0.05. However, the uniqueness of programs and courses offered does not have a significant impact, as indicated by a Beta of 0.011 and a p-value of 0.701.

## **STUDY 2: CONSUMER ATTRIBUTES AND BRAND EQUITY IN HIGHER EDUCATION INSTITUTES**

**4.5.3 RELATIONSHIP BETWEEN CONSUMER ATTRIBUTES AND BRAND EQUITY OF HIGHER EDUCATION INSTITUTES (Study 2 - Objective 1)**

**Consumer Attributes – Brand experience, Age, Gender, Education, and Income**

*HO5a: Consumers’ age does not have any significant impact on Brand Equity of Higher Education Institutes.*

*Table 4.5.3.1: Correlation between Consumers’ age and Brand Equity of Higher Educational Institutes*

	Brand Equity of Higher Educational Institutes	
Age	Pearson’s Correlation	.136
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.136 between age and Brand Equity of Higher Educational Institutes indicates a positive, but weak relationship. The p-value of 0.000 is significantly lower than the 0.05 threshold, suggesting that this correlation is positive. Consequently, the hypothesis that consumers' age does not have any significant impact on brand equity is rejected. The data shows a positive but insignificant relationship between age and brand equity.

*HO5b: Consumer’s gender does not have any significant impact on Brand Equity of Higher Education Institutes.*

*Table 4.5.3.2: Correlation between Consumers’ gender and Brand Equity of Higher Educational Institutes*

	Brand Equity of Higher Educational Institutes	
Gender	Pearson’s Correlation	.031
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.031 between gender and Brand Equity of Higher Educational Institutes indicates a very weak but positive relationship. Despite the statistically significant p-value of 0.000, which is well below the 0.05 threshold, the correlation coefficient suggests that the actual impact of gender on brand equity is minimal. Therefore, while the relationship is positive, its practical significance is limited. This implies that gender does not have a meaningful impact on Brand Equity of Higher

Educational Institutes. Thus, we conclude that alike age, gender too has a significant and positive impact on Brand Equity of Higher Educational Institutes.

***HO5c: Consumer’s education does not have any significant impact on Brand Equity of Higher Education Institutes.***

***Table 4.5.3.3: Correlation between Consumers’ education and Brand Equity of Higher Educational Institutes***

	Brand Equity of Higher Educational Institutes.	
Consumers Education	Pearson’s Correlation	.125
	Sig. (2 tailed)	.000
	N	1380

The above table reveals that despite the statistically significant correlation between consumers' education and brand equity (p-value = 0.000), the correlation strength of 0.125 indicates a positive but weak relationship. This suggests that the practical impact of consumers' education on brand equity is minimal. Consequently, although the relationship is statistically significant, it is not substantial enough to have a meaningful impact on brand equity of higher education institutes.

***HO5d: Consumer’s income does not have any significant impact on Brand Equity of Higher Education Institutes.***

***Table 4.5.3.4: Correlation between Consumers’ income and Brand Equity of Higher Educational Institutes***

	Consumer Based Brand Equity	
Consumers Income	Pearson’s Correlation	-0.53
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of -0.53 reveals a significant but negative relationship between consumers' income and Brand Equity of Higher Educational Institutes, with a p-value of 0.000 indicating the statistical level of significance. This finding is inconsistent with the literature review. Precise explanations for this are difficult but such a counter-intuitive finding could be a product of lack of familiarity of this type of attribute.

**STUDY 3: BRAND HERITAGE AND CONSUMER-BASED BRAND EQUITY OF HIGHER**

## EDUCATION INSTITUTES

### 4.5.4 RELATIONSHIP BETWEEN BRAND HERITAGE AND CONSUMER-BASED BRAND EQUITY OF HIGHER EDUCATION INSTITUTES (Study 3 - Objective 2)

#### Consumer Attributes – Brand experience, Age, Gender, Education, and Income

*HO6a: There is no significant association between Brand heritage and Perceived Economic Value of Higher Educational Institutes.*

*Table 4.5.4.1: Correlation between Brand Heritage and Perceived Economic Value of Higher Educational Institutes.*

	Perceived Economic Value	
Brand Heritage	Pearson's Correlation	.722
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation coefficient of 0.722 between Brand Heritage and Perceived Economic Value indicates a strong positive relationship. With a p-value of 0.000, well below the significance threshold of 0.05, the null hypothesis—which posits no significant relationship between these variables—would be rejected. This result confirms that brand heritage has a statistically significant and strong positive correlation with perceived economic value of higher education Institutes.

*Table 4.5.4.2: Model Summary for Brand Heritage and Perceived Economic Value of Higher Educational Institutes.*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722 <sup>a</sup>	.521	.520	.54948

a. Predictors: (Constant), Brand Heritage

The results of regression analysis indicate that Brand Heritage accounts for 52.1% of the variation in Perceived Economic Value (R Square = 0.521). The Adjusted R Square of 0.520 confirms that this finding is reliable, even when considering other factors. The standard error of 0.54948 shows how much the observed values vary from the predicted values.

**Table 4.5.4.3: ANOVA for Brand Heritage and Perceived Economic Value of Higher Educational Institutes.**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	451.597	1	451.597	1495.674	.000 <sup>b</sup>
Residual	415.765	1377	.302		
Total	867.362	1378			

a. Dependent Variable: Economic Value

b. Predictors: (Constant), Brand Heritage Average

The ANOVA results for Perceived Economic Value and Brand Heritage indicate that the regression model is highly significant. The F-value of 1495.674, with a corresponding p-value of 0.000, shows that Brand Heritage significantly predicts Economic Value. The large Sum of Squares for the regression (451.597) compared to the residual (415.765) suggests that a substantial portion of the variance in Economic Value is explained by Brand Heritage.

***H06b: There is no significant association between Brand heritage and Perceived Functional Value of Higher Educational Institutes.***

**Table 4.5.4.4: Correlation between Brand Heritage and Perceived Functional Value of Higher Educational Institutes.**

	Perceived Functional Value	
Brand Heritage	Pearson's Correlation	.812
	Sig. (2 tailed)	.000
	N	1380

The correlation analysis between Brand Heritage and the Perceived Functional Value of Higher Educational Institutes calculates Pearson's correlation coefficient of 0.812, indicating a strong positive relationship between the two variables. With a p-value of 0.000, which is well below the 0.05 significance level, this correlation is statistically significant. Therefore, we reject the null hypothesis, which suggested that no significant association exists between Brand Heritage and perceived Functional Value. Thus, the above findings confirm that Brand Heritage significantly influences the perceived Functional Value of Higher Educational Institutes.

**Table 4.5.4.5: Model Summary for Brand Heritage and Perceived Functional Value of Higher Educational Institutes.**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.812 <sup>a</sup>	.659	.659	.45072

The Model Summary for Perceived Functional Value and Brand Heritage shows an R value of 0.812, indicating a strong correlation between the two variables. The R<sup>2</sup> value of 0.659 implies that 65.9% of the variance in Perceived Functional Value is explained by Brand Heritage, demonstrating a good fit of the model. The Adjusted R<sup>2</sup> of 0.659 confirms the model's accuracy and the Standard Error of the Estimate of 0.45072 reflects the average deviation of the observed values from the model's predictions.

**Table 4.5.4.6: ANOVA for Brand Heritage and Perceived Functional Value of Higher Educational Institutes.**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	541.682	1	541.682	2666.420	.000 <sup>b</sup>
Residual	279.737	1377	.203		
Total	821.419	1378			

a. Dependent Variable: Functional Value

b. Predictors: (Constant), Brand Heritage

The ANOVA table for Perceived Functional Value and Brand Heritage demonstrates that the regression model is highly significant. The Sum of Squares for the Regression is 541.682 with 1 degree of freedom, resulting in a Mean Square of 541.682. The F-value is 2666.420, and the p-value is 0.000, which is well below the 0.05 significance level, indicating that the model effectively accounts for the variance in Perceived Functional Value. With a Residual Sum of Squares of 279.737 and 1,377 degrees of freedom, and a Total Sum of Squares of 821.419, the results confirm that Brand Heritage is a significant predictor of Perceived Functional Value.

***H06c: There is no significant association between Brand heritage and Perceived Affective Value of Higher Educational Institutes.***

***Table 4.5.4.7: Correlation between Brand Heritage and Perceived Affective Value of Higher Educational Institutes.***

Brand Heritage	Perceived Affective Value	
	Pearson's Correlation	.806
	Sig. (2 tailed)	.000
	N	1380

The Pearson's correlation of 0.806 between Brand Heritage and Affective Value indicates a strong positive relationship. With a p-value of 0.000, which is far below the 0.05 threshold, this relationship is statistically significant. Given the strength and significance of this correlation, the null hypothesis, which asserts that there is no significant association between Brand Heritage and the perceived Affective Value of Higher Educational Institutes, is rejected.

***Table 4.5.4.8: Model Summary for Brand Heritage and Perceived Affective Value of Higher Educational Institutes.***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.806 <sup>a</sup>	.649	.649	.475139

a. Predictors: (Constant), Brand Heritage

The model summary shows a strong relationship between Brand Heritage and Affective Value, with an R value of 0.806. The R<sup>2</sup> value of 0.649 indicates that approximately 64.9% of the variance in Affective Value is explained by Brand Heritage. The Adjusted R Square of 0.649 supports the model's robustness, and the standard error of 0.475139 suggests a reasonably accurate prediction of Perceived Affective Value based on Brand Heritage.

***Table 4.5.4.9: ANOVA for Brand Heritage and Perceived Affective Value of Higher Educational Institutes.***

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	574.912	1	574.912	2546.590	.000 <sup>b</sup>
	Residual	310.868	1377	.226		

Total	885.781	1378		
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- a. Dependent Variable: Affective Value
- b. Predictors: (Constant), Brand Heritage

The ANOVA results indicate that the regression model using Brand Heritage as a predictor of Perceived Affective Value is highly significant, with an F-value of 2546.590 and a p-value of 0.000. This demonstrates that Brand Heritage significantly influences Affective Value. The considerable difference between the Regression Sum of Squares (574.912) and the Residual Sum of Squares (310.868) underscores the model's strong fitness to explain the variance in Affective Value based on Brand Heritage.

***HO6d: There is no significant association between Brand heritage and Perceived Social Value of Higher Educational Institutes.***

***Table 4.5.4.10: Correlation between Brand Heritage and Perceived Social Value of Higher Educational Institutes.***

	Perceived Social Value	
<b>Brand Heritage</b>	Pearson's Correlation	.805
	Sig. (2 tailed)	.000
	N	1380

The correlation analysis between Brand Heritage and the Perceived Social Value of Higher Educational Institutes reveals Pearson's correlation coefficient of 0.805, signifying a strong positive relationship. With a p-value of 0.000, which is well below the 0.05 significance level, the correlation is statistically significant. As a result, we reject the null hypothesis that there is no significant association between Brand Heritage and perceived Social Value. These findings indicate that Brand Heritage has a substantial impact on the perceived Social Value of Higher Educational Institutes.

***Table 4.5.4.11: Model Summary for Brand Heritage and Perceived Social Value of Higher Educational Institutes.***

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805 <sup>a</sup>	.648	.648	.4913

- a. Predictors: (Constant), Brand Heritage

The Model Summary for Perceived Social Value and Brand Heritage indicates a strong positive correlation, with an R value of 0.805 between the predictor (Brand Heritage) and the outcome variable. The R<sup>2</sup> value of 0.648 shows that 64.8% of the variance in Perceived Social Value is explained by Brand Heritage, suggesting a solid model fit. The Adjusted R<sup>2</sup> of 0.648 supports the model's reliability, and the Standard Error of the Estimate of 0.4913 reflects the average discrepancy between the observed and predicted values.

**Table 4.5.4.12: ANOVA for Brand Heritage and Perceived Social Value of Higher Educational Institutes.**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	612.321	1	612.321	2537.298	.000 <sup>b</sup>
1 Residual	332.309	1377	.241		
Total	944.630	1378			

a. Dependent Variable: Perceived Social Value

b. Predictors: (Constant), Brand Heritage

The ANOVA for Perceived Social Value and Brand Heritage shows that the regression model is highly significant. The Regression Sum of Squares is 612.321 with 1 degree of freedom, resulting in a Mean Square of 612.321. The F-value is 2537.298, and the p-value is 0.000, which is well below the 0.05 significance level, indicating that the model significantly explains the variance in Perceived Social Value. The Residual Sum of Squares is 332.309 with 1,377 degrees of freedom, and the Total Sum of Squares is 944.630. This analysis confirms that Brand Heritage is a significant predictor of Perceived Social Value.