University of Bath

UNIVERSITY OF BATH

DOCTOR OF BUSINESS (DBA)

Customer Based Brand Equity in Higher Education- A Study of Private Higher Education in Nepal.

Tiwari, Ashish

Award date:
2024

Awarding institution:
University of Bath

Link to publication

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

Customer Based Brand Equity in Higher Education- A Study of Private Higher Education in Nepal.

Ashish Tiwari

A thesis submitted for the degree of

Doctor of Business Administration

(Higher Education Management)

University of Bath

School of Management

October 2023

Table of Contents

COPYRIGHT

Declaration of any previous submission of the work

The material presented here for examination for the award of a higher degree by research has not been incorporated into a submission for another degree

Candidate's signature
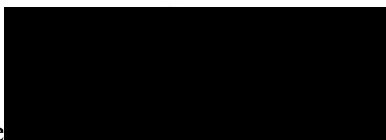
Declaration of authorship

I am the author of this thesis, and the work described therein was carried out by myself personally,

Candidate's signature… █████████████ ……………………….

List of Tables

List of Figures

Glossary of Abbreviations

AVE	Average Variance Extracted
BTS	Barlett's Test of Spehericity
CBBE	Customer Based Brand Equity
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Critical Ratio
DBA	Doctor of Business Administration
EFA	Exploratory Factor Analysis
EIRA	Ethical Implications of Research Activity
FBBE	Firm Based Brand Equity
GER	Gross Enrolment Ratio
GFI	Goodness of Fit Index
HE	Higher Education
HEM	Higher Education Management
KMO	Kaiser-Meyer-Olkin
MSV	Maximum Shared Variance
NRB	Nepal Rastra Bank
RMSEA	Root Mean Square Error of Approximation
SBBE	Student Based Brand Equity
SEM	Structural Equation Modeling
SEM	Structural Equation Modeling
SRMR	Standardized Root Mean Square Residual
UGC	University Grants Commission
UN	United Nations

Acknowledgement

This work would not have been possible without the continuous guidance and unwavering support of my supervisors, Dr. Haiming Hang and Dr. Yvetta Symonyan. They have been inspiring mentors and teachers who have made my academic pursuit possible. I am deeply indebted to them for their encouragement and motivation, and them being supportive of my career and academic goals.

I would also like to express my sincere gratitude for the incredible faculty of the DBA (HEM) programme for their guidance. My heartfelt word of thanks also goes out for my colleagues whose support has been very important for completion of this academic endeavour.

My big and heartfelt thanks to my supporting and understanding wife Nirupama and son Aniruddh for always believing in me and being my source of inspiration. I would have given up on this work much ahead in time if it was not for your encouragement and faith in me. And finally, I thank god for keeping me healthy and bestowing on me all good things in life that I have been blessed with.

Abstract

The primary objective of the research was to explore the factors that influence Customer Based Brand Equity in Higher Education (HE) and investigate the interrelationships between them. Brand Equity in HE largely remains an area of limited focus in the Marketing of HE literature and the study aims to extend our knowledge in that field.

The research was conducted in Nepal where HE has seen phenomenal growth in a short period of time and is largely private and highly competitive. The data was collected from post graduate students of chosen colleges in Kathmandu Valley, capital city of Nepal and a total of 418 questionnaires were used for data analysis. Structural Equation Modelling (SEM) analysis findings provided support for the theoretical model and all hypothesized relationships except 2 out of 12. The findings of the study revealed several significant relationships and patterns related to factors influencing Customer Based Brand Equity in Higher Education in Nepal. The study concluded that there was a positive significant impact of Brand Awareness, Brand Association and Brand Loyalty on Student (Customer) Based Brand Equity for HE institutions. Likewise, the study also concluded that there was a significant positive impact of brand awareness on brand association and brand association on brand loyalty. Next, student satisfaction revealed to have a significant impact on brand loyalty and core and supplementary education services were shown to have a positive and significant impact on student satisfaction. Furthermore, controlled communication (advertising and marketing collaterals) was found to have a significant impact on brand awareness and brand association while uncontrolled communication (publicity and word of mouth) did not have a significant impact on brand awareness and brand association. The study contributes to the existing literature in Branding in HE and has practical implications for the practitioners and policy makers of HE.

Chapter 1

1.1 Overview of the study

Higher Education (HE) has gone through transformation over the past decades due to globalisation and the nature and conduct of HE has undergone a sea change. The complex and multidimensional forces of globalisation have led to fundamental changes in the system and institutions of HE worldwide (Helmsley-Brown and Oplatka, 2006; Bok, 2009, pp 1-16). Globalisation has influenced massification, marketization and rise of competition in HE globally. HE sector is highly competitive and the institutions are pitched against each other competing for students, faculty and funding. With the internationalisation of HE, competition has moved to another level and the motive for internationalisation is no longer only cultural exchange and idea sharing, rather, it has now shifted to monetary motivation and competition. (Knight, 2010).

Further, the traditional definition of HE has changed from being a public good to mixed or private good and due to globalisation; massification and competition in HE is the new normal (Altbach, 1999, p107). The growing competition in HE has resulted in institutions adopting marketing theories and principles for creation of competitive advantage, become marketing oriented and treat students as customers (Chen, 2008; Mazzarol and Soutar, 2001). There is a growing interest of HE institutions in marketing and branding, treating HE as a marketable service and application of service marketing principles to HE. HE is being increasingly regarded as a service by marketing researchers (Arambewela & Hall, 2013; Brown & Mazzarol, 2009; Hennig-Thurau, Langer, & Hansen, 2001).

Conventional service marketing literature holds that services are intangible, variable and perishable in nature (Zeithaml et al, 2011, pp 21-23). It is important to realize that buyers perceive higher risk while making selection of services as they are difficult to evaluate before the purchase is actually made (Parasuraman et al., 1988). HE can also be treated as a service because of its intangible, variable and perishable nature and like any other service it is difficult to evaluate before making a selection. Therefore, marketing principles can be applied to HE like any other service so that the students can evaluate the service before they can make a decision about enrolling in a HE institution.

In-spite of the growing interest of HE institutions in marketing and branding, there seems to exist a narrow and skewed perception of marketing in academia. According to Ng and Forbes (2008, pp 44), the perception of marketing in academia is as follows;

> "When universities think of marketing, they often imagine big advertising and promotion budgets, glossy brochures and intense selling activities"

As the HE institutions have been faced with ever growing competition, they are being compelled to resort to sustainable and holistic branding strategies to build unique positioning in the minds of the students and other stakeholders to give them a distinctive edge over the others. Therefore, there is a growing interest of HE institutions in branding activities (Pinar et al, 2011; Wæraas and Solbakk, 2009). According to Keller (2009), creation of a strong brand is an asset for an organisation and it can help the organisation in creation of customer loyalty, higher margins, customer preference and loyalty and shielding against the competitor actions. Therefore, in the competitive scenario, HE institutions can get similar benefits through branding activities. Adoption of branding practices and a holistic and strategic approach to branding can be seen as an appropriate response by HE institutions to ever rising competition. Although branding is being adopted by HE institutions globally, it seems that it is being done under pressure and a half-hearted approach without complete understanding and grip of the process (Whisman, 2009). Therefore, there is a need for more studies in the area of branding in HE so that the HE institutions can generate more understanding of it and utilise the findings to better navigate the competitive landscape of HE sector.

Helmsley-Brown and Oplatka (2006) in a systematic review of literature on higher education marketing concluded that there are several areas of marketing of HE where a research gap exists and there is a huge scope for the application of marketing in HE. Likewise, Naidoo and Wu (2011), concluded that there is growing need and scope to investigate marketing strategy implementation in HE. Review of existing literature also shows that marketing can be beneficial for HE institutions if applied properly. Chen (2008) points out that HE institutions have increasingly applied marketing concepts like segmentation, image and reputation, positioning and branding to compete in global markets. However, marketing in HE is largely sales oriented and perceived to be synonymous to advertising and promotion and sleek brochures (Ng and Forbes, 2008).   Therefore, a more holistic approach to marketing in HE is required and a strategic approach to marketing needs to be adopted by HE

institutions. Rather than focusing on short term promotions, there is a need for creating strong HE brands that lead to a competitive advantage for the HE Institutions. The ultimate objective of branding activities is to create a strong brand perception of the brand and occupy a distinctive place in the minds of the customers and create a brand value. The value of the brand is referred to as brand equity which is defined as the "differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993, p 1). The value of the brand seen from the perspective of the customers is referred to as customer based brand equity and serves as a strong intangible asset for the company and fetches several advantages for it like less vulnerability to competition and marketing crises, increased margins, customer loyalty, less price sensitive customers, increased perception of product performance, effectiveness of marketing communications and brand extension opportunities (Keller, Parameswaran and Jacob, 2011, p39).

HE sector is an important context for research in branding since HE institutions over the world are becoming increasingly market oriented and students are increasingly being considered as the consumers of HE service (Chen, 2008; Mazzarol and Soutar, 2008). Given the rising competition and the felt need of marketing and branding in HE and the lack of enough literature on branding in HE, there is a distinct requirement for studies in branding in HE (Tiwari, 2018). Therefore, this research aims to investigate factors that influence brand equity in HE and also explore the interrelationship between them in the context of Nepal. Branding in HE is different than other services due to the nature of HE. Compared to the other services what makes HE different from other services is the time of consumption. HE as a service is an extended duration service where the service is consumed over a long period of time (in years) as compared to other services like restaurants (in hours) or tourism (in days) (Pham & Lai, 2016). As HE is an extended duration service there is a long interaction between the service provider (HE institution) and the consumer (students). Further HE is categorised as a service that falls into the credence category, where the students may not be able to evaluate the service long after the service is consumed. (Licata and Frankwick, 1996). These are unique characteristics of HE as a service compared to other services and hence the existing frameworks for other services may not necessarily work in the context of HE. Therefore, separate frameworks for brand equity in HE are required. Further, the HE context in Nepal is unique and hence some other studies in brand equity done elsewhere may not apply. Nepal is a developing country where HE has a short history, is emergent, highly

competitive and largely private and provided by for-profit institutions. These characteristics make Nepal a unique and interesting place for studies in branding in HE.

1.2 The Importance of Research

1.2.1 Why study Brand Equity in HE

As a research topic and also in practice, brand equity is an area of deep interest and scope. However, brand equity is more commonly studied in the area of consumer goods and commercial sectors and studies in brand equity are limited in HE and a research gap exists in studies related to brand equity in HE. With the growing competition in HE institutions globally, brand equity can be a source of sustainable competitive advantage for HE institutions. Brand equity can be helpful for the institutions of HE in attracting students and faculty, building image and reputation, attracting partnerships and collaborations, attracting international students, funding and generating a sustainable competitive advantage. Therefore, it is important to understand brand equity in HE and conduct studies to understand more about the components and influencers of HE brand equity.

HE institutions are increasingly adopting marketing and branding practices with the rise in marketization and competition in HE. (Edmiston 2008; Helmsley, Brown and Goonawardana, 2007; Vidaver-Cohen, 2007). Like commercial enterprises, HE institutions can benefit by adapting marketing and branding practices. However, the nature of HE is different than consumer goods and hence the studies in the area of consumer goods branding may not be applicable in the HE context. HE is being widely considered as a service and principles of service marketing are being applied to HE (Arambewela and Hall, 2013; Brown and Mazzarol, 2009). Notwithstanding, HE is quite different in nature in the service category and is categorised as a service that falls into the credence category, where the students may not be able to evaluate the service even till long after the service is consumed. (Licata and Frankwick, 1996). Therefore, to provide credence and help the students in evaluating the HE service before purchase, brand equity can play an important role.

In-spite of the growing importance and interest in branding in HE, there is a serious lack of studies and models of branding in HE (Palacio et al, 2002; Edmiston, 2008; Hemsley, Brown and Goonawardana, 2007; Vidaver-Cohen, 2007;). Moreover, there are very few studies in

the area of understanding Customer Based Brand Equity (CBBE) in HE and hence, there is a need to conduct more studies in brand equity in HE. CBBE is defined as the capacity of the firm to generate additional cash flows in presence of the brand because the customer attaches value to the brand and is ready to pay a premium when the brand is present rather than when it is absent. CBBE is defined as "differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993, p1). The findings of this study are in the area of CBBE in HE and can help the HE institutions to understand the factors that influence CBBE and help them to crate brand equity so that they can acquire a distinctive competitive advantage over others. The study contributes to and advances the existing body of knowledge on branding in HE, branding in service and brand equity in HE and other service sectors.

1.2.2 Rationale for branding of HE and its research in Nepal

Nepal is a landlocked country located between two huge nations India and China and it has a population of 29 million and an area of around 1, 47, 181 sq. km, stretching 885 km from east to west and 193 km north to south (Ministry of Foreign Affairs, Nepal). Because of the mountainous and uneven terrain and being landlocked, development has been slow in Nepal. There was a 10 year long civil war in Nepal from 1996-2006 and there were two major earthquakes in 2015 which killed 9,000 people and left about 22,000 injured (The Kathmandu Post, 2016).

The History of HE in Nepal is not old as the first HE institution was established in Nepal in 1918 in form of Tribhuvan Chandra College affiliated to Patna University, India (Asian Development Bank, 2015, p7). During those times, HE was highly elite and access was limited to a select few. The growth and rise of HE in Nepal started only after the end of the oligarchy of the Rana regime and establishment of democracy in 1951. The first university of Nepal, the Tribhuvan University was established in 1958 and the growth of HE started only after that (Baral, 2008). Nepal brought the multi university system in 1983 and the after the people's revolution and restoration of democracy in 1990, more universities were established and HE witnessed extraordinary growth post 1990. From 1980 to 2010, the Gross Enrolment Ratio (GER) increased from 3% to 14% and the total enrolments increased from 38 thousand to 407.9 thousand. (UGC, 2012).

As per the last published data by UGC (2022), Nepal has 12 universities, five autonomous medical institutions and 1440 colleges. In Nepal, the colleges affiliated to universities are referred to as 'campuses'. There are two types of campuses under the various universities in Nepal, that are constituent campuses and affiliate campuses; the constituent campuses are directly managed and funded by the concerned university, whereas the affiliate campuses are affiliated to a university but funded and managed either by private entities/businesses/individuals (private campuses) or by local community stakeholders (community campuses).
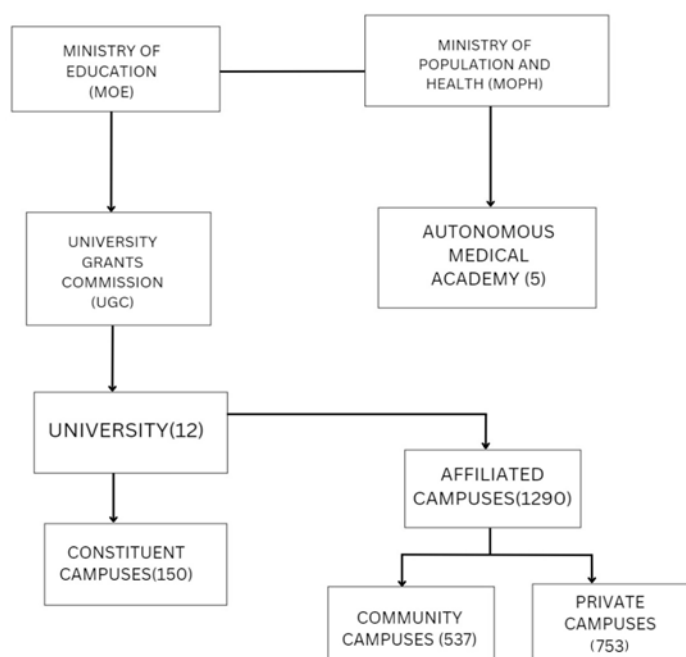
Figure 1. 1 Organizational Structure of Higher Education System of Nepal (UGC, 2022, p. 41)

HE in Nepal is highly competitive and the level of competition amongst the HE institutions can be gauged by the figures of student enrolment and number of institutions. According to UGC (2022), the total number of enrolments in HE in the year 2020/21 was 460,826 in 1,440 HE institutions across the country out of which 753 (52.29%) are private for-profit institutions registered as business entities. The gross enrolment ratio in HE in Nepal is 17.77%.

Apart from the above there are also private colleges affiliated to foreign universities that award the degrees of foreign universities in Nepal in a franchise arrangement. The number of such colleges is 58 with the presence of 32 foreign universities and a total of 19,892 students enrolled in their programs. (UGC, 2022). Therefore, including the colleges offering degrees

in a franchise arrangement with foreign universities the total number of students in HE is 480,718 and there are a total of 1,498 HE institutions. These numbers provide a deep insight into the level of competition in HE in Nepal. The average number of students per HE institution comes out to be only 321. Nepal presents an interesting case for HE as large percentage of provision is by private for-profit institutions and hence there is excessive competitive pressure on these institutions for attracting students and faculty. Therefore, adoption of marketing principles and building of brand equity will help these institutions to generate a competitive advantage and help them compete.

Apart from the competition at home, there is a rising trend of Nepalese students seeking to pursue their HE abroad. This has been a major challenge for HE institutions in the country as they continue to remain vacant due to depleting student numbers. It is also a major challenge for the government as the country's hard earned foreign exchange is being spent for Nepalese students' education abroad. In the year 2021/22, 67.7 billion Nepali Rupees were spent on study abroad while in the first six months of the year 2022-23, there has already been 35.55 billion Nepali Rupees spent (The Annapurna Express, 2023). The government is highly concerned with the growing spend on HE abroad and has been considering policies that will make the institutions of HE in the country more attractive and retain the students at home. According to Bashir (2007) there are several serious disadvantages of cross border consumption of HE in terms of the impact on domestic HE especially in developing countries. The major risk is that the poorly funded domestic HE gets overwhelmed by the foreign competitors. Due to the lack of regulations in the foreign country and also at home and lack of proper information, the students in developing countries are also at the risk of falling prey to aggressive marketing of low quality HE providers leading to wastage of private resources. Also, the nation suffers brain drain and there is a downward trend in HE sector in the country that is considered crucial to national development. Building brand image and reputation of the domestic HE institutions can help to partially solve the problem and help in retaining students. This study can make an important contribution to enhancement of brand image and brand equity of domestic HE institutions in Nepal so that they can build a competitive advantage and are able to retain those students in the country who are going to other countries being influenced by the aggressive marketing and branding of HE institutions in other countries. The study also has the potential to contribute towards informing the policy makers in the country about developing policies that promote brand building of the domestic

HE institutions and building the brand of 'Study in Nepal'. This will be a major contribution to solving the critical problem of brain drain and exodus of Nepalese students for HE.

The objective of this study is to investigate customer based brand equity in HE and explore the factors that influence brand equity in HE. Extant literature shows that the primary antecedents to CBBE are brand awareness, brand association and brand loyalty (Aaker, 1991, 1996; Buil et al., 2008; Eakuru and Mat, 2008; Kim and Kim, 2004; Pappu et al., 2005, 2006; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001), hence, the study explores the impact of these variables on brand equity and also the interrelationship between them. Likewise, the study also investigates the precursors of brand loyalty like student satisfaction and the antecedents of brand awareness and brand association which are controlled and uncontrolled communication. The study was conducted in Nepal, therefore, the findings in the specific context of Nepal will help the institutions of HE in the country to understand the various factors that influence brand equity so that they can focus on those factors and build brand equity to provide them competitive advantage over others. Further, as the study used models from service brand equity, considering HE as a service, the findings of the study are also relevant to other service sectors like health, hospitality and tourism sectors. The findings of the study can also be generalised to other developing countries and contexts where HE sector is highly competitive.

1.3 Research objectives, key research questions and research hypotheses

The primary aim of this research was to improve the academic understanding of customer based brand equity in the context of HE sector and to explore the implications of the findings in practice of management of HE institutions. The research aimed to explore the factors that influence customer based brand equity in HE and the interrelationships between them. As the research is based on the student as customers of HE and HE as a service, the customer based brand equity in this research is referred to as Student Based Brand Equity (SBBE), which refers to HE brand equity seen from the perspective of its customers that is students.

The specific objectives of the research-

    i.   To assess the factors that affect customer based brand equity in HE

ii.   To determine the interrelationship between brand awareness, brand association and brand loyalty and their impact on brand equity

iii.   To assess the effect of student satisfaction on brand loyalty

iv.   To determine the effect of core educational services and supplementary services on student satisfaction

v.   To assess the effect of controlled communication and uncontrolled communication on brand awareness and brand association

The key research questions that the study addressed are as follows -

1. Does brand awareness, brand association and brand loyalty affect customer based brand equity in HE?

2. Does brand awareness predict brand association for HE institutions?

3. Does brand association affect brand loyalty for HE institutions?

4. Does student satisfaction affect brand loyalty in HE institutions?

5. Do controlled communication and uncontrolled communication impact brand association and brand awareness for institutions of HE?

6. Do core educational services affect student satisfaction in institutions of HE?

7. Do supplementary educational services impact student satisfaction in HE institutions?

The key research hypotheses are as follows:

H1: There is a significant impact of controlled communication on brand awareness.

H2: There is a significant impact of controlled communication on brand association.

H3: There is a significant impact of uncontrolled communication on brand awareness.

H4: There is a significant impact of uncontrolled communication on brand association

H5: There is a significant impact of core service on students' satisfaction.

H6: There is a significant impact of support service on students' satisfaction.

H7: There is a significant impact of students' satisfaction on brand loyalty.

H8: There is a significant impact of brand awareness on brand association.

H9: There is a significant impact of brand association on brand loyalty.

H10: There is a significant impact of brand awareness on students' based brand equity.

H11: There is a significant impact of brand association on students' based brand equity.

H12: There is a significant impact of brand loyalty on student based brand equity.

1.4 Overall Framework and Methodology

The research is built around the core themes of branding and brand equity explored in the context of HE. There is a scarcity of existing literature in the area of brand equity in HE, therefore, references are also drawn from service branding and service brand equity, considering HE as a service. The major themes that the study is based upon are marketization and competition in HE, marketing of HE, service branding and service brand equity, HE as a service and students as customers of HE and branding and brand equity in HE.

The conceptual model is derived from studies in the area of service marketing, HE as a service, students as customers, service quality, service brand equity and HE brand equity. The core of the conceptual framework has four key concepts; brand equity, brand awareness, brand association and brand loyalty. (Aaker, 1992; and Keller, 1993; Pinar et al, 2011; Pinar et al, 2014; Mourad & Ennew, 2011). Brand equity is defined as the additional premium that the customer is ready to pay in presence of the brand than when the brand is absent. CBBE is defined as "differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993, p1). The consumers respond more favourably to the product or service in presence of the brand which contributes to added value leading to creation of CBBE. Brand awareness, brand association, brand loyalty are considered to be the antecedents of brand equity in the extant literature. (Keller, 2001; Aaker,1992; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001)

The key models and theories that the conceptual framework is based on are the Brand Equity models by Aaker (1992) and Keller (1993), Service Brand Verdict (SBV) model by Grace and O'Cass (2005), Brand Ecosystem Framework by Pinar et al (2011), University Brand Equity (Pinar et al, 2014), Brand Equity model in HE by Mourad & Ennew (2011) and SERVQUAL (Berry, Parasuraman, & Zeithaml, 1988). The conceptual framework posits that brand awareness, brand association and brand loyalty play a crucial role in influencing Brand Equity in HE. Through the integration of these concepts and theories in the conceptual

framework, this study aims to explore the intricate relationship between brand equity, brand awareness, brand association and brand loyalty.

Furthermore, the conceptual framework also includes core services and supplementary services and posits that they impact student satisfaction which in turn impacts brand loyalty. Likewise, the conceptual framework postulates that uncontrolled communication and controlled communication have an impact on brand awareness and brand association. The conceptual framework helps in addressing the research objective of this study. By investigating the factors that influence brand equity in HE, the research contributes to existing literature on branding and marketing of HE in specific and broadly to the area of branding and marketing of services. This research also contributes to fill the gap in the current understanding of branding and brand equity in HE. The conceptual framework aims to investigate the multidimensional nature of brand equity in HE and also the interplay between the various factors like brand awareness, brand association, brand loyalty that impact brand equity (student based) in HE.

The literature review chapter of the thesis will delve in depth into the theoretical underpinnings of the conceptual framework. The study aims to shed light on understanding the complex dynamics that play in branding of HE and provide valuable insights to marketers and practitioners involved in the area of marketing and branding of HE and other services.

Conceptual Framework
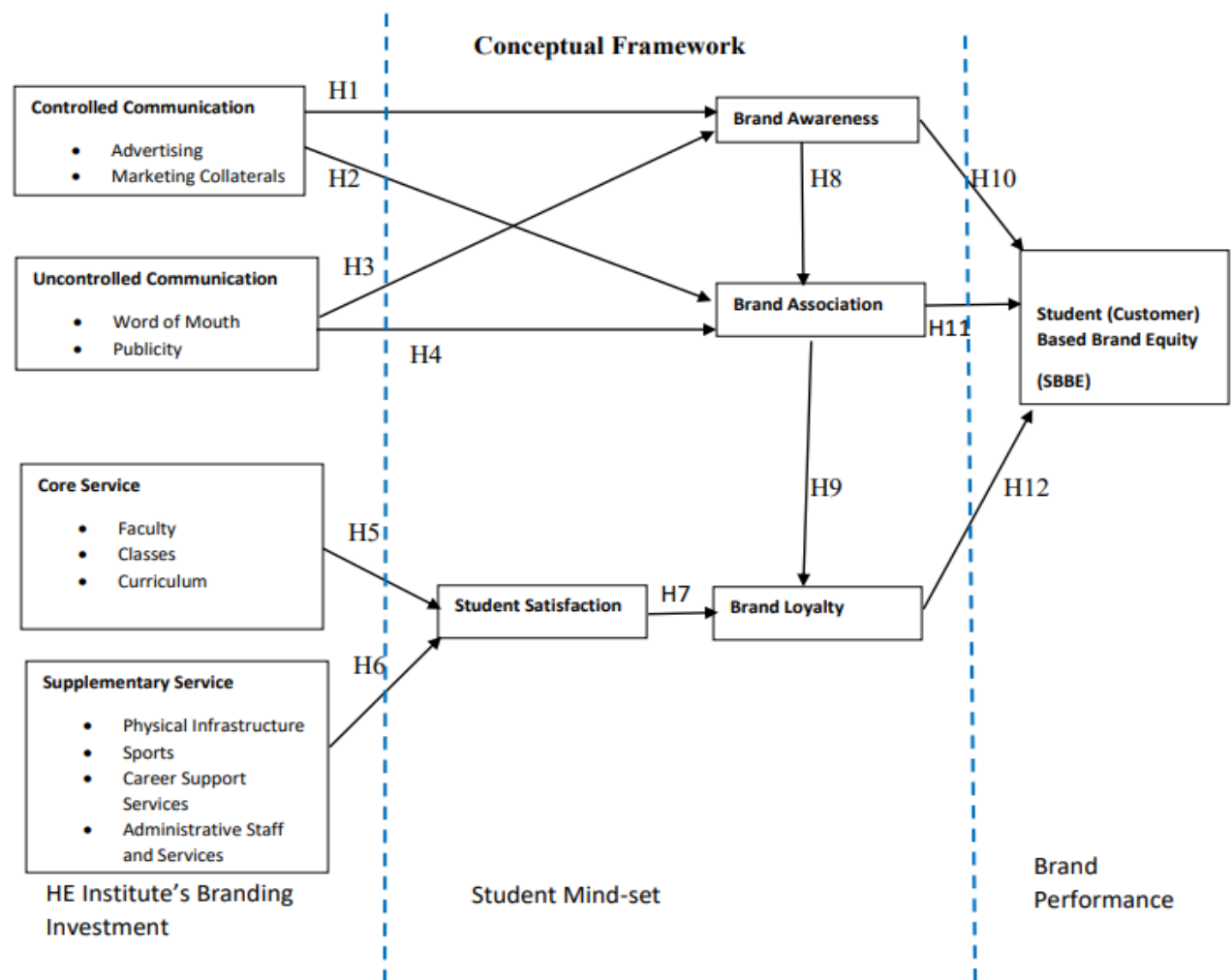
Figure 1. 2 : Conceptual Framework

This study was investigated from the positivist philosophy. The positivist approach is deterministic and establishes cause and effect relationships (Creswell, 2009). Therefore, the study used quantifiable observations that were suitable for descriptive and inferential statistical analysis. The study used survey research as methodology and statistical analysis as method of the study. It is based on the researcher's objective observation and the methodology is scientific investigation of variables based on previously established theories of branding and Brand Equity. Scientific models and quantitative analysis were used to explore causal linkages in dependent and independent variable through empirical data collected though questionnaire survey on large sample size. The standards of validity and reliability are critical and hence were considered very carefully in the study. The study was guided by objectivist ontology, subscribes to the positivist philosophical worldview and primarily used a quantitative approach (Tiwari, 2019).

The research was conducted in Kathmandu, the capital city of Nepal. Two stage sampling was used for the study. In the first stage of sampling, the sampling unit was private HE institutions in Kathmandu and in the second stage the sampling unit was students studying in the post graduate programs in management at those colleges. The final data was collected from the post graduate students of the chosen colleges in Kathmandu Valley. A total of 480 completed questionnaires were received for the study. Out of the 480 completed questionnaires that were received for the study, 418 were used for data analysis after deleting the participants with missing data.

The research initially used descriptive statistics and Exploratory Factor Analysis (EFA) to classify and reduce the underlying variables/factors. Confirmatory Factor Analysis (CFA) was used for verification in the later stage, and Structural Equation Management (SEM) was used for hypothesis testing. The descriptive and inferential analysis of quantitative data was done using IBM SPSS 20 AMOS.

1.5 Theoretical Contributions

The research is focused in the domain of marketing and branding and investigated Customer Based Brand Equity in the specific context of HE. The theoretical framework of the research is based on the theories of service branding, service brand equity, HE as a service and students as customers of HE.

The research focused on making a significant contribution to existing literature on branding and brand equity in HE in specific and to the broader domain of service branding and service brand equity. With the growing global competition in HE, the practice of marketing and branding is getting popular in HE like in commercial enterprises. However, a review of literature shows that there are many studies on brand equity in consumer goods, but there exists a gap in studies related to brand equity in services. (Kayaman and Arasli, 2007 Mourad, Ennew and Kortam, 2011; Krishnan and Hartline, 2001; Bamert and Wehrli, 2005; Van Riel, Lemmink, and Ouwersloot, 2001; Mackay, 2001; Kim, Kim and An., 2003) There exists a lack of consensus on the measurement of brand equity in services and there is a need to develop valid and reliable measures for brand equity that are specific to the unique characteristics of services. Literature related to brand equity in specific service sectors like tourism, hospitality, healthcare, non-profit sector and HE is scarce. This study makes a significant contribution to fill the gap that exists in studies related to brand equity in HE.

The major theoretical contribution of this study is in form of addition to the empirical knowledge on brand equity in HE from the perspective of the students as customers of HE. There is ample literature on brand equity in businesses, consumer goods and other services, however, studies in HE brand equity are scarce. The distinctive contribution of the research results from the investigation of Brand Equity in the context of an emerging service sector of HE which is a mix of public and private provision. The study contributes to the existing knowledge about the factors influencing brand equity in HE and also fills the significant research gap that exists there. The findings fill the research gap in the area of branding in HE and the findings can be utilised not only in HE but also in the area of branding of other services. The study was conducted in Nepal where HE is highly competitive and the findings of the study provide useful theoretical insights about creation of brand equity in HE in developing countries with highly competitive HE sector and also where domestic HE faces threats from international institutions. Previous studies mostly explore the direct relationship between the components of brand equity like brand awareness, brand association and brand loyalty while this study also investigates the relationship between student satisfaction and its impact on brand loyalty. The research also investigated the relationship between marketing efforts like controlled communication and uncontrolled communication on two brand dimensions, brand awareness and brand association and add on to exiting knowledge and provided further support for the models which have investigated the impact of marketing

efforts on brand dimensions. The study provides support for the existing studies in other services that concluded that controlled communication and uncontrolled communication have a significant impact on brand awareness and brand association. This study has a major contribution to existing knowledge by testing this relationship in the context of HE. The study integrates the models of Brand Equity by Aaker (1992) and Keller (1993), Service Brand Verdict (SBV) model by Grace and O'Cass (2005), Brand Ecosystem Framework by Pinar et al (2011), University Brand Equity (Pinar et al, 2014), Brand Equity model in HE by Mourad & Ennew (2011) and SERVQUAL (Berry, Parasuraman, & Zeithaml, 1988) and in doing so it expands the existing knowledge that exists on brand equity in HE and its determinants. The constructs; brand equity, brand awareness, brand association, brand loyalty, student satisfaction, controlled communication, uncontrolled communication, core services and supplementary services form a theoretical model which was tested empirically with CFA and the results show a good model fit which provides support for the theoretical model and validation of the constructs and the interrelationships between them providing support for the theoretical assumptions in the conceptual framework. The empirically tested theoretical model of this research opens up many avenues of further studies in branding, brand dimensions and brand equity in HE and service sectors.

1.6 Structure of This Thesis

The thesis is organised as follows to present the whole research in a comprehensive and coherent manner:

Chapter 1: Introduction

The introduction chapter provides an overview of the research, the significance of the research, the research objective and the key research questions, overall framework and methodology and the key theoretical contributions of the research.

Chapter 2: Literature review

The literature review chapter presents a comprehensive analysis of the existing literature and theoretical framework related to the research topic. The chapter presents a comprehensive analysis of literature around the core themes of marketing, branding and brand equity in the

context of HE. As there is not much existing literature available on branding and brand equity in HE, references are also drawn from service branding and service brand equity, considering HE as a service and students a customer of HE.

Chapter 3: Research Methodology

This research methodology chapter presents the key philosophical assumptions, the methods adopted in conducting the research, research design and plan, population and sample size determination, data collection procedure, instrumentation of data, reliability and validity, data analysis method and issues of ethics and confidentiality.

Chapter 4: Data Analysis and Findings

Data Analysis and Findings chapter presents the empirical findings of the research. It provides a detailed analysis and interpretation of the collected data, addressing the research questions and objectives. The chapter includes descriptive statistics, exploratory factor analysis, validity and reliability analysis, path analysis and results of the hypothesis tests.

Chapter 5: Discussion

The discussion chapter critically evaluates and discusses the key findings of the study and relates it to the existing literature and theoretical framework. It presents a critical analysis of how the findings of this study contribute and advance the existing theories and knowledge in area of customer based brand equity in HE and fills the existing research gap.

Chapter 6: Conclusion

The conclusion chapter summarises the key findings of the research and relates them to the research questions. It presents the theoretical contributions of the research and the implications of the findings of the research to practice. At the end of the chapter it also presents the limitations of the study and recommendations for future research and finally closes with personal reflections of the researcher.

Chapter 2

Literature Review

2.1 Introduction

This thesis is concerned with the understanding of Customer Based Brand Equity (CBBE) in Higher Education (HE). The objective is to understand the factors that influence Brand Equity in HE. The research is contextualised in Nepal where HE has seen phenomenal growth in a short period of time and is largely private and highly competitive. There is fierce competition among the providers of HE to attract student and faculty and to generate competitive advantage over the others. Evidence suggests that adoption of marketing and branding principles by HE Institutions helps them manage the perception of value, maintain competitive market position and manage student satisfaction and loyalty.

The chapter reviews literature around the core themes of marketing, branding and brand equity in the context of institutions of HE. As there is not much existing literature available on branding and brand equity in HE, references are also drawn from service branding and service brand equity literature, considering HE as a service and students as customers of HE. The review focuses on marketization and competition in HE, marketing of HE, service branding and service brand equity, HE as a service, students as customers of HE and branding and brand equity in HE.

The key models and theories that the thesis is informed by are the brand equity model by Aaker (1992) and Keller (1993), Service Brand Verdict (SBV) model by Grace and O'Cass (2005), Brand Ecosystem Framework by Pinar et al (2011), University Brand Equity (Pinar et al, 2014), Brand Equity model in HE by Mourad & Ennew (2011) and SERVQUAL (Berry, Parasuraman, & Zeithaml, 1988)

2.2 Brand and Branding

The practice of branding has existed for centuries in various forms primarily as a method of distinguishing the product of one seller from the other through a unique identification mark. The word brand comes from the old Norse word brandr, which means "to burn," as brands were the means through which owners of livestock marked their animals to identify them (Maurya and Mishra, 2012).

The classic definition of American Marketing Association (1960) defined brand as a name, term, sign, symbol, design or a combination of these which identifies the goods and services of one seller as distinct from those of other sellers. With the passage of time the meaning and scope of brand has widened from being just an identifier of a particular seller's product to a value proposition offered by an organization. Brands have value for customers and also for the organisations that own them. Brands value is reflected in the form of an intangible asset on the company's balance sheet along with other intangible assets like patents and goodwill. Kapferer (2008, p10) asserts that brands are conditional assets that are dependent on other material assets, products and services to produce value. He further argues that brands are a system of mental associations that have the power to influence buyers and act as a risk and time reducer for buyers.

Further, Mishra and Maurya (2012) conducted a study to review the existing literature on meaning of a brand and presented a critical analysis of various understandings of brand in academic literature. The study concludes that the concept of brand is complex and cannot be concluded in few lines. They state that brand is an indicator of value to various stakeholders and the value is both functional and emotional. The value is built over time through interaction of stakeholder with the organization and it is subjective and personal, therefore, it is perceived value. They hold that in order to maximize the value, organizations should strive to reduce the gap between the perception and the real brand identity.

In another study, Alt and Griggs (2007) argue that brands have added value beyond the physical and functional ones and the added value gives the brand its personality. So, we observe that brands have moved much beyond just being a term, symbol or means of identification and have a much wider and deeper meaning and impact. Brands are value indicators for customers and other group of stakeholder and hence organisations should be focused on building brands that have high perceived value for customers and stakeholders at large.

A brand is a set of promises for the customers and a source of value and credence (Davis, Buchanan-Oliver and Brodie, 2000). Branding has come a long way from the classical American Marketing Associations' definition of being a mere identifier to a multidimensional construct which represents the functional and emotional benefits provided by the firm to

satisfy the functional and emotional needs of the customers. Leslie de Chernatony and Francesca Dall' Olmo Riley (1998) in their study concluded that there are various definitions and interpretations of branding which leads to confusion and difference in strategic emphasis amongst practitioners due to different conceptualization of brand. They categorized the broad range of existing brand definitions into twelve main themes that categorises brand as legal instrument, logo, risk reducer, identity system, image, value system, personality, relationship etc. Therefore, we see that the meaning of brand has evolved over a period of time from being an identifier to a set of value propositions to customers. It represents trust, bundle of benefits-both functional and emotional, mental associations and perceived value for customers.

2.3 Brand Equity

In the previous section, we observed that brand has much wider meaning than being just an identifier and it has the capacity to create value for customers as well as organizations. Although the practice of brand management has existed for many decades, brand equity as a central business concept emerged only in the 1980's during the mergers and acquisition boom when the purchase price received by companies also reflected the value of the brand. (Leone et al, 2006). These transactions implied that the brand added value to the organization and was an intangible asset to the firm and the premium charged by these firms in their valuation could be attributed to the value of brand as an intangible asset. According to Keller (2008), brand equity explains the difference in outcome of marketing efforts when a product or service is branded as compared to when it is not and the premium that it commands can be attributed to brand equity. Organisations with high brand equity create higher levels of customer preference and purchase intentions as compared with those with lower brand equity (Cobb-Walgren, Ruble and Donthu, 1995).

There exist extensive academic and industry models of brand equity, however, all of them share one basic premise that brand equity is the added value to the product or service which exists in the minds of customers and is created through the interactions, relationships and associations the customers build with the brands over time. There are several ways through which the value of a brand can be explored for a firm in form of additional revenue and decreased cost (Leone et al, 2006).

Ambler, Kokkinaki and Puntoni (2004) posit that there is an increasing interest amongst academics and practitioners in measurement of marketing performance and their study concludes that amongst the various metrics that the firms use to measure marketing performance, brand equity is growing in recognition and widely measured. However, they also conclude that brand equity is rarely integrated into the formal assessment system. Although the concept of brand equity has established the importance of strategic branding and brand management in marketing, there still does not exist a common viewpoint about the conceptualisation and measurement of brand equity and it has been defined in different ways for different purpose and contexts (Keller, 2008, p59).

Schultz (2003) described brand equity as a continuum with psychological value on one end of the continuum and future financial value of the brand to the firm on the other end. Psychological value of the brand is the value placed on the brand by the consumers and society and the financial value generated by the brand is in form of an intangible asset that could be sold to generate income or as an asset that would produce future value. Therefore, we conclude that brand equity is the value attached to the brand which can be looked at from the customer's perspective on one side and from the firm's perspective on the other.

2.3.1 Types of Brand Equity

In branding literature, Brand Equity has been classified from two primary perspectives; the Firm Based Brand Equity (FBBE) and Customer Based Brand Equity (CBBE). FBBE considers brand as a firm asset and is based on the financial market value of the firm. It is the incremental discounted future cash flows which would be generated in presence of a brand in comparison to when the brand is absent (Simon and Sullivan,1993). FBBE is a financial measure and it is primarily concerned with the premium asset valuation that the firm with a strong brand commands. Presence of a strong brand yields added asset value for the firm as it can generate additional cash flows in the future and hence the present valuation of the firm is higher due to the present value of the discounted future cash flows. On the other hand, CBBE is the value of the brand seen from the customer's perspective. The firm can generate additional cash flows in presence of the brand because the customer attaches value to the brand and is ready to pay a premium when the brand is present than when it is absent. CBBE is defined as "differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993, p1). The consumers respond more favourably to the product or

service in presence of the brand which contributes to added value leading to creation of CBBE. The value of the brand can be positive or negative depending on the customer reaction to the product and marketing mix. Brand value if positive is the customer reacts more favourably to the product and marketing mix and negative if the customer reacts less favourably. The idea of CBBE holds that the value of the brand lies in the hearts and minds of the customers. It depends on what the customers have heard, seen, learnt and felt about the brand through their interactions with the company and the brand over a period of time. Therefore, firms need to manage the interactions of the customers with the brand and ensure that the customers have good experience with the products and services and the marketing programs of the company and they build the right associations with the brand.

2.3.2 Customer Based Brand Equity

Extant Literature shows that there are several benefits of CBBE to a firm. According to Keller (Keller, Parameswaran and Jacob, 2011, p39), brand equity has several advantages which includes less vulnerability to competition and marketing crises, increased margins, customer loyalty, less price sensitive customers, increased perception of product performance, effectiveness of marketing communications and brand extension opportunities. Therefore, it makes sense for firms to spend efforts and resources in generating CBBE.

The two widely cited and popular models of CBBE are the ones by Aaker (1992) and Keller (1993). Aaker upholds that brand equity creates considerable value for the firm and proposed a way to determine this value. Aaker argued that there are five brand equity assets that create value which are brand loyalty, brand awareness, perceived brand quality, brand association and other proprietary brand assets. He asserts that the value can add to or subtract from the value provided by the product and service. Amongst the five brand equity assets; brand association or brand image is most significant while the proprietary brand assets were included for completeness and is typically of lesser importance than all other brand equity assets.

According to the Customer Based Brand Equity model by Keller (2001), building strong brands is a series of sequential steps where the subsequent step is dependent on successful completion of the previous step. There are four consecutive steps in this model which represent four fundamental questions customers ask about a brand; who are you, what are

you, what about you, and what about you and me. These questions sequentially represent brand identity, brand meaning, brand response and brand relationship. It is clear that this is a hierarchical process where the previous stage has to be completed to progress to next stage; brand identity has to created first before brand meaning could be created and all earlier stages have to be complete to create a strong brand relationship with the customers. The model consists of 6 building blocks arranged in a pyramidal structure. The ultimate aim is to progress to the top of the pyramid moving up from one block to the other sequentially. Creation of significant brand equity involves moving to the top of the pyramid to build brand resonance where an intense and active relationship between the customers and the brand exists.

The two models of CBBE by Keller (2001) and Aaker (1992) have a few things in common. brand awareness in Aaker's model is similar to brand identity in Keller's model, brand association is similar to brand meaning and brand loyalty in Aaker's model corresponds to brand resonance in Keller's model. Therefore, we observe that brand awareness, brand association or brand image and brand loyalty are the most important components of Customer Based Brand Equity. In order to build strong equity, brands have to ensure high level of awareness, positive and strong associations and intense and long lasting relationship with the customers.

Likewise, Netemeyer et. al. (2004) in their study about development and validating measures of core facets of CBBE, concluded that that perceived quality, perceived value for cost, uniqueness and willingness to pay a premium were the core facets of CBBE. The study also showed similarities with other CBBE frameworks which includes the fact that CBBE was a multidimensional construct and the nomological correlates of the core facets of CBBE were brand awareness, familiarity, popularity, organizational associations and image consistency. Further, in another study, Faircloth, Capella and Alford (2001) showed that brand image directly influenced brand equity and brand attitude had a significant indirect effect on brand equity through brand image.

Furthermore, in another study of brand equity, Lassar, Mittal and Sharma (1995, p13), operationalised brand equity as "the enhancement in the perceived utility and desirability a brand name confers on a product" and they used performance, value, social image, trustworthiness and identification/attachment as the five components of brand equity to

develop scales for measurement of brand equity. Jarrel (2012) studied a possible relationship between service quality and brand equity in online HE and found that there was a strong positive correlation between service quality and brand equity and a small mediating effect of brand loyalty existed between the relationship between service quality and brand equity. Similarly, in another study of brand equity in the service context, Kim, Kim and An (2003) used data from 12 luxury hotels and concluded that brand loyalty, perceived quality and brand image are important components of CBBE in services.

In all studies related to CBBE, it is defined as the premium that the customers attach to the brand which is a result of various factors related to the brand in which brand awareness, brand image or associations, brand loyalty are the most important ones. Most prior studies have operationalized brand equity dimensions using multiple constructs which primarily include brand awareness, perceived quality, brand loyalty, brand associations, brand personality and organizational associations (e.g. Aaker, 1991, 1996; Buil et al., 2008; Eakuru and Mat, 2008; Kim and Kim, 2004; Pappu et al., 2005, 2006; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001). The conceptualizations discussed in this section inform the conceptual framework of the thesis which focuses on Student (Customer) Based Brand Equity in HE and its antecedents. The conceptual framework has Student (Customer) Based Brand Equity as a construct which is the dependent variable and brand awareness, brand association and brand loyalty are independent variables that are hypothesized to impact brand equity positively.

2.4 Branding in Services

Services bear characteristics that make them different from tangible goods and hence need special marketing and branding considerations. Understanding of the characteristics of services is important for service providers to develop effective strategies, manage customer experiences and deliver high quality service and build a strong brand. According to Zeithaml et. al. (1985) services have following characteristics-

Table 2. 1 Characteristics of Services

Intangibility	Services cannot be seen, touched, felt and tested like goods

Inseparability	Production and consumption of services cannot be separated and production and consumption is simultaneous.
Heterogeneity	There is high variability in performance of services. Service performance can vary according to producer to producer, customer to customer and day to day.
Perishability	It refers to the fact that services cannot be stored.

It is observed in the previous sections that brands are valuable for both consumers and firms and hence branding has received much attention in both academia and practice. There has been a considerable amount of research in developing theoretical frameworks to explain the impact of brands on consumer behaviour and to understand the value of brands and the drivers of brand value, however, most of these frameworks are related to branding for tangible goods and there has been limited consideration for service branding (Krystallis and Chrysochou, 2014; Turley and Moore 1995). Nonetheless, branding for services is of paramount importance due to the intangible nature of services. Like physical goods, customers cannot physically examine, touch and feel the services during the pre-purchase stage and the presence of the brand helps the customers tangiblise the intangible service and provide credence. Presence of strong service brands reduces the customer's perceived monetary, social or safety risk associated with the purchase of the product as it is difficult to evaluate before the purchase of the service (Berry, 2000).

Berry (2000,) in a study of fourteen high performance service companies made a case for service branding as a foundation for service marketing for the organisations of present and future. Berry (2000, p 128) argued that branding is not only for tangible goods but it is a "principal success driver for service organisations as well". He further mentions that "Strong brands are the surrogates when the company offers no fabric to touch, no trousers to try on, no watermelons or apples to scrutinize, no automobile to test drive". The service branding model in the study had company's presented brand, external brand communications, customer experience with company, brand awareness, brand meaning and brand equity as the principal components of a service brand. The company's presented brand is the company's controlled communication of its identity and purpose through advertising, its service facilities and the presentation of the service providers while external brand communications represents

all information customers absorb which is not necessarily controlled by the firm, like the word of mouth or the publicity. The study concluded that the company's presented brand, external communication impact brand awareness and brand meaning and that the brand awareness and brand meaning synergistically contribute to creation of brand equity. Likewise, the works of Dall'Olmo Riley and de Chernatony (2000) and Davis, Buchanan-Oliver and Brodie (2000) also help in understanding the role of brands in a service context.

Further, another study by Brodie, Whittome and Brush (2009) developed and tested a theory of influence of service brand on the customer value-loyalty process. The model uses the influence of brand image, company image, employee trust and company trust to more comprehensively reflect the service perspective. The model tested the influence of brand image, company image, employee trust and company trust on customer value and loyalty. The study shows direct influence of all these aspects of service brand on customer value.

Therefore, we see that various brand dimensions make the service brand influence the customer's perception, attitude and response to the brand. The set of brand associations experienced by the customers before and during the purchase or brand evidence along with advertising and promotion significantly influences consumer satisfaction, attitude and behavioural intentions towards the chosen service brand (Grace and O'Cass 2005, cited in Tiwari, 2019). Furthermore, other major brand dimensions that influence satisfaction and attitude of customers towards service brands include brand name, price/value for money, servicescapes, core service, employee service, feelings, self-image congruence and controlled and uncontrolled communication. Another study by Krystallis and Chrysochou (2014, cited in Tiwari, 2019) considered brand loyalty as a dependent variable which was an outcome of the consumers' evaluation of different service dimensions and communication. This study confirmed the findings of previous studies that brand evidence or the brand associations experienced by the customers before and during the consumption of service significantly influences customer satisfaction, attitude and loyalty towards service brands. The study also concluded that advertising, word of mouth and publicity impact the consumers' response to service brand.

2.5 Service Brand Equity

Brand and brand equity are of utmost importance in service marketing due to the nature of service and growing competition, however, the number of studies on brand equity in services is limited and it is not explored much in literature. Although there are several conceptualisations of brand equity, there are relatively lesser number of empirical studies in brand equity in the service context and it is not explored much in service marketing literature (Kayaman and Arasli, 2007 Mourad, Ennew and Kortam, 2011; Krishnan and Hartline, 2001; Bamert and Wehrli, 2005; Van Riel, Lemmink, and Ouwersloot, 2001; Mackay, 2001; Kim, Kim and An., 2003). There exist gaps in studies related to measurement of brand equity in services. There are several models of brand equity in goods but there is a lack of consensus on measurement of brand equity in services and researchers need to develop reliable and valid measures of brand equity that are specific to the unique characteristics of services. A gap exists in studies related to customer loyalty and brand equity in services, service recovery and brand equity, brand equity and long term service business performance, and also in the area of brand equity in specific service sector like healthcare, hospitality, education and in non- profit sectors. Few studies that developed frameworks for brand equity in services are discussed in this section to understand brand equity in services.

A study of brand equity in the healthcare sector conducted by Chahal and Bala (2012) examined the relationship between the three significant components of brand equity; perceived service quality, brand image and brand loyalty and also their relationship with brand equity. Findings of the study show that brand equity in healthcare services is significantly influenced by perceived service quality and brand loyalty. However, brand image has an indirect effect on service brand equity through brand loyalty. Likewise, a study by Konecnik and Gartner (2007) conceptualised and empirically verified a model for CBBE for travel destination and found out that the four brand dimensions namely awareness, image, quality and loyalty are important for evaluation of a destination brand and influence the CBBE of the destination brand. In a similar study of CBBE for a destination (Australia), Pike and Bianchi (2016) found that brand salience, brand image and brand value are positively related to attitudinal brand loyalty and hence contribute to brand equity.

Further, another study of brand equity in services developed by Wang Tsu and Fang (2009) concluded that service staff and customer interaction have significant direct effect on brand equity. Kimpakorn and Tocquer (2010), in a study of CBBE of service firms studied the relationship between service brand equity and employee brand commitment and found that hotels with high brand equity have stronger level of employee brand commitment than the hotels with low brand equity. Therefore, employee commitment is critical to brand value or service brand equity. The study identified six dimensions for measuring the CBBE for service brand as brand awareness, perceived quality, brand differentiation, brand association, brand trust and brand relationships. The study also showed that the variables, brand differentiation and brand trust had major influence on customer brand relationships.

In a study of developing and testing a model of service branding, Grace and O'Cass (2005) proposed a model with five key constructs; brand verdict, brand attitude, satisfaction, brand evidence and brand hearsay. Brand verdict is defined as the consumers' decision regarding repurchase or boycott or behavioural intentions which is similar to brand loyalty. Brand hearsay consists of all communication that the consumers experience. The set of brand associations experienced by the customers before and during the purchase or brand evidence along with advertising and promotion significantly influence consumer satisfaction, attitude and behavioural intentions towards the chosen service brand (Grace and O'Cass 2005). Furthermore, other major brand dimensions that influence satisfaction and attitude of customers towards service brands include brand name, price/value for money, servicescapes, core service, employee service, feelings, self-image congruence, controlled and uncontrolled communication.

Further, another study by Krystallis and Chrysochou (2014) considered brand loyalty as a dependent variable which was an outcome of the consumers' evaluation of different service dimensions and communication. This study confirmed the findings of previous studies that brand evidence or the brand associations experienced by the customers before and during the consumption of services significantly influences customer satisfaction, attitude and loyalty towards service brands. The study also concluded that advertising, word of mouth and publicity impact the consumers' response to service brand.

In most studies related to service brand equity, some common themes are observed and we see that factors like brand association, brand loyalty, service quality are the most important

antecedents of service brand equity. This is further reinforced in a study of service brand equity by Loureiro, Lopes & Kaufmann (2014) that found brand loyalty, brand identification, brand trust, brand personality and brand awareness to be the variables that have greatest impact on service brand equity. Likewise, another study by He and Yan Li (2010) concluded that in case of services, service quality is a strong driver of brand equity. Further, in a study of scale construction and validation for measurement of brand equity in services, Nath and Bawa (2012) concluded that the brand measurement scale consisted of four sub scales - brand familiarity, perceived quality, brand loyalty and brand association. Therefore, we can conclude that some of the common factors in all studies related to and drivers of service brand equity are brand awareness, perceived quality, brand association and brand loyalty.

2.6 Marketing in HE

The rising global demand for HE has led to proliferation of degrees and institutions of HE. The competition amongst HE institutions for students, faculty and funding is a global phenomenon (Rust et al., 2010; Maringe and Foskett, 2012). Increasing competition amongst institutions of HE has led to marketisation of HE and adoption of market like mechanisms and practices in HE as it has become a mixed good from being a public good. With the rising competition, more HE institutions are adopting marketing practices to create a competitive advantage for themselves to enhance their ability to attract the best students and faculty. Marketing has not been popular with HE institutions as it is generally perceived to be meant only for commercial enterprises, however, with the increasing competition HE institutions are feeling the growing need for embracing marketing practices like never before.

Adoption of market like mechanisms in HE would also mean increase in the number of paying students, no state control over number of student enrolments and fee by the state and like in any other competitive markets, the students would choose between the various service providers based on their perception of the value provided by them. The choice of the students of a HE institution will depend upon availability of information about programmes, courses, majors and other facilities that have the capacity to meet their needs (Bok, 2009, p 24). Therefore, it is important for HE institutions to disseminate this information and manage the students and other stakeholder groups' perception of value so that they remain in the top of their choice list.

In a systematic review of literature on HE marketing, Hemsley-Brown and Oplatka (2006) concluded that the theories and concepts of marketing that have been effectively used in the business world are slowly being recognised by researchers in the field of HE marketing. However, they claim that the literature available about HE marketing is incoherent and also rudimentary and fails to properly explain the marketing of HE Institutions.

It is fairly evident that the role of marketing in HE institutions cannot be negated in the face of globalisation, massification, rising competition and marketisation of HE. There has been a growing interest in the application of marketing theories and principles. However, the theory and practice of marketing in HE is not developed and there seems to be a narrow understanding of the application of marketing in HE. Marketing generally does not have a good reputation and acceptance with the academia who holds a biased and narrow perception of applications of marketing. Marketing in HE institutions is mostly sales oriented and is normally perceived to be synonymous with promotions and advertising (Ng and Forbes, 2009). Schwartz (2004) claims that institutions often apply marketing concepts poorly and make false promises to students. Swain (2005) says that students do not come to a university for a beautifully maintained lawn shown in the brochures. It is important to note and understand that marketing of HE institutions is not only about showcasing frills. The application of marketing concepts and practices in HE needs to be analysed and understood in a more holistic manner.

Further, to understand the broader and holistic role of marketing in HE, it is important to understand the contemporary practices in marketing taking a detour from the traditional and narrow understanding. Marketing has evolved from being just about sales and promotions to a broader and integrated approach. According to Keller and Kotler (2009) conducting marketing in a fragmented and piecemeal basis leads to suboptimal brand performance and modern day marketing is more complex and holistic. HE institutions are still focused on a narrow approach to marketing and marketing in HE is normally more focused on sales. According to Kotler and Keller (2009, p 308) holistic marketing is "the design and implementation of marketing activities, processes, and programs that reflect the breadth and interdependencies of their effects". Holistic marketing assumes that it's not only the customers but everyone including the competitors, employees, other companies and society are important and organisations are relooking at their systems, structures and processes of how they conduct marketing. According to Kotler and Keller, holistic marketing has four

components which includes internal marketing, integrated marketing, relationship marketing and performance marketing. The practice of marketing has evolved from being only sales oriented to a holistic marketing, however, there is not much literature available about the use of holistic marketing in HE and this presents a huge scope of future studies in applications of holistic marketing to HE which will help institutions of HE benefit from marketing in the current times of competition and lack of differentiation and in generating competitive advantage and brand equity.

2.7 HE as a service

Marketing evolved from the economic model of exchange of goods or manufactures' output and the dominant logic was focused on tangible goods, embedded value and transactions, however, the new perspective has emerged and the new dominant logic is focused on intangible resources, co-creation of value and relationships which is the service dominant logic (Vargo and Lusch, 2004). It focuses on customisation and customer as a co-producer. Marketing of HE from the perspective of service dominant logic is considering the students as customers of HE. Ng and Forbes (2009) developed a framework from services marketing for application in the context of HE institutions to understand what marketing orientation would mean for them and how students would value their offering. Their study considered the students as customers of HE and the core service in the university experience being the learning experience that is co-created. Therefore, HE can be considered as a service where the value is intangible and value can be enhanced through co-creation with the students who are considered to be the customers of the HE service.

HE has been increasingly considered as a service and the characteristics that apply to services in other sectors also apply to HE. (Arambewela & Hall, 2013; Brown & Mazzarol, 2009). Zeithaml (1981) categorized services on a continuum on the basis of customers' ability to evaluate the service quality and the continuum ranged from easy to evaluate to difficult to evaluate. According to the study, services are categorized into three categories; search, which is easy to evaluate before purchase, experience, which can be evaluated after purchase and the third category is credence, where a service is difficult to evaluate even after purchase. According to Licata and Frackwick (1996), HE as a service falls into the credence category as it is difficult to evaluate even after purchase and consumption because the customers of HE, the students, do not have enough knowledge required to evaluate the service quality. A HE

consumer may not be able to evaluate the service even after a long time of consumption. A student may be able to realize the benefits of HE only after a long time of graduating (Tiwari, 2018). Therefore, the students would look for evidence and indicators to evaluate the quality of HE. Presence of strong brand can be indicator and evidence of quality of HE, can provide credence and the students can evaluate HE service before, during and after consumption.

Higher Education as a service has all characteristics as described by Zeithaml, (2011), intangibility, inseparability, heterogeneity and perishability. HE as a service is intangible and it cannot be seen or felt but only experienced. It is inseparable and hence the service provider and service consumer cannot be separated. Further, HE as a service is heterogeneous and the service quality will vary and depend on service provider, the institution of HE and students and finally the HE service is perishable and hence its production and consumption is simultaneous.

There are not many studies that look into HE from the services marketing perspective (Ng and Forbes, 2009). As HE is a specialized service, the principles of services marketing to HE can help institutions rethink how they view students and how they are managed. The focus on delivering outstanding service experience, co-creation of learning experience and student oriented marketing can lead to creation of high levels of student satisfaction and loyalty leading to high brand equity for institutions of HE.

2.8 Students as Customers of HE Service

The growing commoditization and marketization of HE has led to increase competition for funding, students and faculty, decreased government funding and increased cost of education. Institutions of HE have started to adopt marketing practices and the mantra of marketing success by becoming customer focused. For attracting and recruiting the best students and faculty; institutions of HE have started to rely heavily on marketing and the practice of marketing is becoming popular with colleges facing declining enrolments and funding (Kotler and Armstrong, 2008, p27).

The core focus of marketing is customers and according to Kotler and Keller (2009) the whole marketing process should be customer focused and customer is the central entity for all marketing strategy and actions. Therefore, for a HE institution to become marketing oriented

the customer should be the central focus. However, there exists a debate over who is the customer of HE and there exists a reluctance to accept the students as customers of HE. The reluctance emanates from the apprehension that considering the students as customers might lead to degradation in quality and rigor of HE.

Michael (1997) argued that universities are increasingly adopting consumerism over professoralism, an arbitrary term which means an ideology that keeps the academics at the centre stage rather than the students who are the customers of HE. The universities need to be student centred for enrolment management, resource attraction, quality management and cost control and students' satisfaction in order to attract more students, retain them, satisfy them and make them positively recommend others to join the university.

There is a continued debate over who are the customers for HE and whether the students should be considered as customers. While one school of thought holds that in order to be market oriented in the times of growing competition, HE institutions need to consider students as customers, while the other school of thought holds that considering the students as customers leads to dilution of academic rigor and quality (Bay and Daniel, 2001). Albanese (1999) argues that students as-customers model has many shortcomings that lead to interactions that are educationally dysfunctional. Students as customers leads to the students believing that they know what is best for them and may result into inappropriate empowerment of the students in the role of customers.

Literature shows that there is divided opinion about students as customers both in favour and against. Arguments against students as customers posit that considering students as customer may lead to degradation of academic rigor and quality and students may dictate terms as buyers of HE service, while on other extreme arguments in favour hold that considering students as customers leads to high level of satisfaction resulting in higher customer satisfaction and hence higher brand loyalty and brand value. If students are treated as customers, they might start demanding unfair deals and start looking for courses with least work and highest grades and the teachers might be forced to inflate grades to please students to ensure high levels of customer satisfaction (Carlson and Fleisher 2002). However, these arguments present the extremes of the debate around students as customers and a balance could be struck between the two extremes. A more rational conclusion around this debate can be drawn by considering the recent developments in service marketing; students are different than customers of other goods and the role of students as customers makes more sense when

it is viewed from the Service Dominant Logic (SDL) and the role of student as a co-creator of value. According to Mark (2013), the criticism of student as customer is based on the outdated conceptualisation of a customer's role and argues that a customer is no longer a passive recipient of services rather the customer is an active co-creator of services. Therefore, a student as a customer is not only a passive consumer of the HE service, rather the student participates in the co-creation of the HE service.

Students as customers of HE buy a complex bundle of benefits that satisfy their needs which include the academic qualification and accompanying services and a complete student experience. With the use of marketing philosophies in HE it is obvious to consider the students as customers of HE service although there are criticisms and several disadvantages of considering students as customers of HE. Cuthbert (2010) argued that applying marketing practices in HE is not only about considering students as customers and taking a narrow view of student as customers. This is an indicator of insufficient understanding of the marketing perspective itself. The holistic understanding of the marketing concept requires to treat the students not only as customers but also consider the students in the role of members, clients, learners and people. The demerits of marketing in HE and students as customers can be overcome by broadening the role of the students and bringing together the modern marketing thinking and modern knowledge of teaching and learning and looking at the student as a co-creator of knowledge and learning along with fellow students, faculty and with others outside the university. The student as co-producer aligns with the marketing philosophy of focus on students and active role of students and challenging the taken for granted one sided assumptions about course design, delivery and evaluations to make it personalised and student centric. Therefore, application of marketing in HE and considering students as co-creators, benefits both, the HE institutions and the students.

2.9 Branding of HE and Brand Equity in HE

With the advent of marketization of HE and growing competition, it is of prime importance for HE institutions to use the practices of service marketing to HE, considering HE as service and students as customers of HE. Branding is important in marketing of services as services are intangible and cannot be touched or examined before making a purchase like a physical good. Hence, it is more important to brand services so that credence is established and the customers can a make a purchase of something that they have not seen or touched and will be

experiencing it only after the purchase decision is made. Hence, brand can serve as an extremely important tool for customers to evaluate a service before purchase.

In making a choice of HE institution, brand can serve as an important component to influence student decision making in choice of HE institution. Marketing in HE has transcended much beyond conventional advertising and sales and the focus is on managing holistic brand. "Institutions that craft, present and manage a unified brand message, experience and environment achieve a competitive advantage in recruiting, retaining and building loyalty amongst their students, parents, staff, faculty, alumnae and donors!" (McKibben, 2005 p 1). In the current context of marketization and competition in HE, strategic brand management and creation of brand equity is extremely important for HE institutions to create and sustain competitive advantage.

In the previous sections, service brand equity and HE as service both have been discussed; therefore, the models and dimensions of service brand equity can be used to explore brand equity in HE. Mourad, Ennew and Kortam (2011) considered HE as a service and investigated the determinants of brand equity in HE from the customer's point of view. They proposed a modified brand equity model based on the models of Keller (1993) and Aaker (1991). The model had two main dimensions of brand equity; brand awareness and brand image and the study concluded that the image related determinants of brand equity are far more significant than the awareness related determinants. The image related attributes included service attributes, symbolic attributes and provider attributes and the awareness dimensions were promotional activities and word of mouth.

In a study of branding for HE, Pinar et al (2011) used the brand ecosystem framework for creation of CBBE. The model proposed the students as consumers of HE and student satisfaction in consumption of the services provided by the HE institution is critical. The student learning experience is the key driving force in creation of the university brand with student experience at the core. According to the model, the student experience is influenced by the core and supporting value creation elements. The core value creation activity is academics which consists of teaching and research and the next level surrounding the core has supporting value creation elements which are student life, sports and community activities. The core and supporting activities interact dynamically to create student experiences. The model has employees, alumni and donors who also affect the student

experience and brand image. All the factors affect the students' university experience and eventually the CBBE. Therefore, CBBE in HE is influenced primarily by overall student experience which is a function of core value creation activities (teaching and research) and secondary value creation activities (student life, sports and community).

In another study Tran et al (2020) investigated brand equity and its indicators- brand image, brand awareness and brand loyalty in the context of HE and the study concluded that significant relationship existed between brand awareness, brand loyalty and brand equity. The study also concluded that brand communication had positive effect on brand image and brand trust. Further, the study also confirmed that brand image was a significant indicator of brand trust and brand trust positively influenced brand loyalty.

Furthermore, a study by Pinar et al (2014) developed and tested the scales for measuring the dimensions of university brand equity and also investigated the relative importance of each of the university brand equity dimensions. They classified the university brand equity dimensions into two categories - core and supporting. The core dimensions included brand awareness, perceived quality, brand loyalty, emotional environment and brand reputation. The supporting value creation dimensions identified were student living (residence and dining services), library services, career services and physical facilities. The study also concluded that perceived quality in core dimension and library services in supporting dimensions were the most important in relative importance amongst others. The study infers that both core and supporting factors impact the university brand equity and the core educational experience cannot exist without the supporting dimensions and hence in creating university brand equity, both factors are important.

Further, a study by Ali et al (2016) shows that the five dimensions of HE service quality; academic aspects, non-academic aspects, program issues, reputation and access, influence student satisfaction which in turn influences institutional image and both student satisfaction and institutional image influence student loyalty. Similarly, a study by Pinar et al (2020) to investigate the role of brand equity dimensions in creation of a strong university brand concluded that brand equity dimensions of brand awareness, perceived quality, brand association, learning environment, emotional environment, brand trust, brand loyalty and university reputation collectively and/or individually influence the students' university learning experiences that result in creating strong university brand equity.

A study by Jillapalli and Jillapalli (2014) studied whether professors have CBBE in the minds of the students and the study concluded that some professors do have CBBE and brand building effort can be successfully applied to build strong professor brands. The results of the study show that characteristics of professor brand; perceived quality of instruction, competence and reputation have an influence on students' feelings of attachment and quality of relationships with the professor brand or the CBBE of professors. Furthermore, another study by Dennis et al. (2016) built upon the work of Jillapalli and Jillapalli and studied the effect of brand attachment and its antecedents on commitment, satisfaction, trust, and brand equity in the context of HE. The study shows that brand meaning is the main antecedent of brand attachment strength that effects satisfaction, trust, commitment and brand equity.

A study by Eldegwy et al (2018) about the brand equity of university social augmenters defined the university social augmenters as "any social platforms offered by the university that offer social interactions between students and are administered by university staff, such as organized volunteering, sporting, workshops, debate models, and clubs" (p 913). The social augmenters allow students to have meaningful and holistic educational experience through the social interactions between students, faculty, alumni and other external parties. The social augmenters define a students' university experience and the study reveals that the social augmenters' reputation, coach to student interaction, student to student interaction influence student satisfaction. The study also concluded that satisfied students show results of higher brand equity by demonstrating brand identification, willingness to recommend and to incur additional premium cost. Like other previous studies, this study also confirms that student satisfaction influences brand equity and its outcomes like their willingness to pay a premium and provide referrals.

A study of university brand equity by Khoshtariaa, Datuashvilic and Matin (2020) suggested that university brand equity dimensions fall into two categories, core and supplementary. The core dimensions of university brand equity consist of perceived quality, brand associations, brand loyalty, brand awareness and knowledge assessment and the supplementary elements consist of library services, dining services, career development and physical evidence. The study shows that out of the five core brand elements, brand loyalty, brand awareness and knowledge assessment are the most important factors for university brand equity. In relation

to the supportive elements, library services and career development are most important in creation of university brand equity.

HE is a high credence service and presence of strong brand or brand equity is a strong influencer in choice of a university by students. A study by Vukasovic (2015) considered three major dimensions as determinants of brand equity which were image related, awareness related and consumer related attributes and concluded that the image related determinants; service, symbolic and finance related attributes were major drivers of brand equity. The service attributes consist of perceived quality of educational services, range of courses, study methods and quality management; the symbolic attributes consist of social image, market position and personality and the financial attributes consist of the relationship between the service quality and price and the financial stability of the faculty. This also confirmed with the study by Mourad, Ennew and Kortam (2011) which concluded that image related attributes of brand equity were more important than the awareness related attributes in case of HE brand equity. The brand awareness attributes used in the study included promotion activities and word of mouth, the image attribute included service attributes, symbolic attributes and provider attributes and the consumer attributes included experience and socio-economic factors.

A study by Goi et. al. (2014) concluded that the two major dimensions of brand identity for HE institutions were visual and verbal identity. The visual identity consists of service facilities, employee service, product/core service, price, culture, employee development and system/culture and the verbal identity consists of distribution channel, word of mouth, public relations, and promotion. Another study by Bosch et al. (2006) also found that reputation, personality, performance and relationship exerted a significant positive influence on the brand identity in HE.

A study of brand equity in HE by Mourad et al (2020) showed that the determinants of brand equity in HE as reported in extant literature may vary according to the maturity of the HE industry and also the country and cultural context. The study claims that this may be the possible explanation for the differences that exist in literature about determinants of brand equity in HE. The study was conducted in an emerging HE market, Egypt and a mature HE market, USA. However, the study presented strong evidence in favour of construct structure for BE advocated in literature which point to the dual dimensions of brand awareness and

brand image. This information is important to this study as it was conducted in a developing country Nepal, which is an emerging market for HE.

2.10 Conclusion

With the rise of competition, HE institutions have been aggressively adopting branding practices and there is a rising interest in branding in HE, however, it is still in a nascent stage. There is not much clarity and understanding of branding and brand equity in HE. Branding is not understood well in the institutions of HE, and there is a very narrow defined perception of branding. There is a lack of literature and branding models in HE. (Edmiston, 2008; Hemsley, Brown and Goonawardana, 2007; Palacio et al, 2002; Tiwari, 2018; Vidaver-Cohen, 2007). CBBE in HE has not been explored and a huge gap is seen to exist in studies on brand equity in HE. Studies in understanding brand equity in HE can contribute to the existing knowledge and HE institutions and practitioners will be greatly benefited by them.

Chapter 3

Research Design and Methodology

3.1 Background

Research strategy, design and methodology depicts a basic framework for conducting the study to attain the predetermined objectives of the study. "Research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis and interpretation." (Creswell 2018, p3). This chapter presents the philosophical assumption, the methods adopted in conducting the research, research design and plan, population and sample size determination, data collection procedure, instrumentation of data, reliability and validity, and data analysis method.

3.2 Research Philosophy

The research philosophy is the overall approach the researcher adopts while conducting research. It refers to "the system of beliefs and assumptions about the development of knowledge" (Saunders et al, 2019, p130) It influences the belief of the researcher towards how data should be collected, analysed and used. Research philosophies influence research and hence they need to be identified.

Research philosophy consists of two types of research assumptions, ontology and epistemology. According to Saunders et al (2019), ontology refers to the assumptions the researcher holds about the nature of reality and epistemology refers to the assumptions about knowledge, how it is acquired, what constitutes acceptable, valid and legitimate knowledge and how can knowledge be communicated to others. According to Crotty (1998) the basic elements of any research process are epistemology, theoretical perspective, methodology and methods. Crotty (p 3) defines epistemology as "theory of knowledge embedded in the theoretical perspective" and describes the theoretical perspective as the philosophical stance that influences the methodology. According to Crotty ontological and epistemological issues emerge together and hence ontology is not considered separately in Crotty's framework. Likewise, Guba (cited in Creswell, 2009) uses the term philosophical worldview and defines it as basic sets of belief that guide action. Creswell asserts that the philosophical worldview defines the general orientation about the world and research that the researcher holds and the

worldview of the researcher would lead to the researcher using quantitative, qualitative or mixed methods. According to Creswell, although there are ongoing debates about the research philosophies, the four worldviews or paradigms/beliefs that are widely discussed in literature are post positivism, constructivism, transformative and pragmatism. The post positivists hold a deterministic philosophy and also reductionist which focuses on reducing ideas into smaller discrete sets which can be tested in form of hypothesis and research questions. It is based on empirical observations and measurements and focuses on testing, verifying or refining an existing theory. In contrast to this, constructivists believe that reality is constructed by individuals through their interpretations of the social world. The constructivist view holds that humans construct meanings through their interaction with the social world. It holds that social reality is subjective and the individual's perspective and experiences shape their understanding of the world and reality is constantly constructed through human interactions. Hence, the focus is on human interactions and rather than starting with a theory like the post positivist, the researcher generates or inductively develops a theory. The next research philosophy, the transformative holds that it is not only the goal of research to understand the social world but the goal is also to transform it. The aim is to create social change by transforming the existing social norms and practices that contribute to oppression, inequity and social injustice. This philosophical paradigm believes that it is the responsibility of the researcher to create positive social change. The pragmatic philosophy believes in practical implication of the research finding on the real world. There is a concern for solutions to problems. It focuses on action and practicality in research and shaping knowledge. It focuses on collaborations and stakeholder involvement and is grounded in the experiences and views of those who are affected by the problem and finding practical solutions to the problem.

The two main epistemological positions according to Bryman and Bell (2015) are positivism and interpretivism. The positivist approach advocates the application of the methods of natural sciences to understand social reality and it entails the principles of phenomenalism, inductivism, deductivisn and that research is value free. However, intrepretivism is the contrasting epistemology to positivism. Unlike the positivist philosophy, it does not focus on the objective facts, rather it holds that reality is subjective and it is based on the individuals' and groups' interpretation of the social world. Interpretivism believes that people interact and make meaning of the social world in a subjective manner and will depend upon their perspectives, values, experiences, beliefs and their interaction with the social world. The

focus of the research is to interpret and uncover the subjective meanings rather than starting with a category or a theory and imposing it.

This study was investigated from the positivist philosophy. The positivist approach is deterministic and establishes cause and effect relationship. Positivists believe in a stable reality that is observable and objective which others can easily repeat. (Levin 1988, cited in Balarabe Kura 2012). It focuses on identifying and assessing causes that influence results. According to Streubert & Carpenter (1999, p. 7 cited in Balarabe Kura 2012), positivist research emphasises "rationality, objectivity, prediction and control". The positivist approach holds that knowledge must be developed objectively without the values of the researcher and participants influencing the development of knowledge (Park et al 2020). An epistemologically positivist approach focuses on discovering observable and measurable facts and regularities, exploring causal relationship in data and creating generalisations (Saunders, 2019). A positivist approach is characterised by empirical observation and measurement and theory verification. A positivist starts with a theory and collects data that supports or disapproves the theory. Positivism holds that the researcher approaches the research in a value-free way and remains detached from the research and data so that it does not influence the research. Positivist researchers are likely to use highly structured methodology so that the results could be generalised and hence quantifiable data and statistical analysis is utilised. (Saunders 2019; Bryman & Bell, 2015).

Positivist philosophy was chosen as it was the most appropriate philosophy for this study because the study sought to identify causal relationships in variables; customers based brand equity, brand awareness, brand loyalty, brand association, student satisfaction, and communication in HE institutions and generalise it to different contexts and population. As studies in brand equity are rare in HE and reliable models do not exist which could be generalised to use in practice, the study aimed to study the factors that influence customer based brand equity in HE. This study aimed to investigate the relationship between specific intervention and its effect on an outcome variable. To achieve this objective, it was necessary to employ a systematic and rigorous approach that can produce objective and reliable data. Positivist approach was chosen as it allows quantifying and measuring the variables and production of standardised and objective data that could be analysed statistically to identify the causal relationship in the variables and generalise the results to the population.

This study assumed that knowledge is hard, real and external to the individual; and knowledge can be acquired and transmitted in tangible form (Cohen, Manion & Morrison, 2000). This ontological assumption says that worlds' reality is absolute and the corresponding knowledge is universal. This epistemology assumes that the knowledge can be acquired through scientific inquiry rather than personally experienced and subjectively interpreted.

Therefore, this study is based on the researcher's objective observation of students' perceptions and attitude. The methodological approach was characterized by scientific investigation on selected factors or variables prescribed by previously established theories on branding and brand equity. The abstraction of reality was sought through mathematical models and quantitative analysis to find out causal linkages among the antecedents and outcome variables through empirical evidence gathered through questionnaire survey on large sample size. Overall, this study is predominantly quantitative and subscribes to a positivist philosophy.

3.3 Research Design

In the research design the researcher choses the qualitative, quantitative or mixed methods and also decides on the type of study within these three choices (Creswell, 2018). Research design is an all-inclusive process for outlining research issues, place selection for data collection, outlining ethical requirements for fieldwork, and outlining data collection and analysis methods, as well as the role of the researcher in the entire research process. The sequential steps in the research design process are; 1. Development of research hypothesis based on relationship between constructs 2. Methodology to test and validate the relationship between the constructs and then 3. To collect data, conduct empirical analysis and draw conclusions and implications. (Bryman & Bell, 2015).

The study used theories of brand equity to build a construct and formulate hypotheses based on existing literature. It used quantifiable observations that are suitable for descriptive and inferential statistical analysis. The study used survey research as methodology and statistical analysis as method of the study. It is based on researcher's objective observation and the methodology is scientific investigation of variables based on previously established theories of branding and brand equity. Scientific models and quantitative analysis were used to

explore causal linkages in dependent and independent variables through empirical data collected though questionnaire survey on large sample size. The standards of validity and reliability are critical and hence were considered very carefully in the study. The study was guided by objectivist ontology, subscribes to the positivist philosophical worldview and primarily used a quantitative approach (Tiwari, 2019).

According to Creswell & Creswell (2018) the three components of research approach in research are research philosophy, design and research methods. Research design is an important component of the research approach which are primarily of three types; quantitative, qualitative and mixed methods. An overview of the three research designs is presented in the table below (Creswell, 2018, p 12)

Table 3. 1 Research Design

Quantitative	Qualitative	Mixed Methods
Experimental Design	Narrative Research	Convergent
Non-Experimental Design such as survey	Phenomenology	Explanatory Sequential
Longitudinal Design	Grounded Theory	Exploratory Sequential
	Ethnographies	Complex Designs with embedded core designs
	Case Studies	

The quantitative and non-experimental survey design was chosen for this study. The primary reason for choosing this design was that the study included multiple variables and aimed to establish causal relationships between multiple variables so that predictions could be made based on the results of the study and so that the findings are objective and free from subjective biases and are generalizable to larger populations and can be replicated in other context. According to Creswell & Creswell (2018, p19), quantitative design is "best" if the research problems calls for "(a) the identification of factors that influence an outcome (b) the utility of an intervention or (c) understanding the best predictors of outcomes". Therefore, quantitative approach is appropriate for this study as it aimed to study the factors that

influence customer based brand equity in HE and also to study the best predictors of brand equity, brand awareness, brand association and brand loyalty in HE.

Although the quantitative design has its own shortcomings and one of them is that it might lead to over simplification of a complex phenomenon by breaking it up into simplified variables and numbers and hence it might miss out on the context and might not give a detailed understanding. However, as there are not many studies of Customer Based Brand Equity in HE, a quantitative research design helps to understand the construct of brand equity and the related variables in HE and it provides a basis for future research where qualitative or mixed research design can be used to understand the more detailed nuances of brand equity in HE.

The conceptual model was developed based on the literature in branding and brand equity, specifically from service branding literature. The research considered various factors which affect Customer Based Brand Equity in HE and the interrelationship between them. A set of hypotheses was formulated based on the existing literature and Customer Based Brand Equity is treated as the dependant variable in the study with various brand dimensions as independent variables. The research is a conclusive research and the findings of the research were carried out by quantitative analysis based on the data collected from primary survey. The data collection was done through a questionnaire with sampled respondents. The findings and results were based on the data provided by the respondents. The primary data was collected from the sample size of 480 respondents. The respondents of the study were students of various colleges in Kathmandu valley affiliated to various Universities in Nepal. The descriptive and inferential analysis of quantitative data was done by IBM SPSS 20 AMOS.

3.3.1 Research Objective and Research Questions

The research aim was to explore the factors that influence customer based brand equity in HE. The objectives of the research were

i.   To assess the factors that affect customer based brand equity in HE
ii.   To determine the interrelationship between brand awareness, brand association and brand loyalty and their impact on brand equity

iii.   To assess the effect of student satisfaction on brand loyalty

iv.   To determine the effect of core educational services and supplementary services on student satisfaction

v.   To assess the effect of controlled communication and uncontrolled communication on brand awareness and brand association

The research questions are as follows:

R1.   Does brand awareness, brand association and brand loyalty affect customer based brand equity in HE?

R2.   Does brand awareness predict brand association for HE Institutions?

R3.   Does brand association affect brand loyalty for HE Institutions?

R4.   Does student satisfaction affect brand loyalty in HE Institutions?

R5.   Do controlled communication and uncontrolled communication impact brand association and brand awareness for institutions of HE?

R6.   Do core educational services affect student satisfaction in institutions of HE?

R7.   Do supplementary educational services impact student satisfaction in HE institutions?

According to Bryman and Bell (2015), the distinction between a qualitative research and quantitative research is primarily explored on the basis of whether the approach to research is deductive or inductive. In the deductive approach, the theory guides research while in the inductive approach the theory is an outcome of the research. The deductive approach is appropriate when established theory or hypothesis exists that needs to be tested and modified, while inductive approach is more relevant when a there is little existing theory and the research questions require more exploratory approach to formulate a theory.

The research adopted a positivist philosophy and therefore it utilised the deductive theory. The deductive approach starts with an established theory based on literature review and then goes on to building and testing of hypothesis through data collection and leads to accepting or rejection of hypothesis to modify the theory. (Bryman and Bell, 2015). Established theories related to Brand Equity in services exist, however, these theories are not tested in the context of HE as a service. Therefore, this study used deductive approach to test the theory of Customer Based Brand Equity in HE.

This study was based on descriptive research design and inferential statistics. This research tested twelve hypotheses related to the factors influencing Customer Based Brand Equity in HE. Cross-sectional research design was adopted as information was collected from the given sample of population only once in a specific period of time.

The quantitative research method was applied to the study to achieve research objectives. Quantitative research method is not only about the quantification of social aspects that distinguishes it from qualitative or mixed methods but it has a distinctive epistemological and ontological position which means that it is much more than just about numbers. (Bryman and Bell, 2011). According to Bryman the justification of focus of a quantitative research on measurement is justified as follows

a. Measurements allow to measure fine differences in people in terms of the characteristics in question. While big differences may be easy to detect but finer differences in people are difficult to detect, hence measurements help in detecting those finer differences.

b. Measurements provide a consistent standard for making the distinction by providing a consistent instrument for measuring the finer differences. These scales remain consistent over time and also with other researchers.

c. The measurements provide a basis for more accurate estimates of degree of relationship between concepts.

There are several methodologies that are used in the field of social sciences like ethnography field experiments, action research surveys, grounded theory, case studies, phenomenology, and numerical methods such as mathematical modelling (Creswell, 2003; Myers, 1997; Crotty, 1998). Considering the research objective, experimental design was not suitable for this study. However, as the research design is quantitative, to meet the research objectives and answer the research questions, data was required to be collected from a large sample in a short time. According to Creswell (2018) survey design helps researchers answer questions about relationship between variables and this research aimed at answering questions related to relationship between various variables related to brand equity. Also, the research required data to be collected from a large sample (minimum 404) which was diverse and dispersed. Therefore, survey method was the best way to gather data considering the time available and also economy as it is not possible to conduct one to one interviews with such a large sample group. According to Pinsonneault and Kraemer (1993) survey research has three primary

features. First, it produces quantitative descriptions of some aspects of the studied population, second, the primary way of collecting information is by asking structured and predefined questions and third, the study is conducted with a small fraction of the total population which is generalised for the whole population. Further, survey research is most appropriate when the control of independent and dependent is not possible or desirable, the phenomenon of interest must be studied in a natural setting and it should occur in the current time or recent past. Considering this, survey research was found to be the most appropriate method for this research.

3.3.2 Population and Sample size determination

3.3.2.1 Sampling Design

Study Domain

According to UGC, 2022, Nepal had a total of 460,826 students enrolled in higher education in 2020/21 in the entire country divided into 7 provinces. Out of the total students of all 7 provinces, the major percentage of students were enrolled in the Bagmati Province with a total of 218,888 students and 628 institutions of HE out of a total of 1440 institutions in the country. The largest percentage of students and institutions are located in Kathmandu Valley in the Bagmati Province. Therefore, Kathmandu Valley, the capital city of Nepal in the Bagmati Province was chosen as the study area. Also, Kathmandu being the capital of Nepal attracts students from all parts of Nepal to various institutions in Kathmandu and all prestigious institutions of Nepal are located in Kathmandu.

Population

The population of the study was students studying in various private colleges affiliated to Kathmandu University, Pokhara University, Mid-Western University and Foreign Universities awarding degrees in Nepal in Kathmandu, Nepal. In Nepal 89.59% HE institutions are private and 52.29% are private for-profit institutions registered as business entities. Since the study has more relevance to private educational institutions, students from private colleges in Kathmandu Valley were considered as population for the study.

Sampling Frame and Sampling Unit

Multistage sampling method was used for the study. Out of the total student enrolment in HE in Nepal in various disciplines, the highest percentage of student enrolment, 46.24% (UGC, 2022) is in management. Therefore, while considering the sampling, the sampling frame was the list of private management colleges in Kathmandu valley offering degrees in management in the first stage and the students studying in selected colleges in Kathmandu Valley in second stage. Multistage sampling was used in the study to ensure that the respondents chosen were representative of the population and they represented students of higher education across major universities in Nepal. In the first stage the sampling unit was the private colleges and in the second stage of the sampling, the sampling unit was the students studying in the post graduate programs in management at the selected colleges. The post graduate students were selected over undergraduate students as this study assumed students as primary customers of higher education who decide about the choice of joining an educational institution and then consume the service. In Nepal, the students at master's level, are the ones who pay for the education and they have higher degree of decision making power on school choice than the bachelors level students.

Sampling Technique

Stage 1- Selection of colleges

For selecting the colleges purposive sampling was used. The researcher's knowledge and professional experience was used to draw the samples of the colleges from the list of private colleges in Kathmandu Valley running programs in management. It was ensured that private for-profit colleges affiliated to all major universities, Kathmandu University, Pokhara University, Mid-Western University and Foreign Affiliated universities were included in the sample. These colleges are the most reputed colleges providing management education in the country and also face most competition and also attract students from all over Nepal, therefore, the findings of the study will provide useful insights into the brand equity for private colleges in Nepal and help the colleges all in building strong competitive advantage through brand equity. The following colleges were selected for drawing samples of students.

Table 3. 2 Colleges selected for Sampling

College	University Affiliated to
Kathmandu University School of Management	Kathmandu University, Nepal
King's College	Westcliff University, USA
Uniglobe College	Pokhara University, Nepal
Rajdhani College	Pokhara University, Nepal
IIMS College	Lincoln University College, Malaysia & Taylor's University, Malaysia
Excel Business College	Pokhara University, Nepal
Apex College	Pokhara University, Nepal
Tribhuvan University School of Management	Tribhuvan University
Ace International Business School	Queen Margaret University, Scotland & Glasgow Caledonian University, Scotland
Presidential Business School	Westcliff University, USA
Global International College	Mid-Western University, Nepal
Ace Institute of Management	Pokhara University, Nepal

Stage 2- Selection of students from the chosen colleges

The sampling of students was carried out based on a purposive sampling method. Only the interested respondents filled in the questionnaires. The students who were approachable and interested to cooperate by filling in the forms were contacted for the questionnaire administration in their schools.

Attempts were made to use random sampling on a sampling frame of list of students obtained from the colleges, but the idea had to be abandoned as when the colleges were approached for acquiring the list of students, most did not agree to share the list of the students. Some colleges had shared the list but sampled students were not available on campus as some were on a study leave preparing for exams and some on projects and internships. Therefore, finally quota based sampling was used selecting the number of students from all the listed colleges in equal proportion but the respondents were selected through convenience sampling in their

school premises. The final year students were considered as those students would have spent time and have gone through the experience of studying in these colleges and hence they will be able to comment on some of the areas of the study because of their experience of the service.

Sample Size

The sample size was determined using Cochran's (1977) formula which is given as follows:

$$n_0 = \frac{z^2 p(1-p)}{e^2}$$

Where n_0 is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute present in a population and e is the desired level of precision.

The calculation of the sample size is done at 95% confidence interval, ±5% precision and considering maximum variability, which occurs when p=0.5. The corresponding value of z at 95% confidence interval is 1.96. Hence the sample size will be as follows:

Sample Size $= \dfrac{(1.96)^2 0.5(1-0.5)}{(0.05)^2} = 384.16$

Rounding off to the next highest integer the sample size will be 384. Considering 10 % margin for safety, the minimum sample size is 422.

During data collection focusing on collecting response from a sample size which is larger than needed leads to a waste of time and effort and does not contribute additionally to research (Bryman, 2007; Zikmund, 2003; Hair et al., 2010). Therefore, it is essential to determine the right sample size so that the results could be generalised to the entire target population. Different methods for determining sample size are suggested depending on the data analysis method to be used by the study (Fowler, 2009). This study used Structural Equation Modelling and therefore this was also considered to determine the sample size for this study. The most widely accepted guidelines for multivariate analysis and the prerequisites of the SEM are also observed. This type of multivariate analysis includes statistical techniques like confirmatory factor analysis (CFA), structural path analysis, total variance extracted, causal modelling with latent variables, analysis of variance, and multiple regression. At least five examples per parameter are recommended by Bentler & Chou (1987)

when the data is adequately normalized, distributed, and free of any missing or outlier data. The generally accepted practice is to have minimum 5 participants per item in the study. There are 58 items in total in the study, hence the minimum sample size for this study should be 350 (58 * 5 = 290). However, as per the calculations using Cochran's formula, the present study intended to achieve at least 384 sample sizes (after treating missing data) to examine the paths proposed in the model with reliable estimates.

Final Sample

The final data was collected from the post graduate students of the chosen colleges in Kathmandu Valley. Two individuals who had received training in field data collection and had previous experience were appointed for data collection for this study. The respondents (students) were contacted for data collection at their respective colleges by the data collectors. A total of 480 students were contacted for filling up the questionnaire and it was filled in the presence of the data collectors to help them if they had any confusion or problems. A total of 480 completed questionnaires were received for the study.

3.4 Data Screening and Analysis

3.4.1 Missing Data

The data was entered in IBM SPSS software data sheet and double checked by the researcher for missing data and errors. The missing data was coded a 0 and the missing data was treated using SPSS and list wise deletion was done. In list wise analysis any cases with missing data were deleted. As the questionnaire was administered by trained personnel, the total missing data was not high and hence the list wise deletion was used. As the number of survey participants was much higher than the minimum required samples because a margin was maintained beforehand anticipating the cases of missing data, list wise deletion did not have any impact on the statistical power of the analysis. Out of the 480 completed questionnaires received for the study, 418 were used for data analysis after deleting the participants with missing data.

Multiple methods of data analysis were used to meet the research objective and answer the research questions. The research initially used descriptive statistics and Exploratory Factor

Analysis (EFA) to classify and reduce the underlying variables/factors. Confirmatory Factor Analysis (CFA) was used for verification in the later stage, and Structural Equation Management (SEM) was used for hypothesis testing.

The tools used for analysing data are discussed as follows:

3.4.2 Descriptive Statistics

In the first step the descriptive statistics, including mean and standard deviations was used to provide basic information on the measures used in the analysis. The data normality was tested to analyse the form of a variable's data distribution and its relation to a normal distribution. In addition, the standard deviation was used to determine the amount of response variance.

3.4.3 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is a statistical method used to reduce and represent relationships between interrelated variables with a manageable number of factors. The Kaiser-Meyer-Oklin value (KMO and Bartlett Sphericity Test (BST) were used to determine the suitability of the data set for factor analysis. A value greater than 0.5 for KMO test indicates the suitability of the data for factor analysis. Likewise, the BST compares the correlation matrix of the variables in the data set to an identity matrix and evaluates if the correlation matrix is significantly different from the identity matrix which would indicate that factor analysis may be the appropriate method for the data set. If the p value from BST is lower than the chosen significance level i.e. 0.05, the data set is suitable for data reduction technique.

Factors with eigenvalues of greater than one are retained in the analysis and factor loadings more than ±0.30 are considered to meet the minimum standard, while those of loads of ±0.40 and ±0.50 are more significant. The study used Varimax Rotation with Kaiser Normalisation, the most common orthogonal approach used for factor interpretability, to simplify and interpret the factor structure. The study KMO and BST tests showed that the study variables were appropriate for factor analysis.

3.4.4 Confirmatory Factor Analysis (CFA)

CFA was used in the study to test the developed theoretical model of relationship between the observed variables and the underlying latent factors. CFA was used to evaluate how well the pre-specified model fitted to the observed data and to determine how well the hypothesized factor structure explained the correlations among the observed variables. The model fit was determined by comparing the predicted covariance matrix of the observed variables with the actual covariance matrix using various goodness of fit index. Goodness of fit suggests how well the specified theoretical structure represents the reality as presented by the data (Hair et al. 2010). According to Hair et al., multiple fit indices should be used to assess a model's goodness of fit and it should include the following:

Chi Square Minimum Divided by Degrees of Freedom

Comparative Fit Index (CFI)

Root Mean Square Error of Approximation (RMSEA)

Standardized Root Mean Square Residual (SRMR).

Therefore, these indices were considered for testing the model's goodness of fit and the threshold values were considered to assess the model fit.

3.5 Reliability of the study

Reliability refers to the consistency of a measure and its ability to produce consistent and reproducible results (Heale and Twycross 2015, Mellinger and Hanson, 2020). In other words, a reliable measurement tool should produce consistent results each time it is used to measure the same construct or phenomenon.
In this study the reliability of various constructs was measured through the following

3.5.1 Internal Reliability

In this study, the Cronbach alpha values above 0.7 were considered to establish that the tools used for the analysis were reliable enough and provide a valid result. Internal consistency or internal reliability estimates the reliability by measuring the homogeneity of items in the measure (Zikmund, 2003; Sekharn & Bougie, 2013). The internal reliability measures the extent to which the items within a factor are correlated to each other and therefore, each item measures some aspects of the construct. Consistency can be tested through the inter-item

consistency (Sekaran and Bougie, 2013). Cronbach's alpha (α) is a statistical test that measures data reliability (Geore & Mallery, 2018). The alpha value normally lies between 0 to1.The rule of thumb that applies to most situations is; α > 0.9 is excellent, α > 0.8 is good, α > 0.7 is acceptable, α > 0.6 is questionable, α > 0.5 is poor and α < 0.5 is unacceptable (Cronbach, 1971). Cronbach alpha has been used to measure the reliability of the instruments in this study. Cronbach's alpha should be at least 0.7 or higher to be reliable and trustworthy for the collected data and retain an item in an adequate scale.

3.5.2 Composite Reliability (CR)

Composite Reliability is used as a measure of reliability in Confirmatory Factor Analysis. Like the internal reliability it measures the extent to which a latent variable is related to its indicators and high values indicate greater reliability and as a rule of thumb estimates that are equal or above 0.7 are considered acceptable. (Hair et al, 2018). Composite Reliability is calculated as the ratio of the sum of the squared factor loadings of a set of indicators to the sum of the squared factor loadings plus the residual variance of the indicators. High construct reliability indicates that internal consistency exists which means that the measures consistently represent the same latent construct. In the study the reliability was ensured by estimating the Composite Reliability apart from the Internal Reliability through Cronbach alpha. In this study all Composite Reliability values were above 0.8 which indicates high reliability.

3.6 Validity

3.6.1 Internal Validity

Internal validity is related to the issue of causality and it is concerned with the question of whether a conclusion that incorporates a causal relationship between two variables holds true. (Bryman and Bell, 2011). It is the extent to which the research study accurately measures the cause and effect relationship between the dependent and independent variables without any extraneous factors influencing the results. In this study the following internal validity measures were considered:

  i.   Content Validity

Content Validity was established by conducting an extensive literature review to ensure that the constructs and items were aligned with the research questions. The key themes and concepts were identified and the constructs and the measurement items were developed after extensive review of literature. The key models and theories that were considered in developing the constructs and the relationships between them are the Brand Equity model by Aaker (1992) and Keller (1993), Service Brand Verdict (SBV) model by Grace and O'Cass (2005), Brand Ecosystem Framework by Pinar et al (2011), University Brand Equity (Pinar et al, 2014), Brand Equity model in HE by Mourad & Ennew (2011) and SERVQUAL (Berry, Parasuraman, & Zeithaml, 1988). The items in the study that were used to measure the various constructs were based on the following literature.

Table 3. 3 Key Constructs and Related Literature

Construct	Literature that the items are based on
Core Service	DeShields, Kara, Kaynak (2005)
	Eliott and Shin (2002)
	Leblanc and Nguyen (1997)
	Gibson (2010)
	Pinar et al (2014)
	Gibson (2010)
	Eliott and Shin (2002)
	DeShields, Kara, Kaynak (2005)
	Pinar et al (2014)
Supplementary Service	Pinar et al (2014)
	Leblanc and Nguyen, 1997
	Leblanc and Nguyen, 1997
	Parasuraman, Zeithaml and Berry (1988)
	Pinar et al (2014)

Student Satisfaction	Athiyaman (1997)
Controlled Communication	Grace and O'Cass (2005); Schivinski and Dabrowski (2015)
Uncontrolled Communication	Grace and O'Cass (2005)
Brand Awareness	Yoo, and Donthu (2001) Pinar et al (2014)
Brand Association	Yoo, and Donthu (2001) Tong and Hawley (2009)
Brand Loyalty	Brown and Mazzarol (2009); Buil, Martínez and De Chernatony (2013); Tong and Hawley (2009); Vukasović, (2016); Yoo, and Donthu, (2001), Hennig-Thurau, Langer and Hansen (2001)
Student (Customer) Based Brand Equity	Buil, Martínez and De Chernatony (2013); Chang and Liu (2009); Netemeyer et al (2004); Yoo, and Donthu (2001)

The literature review provided a strong basis for the content validity of the measurement items used in the study. After that, the items were reviewed with the help of subject experts which included academicians and practitioners in the field of marketing and the thesis supervisors. The experts included five marketing and brand managers from the service sector, three professors of marketing and four high ranking officials from higher education institutions. Based on their comments, this study excluded two items from brand equity, and one item from brand loyalty from further analysis. The remaining items were judged to be clear, coherent, readable, and representative for the study. After incorporating the feedback from the experts, a pilot test of the survey questionnaire was conducted with a small sample to assess the clarity and understanding of the questions.

ii. Convergent validity

In the study convergent validity was assessed to ensure that the set of indicators designed to measure the constructs converged together and that they are not measuring other unrelated constructs. Convergent Validity measures to what extent those items are related that are intended to measure the same construct. According to Hair et al (2018), the items that are indicators of the same construct should converge or share a high proportion of variance in common which is known as convergent validity.

Factor loadings are an important consideration for convergent validity. High loadings on a factor indicate that they converge on a common point i.e. the latent construct. According to Hair et al (2018) for convergent validity the standardised loading estimates should be 0.5 or higher.

The Average Variance Extracted (AVE) investigates the convergent validity of the sample. The average variance is the summary indicator of convergence. As a rule of thumb an AVE of 0.5 or higher suggests adequate convergence. In this study all AVE values were above 0.5 which indicates convergent validity.

iii. Discriminant Validity

Discriminant validity is a measure to assess the extent to which one construct is distinct from other constructs. Discriminant Validity establishes that one construct measures a phenomenon which is not measured by the other construct and that they are distinctly different form each other. In order for discriminant validity to exist, the Maximum Shared Variance (MSV) of a construct should be less than its AVE. This means that the construct should share less variance with other constructs in the model than it explains in its own indicators. The study used this criterion to establish the discriminant validity of the constructs used in the research, and in the study the AVE of all constructs is greater than their MSV and therefore, discriminant validity exists.

3.6.2 External Validity

According to Findley et al (2021), external validity refers to the extent to which the inferences drawn from the sample of the study apply to a larger population or to a different target group. Findley et. al (2021) state that External validity takes two different forms; generalisability and transportability. Generalisability refers to the cases when inference is concerned with a larger population of a predefined sample whereas transportability refers to inferences applied to other target population.

To ensure external validity in this study, multistage sampling was used in the study. In the first stage private management colleges in Kathmandu valley offering undergraduate and postgraduate program were chosen as sample. It was ensured that private colleges affiliated to all major universities of Nepal and international universities were included. Efforts were made to ensure that the colleges that were selected in the study were representative of private higher education institutions in Nepal in terms of their affiliation to universities, degrees offered and size. In the next stage, from each of the selected colleges, students studying in postgraduate programs were selected. For the selection of participants, postgraduate students were preferred over undergraduate students. This was based on the assumption that students are the primary customers of higher education, who decide to join an educational institution and subsequently consume the service. In Nepal, master's level students are the ones who pay for their education and possess a higher degree of decision-making power when it comes to choosing a school, as compared to bachelor's level students. By selecting postgraduate students, the study aimed to ensure the generalizability of the findings to other target audiences, such as students in higher education who are also customers of the educational services. Overall, the study employed rigorous sampling strategy and respondent recruitment to ensure the external validity of the findings.

3.7 Ethics and Confidentiality

The ethical approval for the research was sought from the University through the university's procedure. The Ethical Implications of Research Activity (EIRA)1 form was completed and ethical approval obtained. The respondents of the survey were informed that their participation in the research was voluntary and that they could withdraw from the study at any time. The respondents participated in the study on the basis of informed consent; they were provided with assurance and information about taking part in the study to allow them to

understand the implications of participation and arrive at an informed decision about their participation without any pressure or coercion.

The participants were also assured of anonymity and not disclosing their individual identity at any stage of the process or in any part of the research report. Participants were assigned a unique identifier code, and personal information was removed from all data sets. Data was stored securely and only accessible by the researcher. The data was only used for the purposes of the study and was not shared with any third parties.

Participants were given the opportunity to ask questions about the study at the end of their participation, and the researcher provided additional information about the study as requested.

Chapter 4

Data Analysis and Findings

This chapter presents the empirical findings of the research. It provides a detailed analysis and interpretation of the collected data, addressing the research questions and objectives. The chapter includes descriptive statistics, Exploratory Factor Analysis, Validity and Reliability Analysis, Path Analysis and results of the hypothesis tests.

4.1 Data Screening and Descriptive Statistics

The missing data was coded a 0 and the missing data was treated using SPSS and list wise deletion was done. In list wise analysis any cases with missing data are deleted. As the number of survey participants was much higher than the minimum required samples because a margin was maintained beforehand anticipating the cases of missing data, list wise deletion did not have any impact on the statistical power of the analysis. Out of the 480 completed questionnaires received for the study, N= 418 were used for data analysis after deleting the participants with missing data.

4.1.1 Descriptive Statistics of Brand Loyalty
Table 4. 1: Descriptive Statistics of Brand Loyalty

Items	Mean	Std. Deviation
I am willing to choose college X even if the price is higher than the other colleges.	3.40	1.01
I would recommend college X to others.	3.23	0.95
I would select college X again if I had to enrol for another course/further studies.	3.52	0.94
I consider myself loyal to this college	3.57	0.96

n = 418

A mean score of 3.40 and a relatively high standard deviation of 1.01 for the item "I am willing to choose college X even if the price is higher than the other colleges" indicates that most respondents are willing to choose their college even if the price was higher than other

colleges and there is a general agreement in the respondents about their willingness to pay a premium for the services of their college as compared to other colleges, however, there are some who would not choose their college if the price was higher compared to other colleges.

The respondents also have a positive perception and loyalty towards their college, as indicated by a mean score of 3.23 for the item "I would recommend college X to others." However, there is variability in the responses, as shown by the standard deviation of 0.95. This indicates that some respondents would be neutral or negative towards recommending their college to others which indicates neutral or negative levels of word of mouth and loyalty.

The respondents showed a positive attitude towards selecting their college again if they had to enrol for another course or further studies as indicated by the mean score of 3.52. The standard deviation score is 0.94, which is relatively high and suggests that though there is a general agreement among the respondents that they would select their college again if they had to enrol for another course or further studies, however, there are some who would not enrol again in their college if they had to.

Finally, the respondents showed a positive attitude towards considering themselves as loyal to their college, as indicated by a mean score of 3.57 and a standard deviation of 0.97. This suggests that while most respondents consider themselves as loyal, there are some who are less enthusiastic about it.

Overall, it can be concluded that the respondents have brand loyalty towards their college, and there is an agreement with all statements as all mean scores are above 3.0. However, there is also some variability in the responses, indicating that there may be some differences in opinion among the respondents on other aspects, such as whether or not to recommend the college to others or join the same college again.

4.1.2 Descriptive Statistics of Brand Association
Table 4. 2: Descriptive Statistics of Brand Association

Items	Mean	Std. Deviation
College X has unique brand image compared to other colleges.	4.14	0.73
The students of college X are admired and respected by others.	4.15	0.74
I like the brand image of college X.	3.98	0.98
College X has unique features compared to other colleges.	4.14	0.76
College X has positive image in my mind	4.09	0.81

n = 418

Based on the above data, it can be concluded that the students have positive brand association with their college brand and unique features of their college. The mean values for three items are above 4.0 and that of one item is 3.98 indicating that the most students on average agree with the statements.

"I like the brand image of college X" has a mean of 3.98 and standard deviation of 0.98, indicating that the students have a favourable impression of their college's brand image. The item "College X has unique brand image compared to other colleges" has a mean of 4.14 and Standard Deviation of 0.73, indicating that that students strongly perceive their college to have a unique brand image compared to others.

The standard deviations for all four items are relatively moderate, ranging from 0.73 to 0.98, which suggests that the responses are relatively consistent and not widely spread out from the mean.

4.1.3 Descriptive Statistics of Brand Awareness

Table 4. 3: Descriptive Statistics of Brand Awareness

Items	Mean	Std. Deviation
College X is well known	4.13	0.81
The logo of college X is instantly recognizable	4.13	0.88
College X is amongst the first to come to mind when one thinks of management colleges in the county	4.13	0.83
The name of college X is well known in Nepal	4.17	0.78

n=418

Based on the descriptive statistics, we can observe that the mean values for all four items measuring brand awareness are above 4.0, which indicates that the respondents have a high awareness of their college brand. Specifically, the respondents rated their college as well known, with a mean of 4.13, and the name of their college as well known in Nepal, with a mean of 4.17.

The item "The logo of college X is instantly recognizable", has a mean of 4.13. It is also worth noting that the standard deviation for this item was relatively moderate, at 0.88, indicating that most respondents consider that they will able to recognize the logo of their college instantly.

Overall, the standard deviation values suggest that there is some variability in the responses, with some respondents rating the brand awareness measures higher or lower than others. Therefore, it may be worthwhile to investigate the reasons behind this variability, such as demographics or previous experiences with the brand, however, as this is not a part of the research question, a separate study could be designed to investigate such factors.

Additionally, in another study we could also compare how the brand awareness of colleges compares to the others and the reasons behind the variability.

4.1.4 Descriptive Statistics of Student Based Brand Equity

Table 4. 4 : Descriptive Statistics of Student Based Brand Equity

Items	Mean	Std. Deviation
It makes sense to enrol in college X instead of other college even if they are similar.	3.95	0.77
Even if another college has same features as X, I prefer X.	3.92	0.92
I am willing to pay a higher tuition to enrol in college X than other similar colleges.	3.98	0.70
I think college X is superior to other competing similar colleges.	3.90	0.80

n=418

The data shows that the respondents generally have a positive perception of the college they study in, compared to other similar colleges. The mean scores for all items is above 3.9 and which indicates that most respondents agree that they would prefer their college over other similar colleges.

The mean score is for the item "I think College X is superior to other competing similar colleges", is 3.90 indicating that respondents perceive their college to be superior to other similar colleges. The mean score is for the item "Even if another college has the same features as X, I prefer X", with a mean score of 3.92 and a standard deviation of 0.92. This indicates that while most respondents generally prefer their college over other similar colleges, there may be some who are neutral and also some who would prefer other colleges with similar features.

Overall, the results suggest that the respondents' own college has a preference among them compared to other similar colleges. However, the variability in the responses indicates that it

would be worthwhile to investigate the reasons behind this variability, such as demographic factors or previous experiences with the brand. As this is not a part of the research objective of the study, another study could be done to establish the reasons for variability in brand equity in respondents.

4.1.5 Descriptive Statistics of Controlled Communication (Advertising and Marketing Collaterals)

Table 4.5: Descriptive Statistics of Controlled Communication (Advertising and Marketing Collaterals)

Items	Mean	Std. Deviation
I like the advertising and promotions of college X.	3.41	0.92
I react favourably to the advertising and promotions of college X.	3.28	0.89
The level of advertising and promotion of college X does NOT meet my expectation.	3.42	0.89
The advertising and promotion of college X perform well when compared to the advertising and promotions of other colleges	3.44	0.89

N=418

The mean scores for all four items are above 3, indicating that the respondents have a generally positive perception of the advertising and promotions of their college. This indicates that the respondents find the advertising and promotions of their college to be appealing and have a positive impact on them.

The item "The level of advertising and promotion of College X does NOT meet my expectation" has a mean score of 3.42 and a standard deviation of 0.89. This item was reverse coded and hence the results suggest that while most respondents feel that the advertising and promotion of their college meets their expectations, some respondents may have higher expectations from advertising and promotions of their college and feel that they are not fully

met. It would be worth investigating the reasons behind this perception and whether there are specific areas that respondents feel could be improved.

Finally, the mean score for the item "The advertising and promotion of College X perform well when compared to the advertising and promotions of other colleges" is 3.44 with a standard deviation of 0.89. This suggests that respondents feel that their college advertising and promotions are competitive and more effective when compared to those of other colleges.

Overall, the data indicates that respondents have a positive perception of the advertising and promotions of their college.

4.1.6 Descriptive Statistics of Uncontrolled Communication (Word of mouth and Publicity)

Table 4. 5 : Descriptive Statistics of Uncontrolled Communication (Word of mouth and Publicity)

Items	Mean	Std. Deviation
Publicity of college X has been instrumental in affecting my views of it.	3.89	0.98
Publicity revealed things about the college X which I had not considered about the college.	3.51	1.25
Publicity of college X helped me formulate my views of the college.	3.82	1.03
Publicity of college X did NOT influence my overall evaluation of the college.	3.95	1.09
Word of mouth from friends/family/alumni and students of college X has been significant in influencing my views of college X.	3.88	1.01
My friends/family/alumni and students of college X mentioned things about college X that I had not considered before.	3.91	1.09

n = 418

The mean scores for all four items are above 3.5, indicating that uncontrolled communication, publicity and word of mouth, influenced the respondents' perception of their college. The highest mean score is for the item " Publicity of college X did NOT influence my overall evaluation of the college.", with a mean score of 3.95. This item was reverse coded and the results indicate that that the respondents agree that publicity of their college influenced their overall evaluation of the college brand had a significant impact on how they view the college.

The mean scores for the other five items are also high, all above 3.5, indicating that respondents feel that publicity and word-of-mouth communication have been instrumental in affecting their views of their college and have revealed new information that they had not previously considered while deciding to join the college.

Overall, the data suggests that uncontrolled communication, such as word-of-mouth recommendations from friends, family, alumni, and students, as well as publicity about their college has had a positive impact on respondents' perceptions of the college. These findings highlight the importance of creating positive experiences for students and alumni, as well as effective publicity and marketing strategies, in shaping the image and reputation of institution of Higher Education.

4.1.7 Descriptive Statistics of Core Services
Table 4. 6 : Descriptive Statistics of Core Services

Items	Mean	Std. Deviation
The faculty at college X are friendly and courteous.	3.92	0.74
The faculty at college X are accessible to students' questions and concerns.	3.90	0.77
The instructional quality at college X is good.	3.75	0.87
The curriculum at college X is relevant to future career.	3.84	0.80

n=418

The mean scores for all four items are above 3.7, indicating that the respondents generally have a positive perception of the faculty, classes and curriculum at their college. The highest mean score is for the item "The faculty at college X are friendly and courteous" with a mean score of 3.92 and a standard deviation of 0.74, suggests that most respondents feel that the faculty there are approachable and courteous while only some of them are neutral about it.

The mean scores for the other three items are above 3.7, suggesting that respondents feel that the faculty at their college are knowledgeable in their fields, the instructional quality is good, and the curriculum is relevant to future careers.

The standard deviations for all four items are relatively low, ranging from 0.74 to 0.87, which indicates that the responses are relatively consistent and the students hold consistent opinions about the faculty, classes and curriculum at their college are generally uniform among the respondents.

Overall, the data suggests that the respondents have a positive perception of the faculty, classes and curriculum at their college. The findings suggest that the faculty at colleges are seen as approachable and knowledgeable in their fields, and the curriculum is perceived as relevant to future careers and the instructional quality is good. These findings highlight the importance of Core Services in Higher Education which consists of Faculty, Classes and Curriculum.

4.1.8 Descriptive Statistics of Student Services

Table 4. 7 : Descriptive Statistics of Student Services

	Mean	Std. Deviation
The physical facilities at college X are visually appealing.	3.36	1.03
College X has comfortable classrooms.	3.43	0.99
College X has sports facilities.	3.24	1.04

The administrative staff of the college X are available for student support.	3.33	0.95
The administrative personnel are friendly and courteous.	3.35	0.99

n=418

The mean score for " The physical facilities at college X are visually appealing " is 3.36, indicating that respondents are largely just above neutral that the physical facilities at their college are visually appealing. The standard deviation is 1.03 which means that there are some students who have an opinion that the physical facilities at their college are not visually appealing. The mean score for " College X has comfortable classrooms " is 3.43, indicating that respondents have a moderately positive view of the classrooms at their college.

The mean score for " College X has sports facilities " is 3.24, indicating that respondents do not strongly agree or disagree that the college has sports facilities and the standard deviation is 1.04 which means that there is large variation in responses and some respondents do not agree that their college has sports facilities.

The mean score for " The administrative staff of the college X are available for student support." is 3.33, indicating that respondents have a moderately positive view about the support provided by the administrative staff. The mean score for " The administrative personnel are friendly and courteous." is 3.35, indicating that respondents have a moderately positive view of how friendly and courteous the administrative staff of the college are. The standard deviations for all five items are relatively high, ranging from 0.95 to 1.04, indicating that there is a considerable amount of variation in the responses to these items.

Overall, the data suggests that respondents have a moderate perception of student services at their college. However, there is room for improvement in other areas such as the physical facilities, availability of administrative staff for support, and participation in sports. The variability in the responses suggests that there may be differences in the experiences of students with regard to student services at their college. These findings highlight the

importance of supplementary student services to create a more positive learning environment and better support the needs of students.

4.1.9 Descriptive Statistics of Student Satisfaction
Table 4. 8: Descriptive Statistics of Student Satisfaction

	Mean	Std. Deviation
I am satisfied with my decision to attend college X.	3.42	0.70
If I had to study the course again, I would NOT enrol in college X.	4.19	0.81
My choice to enrol in college X was a wise one.	4.39	0.59
I feel bad about my decision to enrol in college X.	4.27	0.73

n = 418

The mean score for the item "I am satisfied with my decision to attend college X" is 3.42 and the standard deviation of 0.70 which indicates that, on average, students are moderately satisfied with their decision to attend the college they are enrolled in, however, there is a variation in the responses as the standard deviation is 0.70 which indicates that some students are not satisfied with their decision of joining the college.

The mean score for the item " If I had to study the course again, I would NOT enrol in college X." is 4.19 with a standard deviation of 0.81. This item was reverse coded and during the data entry the scores were reversed. The scores indicate that, on average, if the students had to enrol in their college again for the same course, they will be enthusiastic about it and most were willing to enrol again.

The mean score for the item "My choice to enrol in college X was a wise one" is 4.39 with a relatively low standard deviation of 0.59. This indicates that, on average, students perceive their decision to enrol in their college as wise and they are satisfied with their college.

The mean score for the item " I feel bad about my decision to enrol in college X." is 4.27 with a standard deviation of 0.73. This item was reverse coded and during the data entry the scores were reversed. The scores indicate that, on average, the students are happy about their decision to enrol in their college.

Overall, the results suggest that students at college X are satisfied with their decision to enrol in their college and believe that it was a right decision.

4.2 Exploratory Factor Analysis

4.2.1 KMO and Bartlett's Test
Table 4. 9 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.866
Bartlett's Test of Sphericity	Approx. Chi-Square	15202.307
	df	780
	Sig.	0.000

Table 4.10 demonstrates the KMO and Bartlett's test of Sphericity. The study found that the value of KMO is 0.866. The KMO measures the sampling adequacy, which determines if the responses given with the sample are adequate or not and it should be higher than 0.5 for satisfactory factor analysis to proceed (Chetty & Datt, 2015). Kaiser (1974) recommends the KMO value as 0.5 to be minimum and barely accepted, values between 0.7 and 0.8 are acceptable, and values above 0.9 are superb and represent data that are significant for further analysis. Otherwise, the variable or items are deleted from factor loading in exploratory factor analysis. The study found that the value of KMO is 0.866 which is greater than 0.7 and lies in the acceptable range. It can be concluded that sample data is sufficient to show the relationship between the variables.

Bartlett's Test is another indication of the strength of the relationship amongst variables. Bartlett's Test of Sphericity is a statistical test used to determine if the correlation matrix of a set of variables is significantly different from an identity matrix, indicating that the variables are related to each other and can be used in a factor analysis. This tests the null hypothesis

that the correlation matrix is an identity matrix. The alternative hypothesis is that the correlation matrix is significantly different from an identity matrix, indicating that the variables are related. From the table 4.10, it is found that Bartlett's Test of Sphericity is significant. This means that the correlation matrix is not an identity matrix.

4.2.2 Total Variance Explained
Table 4. 10 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.68	21.71	21.71	8.68	21.71	21.71	4.49	11.23	11.23
2	5.18	12.94	34.65	5.18	12.94	34.65	4.22	10.55	21.78
3	3.76	9.40	44.06	3.76	9.40	44.06	3.75	9.38	31.15
4	3.28	8.21	52.26	3.28	8.21	52.26	3.55	8.88	40.03
5	2.73	6.82	59.08	2.73	6.82	59.08	3.46	8.65	48.68
6	2.26	5.65	64.73	2.26	5.65	64.73	3.27	8.18	56.86
7	2.02	5.04	69.77	2.02	5.04	69.77	3.07	7.68	64.54
8	1.86	4.66	74.43	1.86	4.66	74.43	2.64	6.60	71.14
9	1.30	3.25	77.68	1.30	3.25	77.68	2.61	6.54	77.68
Extraction Method: Principal Component Analysis.									

The table 4.11 exhibits the total variance explained by the factor analysis. It shows the eigenvalues of the first, second, third, fourth, fifth, sixth, seven, eight and ninth components are 8.68, 5.18, 3.76, 3.28, 2.73, 2.66, 2.02, 1.86, and 1.30 respectively. The eigenvalues of the extracted components have been recorded to be higher than 1.0. The cumulative percentage indicates that the first nine components collectively explain 77.68% of the total variance in the original data. This suggests that the extracted components have a good ability to summarize the original data and capture its underlying structure.

4.2.3: Scree Plot of all Constructs
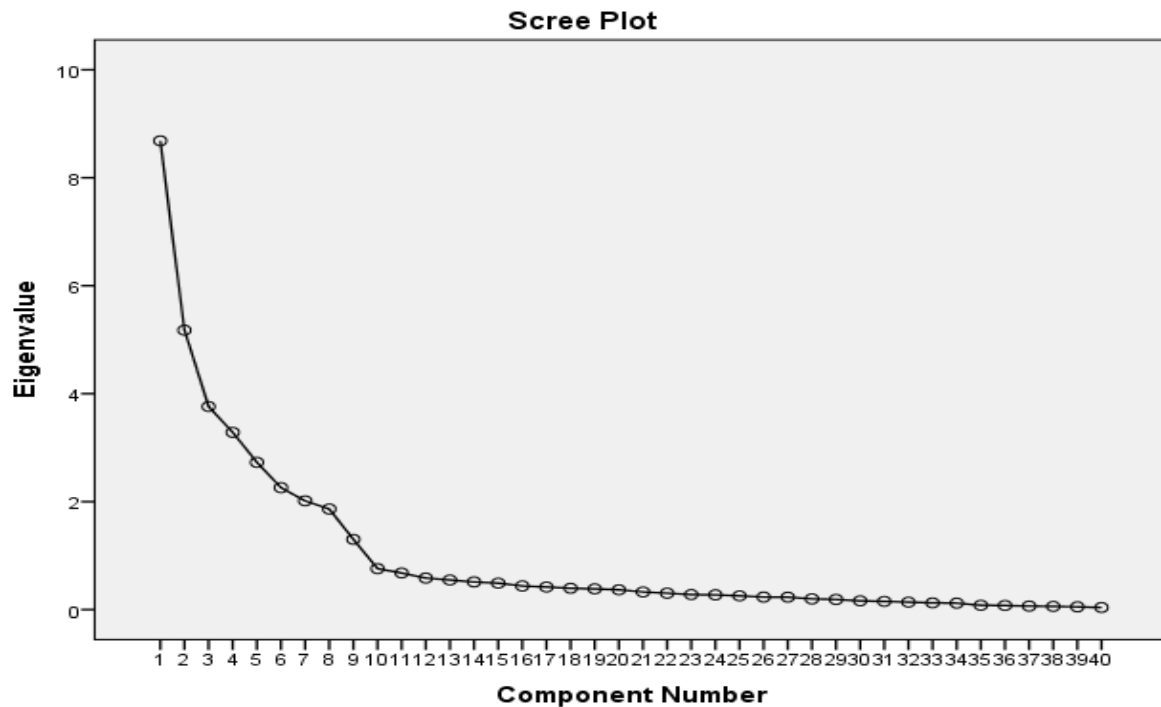
Figure 4. 1: Scree Plot

Figure 4.1 reports the results of the factor analysis. Benneto et al. (2011) have determined minimum factor loadings of 0.511 as a threshold to choose the loadings of each item to the factor generated. A total of nine factors have been identified with an eigenvalue greater than 1.30. The scree plot reveals nine factors in which loadings are greater than 1. Thus, nine elements should only be selected for further study under investigation to avoid any error and misclassification.

The factor analysis has been carried out using Principal Component Analysis using VARIMAX rotation. The result of the PCA has been presented in the table 4.4.

4.2.4 Communalities Values of Each Item

Table 4. 11 Communalities Values of Each Items

	Initial	Extraction
CC1	1.000	.534
CC2	1.000	.703
CC3	1.000	.744
CC5	1.000	.723
UCC1	1.000	.720
UCC2	1.000	.611
UCC3	1.000	.703
UCC4	1.000	.736
UCC5	1.000	.730
UCC6	1.000	.709
COS1	1.000	.830
COS2	1.000	.806
COS3	1.000	.879
COS6	1.000	.927
SS1	1.000	.770
SS2	1.000	.652
SS3	1.000	.412
SS4	1.000	.686
SS5	1.000	.631
SUS1	1.000	.858
SUS2	1.000	.772
SUS3	1.000	.760
SUS4	1.000	.890
BL1	1.000	.804
BL2	1.000	.577

BL3	1.000	.785
BL4	1.000	.550
BA1	1.000	.947
BA2	1.000	.930
BA3	1.000	.930
BA6	1.000	.890
BAS1	1.000	.887
BAS2	1.000	.922
BAS3	1.000	.783
BAS4	1.000	.887
BAS5	1.000	.944
SBBE1	1.000	.897
SBBE2	1.000	.852
SBBE3	1.000	.783
SBBE5	1.000	.921

Extraction Method: Principal Component Analysis.

Table 4.12 depicts the communalities values of all items. Communalities indicates how much of the variance in each variable can be explained by the factors extracted from the analysis. Communalities range from 0 to 1, with higher values indicating that a larger proportion of the variance in a variable is explained by the factors. Further, the table highlights that the communalities of all items are above 0.4, which indicates that the data is good for factor analysis (Kaiser, 1974).

4.2.5 Rotated Component Matrix

Table 4. 12 Rotated Component Matrix

	Component								
	1	2	3	4	5	6	7	8	9
CC1									.513
CC2									.767
CC3									.827
CC5									.772
UCC1		.845							
UCC2		.773							
UCC3		.831							
UCC4		.852							
UCC5		.849							
UCC6		.832							
COS1				.854					
COS2				.855					
COS3				.892					
COS6				.925					
SS1							.695		
SS2							.902		
SS3							.826		
SS4							.682		
SUS1						.887			
SUS2						.859			
SUS3						.869			
SUS4						.929			
BL1								.831	
BL2								.627	
BL3								.861	
BL6								.602	
BA1			.937						

BA2			.919						
BA3			.923						
BA6			.906						
BAS1	.921								
BAS2	.944								
BAS3	.851								
BAS4	.928								
BAS5	.958								
SBBE1					.882				
SBBE2					.863				
SBBE3					.840				
SBBE5					.891				

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.

Table 4.13 resembles the rotated matrix which shows the factors that can affect the Student (Customer) Based Brand Equity. It has a crystal clear nine factors identified (uncontrolled communication, controlled communication, core service, supplementary service, brand awareness, brand association, students' satisfaction, brand loyalty, and student based brand equity) which are used to examine the factors influencing Brand Equity in Higher Education. All factor loadings have been recorded to be higher than 0.5 which is very good for further analysis.

The essential purpose of factor analysis in this study is to discover factors among 57 items measuring various constructs related to brand equity. The factors greater than one eigenvalue have been extracted using Principle Component Analysis (PCA) approach and VARIMAX Rotation. Stevens (2012) reports that this rule is appropriate if the communalities are around 0.5. The factor analysis has been conducted on 57 variables or statements. Therefore, the numbers of items used are valid for the factor generation. Besides, factor analysis has been undertaken using the commonly used rotation method known as VARIMAX. This method is used to maximize the sum of variances of factor loadings.

4.3 Confirmatory Factor Analysis

Confirmatory factor analysis is a more complex approach that tests the hypothesis that the items are associated with specific factors. CFA uses structural equation modelling to test a measurement model whereby loading on the factors allows for evaluation of relationships between observed variables and unobserved variables.

The factor analysis was done to reduce the variables used for conducting research. Finally, nine factors were chosen for study. The factor analysis discarded many statements. The remaining statements have only been used for the investigation.

The CFA has been used to provide a confirmatory test to the measurement theory. It tests how well-measured variables represent a latent construct (Demirbag, Koh, Tatoglu, & Zain, 2006). In the present study, CFA was performed to assess the reliability and validity of latent constructs. All the measurement models (Uncontrolled Communication, Controlled Communication, Core Service, Supplementary Service, Brand Awareness, Brand Association, Students Satisfaction, Brand Loyalty, and Student Based Brand Equity) yielded appropriate goodness of fit.

4.3.1: Confirmatory Factor Analysis of Brand Loyalty (BL)
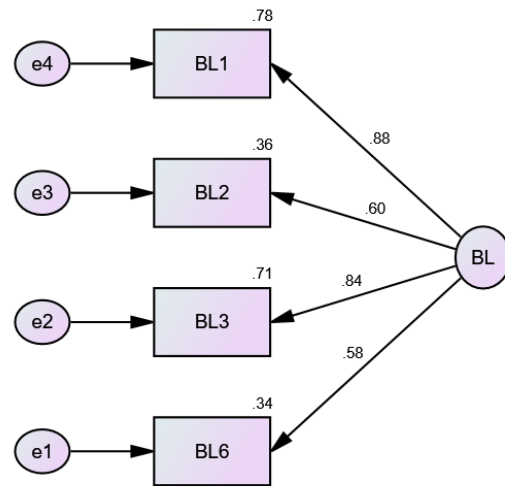
Figure 4. 2: Confirmatory Factor Analysis of Brand Loyalty (BL)

Table 4. 13 : Fit Index of Brand Loyalty (BL)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.312	Between 1 and 3	Excellent
GFI	0.962	> 0.90	Excellent
CFI	0.952	> 0.95	Excellent
SRMR	0.049	< 0.08	Excellent
RMSEA	0.052	< 0.06	Excellent

Table 4.14 describes the fit index. The result of CFA has revealed that four items of brand loyalty construct have been selected based on their standardized regression weights and fit indices (Figure 4.2). The remaining 2 items have been dropped out. The result found that the model is excellent fit ($\chi2/df$ = 2.312, RMR = 0.049, GFI = 0.962, CFI == 0.952, & RMSEA = 0.052). The AVE value has been recorded to be 0.546, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.823, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

4.3.2: Confirmatory Factor Analysis of Controlled Communication (CC)

Figure 4. 3: Confirmatory Factor Analysis of Controlled Communication (CC)

Table 4. 14: :Fit Index of Controlled Communication (CC)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.742	Between 1 and 3	Excellent
CFI	0.983	>0.95	Excellent
GFI	0.979	>0.90	Acceptable
SRMR	0.023	<0.08	Excellent
RMSEA	0.045	<0.06	Excellent

The result of CFA has revealed that five items of controlled communication construct have been selected based on their standardized regression weights and fit indices (Figure 4.3). The result found that the model is excellent fit ($\chi2/df$ = 2.742, SRMR = 0.023, GFI = 0.979, CFI = 0.983, & RMSEA = 0.045). The AVE value has been recorded to be 0.854, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.967, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

4.3.3: Confirmatory Factor Analysis of Uncontrolled Communication (UCC)

Figure 4. 4 Confirmatory Factor Analysis of Uncontrolled Communication (UCC)

Table 4. 15: Fit Index of Uncontrolled Communication (UCC)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.723	Between 1 and 3	Excellent
CFI	0.979	>0.95	Acceptable
GFI	0.965	>0.90	Acceptable
SRMR	0.029	<0.08	Excellent
RMSEA	0.063	<0.06	Excellent

The result of CFA has revealed that six items of uncontrolled communication construct have been selected based on their standardized regression weights and fit indices (Figure 4.4). The remaining 2 items have been dropped out. The result found that the model is excellent fit ($\chi 2$/df = 2.723, SRMR = 0.029, GFI = 0.965, CFI = 0.979, & RMSEA = 0.063). The AVE value has been recorded to be 0.631, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.911, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

4.3.4: Confirmatory Factor Analysis of Core Service (COS)

Table 4. 16 Fit Index of Core Service (COS)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.841	Between 1 and 3	Excellent
CFI	0.991	>0.95	Excellent
GFI	0.978	>0.90	Excellent
SRMR	0.019	<0.08	Excellent
RMSEA	0.037	<0.06	Excellent

The result of CFA has revealed that four items of core service construct have been selected based on their standardized regression weights and fit indices (Figure 4.5). The remaining 4 items have been dropped out. The result found that the model is excellent fit ($\chi 2$/df = 2.841, SRMR = 0.019, GFI = 0.978, CFI = 0.991, & RMSEA = 0.037). The AVE value has been recorded to be 0.815, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.946, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

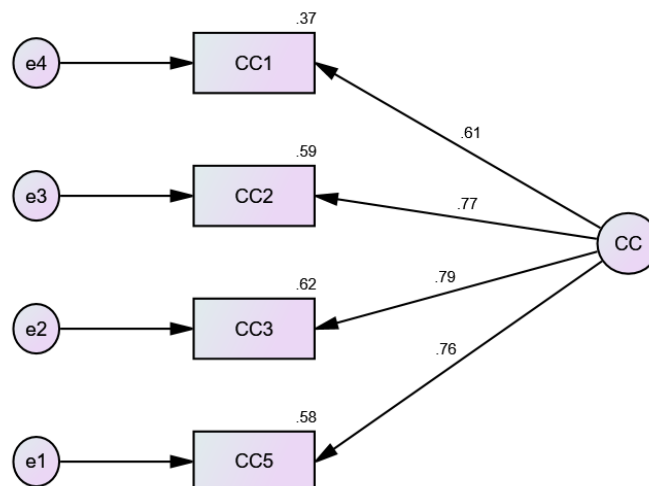*Figure 4. 5:Confirmatory Factor Analysis of Core Service (COS)*

4.3.5: Confirmatory Factor Analysis of Students' Based Brand Equity (SBBE)

Table 4. 17: Fit Index of Students' Based Brand Equity (SBBE)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.315	Between 1 and 3	Excellent
GFI	0.919	>0.95	Excellent
CFI	0.961	>0.90	Excellent
SRMR	0.016	<0.08	Excellent
RMSEA	0.043	<0.06	Excellent
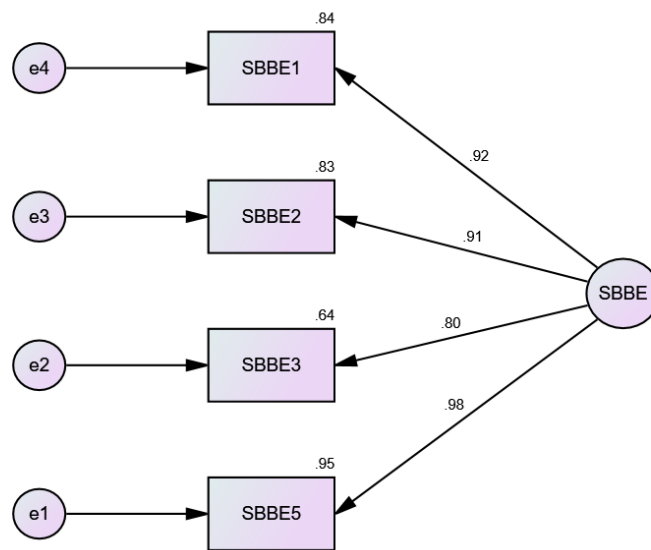
Figure 4. 6 : Confirmatory Factor Analysis of Students' Based Brand Equity (SBBE)

The result of CFA has revealed that four items of students' based brand equity construct have been selected based on their standardized regression weights and fit indices (Figure 4.6). The remaining 2 items have been dropped out. The result found that the model is excellent fit (χ2/df = 2.315, SRMR = 0.016, GFI = 0.919, CFI = 0.961, & RMSEA = 0.043). The AVE value has been recorded to be 0.540, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.823, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

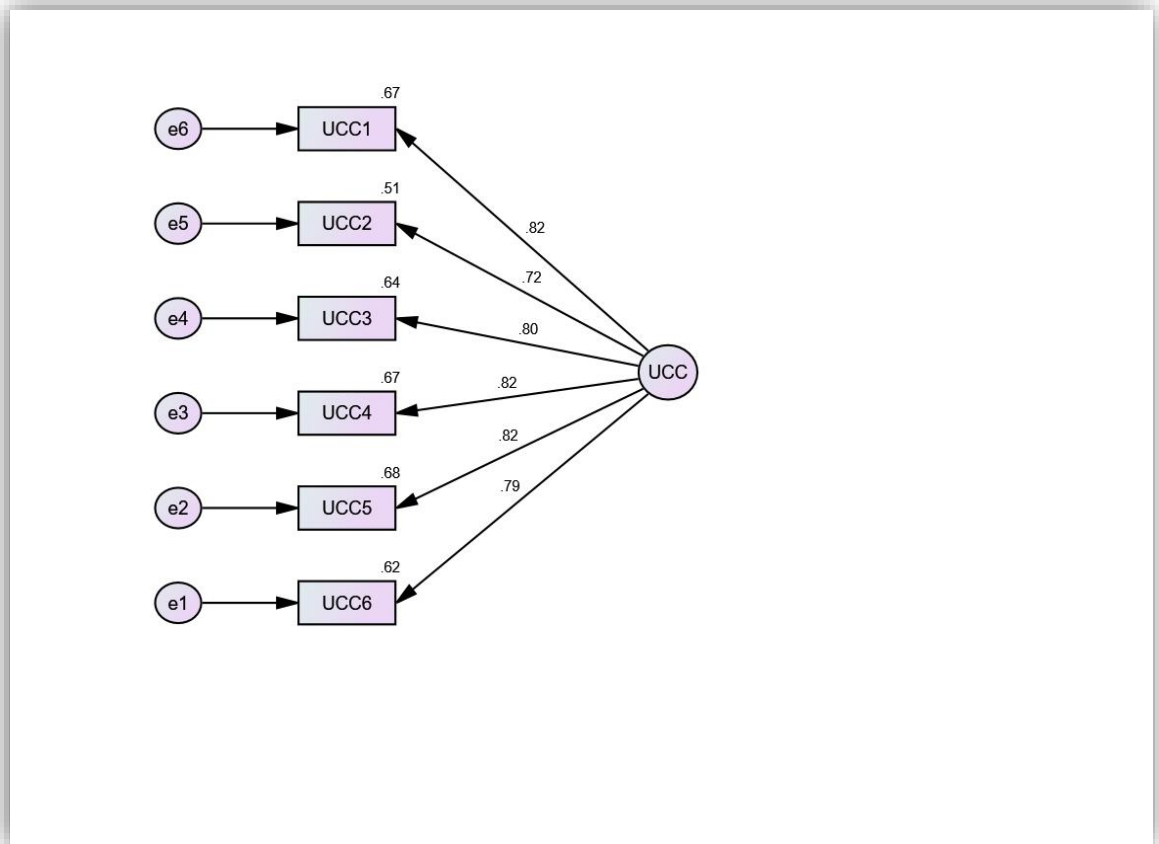**4.3.6: Confirmatory Factor Analysis of Student Satisfaction (SUS)**

Figure 4. 7 : Confirmatory Factor Analysis of Students' Satisfaction (SUS)

Table 4. 18: Fit Index of Students' Satisfaction (SUS)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.341	Between 1 and 3	Excellent
GFI	0.943	>0.95	Excellent
CFI	0.966	>0.90	Excellent
SRMR	0.057	<0.08	Excellent
RMSEA	0.042	<0.06	Excellent

The result of CFA has revealed that four items of students' satisfaction construct have been selected based on their standardized regression weights and fit indices (Figure 4.7). The remaining 2 items have been dropped out. The result found that the model is excellent fit ($\chi 2$/df = 2.341, SRMR = 0.057, GFI = 0.943, CFI = 0.966, & RMSEA = 0.042). The AVE value has been recorded to be 0.748, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.922, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

4.3.7: Confirmatory Factor Analysis of Brand Association (BAS)
Table 4. 19:Fit Index of Brand Association (BAS)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	2.872	Between 1 and 3	Excellent
CFI	0.986	>0.95	Excellent
GFI	0.954	>0.90	Excellent
SRMR	0.008	<0.08	Excellent
RMSEA	0.063	<0.06	Excellent

The result of CFA has revealed that five items of brand association construct have been selected based on their standardized regression weights and fit indices (Figure 4.8). The result found that the model is excellent fit ($\chi 2$/df = 2.872, SRMR = 0.008, GFI = 0.954, CFI = 0.986, & RMSEA = 0.063). The AVE value has been recorded to be 0.854, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.967, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).
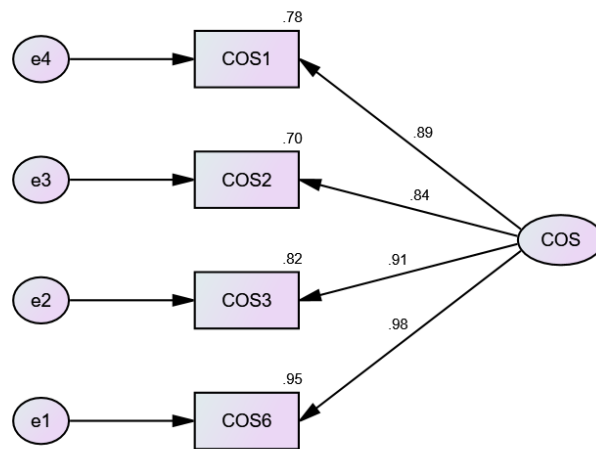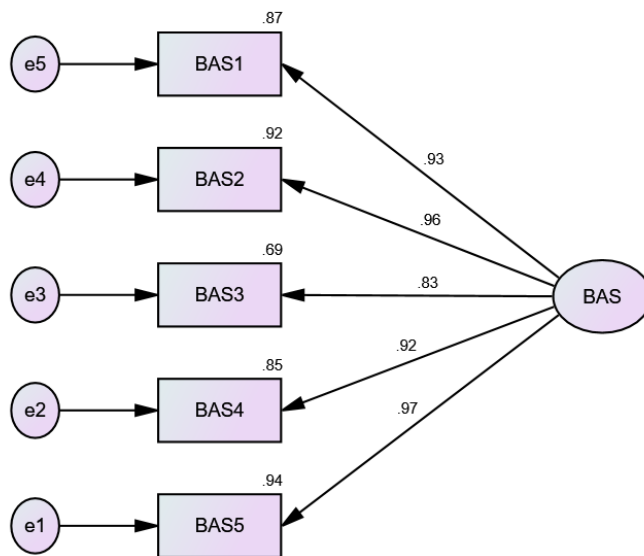
Figure 4. 8 : Confirmatory Factor Analysis of Brand Association (BAS)

4.3.8: Confirmatory Factor Analysis of Brand Awareness (BA)
Table 4. 20: Fit Index of Brand Awareness (BA)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	3.671	Between 1 and 3	Acceptable
CFI	0.918	> 0.95	Excellent
GFI	0.801	> 0.90	Acceptable
SRMR	0.017	< 0.08	Excellent
RMSEA	0.053	< 0.06	Excellent

The result of CFA has revealed that four items of brand awareness construct have been selected based on their standardized regression weights and fit indices (Figure 4.9). The result found that the model is excellent fit (χ2/df = 3.671, RMR = 0.017, GFI = 0.801, CFI = 0.918, & RMSEA = 0.053). The AVE value has been recorded to be 0.896, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.972, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).

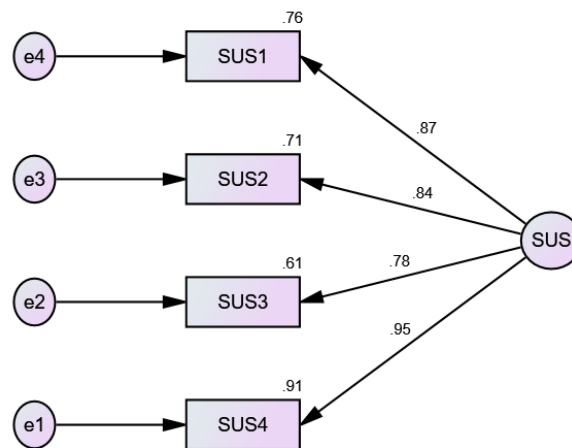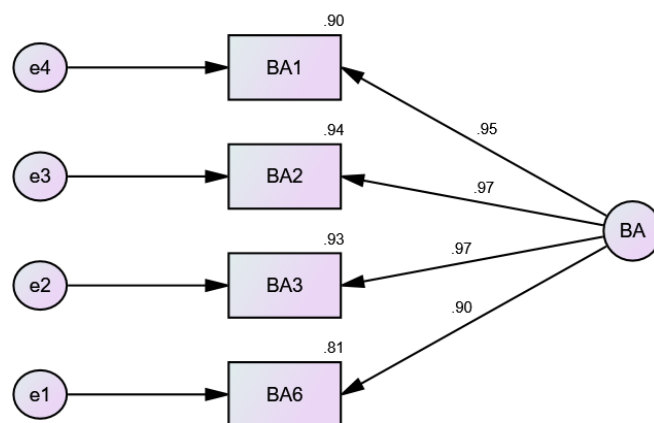**Figure 4. 9 : Confirmatory Factor Analysis of Brand Awareness (BA)**

4.3.9: Confirmatory Factor Analysis of Supplementary Services (SS)

The result of CFA has revealed that five items of supplementary service construct have been selected based on their standardized regression weights and fit indices (Figure 4.10). The remaining 2 items have been dropped. The result found that the model is excellent fit (χ2/df =

3.65, SRMR = 0.012, GFI = 0.976, CFI = 0.998, & RMSEA = 0.001). The AVE value has been recorded to be 0.528, higher than 0.5, leading to convergent validity. Likewise, composite reliability (C.R.) was found to be 0.845, higher than 0.7, confirming convergent validity (Hair et al., 2010). Besides, the value of C.R. is also recorded to be higher than the AVE value leading to convergent validity criteria (Henseler et al., 2010).
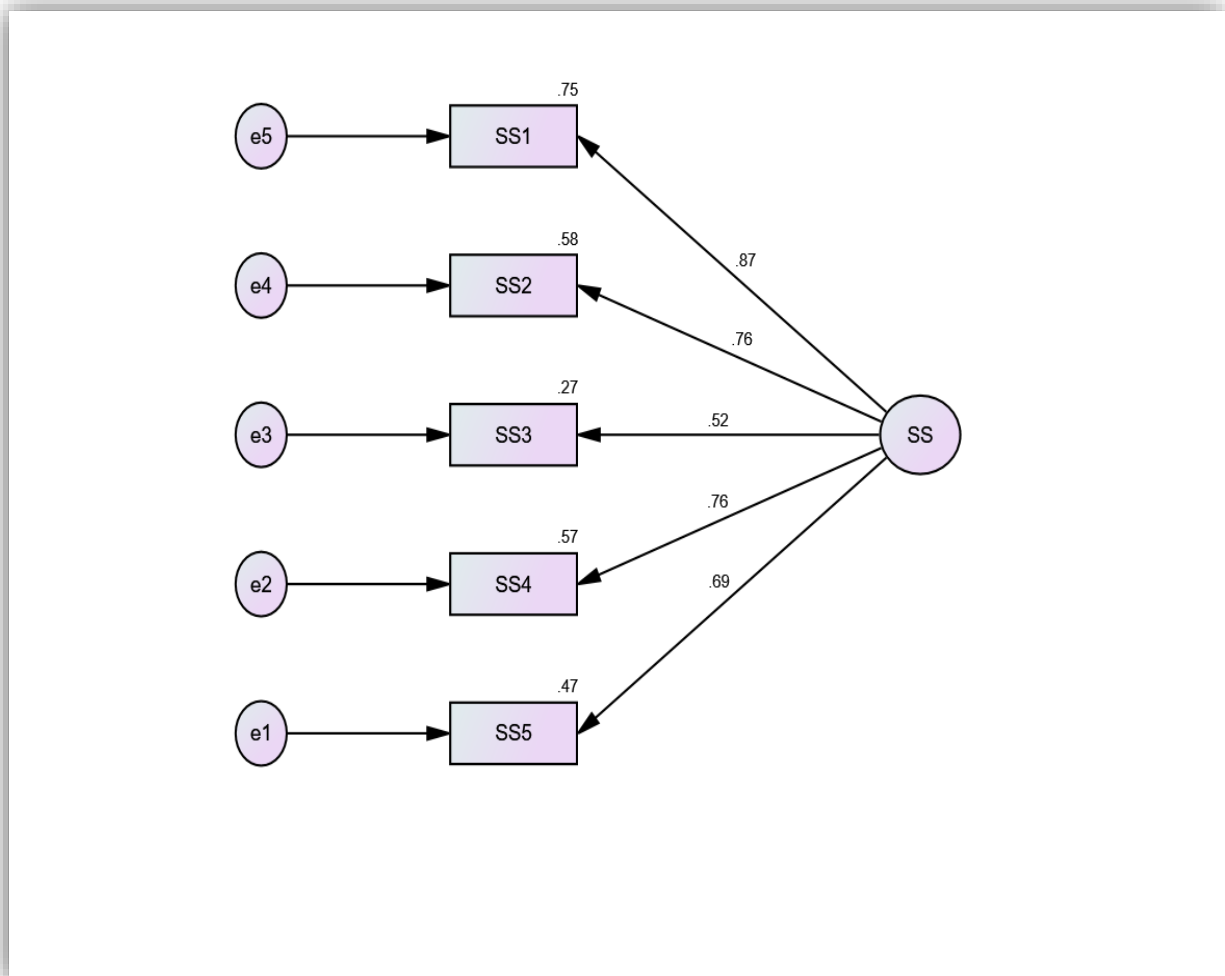
Figure 4. 10 : Confirmatory Factor Analysis of Support Service (SS)

Table 4. 21:Fit Index of Supplementary Service (SS)

Measure	Estimate	Threshold	Interpretation
CMIN/DF	3.65	Between 1 and 3	Acceptable
CFI	0.998	>0.95	Excellent
GFI	0.976	>0.90	Excellent
SRMR	0.012	<0.08	Excellent
RMSEA	0.001	<0.06	Excellent

4.4: Measurement Model of Customer Based Brand Equity
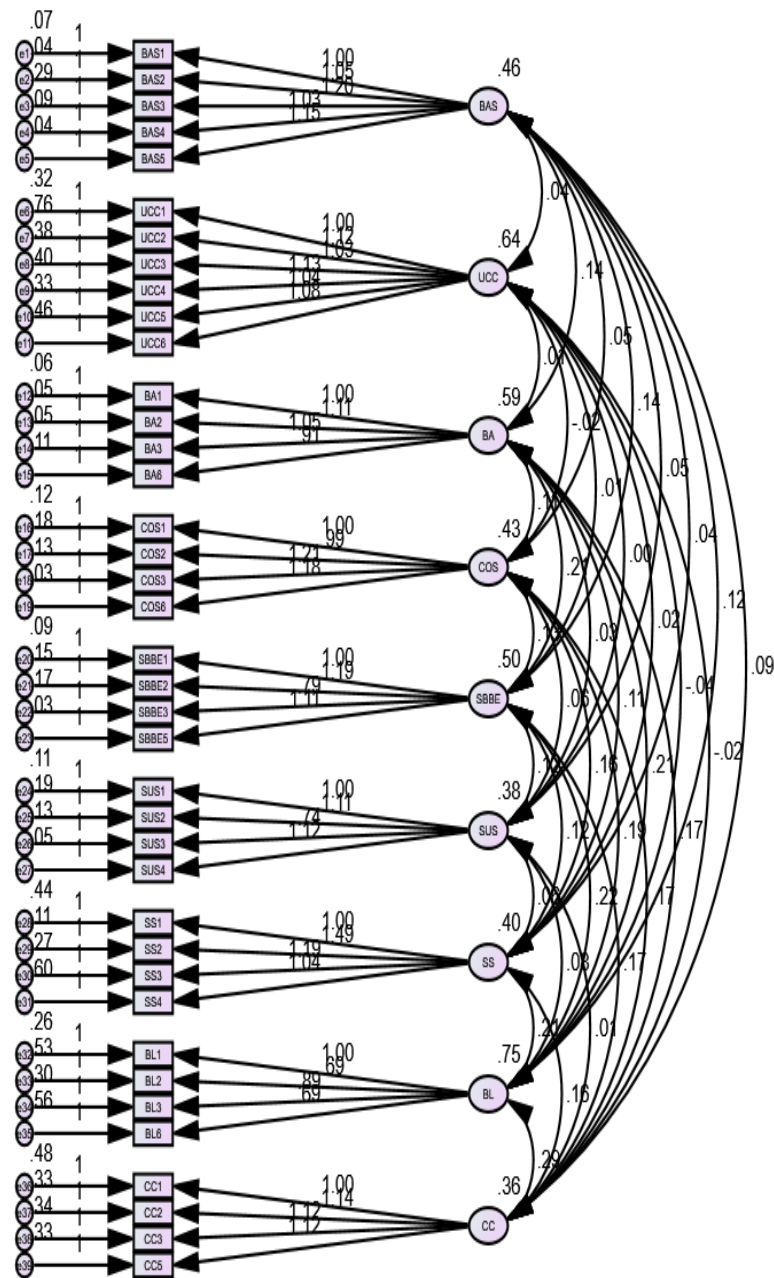
Figure 4. 11: Measurement Model of Customer Based Brand Equity

Table 4. 22: Model Fit Indexes

Measure	Estimate	Threshold	Interpretation
CMIN	1716.37	--	--
DF	666	--	--
CMIN/DF	2.577	Between 1 and 3	Excellent
CFI	0.93	>0.95	Acceptable
SRMR	0.054	<0.08	Excellent
RMSEA	0.061	<0.06	Acceptable

Figure 4.11 describes the measurement model of the Customer Based Brand Equity. The model was found to be acceptable based on model fit indices (CMIN/DF = 2.577, SRMR = 0.054, GFI = 0.901, CFI =0.930, and RMSEA = 0.061). The model fit criteria are supported by Hair et al. (2010), Hu and Bentler (1988) & Henseler et al. (2010). Further, the validity and reliability were assessed using Average Variance Extracted (AVE) and composite reliability (C.R.), Maximum Shared Variance (MSV) and Average Shared Variance (ASV) etc. The convergent validity has been met since the value of AVE was higher than 0.5, and values of C.R. were also obtained to be higher than 0.7. Thus, convergent validity has been obtained. Likewise, the MSV values were also less than AEV which means the discriminant validity has also been met (Henseller et al., 2010). Besides, the square root of AVE of all constructs was higher than the correlation coefficient of all other constructs horizontally and vertically off diagonal matrix values in Table 4.14. Therefore, the requirements of discriminant validity have been met.

4.5: Validity and Reliability Analysis

Table 4. 23: Validity and Reliability Analysis

	CR	AVE	MSV	BL	BAS	UCC	BA	COS	SBBE	SUS	SS	CC
BL	0.829	0.553	0.3	**0.744**								
BAS	0.967	0.854	0.086	0.204	**0.924**							
UCC	0.911	0.631	0.005	-0.058	0.071	**0.795**						
BA	0.972	0.896	0.151	0.312	0.267	0.009	**0.947**					
COS	0.947	0.817	0.191	0.332	0.117	-0.037	0.226	**0.904**				
SBBE	0.946	0.816	0.156	0.361	0.293	0.013	0.388	0.277	**0.903**			
SUS	0.922	0.749	0.078	0.151	0.119	0.001	0.061	0.149	0.28	**0.865**		
SS	0.863	0.617	0.184	0.389	0.097	0.048	0.226	0.394	0.274	0.164	**0.785**	
CC	0.824	0.541	0.3	0.548	0.22	-0.046	0.362	0.437	0.395	0.035	0.429	**0.735**

(Note: CR = Composite Reliability, AVE = Average Variance Extracted, MSV = Maximum Shared Variance, BL = Brand Loyalty, BAS = Brand Association, UCC = Uncontrolled Communication, BA = Brand Awareness, COS = Core Service, SBBE = Students' Based Brand Equity, SUS = Students' Satisfaction, SS = Supplementary Service, CC = Controlled Communication)

Validity was measured by using two criteria, convergent validity and discriminant validity and reliability was measured using the Composite Reliability (CR) and Cronbach Alpha. Convergent validity consists of factor loadings and average variance extracted (AVE). High loadings on a factor indicate that they converge on a common point i.e. the latent construct. Hair et al (2018) and Anderson and Gerbing (1988) suggested that statistically significant path coefficients demonstrate convergent validity and for convergent validity the standardized loading estimates should be 0.5 or higher. In this study results of the measurement model for latent construct revealed that all standardized loadings were over 0.50 (p < 0.005), which supported convergent validity.

Further, the Average Variance Extracted (AVE) investigates the convergent validity of the sample. The average variance is the summary indicator of convergence. As a rule of thumb an

AVE of 0.5 or higher suggests adequate convergence. In this study all AVE values were above 0.5 which indicates convergent validity.

Discriminant validity is a measure to assess the extent to which one construct is distinct from other constructs. Discriminant Validity establishes that one construct measures a phenomenon which is not measured by the other construct and that they are distinctly different from each other. Discriminant validity can be achieved when the squared correlations between variables are less than the Average Variance Extracted by the respective constructs (Fornell and Larcker, 1981). The discriminant validity was assessed using Fornell and Larcker method by comparing the square root of each AVE in the diagonal with the correlation coefficients off diagonal for each construct in the relevant rows and columns which should be less than the square root of the AVE. The results in table 4.24 satisfied this condition and hence discriminant validity can be accepted for this measurement model and discriminant validity exists between the various constructs.

Furthermore, for discriminant validity to exist, the Maximum Shared Variance (MSV) of a construct should be less than its AVE. From the table 4.24 it is clear that the MSV of all constructs is less than AVE and hence, Discriminant Validity exists.

Composite Reliability is used as a measure of reliability in Confirmatory Factor Analysis. It measures the extent to which a latent variable is related to its indicators and high values indicate greater reliability and as a rule of thumb estimates that are equal or above 0.7 are considered acceptable. (Hair et al, 2018). The result showed the composite reliability values to be greater than 0.7, which is also highly significant to resemble the reliability of the data used for conducting research.

Cronbach alpha has been used to measure the reliability of the instruments in this study. Cronbach's alpha should be at least 0.7 or higher to be reliable and trustworthy for the collected data (Cronbach, 1971). The Cronbach's alpha for all constructs in the study as shown by the table 4.25 is above 0.7, the least being 0.818. Therefore, the Cronbach's alpha values show that the measurement scales used in the study are reliable.

Table 4. 24: Cronbach's Alpha

Constructs	Cronbach's Alpha	No. of items
BL	0.944	4
CC	0.961	5
UCC	0.972	4
COS	0.945	4
SBBE	0.818	4
SUS	0.822	4
BAS	0.917	4
BA	0.907	6
SS	0.839	4

4.6: Path Analysis of Student Based Brand Equity
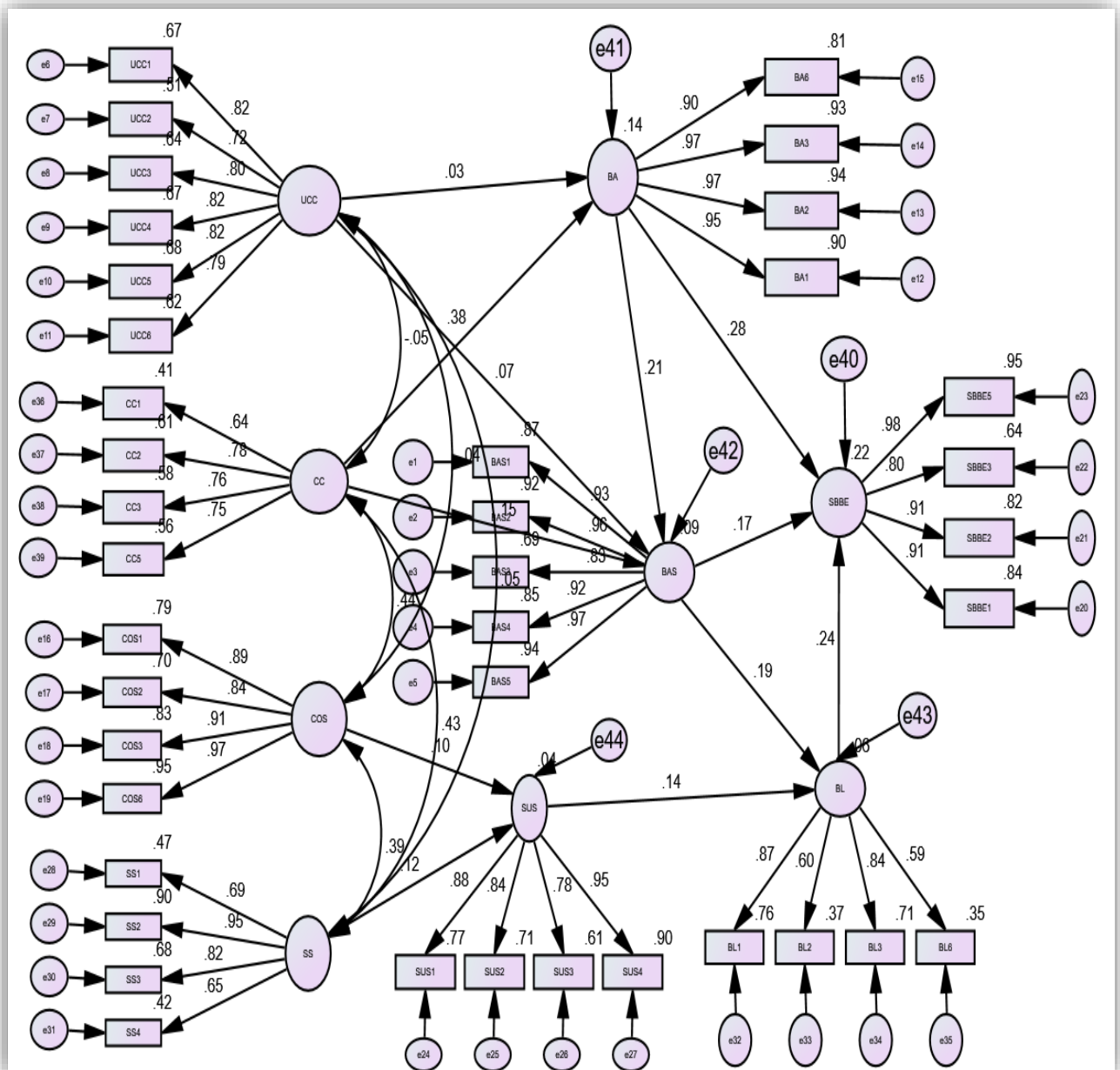
Figure 4. 12 : Path Analysis of Customer Based Brand Equity

(*Note: CR = Composite Reliability, AVE = Average Variance Extracted, MSV = Maximum Shared Variance, BL = Brand Loyalty, BAS = Brand Association, UCC = Uncontrolled Communication, BA = Brand Awareness, COS = Core Service, SBBE = Student Based Brand Equity, SUS = Students' Satisfaction, SS = Supplementary Service, CC = Controlled Communication)*

The path analysis results in Figure 4.12 revealed that out of nine constructs and twelve hypotheses, ten hypotheses were accepted and two of them got rejected. The result revealed that there is a significant impact of controlled communication on brand awareness and brand association respectively (CC $\rightarrow$ BA, β = 0.376, C.R. = 6.67; P < 0.001; CC $\rightarrow$ BAS, β = 0.146, C.R. = 2.537; P < 0.05). Likewise, the result also showed that there is no significant impact of uncontrolled communication on brand awareness and brand association (UCC $\rightarrow$ BA, β = 0.027, C.R. = 0.542; P = 0.588 which is > 0.05; UCC $\rightarrow$ BAS, β = 0.075, C.R. = 1.507; P = 0.132 which is > 0.05). The results also depicted that there is a significant impact of core service (COS) and support service (SS) on students' satisfaction (SUS) (COS $\rightarrow$ SUS, β = 0.102, C.R. = 1.962; P = 0.049 which is < 0.05; SS $\rightarrow$ SUS, β = 0.124, C.R. = 2.18; P = 0.029 which is < 0.05). It has also found that there is a significant impact of brand awareness (BA) on brand association (BAS) (BA $\rightarrow$ BAS, β = 0.213, C.R. = 4.039; P < 0.001). The result has also found that there is a significant influence of brand association (BAS) on brand loyalty (BL) (BAS $\rightarrow$ BL, β = 0.186, C.R. = 3.57; P < 0.001). Furthermore, the results have revealed that there is a significant impact of brand awareness (BA), brand association (BAS), and brand loyalty (BL) on student based brand equity (SBBE) (BA $\rightarrow$ SBBE, β = 0.283, C.R. = 5.975; P < 0.001, BAS $\rightarrow$ SBBE, β = 0.174, C.R. = 3.628; P < 0.001, BL $\rightarrow$ SBBE, β = 0.241, C.R. = 4.871; P < 0.001). The model has found to be good fit to the data used in the study (CMIN/DF = 2.577, SRMR = 0.054, GFI = 0.901, CFI =0.930, and RMSEA = 0.061) for the study in Figure 4.12. The model fit is supported by (Hair et al., 2010, & Henseler et al., 2010).

4.7: Multiple Regression Analysis

Table 4. 25: Path Analysis

Path			Estimate	S.E.	C.R.	P
BA	<---	UCC	0.027	0.047	0.542	0.588
BA	<---	CC	0.376	0.073	6.677	***
BAS	<---	UCC	0.075	0.042	1.507	0.132
BAS	<---	CC	0.146	0.066	2.537	0.011
SUS	<---	COS	0.102	0.052	1.962	0.049
SUS	<---	SS	0.124	0.055	2.18	0.029
BAS	<---	BA	0.213	0.047	4.039	***
BL	<---	SUS	0.141	0.075	2.664	0.008
BL	<---	BAS	0.186	0.067	3.57	***
SBBE	<---	BAS	0.174	0.049	3.628	***
SBBE	<---	BL	0.241	0.039	4.871	***
SBBE	<---	BA	0.283	0.043	5.975	***

4.8 Hypothesis Testing

H1: There is a significant impact of controlled communication on brand awareness.

The result reveals that there is a significant impact of controlled communication on brand awareness ($\beta = 0.376$, C.R. = 6.67; $P < 0.001$) in Nepalese HE institutions. The beta coefficient (β) of 0.376 suggests a moderate to strong positive relationship between controlled communication and brand awareness. Additionally, the CR value of 6.67 and the P-value of 0.000, which is less than the significance level of 0.001, indicate that the results are statistically significant. This means that the findings are unlikely to have occurred by chance and that the relationship between controlled communication and brand awareness is likely to be real. These results suggest that implementing controlled communication strategies, such as advertising and targeted marketing campaigns or branded content, can have a significant impact on increasing brand awareness in Nepalese HE institutions. Therefore, HE Institutions' different advertising

campaigns on various media platforms add to brand awareness of the institutions amongst students.

H2: There is a significant impact of controlled communication on brand association.

The analysis conducted on the impact of controlled communication on brand association in Nepalese HE institutions revealed a significant relationship ($\beta = 0.146$, C.R. $= 2.537$; P < 0.05). The regression coefficient (B) was 0.146, which indicates that for each unit increase in controlled communication, there was a corresponding 0.146-unit increase in brand association.

The critical ratio (CR) was 2.537, which indicates that the result was statistically significant. Additionally, the p-value (P) was 0.011, which is less than the alpha level of 0.05, indicating that the result was significant.

Therefore, it can be concluded that there is a significant positive impact of controlled communication on brand association in Nepalese institutions of Higher Education. This suggests that HE institutions in Nepal should pay close attention to their controlled communication or advertising in order to improve their brand association and ultimately enhance their overall brand equity. Controlled communication or advertising has a significant impact on brand association which helps in building a perceived image of the HE institutions in the minds of the students who are the customers of the services of the HE institutions.

H3: There is a significant impact of uncontrolled communication on brand awareness.

The result reveals that the study found no significant impact of uncontrolled communication on brand awareness ($\beta = 0.027$, C.R. $= 0.542$; P $= 0.588$ which is greater than 0.05) in Nepalese universities. The β coefficient of 0.027 indicates that the relationship between uncontrolled communication and brand awareness is very weak. Additionally, the CR value of 0.542 and the P-value of 0.588 suggest that the results are not statistically significant, meaning that the findings may have occurred by chance rather than a true effect.

Uncontrolled communication which consists of word of mouth and publicity has shown to have no significant impact on brand awareness for Nepalese HE institutions which is contrary to studies in other parts of the world which reported a significant relationship. It's important to keep in mind that this result only applies to Nepalese HE institutions and may not be generalizable to other contexts or populations. Additionally, it's possible that there are other factors that were not taken into account in this study that could influence the relationship between uncontrolled communication and brand awareness. Overall, these results suggest that uncontrolled communication may not be a significant factor in influencing brand awareness in Nepalese universities, however, controlled communication or advertising has a significant impact. It may be possible that for Nepalese students, advertising is stronger and more impactful method of communication for building brand awareness than uncontrolled communication methods like word of mouth and publicity. Further research is needed to better understand the relationship between uncontrolled communication and brand awareness in the specific context of higher education institutions in Nepal.

H4: There is a significant impact of uncontrolled communication on brand association.

Based on the statistical analysis provided, it appears that the study found no significant impact of uncontrolled communication on brand association (β = 0.075, CR = 1.507, P = 0.132) in Nepalese HE Institutions. The β coefficient of 0.075 suggests a weak relationship between uncontrolled communication and brand association. Additionally, the CR value of 1.507 and the P-value of 0.132 indicate that the results are not statistically significant, meaning that the findings may have occurred by chance rather than a true effect.

Uncontrolled communication, comprising of word of mouth and publicity show no significant impact on brand association for Nepalese HE institutions which is contrary to other studies which reported a significant relationship. However, the result only applies to Nepalese HE institutions and may not be generalizable to other contexts or populations. Additionally, it's possible that there are other factors that were not taken into account in this study that could influence the relationship between uncontrolled communication and brand association. Overall, these results suggest that uncontrolled communication may not be a significant factor in influencing brand awareness in Nepalese institutions of HE, however, controlled communication or advertising has a significant impact. It may be possible that for Nepalese

students, advertising is a stronger and more impactful method of communication for building brand association than uncontrolled communication methods like word of mouth and publicity. Further research is needed to better understand the relationship between uncontrolled communication and brand association in the specific context of higher education institutions in Nepal. Additionally, there may be other variables or factors that were not taken into account in this study that could influence the relationship between uncontrolled communication and brand association.

H5: There is a significant impact of core service on students' satisfaction.

The analysis conducted on the impact of core service on students' satisfaction in Nepalese HE institutions revealed a significant relationship (β = 0.102, CR = 1.962, P = 0.049 which is less than 0.05). The regression coefficient (β) was 0.102, indicating that for each unit increase in core service, there was a corresponding 0.102-unit increase in students' satisfaction. The critical ratio (CR) was 1.962, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.049, which is less than the significance level of 0.05, suggesting that the result was significant at a 5% level of significance.

Thus, it can be concluded that there is a significant positive impact of core service like faculty, curriculum and classes on students' satisfaction in Nepalese HE institutions. These results suggest that improving the core services like the faculty, curriculum and classes offered by the university can lead to increased satisfaction among students which in turn impacts the brand loyalty of students positively. Nepalese HE institutions should focus on improving their core services in order to enhance students' satisfaction and overall brand loyalty and perceived brand value.

H6: There is a significant impact of supplementary service on students' satisfaction.

The analysis conducted on the impact of supplementary service on students' satisfaction in Nepalese HE institutions revealed a significant relationship (β = 0.124, CR = 2.18, P = 0.029 which is less than 0.05). The regression coefficient (β) was 0.124, indicating that for each unit increase in supplementary service, there was a corresponding 0.124-unit increase in students' satisfaction. The critical ratio (CR) was 2.18, which indicates that the result was statistically

significant. Moreover, the p-value (P) was 0.029, which is less than the alpha level of 0.05, suggesting that the result was significant at a 5% level of significance.

Therefore, it can be concluded that there is a significant positive impact of supplementary service on students' satisfaction in Nepalese HE institutions. These findings suggest that improving the quality of supplementary services provided by the institutions can lead to increased satisfaction among students. Hence, Nepalese HE institutions should focus on enhancing their supplementary services in order to improve students' satisfaction and overall success.

H7: There is a significant impact of students' satisfaction on brand loyalty.

The analysis conducted on the impact of students' satisfaction on brand loyalty in Nepalese institutions of HE revealed a significant relationship ($\beta = 0.141$, CR = 2.664, P = 0.008 which is less than 0.01). The regression coefficient (β) was 0.141, indicating that for each unit increase in students' satisfaction, there was a corresponding 0.141-unit increase in brand loyalty. The critical ratio (CR) was 2.664, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.008, which is less than the alpha level of 0.01, suggesting that the result was significant at a 1% level of significance.

Therefore, it can be concluded that there is a significant positive impact of students' satisfaction on brand loyalty in Nepalese HE Institutions. These findings suggest that by enhancing students' satisfaction HE institutions in Nepal can increase brand loyalty among their students. Hence, Nepalese universities should focus on improving students' satisfaction in order to enhance their brand loyalty and overall success of the brand.

H8: There is a significant impact of brand awareness on brand association.

The analysis conducted on the impact of brand awareness on brand association in Nepalese HE institutions revealed a significant relationship ($\beta = 0.213$, CR = 4.039, P < 0.001). The regression coefficient (B) was 0.213, indicating that for each unit increase in brand awareness, there was a corresponding 0.213-unit increase in brand association. The critical ratio (CR) was 4.039, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.000, which is less than the alpha level of 0.01, suggesting that the result was highly significant.

Therefore, it can be concluded that there is a significant positive impact of brand awareness on brand association in Nepalese HE institutions. These findings suggest that by increasing brand awareness, institutions can enhance brand association among their stakeholders and the perceived image of the HE institution's brand can be enhanced to contribute to the overall brand equity. Hence, Nepalese universities should focus on improving their brand awareness in order to improve their brand association and overall success.

H9: There is a significant impact of brand association on brand loyalty.

The analysis conducted on the impact of brand association on brand loyalty in Nepalese HE institutions revealed a significant relationship ($\beta = 0.186$, CR = 3.57, P < 0.001). The regression coefficient (β) was 0.186, indicating that for each unit increase in brand association, there was a corresponding 0.186-unit increase in brand loyalty. The critical ratio (CR) was 3.57, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.000, which is less than the alpha level of 0.01, suggesting that the result was highly significant.

Therefore, it can be concluded that there is a significant positive impact of brand association on brand loyalty in Nepalese HE institutions. These findings suggest that by improving brand association or the perceived brand image, universities in Nepal can increase brand loyalty amongst their stakeholders. Hence, Nepalese universities should focus on enhancing their brand association in order to improve their brand loyalty and overall brand value.

H10: There is a significant impact of brand awareness on students' based brand equity.

The analysis conducted on the impact of brand awareness on student based brand equity in Nepalese HE institutions revealed a significant relationship ($\beta = 0.283$, CR = 5.975, P < 0.001). The regression coefficient (β) was 0.283, indicating that for each unit increase in brand awareness, there was a corresponding 0.283-unit increase in students' based brand equity. The critical ratio (CR) was 5.975, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.000, which is less than the alpha level of 0.01, suggesting that the result was highly significant.

Therefore, it can be concluded that there is a significant positive impact of brand awareness on student based brand equity in Nepalese HE institutions. These findings suggest that by enhancing brand awareness, universities in Nepal can increase students' based brand equity. Hence, Nepalese HE institutions should focus on improving their brand awareness in order to enhance their student based brand equity which represents the overall value of the brand.

H11: There is a significant impact of brand association on students' based brand equity.

The analysis conducted on the impact of brand association on student based brand equity in HE institutions revealed a significant relationship (β = 0.174, CR = 3.628, P < 0.001). The regression coefficient (β) was 0.174, indicating that for each unit increase in brand association, there was a corresponding 0.174-unit increase in students' based brand equity. The critical ratio (CR) was 3.628, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.000, which is less than the alpha level of 0.01, suggesting that the result was highly significant.

Therefore, it can be concluded that there is a significant positive impact of brand association on students' based brand equity in HE institutions. These findings suggest that by improving brand association, HE institutions in Nepal can increase students' based brand equity. Hence, Nepalese HE institutions should focus on enhancing their brand association in order to improve their students' based brand equity which is the overall value of the brand.

H12: There is a significant impact of brand loyalty on student based brand equity.

The analysis conducted on the impact of brand loyalty on student based brand equity in Nepalese HE institutions revealed a significant relationship (β = 0.241, CR = 4.871, P < 0.001). The regression coefficient (β) was 0.241, indicating that for each unit increase in brand loyalty, there was a corresponding 0.241-unit increase in students' based brand equity. The critical ratio (CR) was 4.871, which indicates that the result was statistically significant. Moreover, the p-value (P) was 0.000, which is less than the alpha level of 0.01, suggesting that the result was highly significant.

Therefore, it can be concluded that there is a significant positive impact of brand loyalty on students' based brand equity in HE institutions. These findings suggest that by enhancing brand loyalty, HE institutions in Nepal can increase students' based brand equity. Hence, Nepalese HE institutions should focus on improving their brand loyalty in order to enhance their student based brand equity and overall value of the brand.

Chapter 5

Discussion

The primary objective of this study was to investigate the factors that influence customer based brand equity in Higher Education (HE). The study mainly focused on understanding the interrelationship between the primary determinants of brand equity in HE that are brand awareness, brand association and brand loyalty and their impact on brand equity. The findings of the study underscore the importance of these three factors in building brand equity in HE and show that brand awareness, brand association and brand loyalty have significant impact on brand equity in HE. The study also focused on the investigation of effect of student satisfaction on brand loyalty, effect of core educational services and supplementary services on student satisfaction and effect of controlled communication and uncontrolled communication on brand awareness and brand association. This chapter presents the interpretations of the key results discussed in Chapter 4, comparisons with previous studies, theoretical implications and unanticipated findings and explanation.

The key models and theories that the thesis is informed by are the Brand Equity model by Aaker (1992) and Keller (1993), Service Brand Verdict (SBV) model by Grace and O'Cass (2005), Brand Ecosystem Framework by Pinar et al (2011), University Brand Equity (Pinar et al, 2014), Brand Equity model in HE by Mourad & Ennew (2011) and SERVQUAL (Berry, Parasuraman, & Zeithaml, 1988).

The findings of this study provide valuable theoretical contributions and also insights for practitioners, researchers and policy makers in the field of marketing and branding of HE and services. The conceptual model was based primarily on the Brand Equity models of Aaker (1992) and Keller (1993), and the conceptual framework had nine constructs altogether. The research findings fill the research gap in the area of branding in HE and the findings can be utilised not only in HE but also in the area of branding of other services. The study was conducted in Nepal where HE is highly competitive and the findings of the study provide useful insights for the HE institutions to create competitive advantage through branding.

5.1 Analysis of Findings

The analysis of the findings of the study are presented in this chapter according to the key hypotheses of this study.

The hypotheses and the findings are tabulated in the following table:

Table 5. 1 : Hypothesis and Results

Hypothesis	Prediction	Key Statistical Results	Result
Hypothesis 1: H1	There is a significant impact of controlled communication on brand awareness.	$\beta = 0.376$ CR = 6.677 P = 0.000	Supported
Hypothesis2: H2	There is a significant impact of controlled communication on brand association.	$\beta = 0.146$, CR = 2.537, P = 0.000	Supported
Hypothesis 3 H3	There is a significant impact of uncontrolled communication on brand awareness.	$\beta = 0.027$, CR = 0.542, P = 0.588	Not Supported
Hypothesis 4 H4	There is a significant impact of uncontrolled communication on brand association	$\beta = 0.075$ CR = 1.507 P = 0.132	Not Supported
Hypothesis 5 H5	There is a significant impact of core service on students' satisfaction.	$\beta = 0.102$ CR = 1.962 P = 0.059	Supported
Hypothesis 6 H6	There is a significant impact of support service on students' satisfaction.	$\beta = 0.124$	Supported

		CR = 2.18	
		P = 0.028	
Hypothesis 7 H7	There is a significant impact of students' satisfaction on brand loyalty.	β = 0.141 CR = 2.664 P = 0.008	Supported
Hypothesis 8 H8	There is a significant impact of brand awareness on brand association.	β = 0.213, CR = 4.039, P = 0.000	Supported
Hypothesis 9 H9	There is a significant impact of brand association on brand loyalty.	β = 0.186, CR = 3.57, P = 0.000	Supported
Hypothesis 10 H10	There is a significant impact of brand awareness on students' based brand equity.	β = 0.186, CR = 3.57 P = 0.000	Supported
Hypothesis 11 H11	There is a significant impact of brand association on students' based brand equity.	β = 0.174 CR = 3.628 P = 0.000	Supported
Hypothesis 12 H12	There is a significant impact of brand loyalty on student based brand equity.	β = 0.241 CR = 4.871 P = 0.000	Supported

5.1.1 Impact of controlled communication on brand awareness.

The result of this study revealed that there is a significant impact of controlled communication on brand awareness ($\beta = 0.376$, CR = 6.677, P = 0.000) in Nepalese HE institutions. The beta coefficient (β) of 0.376 suggests a moderate to strong positive relationship between controlled communication and brand awareness. In this study the components of controlled communication were advertising and marketing collaterals. The study shows that there is a strong positive relationship between controlled communication which consists of advertising and marketing collateral and brand awareness. This finding of the study aligns with previous studies which show that controlled communication has a positive relationship with brand awareness (Grace and O' Cass, 2005; Krystallis and Chrysochu, 2014; Ahmad and Rouf, 2014). However, the study by Grace and O' Cass was conducted for retail stores and banks, the one by Krystallis and Chrysochu was conducted in two different service sectors, banks and airlines, and the study by Ahmad and Rouf was conducted in the telecom sector. It is important to note that most studies that explore the relationship between controlled communication and brand awareness are in the context of business and other service sectors and there are very few studies that explore the relationship between controlled communication and brand awareness in the context of HE institutions. According to Kotler et al (2013) a HE institution can create reputation through advertising and therefore the findings of this study fills the research gap by concluding that there is a positive significant relationship between controlled communication and brand awareness in the context of HE. This study contributes to existing literature related to controlled communication like advertising and marketing collaterals and brand awareness in HE and other services.

Brand awareness is an important component of brand equity and hence controlled communication can be used by HE institutions to enhance brand positioning and creation of a competitive advantage. In Nepal, there is insufficient knowledge about the practice of advertising in services and more so in higher education (Awale and Shrestha, 2022). Therefore, this finding provides substantial contribution to the existing literature and provides important evidence and guidelines to institutions of HE in Nepal where not much understanding of advertising in services, especially in HE exists and hence it is largely neglected and is mostly ad hoc. The study provides empirical evidence to existing knowledge

about the role of controlled communication like advertising and marketing collateral like brochures, leaflets, newsletters, website, branded content, blogs, landing pages etc. in enhancing brand awareness. The HE sector is highly competitive and the HE institutions feel the need of differentiating themselves and creating a competitive advantage through strong brand positioning. Creation of brand awareness through advertising can go a long way in creation of brand perception and strong brand equity of HE institutions in Nepal. HE institutions in Nepal should adopt a more strategic approach to advertising than an ad hoc approach to increase brand awareness amongst students.

5.1.2 Impact of controlled communication on brand association.

The analysis conducted on the impact of controlled communication on brand association in Nepalese HE institutions revealed a significant relationship (β = 0.146, CR = 2.537, P = 0.000). The regression coefficient (β) was 0.146, which indicates that for each unit increase in controlled communication, there was a corresponding 0.146-unit increase in brand association.

Therefore, it can be concluded that there is a significant positive impact of controlled communication like advertising and marketing collateral on brand association in Nepalese institutions of Higher Education. The findings of the study confirm with the previous study by Grace and O'Cass (2005) that the set of brand associations experienced by the customers before and during the purchase along with advertising and promotion significantly influence consumer satisfaction, attitude and behavioural intentions towards the chosen service brand. The study also aligns with the findings of the study by Chen et al (2013) that found that there was a positive causal relationship between brand investment that is the spending made by the company on brand like in advertising, brand awareness and brand association. However, these studies were conducted in the area of retail, banking and buyers of computers and not in HE. This study confirmed the results of previous studies done in other sectors also apply in the field of HE and filled a research gap by establishing that like in other consumer goods and services, advertising and other marketing collaterals have a significant impact on brand association in HE. The findings fill a research gap in studies related to marketing efforts by organisations like advertising and its impact on creation of brand associations in the minds of the customers in HE sector and also other services.

5.1.3 Impact of uncontrolled communication on brand awareness.

The result revealed that the study found no significant impact of uncontrolled communication on brand awareness ($\beta = 0.027$, CR = 0.542, P = 0.588) in Nepalese HE institutions. The β coefficient of 0.027 indicates that the relationship between uncontrolled communication and brand awareness is very weak. This finding is contrary to previous findings of studies that found that there is a positive significant relationship between uncontrolled communication which consists of word of mouth and unpaid publicity and brand awareness (Grace and O' Cass, 2005; Krystallis and Chrysochu, 2014; Bansal and Voyer, 2000; Hauss, 1993). It is important to keep in mind that this result only applies to Nepalese HE institutions and may not be generalizable to other contexts or populations. Additionally, it's possible that there are other factors that were not taken into account in this study that could influence the relationship between uncontrolled communication and brand awareness.

Furthermore, the previous studies by Grace and O' Cass was conducted for retail stores and banks, the one by Krystallis and Chrysochu was conducted in two different service sectors and banks and airlines while the study by Bansal and Voyer tested the role of word of mouth within customers of 12 different services. All the studies were related to services, however, not to HE and studies which tested the impact of uncontrolled communication on brand association in the specific context of HE were not found. Therefore, the findings of this study could be different than the previous studies because they were related to other services and HE is different in nature than other services. According to Pham & Lai (2016), HE is an extended duration service where the service is consumed over a long period of time (in years) as compared to other services like restaurants (in hours) or tourism (in days). As HE is an extended duration service there is a long interaction between the service provider (HE institution) and the consumer (students). Further, HE is categorised as a service that falls into the credence category, where the students may not be able to evaluate the service even till long after the service is consumed unlike other services where the service can be evaluated before or during consumption (Licata and Frankwick, 1996). Although, there is no difference in the methodology of this study and some of the previous similar studies cited here as most of the studies used survey method and structural equation modeling for data analysis like this study.

Overall, these results suggest that uncontrolled communication may not be a significant factor in influencing brand awareness in Nepalese HE institutions, however, controlled

communication or advertising has a significant impact. It may be possible that for Nepalese HE institutions, advertising is a stronger and more impactful method of communication for building brand awareness than uncontrolled communication methods like word of mouth and paid publicity. Further research is needed to better understand the relationship between uncontrolled communication and brand awareness in the specific context of HE institutions in Nepal. A possible reason for the result which is contrary to the findings of other studies could be that the other studies are primarily focused on other services and not HE and the findings are different in the context of HE. Therefore, more detailed further studies can be conducted to explore the relation between word of mouth, unpaid publicity and brand awareness in the context of HE institutions. According to Awale and Shrestha (2022), the largest percentage of the promotional budget of colleges (about 70%) is spent on advertising and the rest is spent on other modes of promotion like personal selling, sales promotion, direct marketing and publicity. According to Awale and Shrestha the smallest percentage of the college promotional budget is spent on publicity and public relations. This shows lack of attention to other modes of promotion like publicity and word of mouth by Nepalese HE institutions and major focus on advertising. To a certain extent this fact explains the finding of the study that there is no significant relationship between publicity and word of mouth and brand awareness which is contrary to the finding of other studies. As the colleges spend negligible effort and budgets in publicity and public relations and hence these tools create no impact on the brand in the context of HE institutions in Nepal. Further study is needed to find out the reason for this finding which is not aligned with the findings of previous studies.

5.1.4 Impact of uncontrolled communication on brand association

The study concluded that there was no significant impact of uncontrolled communication on brand association ($\beta = 0.075$, CR = 1.507, P = 0.132) in Nepalese HE institutions. Uncontrolled communication, comprising of word of mouth and publicity show no significant impact on brand association for Nepalese HE institutions which is contrary to other studies which reported a significant relationship (Grace and O' Cass, 2005; Krystallis and Chrysochu, 2014). However, the result only applies to Nepalese HE institutions and may not be generalizable to other contexts or populations. Additionally, it's possible that there are other factors that were not taken into account in this study that could influence the relationship between unpaid publicity and word of mouth and brand association. Overall, these results suggest that uncontrolled communication may not be a significant factor in

influencing brand association in Nepalese institutions of HE, however, controlled communication or advertising has a significant impact. It is important to note that the previous studies are in banking, airlines and retail sector and not in the area of HE. Therefore, that could be a reason for the difference in results that are contrary to the findings of previous research studies. Further, the study used cross sectional design that captures the data at a particular point in time. There could be a difference in findings if a longitudinal study was conducted to find out the long term impact of word of mouth and publicity on building brand associations in students.

Further research is needed to better understand the relationship between uncontrolled communication and brand association in the specific context of higher education institutions in Nepal. Additionally, there may be other variables or factors that were not taken into account in this study that could influence the relationship between uncontrolled communication and brand association. According to Awale and Shrestha (2022), Nepalese HE institutions do not focus and spend much on publicity and public relations. Therefore, these tools may not have much impact on creating and enhancing brand association for Nepalese HE institutions. For Nepalese HE institutions, the major spending is on advertising and we also see that according to this study advertising has a positive significant impact on brand awareness and brand association for Nepalese HE institutions. However, further studies need to be conducted to explore the relationship between uncontrolled communication like word of mouth and unpaid publicity and brand association. It might be possible that because HE institutions in Nepal are not focussed much on uncontrolled communication, it does not seem to have any impact on brand association and hence the brand equity, however, it might be possible that the real potential of uncontrolled communication in creation of positive brand association remains unutilised in Nepalese HE institutions and the promotional focus has only been on advertisement.

With the ever growing competition in HE in Nepal, it is important that the role of publicity and public relations and word of mouth is explored so that it can be used to create brand association and brand equity for HE institutions in Nepal. There is a need for further research studies in the area of understanding the role of other tools of promotion than advertising in enhancing the brand image and brand equity of HE institutions in Nepal.

5.1.5 Impact of core service on students' satisfaction.

The analysis conducted on the impact of core service on students' satisfaction in Nepalese university revealed a significant relationship (β = 0.124, CR = 2.18, P = 0.028 < 0.05). Therefore, it can be concluded that there is a significant positive impact of core services on students' satisfaction in Nepalese HE institutions. The construct core education service in this study consists of faculty, classes and curriculum. The analysis shows that faculty, classes and curriculum have a significant positive impact on student satisfaction which align with previous studies by Butt and Rehman (2010), Ng. and Forbes (2009), Krystallis and Chrysochu (2014), Aldemir, C. and Gülcan, Y. (2004), DeShields, O.W., Kara, A. and Kaynak, E., (2005).

The study provides support for the existing theories on student satisfaction and the role of core educational services like faculty, curriculum and classes on student satisfaction. The study provides an important contribution to literature on student satisfaction in HE and its antecedents and also the role of student satisfaction on brand loyalty. The results support the generalisation of the theory of student satisfaction in HE and the role of faculty, classes and curriculum on student satisfaction. These findings suggest that improving the quality of core services which consists of faculty, classes and curriculum provided by the university leads to increased satisfaction among students.

Hence, Nepalese HE institutions should focus on enhancing their core services in order to improve students' satisfaction. Another finding of this study also concluded that student satisfaction affects brand loyalty which in turn positively impacts brand equity. Therefore, in order to enhance brand equity and acquire a competitive advantage, Nepalese HE institutions should focus on the core service elements; faculty, classes and curriculum and enhance student satisfaction. The findings of the study also provide support for the study by Ng and Forbes (2009) about HE as a service and the role of core and supplementary services in HE. Nepalese HE institutions should focus on providing an excellent student experience and enhance student experience by focusing on the core education service elements. The HE institutions should focus on attracting, inducting, training and retaining qualified faculty members who can deliver quality education. The faculty should be friendly and courteous and highly knowledgeable in their fields. Apart from that, the faculty should understand student needs.

Likewise, the curriculum should be contemporary and relevant to real life and driven by the needs of the market. Further, the quality of delivery inside the classroom should also be taken into consideration as it is also one of the major components of core service that determines student satisfaction. The classroom delivery should be effective and the classroom facilities should be comfortable and conducive to learning. In order to enhance student satisfaction, the HE institutions should ensure that the classes are interesting and participative.

5.1.6 Impact of support service on students' satisfaction.

The analysis conducted on the impact of support services on students' satisfaction in Nepalese HE institutions revealed a significant relationship ($\beta = 0.124$, CR = 2.18, P = 0.028 < 0.05). Therefore, it can be concluded that there is a significant positive impact of support services on students' satisfaction in Nepalese universities. The support services that were considered in the study was Physical Infrastructure, Sports, Career Support Services and Administrative Staff and Service. The findings of the study are aligned with several previous studies that show a positive significant relationship between educational support services and student satisfaction (Borishade et al, 2021; Ng and Forbes, 2008; Grace and O'Cass, 2005; Krystallis and Chrysochu, 2014; Douglas et al, 2006; Pinar et al, 2011).

According to Pinar el al. (2011), the student learning experience is the key driving force in creation of the university brand with student experience at the core. According to the model, the student experience is influenced by the core and supporting value creation elements. The core value creation activity is academics and the next level surrounding the core has supporting value creation elements. The core and supporting activities interact dynamically to create student experiences and all these factors affect the students' university experience and eventually the brand equity. The results of this study align with the study by Pinar et al that the supporting value creating services provided by the HE institutions impact student satisfaction. The support services consist of physical infrastructure, sports, career supplementary services and administrative staff and service. In order to enhance student satisfaction which positively impacts brand loyalty, Nepalese HE institutions should focus on providing quality support services.

The results of this study suggest the importance of quality service in HE institutions, as this will influence student satisfaction, which will ultimately positively influence student loyalty.

The finding is also aligned with the findings of the study by Borishade et al (2021). These findings suggest that improving the quality of support services provided by the university and colleges can lead to increased satisfaction among students. The study provides further empirical evidence for previous studies on service quality and customer satisfaction and also on the importance of HE service quality elements on student satisfaction. The findings support for the HE institutions' focus on enhancing their support services in order to improve students' satisfaction and overall success. The HE institutions should focus on providing good infrastructure facilities to students which is conducive of learning and includes state of the art equipment and facilities, appealing ambience, comfortable classrooms and cleanliness.

Another support service that the HE institutions should provide for student satisfaction is sports and opportunities for students to participate in sports events. Likewise, supportive administrative support staff catering to the specific needs of students impacts the students. Finally, the college should provide career support services like internships and placements which has a positive impact on student satisfaction.

5.1.7 Impact of students' satisfaction on brand loyalty.

The analysis conducted on the impact of students' satisfaction on brand loyalty in Nepalese institutions of Higher Education revealed a significant relationship ($\beta = 0.141$, CR = 2.664, P = 0.008 < 0.01). The results show that there is a significant positive impact of students' satisfaction on brand loyalty in Nepalese HE institutions. The findings are in line with other studies which show a positive significant impact of level of student satisfaction on brand loyalty in students (Mai, 2005; Ng and Forbes, 2009; Ali et al, 2016; Eldegwy et al 2018; Brown & Mazzarol, 2009; Borishade et al, 2021). The finding contributes to the body of literature indicating that student satisfaction plays a crucial role in building brand loyalty among students of HE. The findings of the study reinforce the theoretical understanding that satisfied students are more likely to develop loyalty towards the HE institution by establishing a positive significant relationship between student satisfaction and brand loyalty. The findings also support the theoretical proposition that satisfied students are more likely to have positive attitude and be emotionally attached and loyal to the HE institution.

The findings of this study suggest that satisfaction of students positively influences student loyalty for HE institutions. As HE in Nepal is extremely competitive, the institutions of HE that are seeking to enhance their positioning and acquire a competitive positioning over others can do so by influencing loyalty in students by working on enhancing the levels of student satisfaction. The institutions of HE can work on the factors that influence the student satisfaction and strive to enhance student satisfaction which would have a direct impact on enhancement of brand loyalty leading to enhancement of brand positioning, positive perceptions of the HE institution's brand image and ultimately increased brand equity.

5.1.8 Impact of brand awareness on brand association.

The analysis conducted on the impact of brand awareness on brand association in Nepalese HE institutions revealed a significant relationship ($\beta = 0.213$, CR = 4.039, P = 0.000 < 0.01). Studies show that brand awareness is an antecedent of brand association and customers must be first aware of the brand and then only they can develop associations with the brand (Washburn and Plank 2002, Keller, 1993, French and Smith, 2013). The finding of this study is aligned with the previous studies that provide evidence that brand awareness is a necessary precursor of brand association. Most prior studies investigating the relationship between brand awareness and brand association are focused on consumer goods and there are few studies that explore the relationship between brand awareness and brand association in services and more specifically in HE. The results of the study indicate that it is important for students to have brand awareness of the HE institution's brand before they can build positive and meaningful associations and connections with the brand. The significant relationship between brand awareness and brand association uncovered in this study validates the theoretical propositions put forth by other researchers that brand awareness is an important driver of brand association. The study provides support for the model by Aaker (1992) that proposes that brand building is a sequential and hierarchical process where one step has to be fulfilled before progressing to the next step till the final point in brand building that is brand resonance where active and intense relationship with the customer is achieved. In this model, brand awareness precedes brand association in the process of building brand equity and the findings of this study provide support for the theoretical model.

Therefore, Nepalese HE institutions can focus on enhancing brand awareness of their institutions amongst target groups of students through carefully crafted marketing strategies

and actions. This includes using marketing communication campaigns, using social media to reach the target customers and to undertake brand exposure activities to increase the brand awareness amongst students. Creation of brand awareness will lead to creation of strong and positive brand association amongst the target audience of the Nepalese HE institutions.

The findings of the study highlight the importance of building brand awareness which leads to creation of brand Association. Therefore, Nepalese HE institutions can build strong and positive brand associations that lead to enhanced brand perceptions in the minds of the target audience contributing to enhanced brand equity. Nepalese HE institutions are facing stiff competition and hence creation of brand awareness and positive brand associations is important for them to differentiate themselves from others and build a competitive advantage through building positive associations and favourable image in the minds of the stakeholders. The study also establishes that brand association as an important component of brand equity and building brand awareness and brand association leads to creation of brand equity for institutions of HE. Therefore, Nepalese HE institutions should focus on creating meaningful and positive brand associations so that the institutions could build brand equity. Institutions with high Brand Equity can stand out in the highly competitive Nepalese HE and be a favourable choice for students and faculty.

5.1.9 Impact of brand association on brand loyalty.

The analysis conducted on the impact of brand association on brand loyalty in Nepalese HE institutions revealed a significant relationship ($\beta = 0.186$, CR = 3.57, P = 0.000 < 0.01). Therefore, it can be concluded that there is a significant positive impact of brand association on brand loyalty in Nepalese HE institutions. The finding is aligned with the previous studies which show that brand association has a significant positive impact on brand loyalty and that brand association is an important driver of customer loyalty (Aaker, 1991; Keller, 1993; Yoo, B.& Donthu, N., 2001; Escalas, J. E., & Bettman, J. R.,2003; Gladden & Funk, 2001). By establishing positive, unique, and relevant brand associations, institutions can build a strong emotional connection and a sense of loyalty among consumers, resulting in repeat purchases, advocacy, and a preference for the brand over competitors.

These findings support the existing theories about the relationship between brand association and brand loyalty. The findings of this study provide empirical evidence for the existing

theories that suggest improving brand association or the perceived brand image, can increase brand loyalty. Hence, Nepalese universities should focus on enhancing their brand association in order to improve brand loyalty amongst students and overall brand equity to stand out in the competition and have an advantage over others. Since the study provides evidence that brand association impacts brand loyalty in students for HE institutions, it is important for HE institutions to cultivate and reinforce positive and meaningful brand associations that resonate with the target audience and differentiate them from the competitors.

The study contributes to the theories around brand association and brand image that postulate that clear brand identity which includes a well-articulated value proposition, mission and vision and the core values and philosophies provide a foundation of building brand associations that align with the desired image of the institution. Strong brand association can be built by institutions of HE through proper visual identity of the HE institution through logo, colour, typography and other visual elements. There are other actions on the part of the HE institution that can lead to creation of strong brand association which are management of student experience, management of touch points and use of effective communication strategies. The study concludes that creating sustainable brand positioning in the minds of the target audience by establishing brand associations that are meaningful and positive which will lead to brand loyalty and ultimately will create brand equity for HE institutions.

5.1.10 Impact of Brand Awareness, Brand Association and Brand Loyalty on Student (Customer) Based Brand Equity.

The analysis conducted on the impact of brand awareness on student based brand equity in Nepalese HE institutions revealed a significant relationship ($\beta = 0.186$, CR = 3.57, P = 0.000 < 0.01). The result is aligned with the previous studies that show that there is a significant positive relationship between brand awareness and brand equity. The two major models of brand equity that postulate brand awareness to be a major determinant of brand equity are those by Aaker (1992) and Keller (1993). Aaker posits that brand equity creates considerable value for the firm and proposed a way to determine this value. Aaker argues that there are five brand equity assets that create value which are brand loyalty, brand awareness, perceived brand quality, brand association and other proprietary brand assets. Apart from that there are multiple studies that concluded that brand awareness is an important influencer of brand

equity (Netemeyer et al, 2004; Aaker, 1991,1996; Buil et al., 2008; Eakuru and Mat, 2008; Kim and Kim, 2004; Pappu et al., 2005, 2006; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001).

Likewise, the analysis conducted on the impact of brand association on student based brand equity in HE institutions revealed a significant relationship ($\beta = 0.186$, CR = 3.57 P = 0.000 < 0.01). The result confirms the previous studies in service brand equity that show a positive significance between brand association and brand equity (Loureiro, Lopes & Kaufmann, 2014; Nath and Bawa, 2012).

Furthermore, the analysis conducted on the impact of brand loyalty on student based brand equity in Nepalese HE institutions revealed a significant relationship ($\beta = 0.241$, CR = 4.871, P = 0.000 < 0.01). Therefore, it can be concluded that there is a significant positive impact of brand loyalty on student based brand equity in HE institutions. The findings of this study also confirm the findings of previous studies that concluded that brand loyalty was an antecedent of brand equity and brand loyalty had a significant positive impact on brand equity (Kim, Kim and An, 2003; Jarrel, 2012; Aaker, 1991, 1996; Buil et al., 2008; Eakuru and Mat, 2008; Kim and Kim, 2004; Pappu et al., 2005, 2006; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001).

The results of the three hypotheses (H10, H11, H12) indicate that enhancement of brand awareness, creation of positive brand associations and building strong brand loyalty amongst students contribute to enhancing the overall brand value and the brand equity of the HE institution brand in Nepal. The findings emphasize the importance of brand awareness, brand association and brand loyalty for building strong brand value for HE institutions in the times of rising competition in HE and provide empirical evidence to the extant literature that shows that brand awareness, brand association and brand loyalty are the three most important components of brand equity and influence brand equity.

These findings offer valuable insights into the existing knowledge about building strong brand equity and competitive advantage for HE institutions. The findings imply that building brand awareness both in terms of brand recognition and recall through carefully crafted marketing communication and promotional activities is important for HE institutions to

enhance their brand equity, as according to extant literature and findings of this study, brand awareness is an important source of brand equity. According to Keller et al (Strategic Brand Management, 2011), brand awareness leads to three types of advantages; learning, consideration and choice advantages. Learning advantage means that the brand awareness influences the formation and strength of the brand association that lead to a brand image. Thus the findings of the study contribute to the existing literature on components of brand equity and the theory suggests that HE institutions first need to create brand awareness which would lead to creation of brand image leading to brand equity. Raising the brand awareness makes the offering become a part of the consideration set of the customers, which is a set of a handful of brands that receive the attention and serious consideration of the customers before making a purchase. Finally, brand awareness leads to choice advantage which means that there is a preference to choose the brand with which the customer has higher awareness as compared to other brands in the consideration set. Therefore, for creation of brand equity for HE, the first branding task would be to create high levels of brand awareness so that the brand becomes a part of the consideration set and also gets a preference over other brands while making a choice from the consideration set.

The two most popular and widely cited models of brand equity are by Aaker (1992) and Keller (1993). Both of these models are about the key components and determinants of brand equity. According to the Aaker, Brand Equity creates value for the firm and is determined by five key assets or components that are brand loyalty, brand awareness, perceived brand quality, brand association and other proprietary brand assets. Each of these assets have a differential impact on brand equity and create overall brand value for the firm. The study provided empirical support for the model of brand equity as the analysis shows that there is a significant positive impact of brand awareness, brand association and brand loyalty on brand equity.

Likewise, Keller also claimed that brand equity is the additional premium that a customer is ready to pay for the product or service offering in presence of the brand than when the brand is absent. According to the Customer Based Brand Equity model by Keller (2001), building strong brands is a series of sequential steps where the subsequent step is dependent on successful completion of the previous step. There are four consecutive steps in this model which represent four fundamental questions customers ask about a brand; who are you, what are you, what about you, and what about you and me. These questions sequentially represent

brand identity, brand meaning, brand response and brand relationship. The two models of brand equity by Aaker (1992) and Keller (1993) have a few things in common. By definition, brand awareness in Aaker's model is similar to brand identity in Keller's model, brand association is similar to brand meaning and brand loyalty in Aaker's model corresponds to brand resonance in Keller's model. Both models show that brand awareness, brand association or brand image and brand loyalty are the most important components of customer based brand equity. In order to build strong equity, brands have to ensure high level of awareness, positive and strong associations and intense and long lasting relationship and loyalty with the customers. Most studies define brand equity as the premium that the customers attach to the brand which is a result of various factors related to the brand in which brand awareness, brand image or associations, brand loyalty are the most important ones. Brand Equity has been operationalised as a multidimensional construct that primarily includes brand awareness, perceived quality, brand loyalty, brand associations and brand personality (Aaker, 1991, 1996; Buil et al., 2008; Eakuru and Mat, 2008; Kim and Kim, 2004; Pappu et al., 2005, 2006; Tong and Hawley, 2009; Yoo et al., 2000; Yoo and Donthu, 2001; Chahal and Bala, 2012; Sasmita and Suki, 2015). The conceptual framework in this study has brand equity as dependent variable and brand awareness, brand association and brand loyalty were considered independent variables that were hypothesized to impact brand equity positively for institutions of HE in Nepal. Therefore, the findings of this study align with previous studies indicating a significant impact of brand awareness, brand association and brand loyalty of students on the overall brand equity of the HE institutions. The findings of the study make significant contribution to existing literature on brand equity in services and HE by providing support for the theory that brand awareness, brand association and brand loyalty are significant determinants of brand equity. The contribution of this study is significant in terms of empirical support for the existing theories of brand equity in services and in a new area that is HE which still has scarcity of enough studies in branding and brand equity.

Chapter 6

Conclusion

This chapter provides a recap of the significance of this research, key research questions, reflection of the methodology employed, major findings of the study, the key insights and the implications of this research for theory. The chapter finally presents the practical implications of the study, limitation of the research, future research directions, and closing thoughts and reflection.

6.1 Significance of the research

Higher Education has undergone a significant change and has transformed from being a public good to mixed and private good. Due to the rising demand and supply of HE globally, marketization and competition in HE has become a common phenomenon. Marketing and branding were not accepted in HE as considered to be a practice of commercial enterprises and were perceived as detrimental to academic quality. However, with the rising competition, HE institutions have started to feel the need of use of marketing and branding in HE to gain preference over other institutions and build a sustainable competitive advantage. Branding is gaining acceptance and popularity with the HE institutions and more HE institutions are now adopting branding practices to create a strong brand image and reputation. HE is being considered as a service and the concept of students as customers of HE is gaining popularity.

The ultimate objective of branding activities is to create a strong brand perception of the brand and occupy a distinctive place in the minds of the customers and create a brand value. The value of the brand is referred to as brand equity which is defined as the "differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 1993, p 1). As a research topic and also in practice, brand equity is an area of deep interest and scope. However, brand equity is more commonly studied in the area of consumer goods and commercial sectors and studies in brand equity are rare in HE and a research gap exists in studies related to customer based brand equity in HE. With the growing competition in HE institutions globally, brand equity can be a source of sustainable competitive advantage for HE institutions. Brand equity can be helpful for the institutions of HE in attracting student and faculty, building image and reputation, attracting partnerships and collaborations, attracting international students, funding and generating a sustainable competitive advantage.

This research was focused on investigating Student (Customer) Based Brand Equity in HE and explore factors that influence student (customer) based brand equity in HE and also the interrelationship between them. The research fills in a theoretical gap that exists in studies related to customer based brand equity in HE. The research provides empirical evidence for the theories of brand equity in HE considering HE as a service and students as customers of HE.

The findings of this study contribute to the existing knowledge in customer based brand equity in HE. The study was conducted in Nepal, where the HE sector is extremely competitive and is also facing the challenge of competing with HE institutions from other countries. Therefore, the findings of this study are extremely helpful for HE institutions in Nepal to help them create competitive advantage through brand equity. The results confirm several established relationships, expand on previous findings, and uncover new insights. The study has implications for HE leaders and strategists, practitioners of marketing of HE, HE policy makers, practitioners of service marketing and also for researchers in the area of marketing and branding of HE and other services. The study provides empirical evidence to support decision-making and informs interventions aimed at creating and improving brand equity in HE.

6.2 The Key Research Questions and Findings

The primary objective of this research was to explore the factors that influence Student (Customer) Based Brand Equity in Higher Education. The specific objectives of the research were;

    i.   To assess the factors that affect Student (Customer) Based Brand Equity in Higher Education

    ii.   To determine the interrelationship between Brand Awareness, Brand Association and Brand Loyalty and their impact on Brand Equity

  iii.   To assess the effect of Student Satisfaction on Brand Loyalty

  iv.   To determine the effect of Core Educational Services and Supplementary Services on Student Satisfaction

    v.   To assess the effect of Controlled Communication and Uncontrolled Communication on Brand Awareness

vi. To determine the effect of Controlled Communication and Uncontrolled Communication on Brand Association

The key research questions that the study addressed are as follows;

1. Does Brand Awareness, Brand Association and Brand Loyalty affect Student (Customer) Based Brand Equity in HE?
2. Does Brand Awareness predict Brand Association for HE institutions?
3. Does Brand Association affect Brand Loyalty for HE institutions?
4. Does Student Satisfaction affect Brand Loyalty in Higher Education institutions?
5. Do Controlled Communication and Uncontrolled Communication Impact Brand Association and Brand Awareness for institutions of HE?
6. Do Core Educational Services affect Student Satisfaction in institutions of HE?
7. Do Supplementary Educational Services impact Student Satisfaction in HE institutions?

To achieve the research objective and answer the research questions, a quantitative research design was adopted, and data was collected through a structured survey questionnaire administered to postgraduate students of private colleges in Kathmandu Valley, the capital city of Nepal. A total of 480 students were contacted for completing the questionnaire and they were filled in the presence of the data collectors to help them if they had any confusion or problems. A total of 480 completed questionnaires were received for the study. Out of the 480 completed questionnaires that were received for the study, 418 were used for data analysis after deleting the participants with missing data.

The analysis of the collected data produced valuable insights into the research objectives, contributing to the existing literature on customer based rand equity in HE. The findings provided support for the theoretical model and all hypothesized relationships except 2 out of 12. The findings of the study revealed several significant relationships and patterns related to factors influencing Student (Customer) Based Brand Equity in HE in Nepal. The study concluded that there was a positive significant impact of brand awareness, brand association and brand loyalty on brand equity for HE institutions. Likewise, the study also concluded that there was a significant positive impact of brand awareness on brand association and brand association on brand loyalty. Likewise, student satisfaction revealed to have a significant

impact on brand loyalty and core and supplementary education services were shown to have positive significant impact on student satisfaction. Furthermore, controlled communication consisting of advertising and marketing collaterals was found to have significant impact on brand awareness and brand association.

6.3 Key Theoretical Contributions

The findings of the study add to the literature on branding and brand equity in the context of HE. The key contribution of the findings of this study is enhancing the theoretical understanding of brand equity in the unique context of HE. The findings provide empirical evidence to the multidimensionality of the customer based brand equity as proposed by brand equity models of Aaker (1992) and Keller (1993) in the context of HE. The major theoretical contribution of this study lies in advancement of the brand equity models by Aaker and Keller which are the most accepted and widely used models in the study of brand equity. The identified relationship between brand awareness, brand association, brand loyalty and student based brand equity provides a theoretical framework for studying brand equity in HE seen from the point of view of the students who are the customers of HE. The study establishes brand awareness, brand association and brand loyalty as important antecedents of brand equity in HE seen from the perspective of the students.

Previous research in brand equity has shown its effectiveness in explaining the factors that influence brand equity and the interrelationship between them, however, most previous research applicability was restricted to consumer goods and other commercial services. The study addressed this limitation by incorporating new variables like student satisfaction, controlled communication, uncontrolled communication, core and supplementary educational services in the model and adapting and testing it to the unique context of HE. The enhanced and more comprehensive model was validated through data collected from a representative sample and results showed a good model fit. The enhanced model was empirically tested and the data provided support for the theoretical model and validation of the constructs and the interrelationships between them providing support for the theoretical assumptions in the conceptual framework. The findings significantly contribute to the existing body of knowledge by bridging the gap that exists by providing a more detailed perspective on Student (Customer) Based Brand Equity in HE. The study provides a more comprehensive, enhanced and effective model for investigating and understanding Student (Customer) Based

Brand Equity in HE. The findings of the study extend the traditional theories of brand equity and demonstrate their applicability to the unique context of HE. The study provides a novel model for investigating and measuring brand equity in HE seen from the perspective of the students.

Another major contribution of this research is its empirical contribution to HE as a service and students as customers of HE. The study was conducted in Nepal which is an emerging HE market and where provision of HE is largely private and highly competitive. Therefore, it contributes to the body of knowledge about brand equity in a developing country where HE sector is emerging, highly competitive, largely private and faces the challenge of competing with international providers in a globalised world. It opens avenues for further research to compare brand equity in HE in developing and developed world and the role of culture and country context in influencing brand equity.

Further, another significant contribution that the thesis makes is the synthesis of diversified theoretical concepts from the area of service branding, marketing communication, customer satisfaction and brand equity into one model and testing it in the context of HE. The conceptual model of the study integrated the theoretical concepts from these areas and investigated the complex interrelationship between them in the context of HE.

The findings of the study emphasise the important role that student satisfaction plays in impacting brand loyalty positively. It contributes to the evolving theory of student centric branding approach in HE and the importance of meeting student expectations and managing student experience in a way that positive student experience becomes a part of the overall brand identity of the institution.

Further, the research also investigated the relationship between integrated marketing communication like controlled communication and uncontrolled communication and two important brand equity dimensions; brand awareness and brand association. It emphasises the role of marketing communication in creation of brand awareness and building positive brand associations. The theoretical implications involve emphasising the synergistic and integrative nature of various marketing tools and their role in building a positive brand image and ultimately enhancing the brand equity of HE institutions. The findings add to the existing

knowledge about the role of integrated marketing communication in branding of HE institutions.

The study fills in the theoretical gap that exists in the area of brand equity as a multidimensional concept and also the investigation of interrelationships between the various components of customer based brand equity in HE. In Nepal, there have not been any studies in the area of exploring customer based brand equity in HE so far. Branding in HE is an emerging area as the HE institutions are realising the importance of branding given the increased competition and the need for creating a competitive advantage through strong brand positioning and brand equity.

Furthermore, the study also incorporated the key concepts of the Brand Ecosystem model by Pinar et al (2014) into the overall conceptual framework and tested the impact of core educational services and support services on student satisfaction. The extension of the brand ecosystem model tests the impact of educational services on student satisfaction. The findings contributed to the existing knowledge about the role of core educational services like faculty, classes and curriculum and supplementary educational services like physical infrastructure, sports, career support services and administrative staff in influencing student satisfaction in HE. The study provides an extension to the Brand Ecosystem framework and emphasises the role of core and supporting services in developing branding strategies for institutions of HE. The study establishes a positive impact of student satisfaction on brand loyalty and hence it contributes positively to the theoretical models of service quality in HE that explore the relationship between various elements of service quality, student satisfaction and brand loyalty.

Overall the theoretical implications of the study contribute to the advancement of the existing knowledge of student (customer) based brand equity in HE and offers a foundation for future research and theoretical development in the area on HE brand equity.

6.4 Practical Implications

The findings of this study have implications for practitioners, specifically top level management, marketers and policy makers of HE. The findings of the research will help practitioners understand the various factors that influence brand equity in HE and also how

these factors interact with each other. Brand equity performs a major role in influencing consumer choice in services and specially in HE. The findings of the study have several important practical implications which are outlined as below:

a. Focus on strategic approach to branding

Student based brand equity or the perceived value of the brand seen from the perspective of the student leads to competitive advantage for HE institutions. The institutions have been faced with the challenge of keeping up to the rising competition and have been adopting marketing and branding practices to differentiate themselves from the other service providers to be able to attract better funding, students and faculty. However, the results of marketing should not be measured only in terms of student recruitment, but rather in terms of creation of long term brand equity. The findings of the study will help the practitioners to understand the various components of customer based brand equity in HE and invest in them for creation of strong brand positioning and brand equity so that the students place a higher value on their brand while making a choice.

The findings of this study would help the top management of universities and colleges to understand the importance of strategic branding and focus on investing efforts and resources on brand building and creation of brand equity. The study also provides a perspective to the managers of HE institutions that brand building is a long term and strategic process which can yield long term sustainable competitive advantage to HE institutions.

The study provides an insight into branding and brand equity in HE and focus on the fact that university marketing and branding is not only about advertising, brochures and leaflets and attempts of student recruitment. Rather, branding in HE is a strategic act and HE institutions need to adopt a strategic and holistic approach to building strong brand equity. The study provides a holistic model for building brand equity in HE to practitioners.

b. Enhancing brand awareness, brand association and brand loyalty for building brand equity

The study shows that there is a positive and significant impact of brand awareness, brand association and brand loyalty on student based brand equity. Therefore, institutions should focus on investing in increasing the brand awareness in students. This would include

enhancing both brand recognition and recall through marketing campaigns, social media campaigns, website, marketing materials like brochures, leaflets, other marketing collaterals and visual brand identity like the logo and brand colours.

The study provides evidence of direct and significant impact of brand association on brand equity and hence HE institutions should focus on building strong and positive brand associations amongst its target audience. This would involve focusing on the unique value and offerings and specific characteristics that the institution has in comparison with others. The institutions should focus on effectively communicating the mission, philosophies, values and their unique offerings to the target audience to establish strong and positive brand association in their minds.

The study also found that brand loyalty is another important antecedent of brand equity in HE. Institutions of HE should recognise the importance of building strong and long lasting brand loyalty amongst students to ensure strong brand equity. Keller's brand equity model (1993) posits that building strong brand loyalty is a series of sequential steps where the subsequent step is dependent on successful completion of the previous step. It is clear that this is a hierarchical process where the previous stage has to be completed to progress to next stage. Therefore, brand awareness has to be built first, then brand association leading to the top of the pyramid to brand loyalty where intense and active relationship between the customers and the brand exists. The study also showed positive significant impact of brand awareness on brand association and brand association on brand loyalty. Therefore, HE institutions should first focus on building brand awareness and brand association which would positively impact brand loyalty.

The study also found that amongst the three dimensions; brand awareness, brand association and brand loyalty that impact brand equity, brand loyalty had the highest impact on brand equity. Therefore, HE institutions should not only focus on building awareness and image but they should focus the most on building strong brand loyalty amongst students as that has the highest impact on brand equity in HE.

c. Enhancing Student Satisfaction

The study also proposed another route to building brand loyalty which is through student satisfaction. The study showed that there is a positive and significant impact of student satisfaction on brand loyalty in HE. Therefore, institutions should realise the importance of student satisfaction in ensuring brand loyalty and should make conscious efforts to continually improve student experience and student engagement to ensure high satisfaction. Student satisfaction studies should be conducted periodically and student concerns should be addressed and a supportive learning environment should be fostered for high student satisfaction. The findings also show that there is a positive significant impact of core (faculty, curriculum and classes) and supplementary (physical infrastructure, sports, career support services and administrative staff) educational services on student satisfaction. Therefore, institutions should pay attention to both core and supplementary services to ensure student satisfaction which positively impacts student loyalty. Institutions of HE should prioritise investments in programs and services that enhance the overall student experience. Institutions should strive to ensure understanding and supportive faculty, engaging and interactive classroom experience, conducive learning environment and infrastructure, supportive administrative staff, effective career support services and sports facilities for student satisfaction.

d. Focus on integrated communication

The findings of the study highlight the importance of integrated communication, including both controlled and uncontrolled communication, in effective brand management in HE. Institutions of HE should effectively use controlled communication like advertising and marketing collaterals and uncontrolled communication like word of mouth and publicity for brand building. Institutions should focus on different tools of marketing communication to ensure high levels of brand awareness and brand association. They should employ an integrated approach towards communication and use various channels both personal and non-personal. They should use a good mix of various communication channels which may include both online and conventional channels. Various channels and communication tools like campus events, marketing materials, website, social media, advertising etc. should be used rather than using only one or narrow range of communication channels and tools.

e. The importance for continuous monitoring and adaptation

The findings of the research also implicate that in order to stay competitive in the times of excessive competition, institutions of HE should continually monitor various indicators of brand equity like brand awareness, brand association, brand loyalty and student satisfaction and be agile in adapting strategies in the light of highly competitive and dynamic landscape of HE. Furthermore, institutions of HE can use the findings of this study to monitor their brand performance in terms of brand value and brand positioning in the eyes of the students. Understanding their market positioning and brand value can help them in developing effective branding strategies to enhance their brand value.

f. Practical implications to specific context of Nepalese HE

Nepalese HE institutions have been facing tremendous competition with students leaving the country to pursue their HE in foreign countries. "In the first five months of the current fiscal year, students going abroad for foreign studies have taken about Rs. 29 billion in foreign currency. According to Nepal Rastra Bank (NRB), those going for foreign studies from July to November have legally availed the exchange facility of Rs 28.81 billion. The central bank data clearly shows the growing trend of studying abroad where an exodus of people are leaving Nepal for study and foreign employment" (The Himalayan Times, March 10, 2023)

The Nepalese HE institutions have the challenge of retaining students who leave for HE in other countries because they have a high perceived image of the foreign HE institutions. The Nepalese HE institutions can use the findings of this study to create a better perceived image of theirs to retain and attract the students leaving the country for higher studies. There is a general perception that the HE institutions in the country are not as good as those in foreign lands. The general perception of the students is that the HE institutions in the country do not provide quality education (Himalayan Time, March 10, 2023). The findings of this study can help the HE institutions in the country to create better brand image of the Nepalese HE institutions and provide guidance to the management of Nepalese HE institutions on the process of long term brand building. The findings of this study provide guidelines about which components of brand equity to focus on to build strong brand loyalty and customer perception and ultimately strong brand equity to attract and retain the students in the country. Marketing of services and marketing practices in HE in Nepal is at a rudimentary stage (Awale and Shrestha, 2023) and hence the findings of this study can be used in marketing and

branding of HE and other services in Nepal primarily the tourism sector and destination marketing.

Nepal's HE is dominated by private education and the public institutions also have an inclination towards being run like private as most of their popular programs like medicine and management programs like MBA require students to pay full tuition fee which is comparable to private institutions. Therefore, it is important for policy makers to come up with a policy for categorisation of these institutions and capping the fee according to the category of these institutions. One of the factors that can be relevant in categorisation of these institutions can be their perceived brand image and the overall brand equity among the students, recruiters and the society at large. The findings of this study can be helpful for policy makers to develop a framework for categorising the HE institutions according to market positioning and perceived brand value.

Furthermore, according to the census data of Nepal of 2011, the highest percentage in the population age mix of Nepal is the working age population. The working age population of men is 57.9% and women is 61.6%. (United Nations Population Fund, 2017, pp. 7-12). Added to this is the fact that the fertility and mortality rates have been declining and hence Nepal stands at a point where it is facing a demographic dividend and an opportunity for rapid economic growth in the coming decades if the opportunity is utilised well.

Higher education will play a crucial role in the determination of how well Nepal does during the demographic dividend. Therefore, it is crucial that the young population who are leaving the country for HE are retained in the country and they are provided quality education by HE institutions at home. In order to retain the young population, building strong and positive brand positioning and brand equity of Nepalese HE institutions in the minds of the young students is extremely important and the findings of this study can be used by HE institutions for the same.

6.5 Limitations and Future Research

Nepal has 7 states and 77 districts, however, the study was focussed primarily in the state of Bagmati and only in three districts of Kathmandu, Lalitpur and Bhaktapur. Out of the total students of all 7 provinces, the major percentage of students are enrolled in the Bagmati Province. A total of 218,888 (52%) students out of total 420,826 are enrolled in the Bagmati

Province. Likewise, there are 628 institutions of HE in Bagmati province out of a total of 1440 in the country (UGC, 2022). The largest percentage of students and institutions are located the three districts of Kathmandu, Lalitpur and Bhaktapur in the Bagmati Province. Therefore, Kathmandu Valley, the capital city of Nepal in the Bagmati Province was chosen as the study area. Also, Kathmandu being the capital of Nepal attracts students from all parts of Nepal to various institutions in Kathmandu and all prestigious institutions of Nepal are located in Kathmandu. However, the study did not include HE institutions from other parts of Nepal due to the constraints of time and cost. In the future, a similar study can be conducted in other parts of Nepal, especially in the Eastern and Western part of Nepal to understand Brand Equity in HE and also to see if there is a difference in findings between the most prestigious HE institutions located in Kathmandu Valley and HE institutions in other parts of Nepal. Branding in HE is almost non-existent in HE institutions located outside Kathmandu Valley. One of the most crucial limitation of this study is that it is focused on HE institutions located in Kathmandu Valley only.

Another limitation of the study is that it takes into consideration only the private HE institutions in Nepal. In Nepal 89.59% of HE institutions are private and 52.29% are private for-profit institutions registered as business entities (UGC, 2022). Since the study has more relevance to private educational institutions, students from private colleges in Kathmandu Valley were considered as sample for the study. As the public HE institutions in Nepal are run differently than private institutions, the findings of this study should be generalised to public institutions with caution.

In this study only private colleges offering degrees in management were considered because out of the total student enrolment in HE in Nepal in various disciplines, the highest percentage of student enrolment, 46.25% (UGC, 2022) is in management. Therefore, one of the limitations of this study is that the sample consists of only those colleges offering degrees in management discipline. This opens a wide scope for future research to conduct a study with larger samples that also contain institutions offering other disciplines as well.

The study used cross sectional design that captures the data at a particular point in time. The data was collected with a self-reported questionnaire and may be subject to response bias and social desirability effect. As the participants of the survey were students from various colleges, it could be likely that they provided response that is socially acceptable and the

response could have been biased towards the colleges that they are studying in. Therefore, to overcome this limitation future research could be designed with multiple data collection methods or use alternative methods to mitigate such biases.

The study focused on brand equity from the perspective of the students and ignored the point of view of the University and Colleges. In the future there could be studies that focus on investigating brand equity in HE from the perspective of the HE institutions as well.

The study considered students as customers of HE and explored brand equity from the perspective of the students, however, the organisations who employ the graduates of HE are also the customers of HE. This study did not explore HE brand equity from the perspective of the employers who are major stakeholders of HE.

Finally, the model has been tested only in the specific context of Nepal and caution should be exercised before generalising it to the HE in other countries and contexts. However, the analysis of this study provides a basis for further research in brand equity in HE and in services.

Various scope and directions for further research exist based on the findings of this research. Further research can be done with larger samples to ensure more generalisability of the research. The model can be replicated in other areas of HE like medicine, engineering, science and humanities and can be conducted in other parts of Nepal to improve the generalisability of the findings. Likewise, research can be conducted in other countries as the customer perception and country of origin is a critical brand driver in HE.

Further research can be conducted to investigate factors influencing HE brand equity in the employers who recruit the graduates of HE institutions. The recruiter's preference for graduates of a HE institution depends on their brand perception of that institution. Their level of brand awareness, brand association and brand loyalty will determine their preference of graduate from one institution over others. Therefore, a study which investigates the brand equity of HE institutions in the employers is strongly recommended.

The findings of this research show that there was no significant impact of uncontrolled communication tools like unpaid publicity and word of mouth on brand awareness and brand association. This finding is contrary to the findings of other studies done in the area of investigating the impact of word of mouth and publicity on brand awareness and brand

association in the context of services. Further research is needed to understand this contrary to usual finding as unpaid publicity and word of mouth are considered to be extremely important drivers of brand awareness and brand association.

A longitudinal study would be necessary to confirm if brand equity develops gradually and sequentially as suggested by Keller (1993) in students starting from brand awareness to brand association to creation of strong loyalty and brand equity. For this purpose, the longitudinal study will start from the pre application stages of the students and it will continue till they graduate and are employed.

Furthermore, there also exists considerable opportunity to apply the modified customer based brand equity model to other services apart from HE. As health and hospitality are important sectors in Nepal, this research paves the way for using the brand equity model and findings of this research for conducting research in other service sectors especially healthcare and hospitality in Nepal.

Nepal has tremendous potential as a tourist destination and there is a need for studies in destination branding for Nepal. The findings of this study provide a basis for further studies in destination branding of Nepal.

6.6 Reflections and Closing Thoughts

I have been involved in HE for the last 24 years and my journey involves working with two HE institutions in Nepal from the day of their inception and bringing them to a level where they are perceived to be the best providers of management education in the country. The journey has been full of challenges but it has been extremely rewarding. Starting a college offering graduate and post graduate programs in management in 1999 when there was only one school in the entire country offering an MBA program, was not an easy task. But when I started there was a dream of making it the best in Nepal. The dream has been realised and looking back, the entire journey has been full of amazing learning experiences. I think I could not have had any other career which could have been more rewarding than what I have been doing over the last 24 years of my life.

I have been in a top level management position in HE and I always wanted to complete a doctoral degree which had a direct relevance to my profession. Therefore, I decided to join

the DBA in Higher Education Management as I thought that being a manager in HE it would be highly relevant and beneficial to me and I can bring the learning from the DBA and implement at my organisation and in my country. Another incentive to join the DBA was to learn from a cohort which was diverse in terms of nationalities and get a global perspective to HE so that my work and institution can benefit from my exposure and learning.

I chose the area of Branding in HE as that has been my core passion as a manager in HE. The institution that I work for has a distinct reputation of being the first HE institution in the country to practice strategic branding and it was the first ever HE institution in the country to adopt branding practices and be able to create a distinctive brand image in the country. Myself with my team have been instrumental in getting the institution to a level where it is considered to be the pioneer in practising branding in HE in Nepal. I wanted to broaden my horizon of knowledge in the area of my passion and hence chose to do research on brand equity in HE. When I started to explore literature on brand equity in HE, I found that there were few empirical studies on brand equity in HE. Working in the HE sector in Nepal, I was aware of the level of competition in HE and also the fact that marketing and branding in HE is still in a rudimentary stage in Nepal. However, there is a need for HE institutions to practice strategic marketing and branding to create competitive advantage. Therefore, I arrived at a conclusion that a study of exploring brand equity in HE will be beneficial to HE institutions in Nepal and also to the education policy of the country.

Reflecting on the research journey from the start of the process till here, it is evident that the journey has been a rich and rewarding learning experience. From the time of interacting with literature to finalise the topic, to the literature review, finalisation of the research design, data collection and analysis and writing down the findings and analysis; each step in the process has brought immense learning and provided deep knowledge and insights into the research topic and the broader research area.

The journey has been rigorous but at the end it is extremely rewarding in terms of the valuable knowledge and experience that it has provided. The journey has not been without challenges. The time constraints, challenges with data collection and juggling to balance the research work with personal and professional obligations has been challenging, but it has taught me the value of prioritising, the importance of time and the value of perseverance, patience and hard work. A large part of the research work was done during the times when the world faced the unprecedented situation of a global pandemic of COVID 19. Data

collection and meeting respondents became a challenge and hence there were delays in the planned schedule of the research. This has provided insights in to how to keep moving in times of adversity and lessons in perseverance and conscientiousness and ability to keep moving with hope and moving ahead with a belief that tomorrow will be better than today.

The research journey has been an amazing learning experience and transformational that has enhanced my research skills, people skills and my analytical and critical thinking skills. It has expanded my horizon of knowledge and has provided me deep insights into my research topic and has deepened my passion for research. I will also be able to use the findings of my research to my organisation for creation of competitive advantage through building brand equity and I will be able to take the organisation to newer heights. It has provided a basis for further research and contribution to research and practice. As a researcher and a professional my overall experience has been nothing less than transformational and I have grown as a professional and a researcher.

References

Aaker, D.A., 1991. *Managing Brand Equity*. New York: The Free Press

Aaker, D.A., 1992. The Value of Brand Equity. *Journal of Business Strategy*, 13(4), pp.27 3

Aaker, D.A., 1996. *Building Strong Brands*. New York: The Free Press

Ahmed, J. and Rouf, M.A., 2014. Controlled, Uncontrolled Communication, Brand Name and Brand Attitude: A Relational Study on Cellular Telecom Sector of Bangladesh. *American Journal of Trade and Policy*, 1(3), pp.103–110.

Albanese, M., 1999. Students are not customers: a better model for medical education. *Academic Medicine*, 74(11), pp.1172-86.

Aldemir, C. and Gülcan, Y., 2004. Higher Education Management and Student Satisfaction in Higher Education: A Turkish Case. *Higher Education Management and Policy*, 16(2).

Ali, F., Zhou, Y., Hussain, K., Nair, P.K. and Ragavan, N.A., 2016. Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education*, 24(1), pp.70–94.

Alt, M. and Griggs, S., 1988. Can a brand be cheeky? *Marketing Intelligence & Planning*, 6(4), pp.9-16.

Altbach, P.G., 1999. The logic of mass higher education. *Tertiary Education & Management,* 5(2), pp.107-124.

Ambler, T., Kokkinaki, F. and Puntoni, S., 2004. Assessing marketing performance: reasons for metrics selection. *Journal of Marketing Management*, 20(3-4), pp.475-498.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.

Arambewela, R. and Hall, J., 2013. The interactional effects of the internal and external university environment, and the influence of personal values, on satisfaction among international postgraduate students. *Studies in Higher Education*, 38(7), pp.972-988.

Asian Development Bank, 2015. *Innovative Strategies in Higher Education for Accelerated Human Resource Development in South Asia: Nepal*. Manila: Asian Development Bank p 7

Athiyaman, A., 1997. Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing*, 31(7), pp.528–540.

Awale, S. and Shrestha, B.K., 2022. Effectiveness of Print Advertising Practices of Higher Education Services in Nepal. *Journal of Promotion Management*, 28(1), pp.1–19.

Balarabe Kura, S.Y., 2012. Qualitative and Quantitative Approaches to the Study of Poverty: Taming the Tensions and Appreciating the Complementarities. *Qualitative Report*, *17*, p.34.

Bamert, T. and Wehrli, H.P., 2005. Service quality as an important dimension of brand equity in Swiss services industries. *Managing Service Quality: An International Journal*, *15*(2), pp.132-141.

Bansal, H.S. and Voyer, P.A., 2000. Word-of-mouth processes within a services purchase decision context. *Journal of Service Research*, *3*(2), pp.166-177.

Baral, K.J., 2008. Higher Education Financing in Nepal. *Journal of Nepalese Business Studies*, 4(1), pp.1–9.

Bashir, S., 2007. Trends in International Trade in Higher Education: Implications and Options for Developing Countries. Education Working Paper Series, Number 6. *World Bank Publications*.

Bay, D. and Daniel, H., 2001. The student is not the customer—An alternative perspective. *Journal of Marketing for Higher Education*, 11(1), pp.1-19.

Bentler, P.M. and Chou, C.P., 1987. Practical issues in structural modelling. *Sociological Methods & Research*, *16*(1), pp.78-117.

Berry, L.L., 2000. Cultivating service brand equity. *Journal of the Academy of Marketing Science,* 28(1), pp.128-137.

Berry, L.L., Parasuraman, A. and Zeithaml, V.A., 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of retailing*, 64(1), pp.12–40.

Berry, L.L., Parasuraman, A. and Zeithaml, V.A., 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of retailing*, 64(1), pp.12–40.

Bok, D., 2009. *Universities in the Marketplace*. 1st ed. Princeton, N.J.: Princeton University Press.

Borishade, T.T., Ogunnaike, O.O., Salau, O., Motilewa, B.D. and Dirisu, J.I., 2021. Assessing the relationship among service quality, student satisfaction and loyalty: the NIGERIAN higher education experience., *Heliyon*, *7*(7).

Bosch, J., Venter, E., Han, Y. and Boshoff, C., 2006. The impact of brand identity on the perceived brand image of a merged higher education institution: Part one. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, *15*(2), pp.10 30.

Brodie, R.J., 2009. From goods to service branding: An integrative perspective. *Marketing Theory*, 9(1), pp.107–111.

Brodie, R.J., Whittome, J.R.M. and Brush, G.J., 2009. Investigating the service brand: customer value perspective. *Journal of Business Research*, 62(3), pp.345–355.

Brown, R.M. and Mazzarol, T.W., 2009. The importance of institutional image to student satisfaction and loyalty within higher education. *Higher Education*, 58(1), pp.81-95.

Bryman, A. and Bell, E. (2007) *Business Research Methods*. 2e. Oxford: Oxford University Press.

Bryman, A. and Bell, E. (2011) *Business Research Methods*. 3e. Oxford: Oxford University Press. p 154

Bryman, A. and Bell, E. (2015) *Business Research Methods*. 4e. Oxford: Oxford University Press.

Buil, I., De Chernatony, L. and Martinez, E., 2008. A cross-national validation of the consumer-based brand equity scale. *Journal of Product & Brand Management*, 17(6), pp.384-392.

Butt, B.Z. and Rehman, K.U., 2010. A study examining the student's satisfaction in higher education. *Procedia - Social and Behavioral Sciences*, 2(2), pp.5446–5450.

Carlson, P.M. and Fleisher, M.S., 2002. Shifting realities in higher education: today's business model threatens our academic excellence. *International Journal of Public Administration,* 25(9-10), pp.1097-1111.

Chahal, H. and Bala, M., 2012. Significant components of service brand equity in healthcare sector. *International Journal of Health Care Quality Assurance*, 25(4), pp.343–362.

Chang, H.H. and Liu, Y.M., 2009. The impact of brand equity on brand preference and purchase intentions in the service industries. *Service Industries Journal*, 29(12), pp.1687–1706.

Chen, L.-H., 2008. Internationalization or International Marketing? Two Frameworks for Understanding International Students' Choice of Canadian Universities. *Journal of Marketing for Higher Education*, 18(1), pp.1–33.

Chen, T., Yeh, T. and Jheng, W., 2013. Factors influencing brand association. *African Journal of Business Management*, 7(19), pp.1914–1926.

Chetty, R., & Datt, R. (2015). Determining Sample Adequacy. In R. Datt & T. Hoang (Eds.), *Strategic Decision Making: Applying the Analytic Hierarchy Process*, Springer. pp. 37-42.

Cobb-Walgren, C.J., Ruble, C.A. and Donthu, N., 1995. Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), pp.25-40.

Cochran, W.G., 1977. *Sampling Techniques*. John Wiley & Sons.

Cohen, L., Manion, L., & Morrison, K. (2000*). Research Methods in Education.* New York: Routledge Falmer.

Creswell, John W., and Creswell, J. David. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Los Angeles: SAGE, 2018.

Cronbach, L.J., 1970. *Essentials of Psychological Testing*. Harper & Row.

Crotty, M.J., 1998. The foundations of social research: Meaning and perspective in the research process. *The Foundations of Social Research*. London: SAGE. pp.1-256.

Cuthbert, R., 2010. Students as customers. *Higher Education Review*, *42*(3), pp.3-25.

Davis, R., Buchanan-Oliver, M. and Brodie, R.J., 2000. Retail service branding in electronic commerce environments. *Journal of Service Research*, 3(2), pp.178-186.

De Chernatony, L. and Dall'Olmo Riley, F., 1998. Defining A 'Brand': Beyond The Literature with Experts' Interpretations. *Journal of Marketing Management*, 14(5), pp.417 443.

De Chernatony, L. and Dall'Olmo Riley, F., 1998a. Modelling the components of the brand. *European Journal of Marketing*, 32(11/12), pp.1074–1090.

Demirbag, M., Koh, S. C. L., Tatoglu, E., & Zain, M. (2006). Measuring the competitive advantage of the Turkish textile and clothing industry in the European Union countries. *International Journal of Production Economics*, 103(2), 828-846

Dennis, C., Papagiannidis, S., Alamanos, E. and Bourlakis, M., 2016. The role of brand attachment strength in higher education. *Journal of Business Research*, 69(8), pp.3049–3057.

DeShields, O.W., Kara, A. and Kaynak, E., 2005. Determinants of business student satisfaction and retention in higher education: Applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19(2), pp.128–139.

Douglas, J., Douglas, A. and Barnes, B., 2006. Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), pp.251–267.

Eakuru, N. and Mat, N.K.N., 2008. The application of structural equation modelling (SEM) in determining the antecedents of customer loyalty in banks in South Thailand. *The Business Review, Cambridge,* 10(2), pp.129-139.

Edmiston, D., 2008. An examination of integrated marketing communication in US public institutions of higher education. *International Journal of Educational Advancement*, *8*(3-4), pp.152-175.

Eldegwy, A., Elsharnouby, T.H. and Kortam, W., 2018. How sociable is your university brand? An empirical investigation of university social augmenters' brand equity. *International Journal of Educational Management*, 32(5), pp.912–930.

Elliott, K.M. and Shin, D., 2002. Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, *24*(2), pp.197-209.

Escalas, J.E. and Bettman, J.R., 2005. Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, *32*(3), pp.378-389.

Faircloth, J.B., Capella, L.M. and Alford, B.L., 2001. The effect of brand attitude and brand image on brand equity. *Journal of Marketing Theory and Practice*, 9(3), pp.61-75.

Findley, M.G., Kikuta, K. and Denly, M., 2021. External validity. *Annual Review of Political Science*, *24*, pp.365-393.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

French, A. and Smith, G., 2013. Measuring brand association strength: A consumer based brand equity approach. *European Journal of Marketing*, 47(8), pp.1356–1367.

George, D. and Mallery, P., 2018. Reliability analysis. In *IBM SPSS Statistics 25 Step by Step,* Routledge. pp. 249-260.

Gibson, A., 2010. Measuring business student satisfaction: A review and summary of the major predictors. *Journal of Higher Education Policy and Management*, 32(3), pp.251–259.

Gladden, J.M. and Funk, D.C., 2001. Understanding Brand Loyalty in Professional Sport: Examining the Link Between Brand Associations and Brand Loyalty. *International Journal of Sports Marketing and Sponsorship*, 3(1), pp.54–81.

Goi, M.T., Goi, C.L. and Wong, D., 2014. Constructing a brand identity scale for higher education institutions. *Journal of Marketing for Higher Education*, 24(1), pp.59–74.

Grace, D. and O'Cass, A., 2005. Service branding: Consumer verdicts on service brands. *Journal of Retailing and Consumer Services*, 12(2), pp.125–139.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate Data Analysis (7th ed.)*. Prentice Hall.

Hauss, D., 1993. Measuring the impact of public relations. *The Public Relations Journal*, *49*(2), p.14.

He, H. and Li, Y., 2011. Key service drivers for high-tech service brand equity: The mediating role of overall service quality and perceived value. *Journal of Marketing Management*, 27(1–2), pp.77–99.

Hemsley-Brown, J. and Goonawardana, S., 2007. Brand harmonization in the international higher education market. *Journal of Business Research*, *60*(9), pp.942-948.

Hemsley-Brown, J. and Oplatka, I., 2006. Universities in a competitive global marketplace. *International Journal of Public Sector Management*, 19(4), pp.316-338.

Hennig-Thurau, T., Langer, M.F. and Hansen, U., 2001. Modeling and Managing Student Loyalty: An Approach Based on the Concept of Relationship Quality. *Journal of Service Research*, 3(4), pp.331–344.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2010). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277-320.

Jarrell, C.M., 2012. *An examination of possible relationships between service quality and brand equity in online higher education*. Northcentral University.

Jillapalli, R.K. and Jillapalli, R., 2014. Do professors have customer-based brand equity? *Journal of Marketing for Higher Education*, 24(1), pp.22–40.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.

Kapferer, J.N., 2008. *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term*. Kogan Page Publishers.

Kayaman, R. and Arasli, H., 2007. Customer based brand equity: evidence from the hotel industry. *Managing Service Quality: An International Journal*, *17*(1), pp.92-109.

Keller, K.L., 1993. Conceptualizing, measuring, and managing customer-based brand equity. *The Journal of Marketing*, 57(1), pp.1–22.

Keller, K.L., 2001. Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands. *Journal of Marketing Communications*, 15(2–3), pp.139–155.

Keller, K.L., 2008. *Strategic Brand management: Building, Measuring, and Managing Brand Equity*. 3rd ed. India: Pearson Education.

Keller, K.L. and Kotler, P., 2015. Holistic marketing: a broad, integrated perspective to marketing management. In *Does Marketing Need Reform? Fresh Perspectives on the Future* (pp. 308-313). Routledge.

Keller, K.L., Parameswaran, M.G. and Jacob, I., 2011. *Strategic Brand Management: Building, Measuring, and Managing Brand Equity.* 3rd ed. India: Pearson Education.

Khoshtaria, T., Datuashvili, D. and Matin, A., 2020. The impact of brand equity dimensions on university reputation: an empirical study of Georgian higher education. *Journal of Marketing for Higher Education*, 30(2), pp.239–255.

Kim, H.B., Kim, W.G. and An, J.A., 2003. The effect of consumer-based brand equity on firms' financial performance. *Journal of Consumer Marketing*, 20(4–5), pp.335–351.

Kim, W.G. and Kim, H.B., 2004. Measuring customer-based restaurant brand equity: Investigating the relationship between brand equity and firms' performance. *Cornell Hotel and Restaurant Administration Quarterly,* 45(2), p.108.

Kimpakorn, N. and Tocquer, G., 2010. Service brand equity and employee brand Commitment. *Journal of Services Marketing*, 24(5), pp.378–388.

Knight, J., 2010. Internationalization and the competitiveness agenda. In Portnoi, Rust, and Bagley, eds. *Higher Education Policy and the Global Competition Phenomenon*. US: Palgrave Macmillan, pp. 205-218.

Konecnik, M. and Gartner, W.C., 2007. Customer-based brand equity for a destination. *Annals of Tourism Research*, 34(2), pp.400–421.

Kotler, P. and Armstrong, G., 2008. *Marketing Management*.12e. India: Pearson Education.

Kotler, P. and Keller, K.L., 2009. *Marketing Management*.13e. New Jersey: Prentice Hall Inc.

Kotler, P., Keller, K.L., Koshy, A., and Jha, M., 2013. *Marketing Management*. 14e. India: Pearson.

Krishnan, B.C. and Hartline, M.D., 2001. Brand equity: is it more important in services? *Journal of Services Marketing*, *15*(5), pp.328-342.

Krystallis, A. and Chrysochou, P., 2014. The effects of service brand dimensions on brand loyalty. *Journal of Retailing and Consumer Services*, 21(2), pp.139–147.

Lassar, W., Mittal, B. and Sharma, A., 1995. Measuring customer-based brand equity. *Journal of Consumer Marketing*. Vol. 12 No. 4, pp. 11-19.

LeBlanc, G. and Nguyen, N., 1997. Searching for excellence in business education: An exploratory study of customer impressions of service quality. *International Journal of Educational Management*, 11(2), pp.72–79.

Leone, R.P., Rao, V.R., Keller, K.L., Luo, A.M., McAlister, L. and Srivastava, R., 2006. Linking brand equity to customer equity. *Journal of Service Research*, *9*(2), pp.125-138.

Licata, J. and Frankwick, G.L., 1996. University marketing: a professional service organization perspective. *Journal of Marketing for Higher Education*, *7*(2), pp.1-16.

Loureiro, S.M.C., Lopes, R. and Kaufmann, H.R., 2014. How brand personality, brand identification and service quality influence service brand equity. *Cogent Business and Management*, 1(1), 981329.

Mackay, M.M., 2001. Application of brand equity measures in service markets. *Journal of Services Marketing*, *15*(3), pp.210-221.

Mai, L.W., 2005. A comparative study between UK and US: The student satisfaction in higher education and its influential factors. *Journal of Marketing Management*, *21*(7-8), pp.859-878.

Maringe, F. and Foskett, N. eds., 2012. *Globalization and Internationalization in Higher Education: Theoretical, Strategic and Management Perspectives*. A&C Black. pp 65-82

Mark, E., 2013. Students are not products. They are customers. *College Student Journal,* 47(3), pp.489-493.

Maurya, U.K. and Mishra, P., 2012. What is a brand? A Perspective on brand meaning. *European Journal of Business and Management*, 4(3), pp.122–134.

Mazzarol, T. and Soutar, G., 2001. The global market for higher education: Sustainable competitive strategies for the new millennium. In *The Global Market for Higher Education*. Edward Elgar Publishing.

McKibben, J.D., 2005. Harnessing the Power of the University Brand: Five Steps to an Effective Branded Facility Branding for Higher Education, white paper presentation at the American Marketing Association's Symposium on Marketing in Higher Education. *San Diego, California: Perkins+ Will Branded Environments*.

Michael, S.O., 1997. American higher education system: Consumerism versus professorialism. *International Journal of Educational Management* 11(3), pp.117–130.

Ministry of Foreign Affairs, Nepal. *Nepal Profile*, *Ministry of Foreign Affairs Nepal MOFA*. Available at: https://mofa.gov.np/nepal-profile-updated/ (Accessed: 29 July 2023).

Mourad, M., Ennew, C. and Kortam, W., 2011. Brand equity in higher education. *Marketing Intelligence & Planning*, *29*(4), pp.403-420.

Mourad, M., Meshreki, H. and Sarofim, S., 2020. Brand equity in higher education: comparative analysis. *Studies in Higher Education*, 45(1), pp.209–231.

Myers, M. D. (1997). Qualitative Research in Information Systems. *MIS Quarterly*, 21(2), 241– 242

Naidoo, V. and Wu, T., 2011. Marketing strategy implementation in higher education: A mixed approach for model development and testing. *Journal of Marketing Management*, 27(11–12), pp.1117–1141.

Nath, P. and Bawa, A., 2012. Measurement of Brand Equity of Services. *International Management*, 11(2).

Netemeyer, R.G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J. and Wirth, F., 2004. Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(2), pp.209–224.

Ng, I.C.L. and Forbes, J., 2008. Education as service: the understanding of university experience through the service logic. *Journal of Marketing of Higher Education*, pp.38–64.

Palacio, A.B., Meneses, G.D. and Pérez, P.J.P., 2002. The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration*, *40*(5), pp.486-505.

Pappu, R. and Quester, P., 2006. Does customer satisfaction lead to improved brand equity? An empirical examination of two categories of retail brands. *Journal of Product & Brand Management,* 15(1), pp.4-14.

Pappu, R., Quester, P.G. and Cooksey, R.W., 2005. Consumer-based brand equity: improving the measurement – empirical evidence. *Journal of Product & Brand Management*, 14(3), pp.143–154.

Park, Y.S., Konge, L. and Artino, A.R., 2020. The positivism paradigm of research. *Academic medicine*, *95*(5), pp.690-694.

Pike, S. and Bianchi, C., 2016. Destination Brand Equity for Australia: Testing a Model of CBBE in Short-Haul and Long-Haul Markets. *Journal of Hospitality and Tourism Research*, 40(1), pp.114–134.

Pinar, M., Girard, T. and Basfirinci, C., 2020. Examining the relationship between brand equity dimensions and university brand equity: An empirical study in Turkey. *International Journal of Educational Management*, *34*(7), pp.1119-1141.

Pinar, M., Trapp, P., Girard, T. and Boyt, T.E., 2011. Utilizing the brand ecosystem framework in designing branding strategies for higher education. *International Journal of Educational Management*, 25, pp.724–739.

Pinar, M., Trapp, P., Girard, T. and Boyt, T.E., 2014. University brand equity: An empirical investigation of its dimensions. *International Journal of Educational Management*, 28(6), pp.616–634.

Pinsonneault, A. and Kraemer, K., 1993. Survey research methodology in management information systems: an assessment. *Journal of Management Information Systems*, *10*(2), pp.75-105.

Rust, V., Portnoi, L. and Bagley, S., 2010. Mapping the terrain: The global competition phenomenon in higher education. In Portnoi, Rust, and Bagley, eds. *Higher Education, Policy, and the Global Competition Phenomenon* pp. 205-218. US: Palgrave Macmillan, pp 1-13

Sasmita, J. and Mohd Suki, N., 2015. Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail and Distribution Management*, 43(3), pp.276–292.

Saunders, M. N. K., Philip Lewis, and Adrian Thornhill, 2019. *Research Methods for Business Students*. 8th ed. Harlow, England: Pearson,

Schivinski, B. and Dabrowski, D., 2015. The impact of brand communication on brand equity through Facebook. *Journal of Research in Interactive Marketing*, *9*(1), pp.31-53.

Schultz, D.E., 2003. Brand Equity: Both Ends of the Spectrum. *Interactive Marketing*,5(1), pp.5-6.

Schwartz, S., 2004. Stop spinning, start delivering. *The Times Higher Education Supplement.* 22 October

Sekaran, U. and Bougie, R. (2013) *Research Methods for Business: A Skill-Building Approach*. 6e. Chichester: Wiley.

Simon, C.J. and Sullivan, M.W., 1993. The measurement and determinants of brand equity: A financial approach. *Marketing science*, 12(1), pp.28-52.

Stevens, J.P., 2012. Exploratory and confirmatory factor analysis. In *Applied Multivariate Statistics for the Social Sciences*. Routledge. pp. 337-406

Swain. H., 2005. A well-cut lawn is not the draw. *The Times Higher Education Supplement.* 3 June.

The Annapurna Express, 2023. *Foreign Education and Abroad Travel Spending of Nepalis Exceed Nepal's Tourism Earnings* [online]. Available from: https://theannapurnaexpress.com/news/foreign-education-and-abroad-travel-spending-of-nepalis-exceed-nepals-tourism-earnings-38145/ (Accessed: 29 July 2023).

The Himalayan Times, 2023. *Higher education: At home or abroad?* [online]. Available from: https://thehimalayantimes.com/opinion/higher-education-at-home-or-abroad [Accessed 29 July 2023].

The Kathmandu Post, 2016. *Nepal earthquake: How is country faring one year on*? [online]. Available from: http://kathmandupost.ekantipur.com/news/2016-04-23/nepal earthquake-how-is-country-faring-one-year-on.html [Accessed 23 January 2018].

Tiwari, A.,2018. Brand Equity in Higher Education. *MN60612: Strategic Issues 2*. University of Bath. Unpublished assignment

Tiwari, A., 2019. Customer based brand equity in higher education-a study of private higher education in Nepal. *MN60613: Research Methods*. University of Bath. Unpublished assignment

Tong, X. and Hawley, J.M., 2009. Measuring customer-based BE: empirical evidence from the sportswear market in China. *Journal of Product & Brand Management*, 18(4), pp.262 271.

Tran, K.T., Nguyen, P. V., Do, H.T.S. and Nguyen, L.T., 2020. University students' insight on brand equity. *Management Science Letters*, 10(9), pp.2053–2062.

UGC, 2012. *Education Management Information System; Report on Higher Education 2010/11 AD (2067/68 B.S.), Nepal.* Bhaktapur: University Grants Commission.

UGC, 2017. *Education Management Information System; Report on Higher Education 2015/16 AD (2072/73 B.S.), Nepal.* Bhaktapur: University Grants Commission.

UGC, 2022. *Education Management Information System; Report on Higher Education, 2020/21 A.D. (2077/78 B.S.), Nepal.* Bhaktapur: University Grants Commission.

United Nations Population Fund, 2017. *Population Situation Analysis of Nepal*., pp.7-12.

Van Riel, A.C., Lemmink, J. and Ouwersloot, H., 2001. Consumer evaluations of service brand extensions. *Journal of Service Research*, *3*(3), pp.220-231.

Vargo, S.L. and Lusch, R.F., 2004. Evolving to a New Dominant Logic for Marketing. *Journal of marketing*, *68*(1), pp.1-17.

Vidaver-Cohen, D., 2007. Reputation beyond the rankings: A conceptual framework for business school research. *Corporate Reputation Review,* 10(4), pp.278-304.

Vukasovič, T., 2015. Managing consumer-based brand equity in higher education. *Managing Global Transitions*, *13*(1), pp.75-90.

Wæraas, A. and Solbakk, M.N., 2009. Defining the essence of a university: Lessons from higher education branding. *Higher Education*, *57*(4), p.449.

Wang, C.H., Hsu, L.C. and Fang, S.R., 2009. Constructing a relationship-based brand equity model. *Service Business*, 3(3), pp.275–292.

Washburn, J.H. and Plank, R.E., 2002. Measuring Brand Equity: An Evaluation of a Consumer-Based Brand Equity Scale. *Journal of Marketing Theory and Practice*, 10(1), pp.46–62.

Whisman, R., 2009. Internal branding: a university's most valuable intangible asset. *Journal of Product & Brand Management*, *18*(5), pp.367-370.

Yoo, B. and Donthu, N., 2001. Developing and validating a multidimensional consumer based brand equity scale. *Journal of Business Research*, 52(1), pp.1–14.

Yoo, B., Donthu, N. and Lee, S., 2000. An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), pp.195-211.

Zeithaml, V. A. (1981). How consumer evaluation process differs between goods and services. In: Donnelly J. H. & George W. R., eds. *Marketing of Services*. Chicago, IL: American Marketing Association, pp. 186-190.

Zeithaml, V.A., Bitner, M.J., Gremler, D.D., and Pandit, A., 2011. *Services Marketing: Integrating Customer Focus Across the Firm*.5e. New Delhi: Tata McGraw Hill Education, p 21-24

Zeithaml, V.A., Parasuraman, A. and Berry, L.L., 1985. Problems and strategies in services marketing. *Journal of Marketing*, 49(2), pp.33-46.

Zikmund, W.G. (2003) *Business Research Methods*. 7e. Mason, Ohio: Thomson/South-Western.

ANNEXURES

Annexure 1- Questionnaire

Dear respondent,

The objective of this survey is to investigate the factors influencing brand equity in higher education in Nepal. **You need to provide your perception of the management college where you are studying in comparison to other management colleges in Nepal.** Your response will be used for academic research only and your answers will be kept confidential and used only in aggregate form. This questionnaire will take approximately 15-20 minutes to complete.

Please read carefully and answer the following questions. Be honest in your response. There are no right and wrong answers. It is only your opinion that we are interested in. Your response is very important and we appreciate your time and willingness to respond.

Part A.

Indicate how much you agree or disagree with **each statement** by circling one answer. You may "strongly disagree", "disagree", "neither disagree nor agree", "agree" or "strongly agree" with each statement.

Note: In the following statements, **"X"** represents the college you are studying in and evaluating.

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A1. The faculty at college X are friendly and courteous.	1	2	3	4	5
A2. The faculty at college X are accessible to students' questions and concerns.	1	2	3	4	5
A3. The instructional quality at college X is good.	1	2	3	4	5
A4. The classes at college X are interesting.	1	2	3	4	5
A5. The classes at college X are NOT participative.	1	2	3	4	5
A6. The curriculum at college X is relevant to future career.	1	2	3	4	5

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A7.The curriculum at college X is relevant to real life.	1	2	3	4	5
A8. The curriculum at college X is up to date.	1	2	3	4	5
A9.The physical facilities at college X are visually appealing.	1	2	3	4	5
A10.College X has comfortable classrooms.	1	2	3	4	5
A11.College X has sports facilities.	1	2	3	4	5
A12.The administrative staff of the college X are available for student support.	1	2	3	4	5
A13.The administrative personnel are friendly and courteous.	1	2	3	4	5
A14. The placement center of college X helps students search jobs.	1	2	3	4	5
A15.College X offers internship programs.	1	2	3	4	5
A16.I am satisfied with my decision to attend college X.	1	2	3	4	5
A17.If I had to study the course again, I would NOT enrol in college X.	1	2	3	4	5
A18.My choice to enrol in college X was a wise one.	1	2	3	4	5

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A19.I feel bad about my decision to enrol in college X.	1	2	3	4	5
A20.I think I did the right thing when I decided to enrol in college X.	1	2	3	4	5
A21.I am NOT happy that I enrolled in college X.	1	2	3	4	5
A22.I like the advertising and promotions of college X.	1	2	3	4	5
A23.I react favourably to the advertising and promotions of college X.	1	2	3	4	5
A24. The level of advertising and promotion of college X does NOT meet my expectation.	1	2	3	4	5
A25.The advertising and promotions of college X do a good job.	1	2	3	4	5
A26.The advertising and promotion of college X perform well when compared to the advertising and promotions of other colleges.	1	2	3	4	5
A27.Publicity* of college X has been instrumental in affecting my views of it. *Publicity refers to all non-paid form of communication	1	2	3	4	5
A28.Publicity revealed things about the college X which I had not considered about the college.	1	2	3	4	5
A29.Publicity of college X helped me formulate my views of the college.	1	2	3	4	5

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A30.Publicity of college X did NOT influence my overall evaluation of the college.	1	2	3	4	5
A31.Word of mouth from friends/family/alumni and students of college X has been significant in influencing my views of college X.	1	2	3	4	5
A32.My friends/family/alumni and students of college X mentioned things about college X that I had not considered before.	1	2	3	4	5
A33.My friends/family/alumni and students of college X helped me formulate my idea of the college.	1	2	3	4	5
A34.My friends/family/alumni and students of college X influenced my evaluation of the college.	1	2	3	4	5
A35.College X is well known.	1	2	3	4	5
A36.The logo of college X is instantly recognizable.	1	2	3	4	5
A37.College X is amongst the first to come to mind when one thinks of management colleges in the county.	1	2	3	4	5
A38.I can recognize brand X in comparison with the other competing brands.	1	2	3	4	5
A39.Some characteristics of brand X come to my mind quickly	1	2	3	4	5
A40.The name of college X is well known in Nepal	1	2	3	4	5
A41.College X has unique brand image compared to other colleges.	1	2	3	4	5

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A42.The students of college X are admired and respected by others.	1	2	3	4	5
A43.I like the brand image of college X.	1	2	3	4	5
A44.College X has unique features compared to other colleges.	1	2	3	4	5
A45.College X has positive image in my mind	1	2	3	4	5
A46.I am willing to choose college X even if the price is higher than the other colleges.	1	2	3	4	5
A47.I would recommend college X to others.	1	2	3	4	5
A48.I would select college X again if I had to enrol for another course/further studies.	1	2	3	4	5
A49.I would maintain contact with the faculty after graduation.	1	2	3	4	5
A50.I would join the alumni organization.	1	2	3	4	5
A51.I consider myself loyal to this college	1	2	3	4	5
In following questions (A53-A58), Similar* means colleges have similar faculty, curriculum, infrastructure, admin and support services					
A52. It makes sense to enrol in college X instead of other college even if they are similar.	1	2	3	4	5
A53.Even if another college has same features as X, I prefer X.	1	2	3	4	5

Statements	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
A54. I am willing to pay a higher tuition to enrol in college X than other similar colleges.	1	2	3	4	5
A55. I am willing to pay ____% more to get a degree from college X over other similar colleges.	10 or less	15	20	25	30 or more
A56. I do NOT prefer college X over other similar colleges.	1	2	3	4	5
A57. I think college X is superior to other competing similar colleges.	1	2	3	4	5

Part B

The response to the following questions will be kept fully confidential.

For the following questions, please circle one answer that describes your current status.

B1. What best describes your gender?

Male ………………………………. 1

Female ………………………………. 2

Others …………………………….…..3

B2. What is your age?

17-21 years…………………………………   1

22 – 26 years……………………………….   2

26 and above……………………………….   3

B3. What is your monthly family income in Nepali rupees?

Less than 20,000……………………………   1

20,001 to 40,000…………………………… 2

40,001 to 60,000…………………………… 3

60,001 to 80,000…………………………… 4

80,001 to 100,000………………………… 5

Above 100,000……………………………   6

B4. Where is your permanent home in Nepal?

In Kathmandu Valley………………………   1

Outside Kathmandu Valley……………….. 2

B5. Name of your college _____

B7. Program _____

B6. Year _____B7. Semester/Trimester _____

B8. Your Name _____

B9. Your Phone Number _____

Thank you for your cooperation and support

Annexure 2 – Demographic Profile of the Respondents

Gender Profile

Table : Respondents' profile Gender wise

Gender	Frequency	Percent
Male	198	47.4
Female	220	52.6
Total	418	100.0
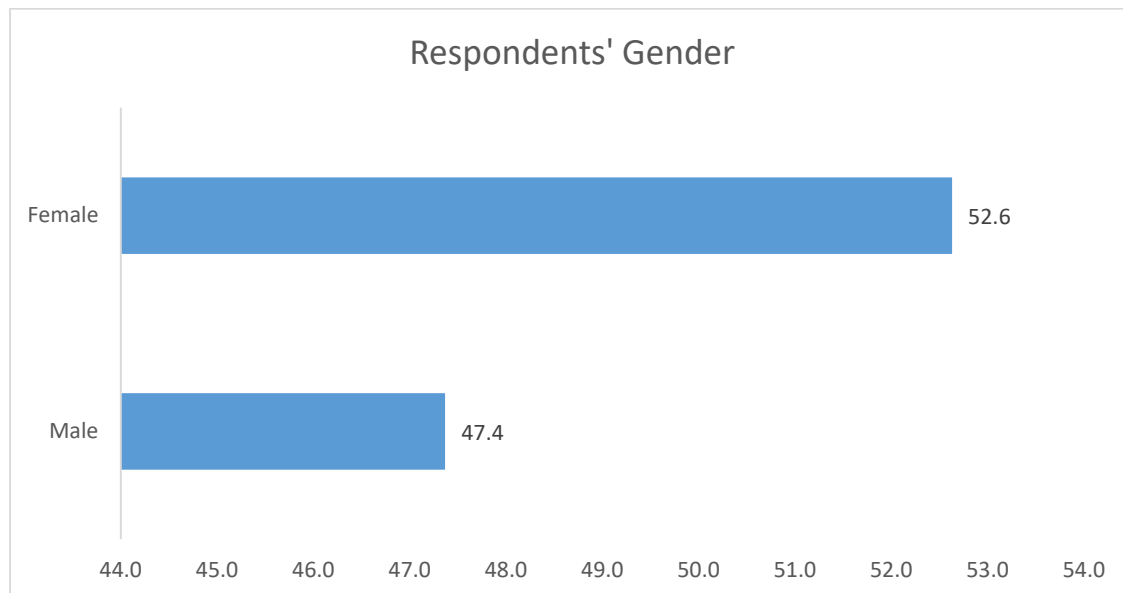
Table: Respondents' Age

Age	Frequency	Percent
17 to 21	6	1.4
22 to 26	369	88.3
26 and above	43	10.3
Total	418	100.0
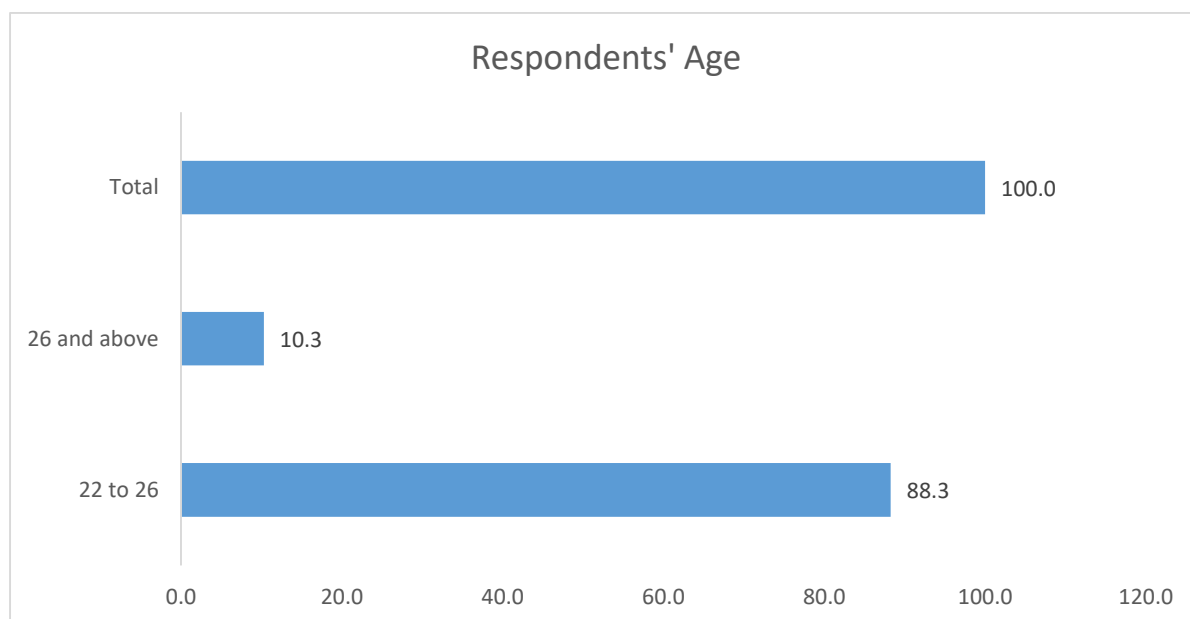
Respondents' Age

Table: Respondents' Family Income

Income	Frequency	Percent
Less than 20000	40	9.6
20001 to 40000	57	13.6
40001 to 60000	72	17.2
60001 to 80000	57	13.6
80001 to 100000	59	14.1
greater than 100001	133	31.8
Total	418	100.0

Family Income of Respondents

Income Range	Percent
greater than 100001	31.8
80001 to 100000	14.1
60001 to 80000	13.6
40001 to 60000	17.2
20001 to 40000	13.6
Less than 20000	9.6
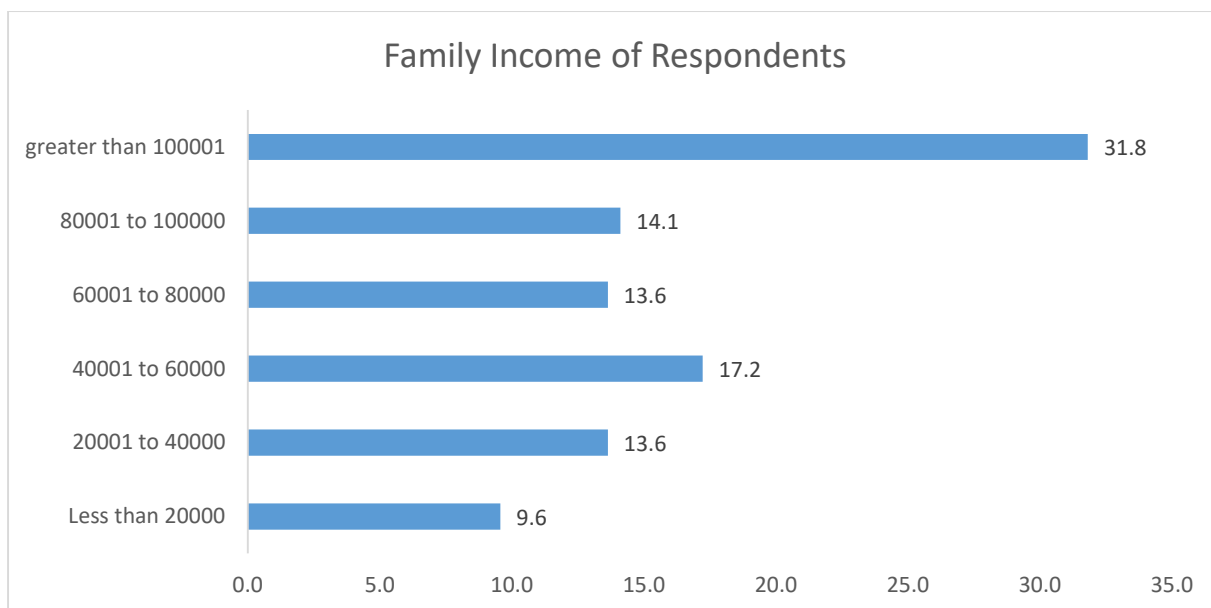
Table: Respondents' permanent home

Permanent Home	Frequency	Percent
Kathmandu Valley	204	48.8
Outside Kathmandu Valley	214	51.2
Total	418	100.0

Respondents' Permanent Home