ARMITA SERAJZAHEDI

# TOWARDS A HOLISTIC HIGHER EDUCATION BRANDING



September 2021

### ARMITA SERAJZAHEDI

# TOWARDS A HOLISTIC HIGHER EDUCATION BRANDING

A thesis submitted in fulfilment of the requirements for the degree of Doctor in Economic and Management Sciences

Supervised by:

Professor Maria Manuela Guerreiro Professor Patricia Susana Pinto Professor Hasan Sadeghi Naeini



2021

#### **AUTHORSHIP DECLARATION**

### TOWARDS A HOLISTIC HIGHER EDUCATION BRANDING

Ph.D. in Economic and Management Sciences

Statement of Work Authorship

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are included in the listing of references included.

Armita Serajzahedi

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"Education" is not learning of the facts, But the training of the mind to think."

(Albert Einstein)

### ACKNOWLEDGEMENTS

I wish to express my gratitude to the supervisors of this thesis, Professors Maria Manuela Guerreiro, Patrícia Susana Pinto and Hassan Sadeghi Naeini for their valuable suggestions that helped to overcome the most difficult moments of my work, for their encouragement and support, and the opportunities to enhance my skills.

My special gratitude is addressed to my beloved Family and Friends for their infinite availability, help, and affection that tempered the various moments of frustration and always motivate me along the path.

I would like to thank my Colleagues and Students at IUST and UAlg for their cooperation, friendship and support.

#### ABSTRACT

Higher education branding (HEB) has recently been in focus as an important solution in differentiating and communicating the competitive advantage of universities. In general, educational services include several factors that can be examined in the marketing and branding of higher education at different stages of the educational experience. Although the results of branding in higher education and its outcomes for universities are well documented from different perspectives, research is still lacking to develop a comprehensive approach to all the factors influencing the HEB process, specially from a service approach. In this regard, this thesis presents three studies with the aim of examining the effective factors of branding in the higher education sector as providers of special services and particular experiences for students.

The first study provides an overview of HEB following a service design approach to find significant gaps and deficiencies in the literature. The second study offers a valuable contribution to the understanding of HEB through presenting a holistic conceptual model which supports the nature of educational experiences and services, providing an integrated approach to the branding process. Subsequently, the third study contributes to refine and validate the proposed scale to measure the dimensions and subdimensions of the HEB model through a two-stage study using data collected from fresh alumni and students of six universities from two countries, Iran and Portugal.

Overall, the results corroborate the importance of HEB dimensions, and statistically significant evidence in the data analysis indicates that the main concepts are significantly associated with the construct and the HEB model is valid. Therefore, the proposed model can be used in the process of measuring the success and strength of the higher education brand in different stages (pre-experience, experience, post-experience) of educational services.

**Keywords:** Higher Education Branding, Service Design Process, Branding Model, Scale Development.

#### RESUMO

A educação, enquanto requisito fundamental ao desenvolvimento das sociedades, visa capacitar os estudantes com competências direcionadas para a eficácia motivando-os a participar nos processos de aprendizagem e desenvolvimento do conhecimento. O ensino superior é considerado um serviço que, oferecido pelas universidades, em última instância, deve suscitar estímulos mentais a partir dos quais os estudantes deverão adquiri novas competência.

A variedade de serviços oferecidos, disparidade de *stakeholders*, dificuldade em avaliar a qualidade antes da aquisição, o papel dos estudantes na cocriação do processo de aprendizagem e as mudanças nas suas expectativas fazem com que a educação seja um serviço único e as universidades organizações complexas.

O aumento da concorrência e os vários desafios que caraterizam atualmente o ensino superior, fazem da gestão da marca uma estratégia essencial para distinguir as universidades e oferecer vantagem competitiva. Neste contexto, a marca das universidades é encarada como uma solução para atrair recursos e capital criativo, diferenciar e comunicar a vantagem competitiva, melhorar a competitividade e a reputação e dar mais ênfase à melhoria da qualidade do serviço.

O processo de gestão da marca por parte das instituições de ensino superior pode proporcionar vantagens competitivas e, simultaneamente, influenciar a satisfação das partes envolvidas (colaboradores, corpo docente, estudantes, e outros parceiros internos e externos). Embora se trate de um campo do conhecimento bastante consolidado na área do Marketing, a literatura reconhece que a marca das universidades deve ser equacionada em conformidade com as peculiaridades que caraterizam a complexidade do ensino superior.

O sucesso global de uma marca universitária depende do equilíbrio entre a integridade académica e as exigências dos estudantes tendo em conta etapas da experiência (préexperiência, experiência e pós-experiência) e considerando as expectativas do mercado de trabalho. De facto, a qualidade do serviço e a marca são duas fontes importantes para alcançar uma vantagem competitiva no contexto do ensino superior.

Esta investigação, numa abordagem de marketing de serviços, mais concretamente focada na marca em instituições de ensino superior e serviços educacionais, pretende contribuir para esclarecer a seguinte questão de investigação: "até que ponto é que as instituições de ensino superior e as universidades utilizam abordagens de marketing e de gestão da marca?". A subsequente questão específica pretende avaliar "de que modo as instituições de ensino superior e as universidades, sendo consideradas organizações prestadoras de serviços, com caraterísticas e responsabilidades específicas, aplicam o processo de desenho do serviço para criar um modelo de gestão da marca adaptado às universidades?". Neste contexto, foram traçados três objetivos: caraterizar o estado da arte sobre a marca em instituições de ensino superior numa abordagem de design de serviços (Estudo 1); conceptualizar um modelo holístico e abrangente de gestão da marca no contexto do ensino superior (Estudo 2); contribuir para uma escala destinada a medir a gestão a marca em instituições de ensino superior (Estudo 3).

A originalidade desta pesquisa reside na sua abordagem abrangente e integrada na medida em que contempla dimensões e atributos específicos da marca e do marketing aplicados ao caso específico do ensino superior fundamentados numa abordagem de design de serviços.

O estudo 1 carateriza o estado da arte relativamente à gestão marca em instituições de ensino superior, numa abordagem de design de serviço e na perspetiva do cliente, com o propósito de identificar lacunas na literatura e perspetivar investigação futura.

Consideraram-se instituições de ensino superior e universidades organizações prestadores de serviços tendo os alunos como seus principais clientes.

O estudo 2 dedica-se à identificação dos temas e conceitos mais frequentes na literatura com o propósito de caracterizar o constructo neste contexto específico, identificar dimensões pertinentes e gerar os respetivos itens. Através da integração de contributos de diferentes áreas do Marketing e do Marketing de Serviços e, em particular, da gestão da marca e do *branding*, este estudo propõe um modelo conceptual integrado em contexto de gestão da marca nas universidades, alinhado com a natureza das experiências e serviços educacionais – modelo de *Higher Education Branding* (HEB).

O estudo 3 assume-se como um contributo para o desenvolvimento de uma escala destinada a mensurar empiricamente o modelo HEB. A um intenso processo de validação de dimensões e itens no qual participaram especialistas nas áreas do Marketing e da Gestão em contexto universitário, seguiu-se a recolha de dados através de inquérito por questionário, junto de recentes alumni em instituições de ensino superior, em Portugal e no Irão. A análise de confiabilidade e coerência interna permitiram refinar o modelo. Posteriormente, foi realizado um segundo momento de recolha de dados, desta vez, entre alunos atuais em quatro universidades públicas e duas privadas, no Irã e em Portugal. Nesta etapa, os alunos de diferentes áreas de estudo (design, marketing e gestão, economia e sociologia) foram convidados a participar. Perante um construto hierárquico de terceira ordem, o software PLS-PM foi utilizado para estimar as escalas do modelo HEB numa abordagem mista, bietápica. De um modo geral, os resultados corroboram as dimensões consideradas no âmbito do HEB. Evidências estatisticamente significativas decorrentes da análise dos dados indicam que os principais conceitos estão significativamente associados ao construto principal e que o modelo HEB é válido, podendo ser utilizado no processo de mensuração da força da marca em instituições de ensino superior.

Esta investigação contribui para a teoria na medida em que propõe um modelo integrado de gestão da marca em organizações de ensino superior. Uma das implicações mais importantes e práticas desta pesquisa é o reconhecimento da adequação do uso da abordagem da experiência em três etapas - pré-experiência, experiência e pós-experiência – em contexto de serviços educacionais e o facto de colocar a gestão da marca numa perspetiva operacional através da identificação das suas dimensões e respetivos itens numa ótica de mensuração.

O modelo conceptual proposto adotou vários conceitos de HEB e marketing de serviços em contexto educativo ao nível do ensino superior e integra elementos do Marketing Mix nas universidades, tais como o Produto (conteúdo e pedagogia), Processo (processo interno e prestação de serviço), Política ( estratégia de gestão universitária), Prospeção (expectativas e resultados do serviço), Promoção (comunicação universitária, Imagem, identidade e ranking), Instalações físicas e de apoio (infraestruturas, ambientes e equipamentos), Preço (aspetos financeiros), Local (localização: país, cidade e campus) e Pessoas (principais parceiros).

Em resumo, o modelo de gestão da marca em instituições de ensino superior fornece um conjunto completo de itens para medir a força da marca e o sucesso das universidades (públicas e privadas). Alinhar as expectativas dos alunos (em diferentes estágios de experiências educacionais) e do mercado de trabalho dá direções às universidades para desenvolver experiências valiosas com impactos de longo prazo e ajudá-las a se diferenciarem dos concorrentes.

Como sugestões para investigações futuras surgem o interesse em desenvolver os procedimentos teóricos conducentes ao desenvolvimento de uma escala, o teste efetivo

do modelo em diferentes contextos culturais, áreas de formação, instituições públicas versus privadas, entre outras.

**Palavras-chave:** Marca universitária, Design de Serviço, Gestão da Marca, Desenvolvimento de Escala.

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### LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CITC	Corrected Item-Total Correlations
CR	Construct Reliability
HEB	Higher Education Branding
HEdPERF	Higher Education Performance
SAC	Student-as-Customer
SD	Standard Deviation
Sig.	Statistical Significance

# Chapter 1. GENERAL INTRODUCTION

#### 1.1. Context and Scope

Education as a fundamental element in society's development (Alcaide-Pulido, Alves & Gutiérrez-Villar, 2017) aims to equip students to be effective and motivate them to participate in the learning and knowledge development processes (Sultan & Wong, 2014). The importance of higher education is raised to the extent that Uncles (2018) believed that the purpose of higher education goes beyond short-run efficiency, effectiveness and productivity or in other words, higher education plays a critical role for country competitiveness (Rauschnabel, Krey, Babin & Ivens, 2016).

Higher education is considered as a comprehensive professional service (Moogan, 2011) or more precisely, a mental stimulus type of service (Hashim, Mohd Yasin & Ya'kob, 2020) provided by universities. Unique service characteristics (Pinar, Trapp, Girard & Boyt, 2011) such as variety of the service offered (Chalcraft, Hilton & Hughes, 2015), disparate stakeholders (Chapleo, 2015), difficulties associated with evaluating quality in advance of purchase (Mourad, Ennew & Kortam, 2011), actively co-production of education by students (Sharrock, 2000) and changing students' expectations over time (Letcher & Neves, 2010) lead to the uniqueness of education as a service (Ng & Forbes, 2009) and complexity of universities as organizations (Chapleo, 2010).

Increasing competition in the higher education context (Ghobehei, Sadeghvaziri, Ebrahimi & Bakeshloo, 2019; Vaikunthavasan, Jebarajakirthy & Shankar, 2019) and various challenges in the educational market (Orîndaru, 2015), make branding an essential element to distinguish the universities and offer a competitive advantage (Mogaji, 2019). Thus, universities have turned to branding as a solution (Pinar *et al.,* 2011) to attract resources to survive (Mampaey, Huisman & Seeber, 2015), to differentiate and communicate competitive advantage (Dholakia & Acciardo, 2014), to improve competitiveness and reputation (Wæraas & Solbakk, 2009) and to place more emphasis on improving service quality (Casidy, 2014a).

Although it is believed that universities benefit from investing in branding efforts and brand management process (Balaji, Roy & Sadeque, 2016) and branding in educational institutions can provide competitive advantages to higher education institutions and more satisfaction for the consumers (Goi, Goi & Wong, 2014), it should be noticed that university branding is different from commercial branding (Chapleo, 2015) and the complexity of higher education makes the branding process more difficult than in traditional, commercial contexts (Dholakia & Acciardo, 2014).

#### **1.2. Research Question and Objectives**

On one hand, branding is crucial to distinguish the services provided by universities (Shahaida, Rajashekar & Nargundkar, 2009), specially because of the intangibility and inseparability of higher education services (Curtis, Abratt & Minor, 2009). Although the importance of research to understand service brands has been growing (O'Cass & Grace, 2004) yet little has been done on the branding of services, specially higher education (Endo, de Farias & Coelho, 2019; Mupemhi, 2013). Actually, service branding is a relatively new field of academic enquiry compared to product branding (Skaalsvik & Olsen, 2014). That is why it is claimed that theory of HEB has been borrowed from non-education sectors and has its roots in product marketing (Chapleo, 2010).

On the other hand, brand success is a complex, multidimensional construct (Chapleo, 2005) and successful branding may need continual monitoring, evaluation, and updating (Tolbert, 2014). A successful brand needs to develop a great degree of congruence between the values and the rational and emotional needs of the consumers (Chapleo, 2010). The important factors for branding universities have not yet been presented in any type of branding framework (Kaushal & Ali, 2019; Pinar *et al.*, 2011), clear brand management models (Williams Jr & Omar, 2014) or theoretical frameworks (Wilson & Elliot, 2016). A limited number of articles explicitly explore the development of brands in higher education sectors (Yuan, Liu, Luo & Yen, 2016) and it is hard to measure how successful university brands are when there is little empirical literature on the aims of branding in universities (Chapleo, 2015).

The overall success of a university brand depends on balancing academic integrity with student requirements (Moogan, 2011; Orîndaru, 2015), in three stages of the educational service experience (pre-experience, experience and post-experience) (Clewes, 2003; Khanna, Jacob & Yadav, 2014; Stickdorn, Schneider, Andrews & Lawrence, 2011) and considering the expectations of the labour market (Hall & Witek, 2016; Shahaida *et al.*, 2009). In fact, service quality and brand are two important sources for achieving the competitive advantage in the higher education context (Sultan & Wong, 2014).

This thesis applies service approach cultivated through branding and marketing literature and integrating contributions from different fields of HEB and educational services. Accordingly, the primary question, "*whether higher education institutions and universities necessarily use marketing approaches in branding?*" led to a specific question: if higher education institutions and universities are considered as service providers, with particular characteristics and responsibilities, how to apply the service design process to create a model for HEB. To find the answer to this question, three objectives were pursued: To review HEB based on service design approach (Study 1); To identify the most effective concepts, dimensions, and scales to create a holistic and comprehensive model for branding in higher education context (Study 2); To develop and test a scale to measure HEB (Study 3).

#### **1.3. Significance of the Study**

The significance of this study relies on applying service design approach to HEB process to create a comprehensive and holistic model for HEB. The literature confirms that: (1) Higher education is far from being a market (Mampaey *et al.*, 2015) and universities do not fit with a commercial model (Chapleo, 2015) or business models (Yousaf, Fan & Laber, 2020); (2) There is still a lack of brand model and theoretical frameworks for HEB (Chapleo, 2015; Williams Jr & Omar, 2014; Wilson & Elliot, 2016); and (3) to reach the brand success as a complex multidimensional construct (Plungpongpan, Tiangsoongnern & Speece, 2016) along with complexity of higher education organizations (Chapleo, 2010) and educational services (Trischler & Scott, 2016), universities are in difficult position of trying to balance academic integrity with the requirements of students (Orîndaru, 2015) and considering the expectations of both students and the labor market (Hall & Witek, 2016).

The originality of this thesis is that it comprehensively considers many aspects of higher education branding and marketing accompanied by service design approach and provides a conceptual model to promote a successful and strong higher education brand.

#### 1.4. Methodology

In the initial stage, the narrative literature review (Cronin, Ryan & Coughlan, 2008) approach was adopted to provide a comprehensive background about HEB. In this way,

the first study (Chapter 2) provided the overview of HEB based on the service design approach and found significant gaps and deficiencies in the literature. This thesis employed the scale development procedures of Churchill (1979) which involves 3 stages: scale generation, scale refinement and scale validation. The second study (Chapter 3) addressed the first stage and determined the frequent themes and concepts of the literature, identified the common dimensions and developed components and scales of HEB which led to creating a holistic and comprehensive conceptual model. The second and third stages of the Churchill procedure were studied in the third study (Chapter 4). Stage 2 relied on a structured questionnaire refines the proposed dimensions and related items to be considered in the HEB scale. Stage 3 also validated the scales based on a modified questionnaire and provided experimental support for the HEB model. In this way, the measurement scales of all concepts and dimensions of HEB model were obtained. In order to conduct the empirical studies presented in this thesis, a two-step data collection process was followed. First, a structured questionnaire was set up online, using Google Forms, and was presented to fresh alumni, who had graduated during the last year (2020). This survey was conducted by collecting the email address of fresh alumni from five university - Design departments (three public universities and two private universities) in Iran, from 11 November 2020 to 24 January 2021. At this step, the questionnaire was translated from English to Farsi, including nine main sections of questions with the purpose of asking the participants to which extent do they agree or disagree that each item is helpful to build a strong and successful higher education brand. The reliability analysis and coherence between each item and the others, using SPSS 25.0, were examined to refine the questionnaire. In order to perform the second step of the data collection, the refined questionnaire was designed using Google Forms and distributed online in four public and two private universities in Iran and Portugal, with the help of university staff, from April 21 and May 30, 2021. At this step, the questionnaire was translated into Farsi and Portuguese and students in different fields of study (design, marketing and management, economics and sociology) were invited to participate. Confronting with a third-order hierarchical construct of the HEB complex model, PLS-PM was used to estimate the scales of HEB model with the mixed two step approach for the first-order constructs and also second-order constructs of the model (Cataldo, Grassia, Lauro & Marino, 2017).

#### 1.5. Structure of the Thesis

As the main objective of this thesis is to conceptualise and develop the HEB model, it conducted to investigate and define the most effective concepts, dimensions, and scales to create a holistic and comprehensive model for branding in higher education context as a special service. This thesis is organised through five chapters each emphasizing specific aspects of the thesis main purpose which is to create a holistic and comprehensive model with service design approach and develop scales for HEB. The first chapter (introduction) clarifies the general idea of the research and a brief summary of the concepts and approaches in this field and presents the structure of this thesis.

Chapter two entitled, "Higher education branding based on service design approach: a narrative review to identify gaps", provides an overview of HEB following a service design approach to find significant gaps and deficiencies in the literature. This chapter focused on a customer-based and service design process, considering higher education institutions and universities as service providers for students as their main stakeholders.

Chapter three under the title of, "A holistic conceptual model for higher education branding", explores concepts, dimensions, and scales of HEB to create a holistic and comprehensive conceptual model, using a service design approach cultivated through branding and marketing literature. Through integrating contributions from different fields of HEB and educational services, this chapter provides a representation of the HEB model which supports the nature of educational experiences and services.

Chapter four named, "Higher education branding model: a contribution to scale development and testing", intends to refine and validate the proposed scales to measure the dimensions and sub-dimensions of the HEB model through a two-stage study in a mixed-method design.

In the fifth chapter, "General conclusion", the sum of the results of the previous chapters and the total conclusion of the thesis are stated. This chapter presents the most important achievements, research limitations, and recommendations for further research.

Figure 1.1 illustrates the structure of the thesis, which consists of five chapters. The first chapter introduces the main issues of the research, its importance and the main purpose of the thesis. This chapter also introduces the three chapters integrated in the thesis and a summary of the methodological process used in this research. Studies one to three are presented in chapters 2, 3, and 4, respectively. Chapter 5 sums up the studies

and clarifies the main contribution and limitations of the research, as well as directions for future research.

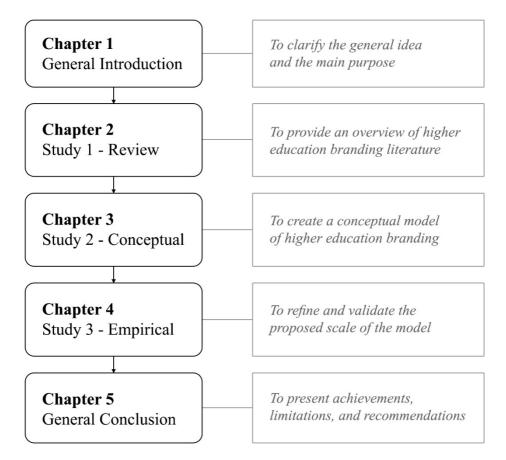


Figure 1.1. Structure of the thesis

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Chapter 2. HIGHER EDUCATION BRANDING BASED ON SERVICE DESIGN APPROACH: A NARRATIVE REVIEW TO IDENTIFY GAPS

#### 2.1. Introduction

The growing importance of higher education branding (HEB) results from the competition for reputation, support and attracting students and staff (Erdoğmuş & Ergun, 2016; Khanna *et al.*, 2014; Tas & Ergin, 2012; Watjatrakul, 2014). Universities face stiff competition (Whisman, 2009) and need strategies to maintain and enhance their competitiveness (Melewar & Akel, 2005). Efforts to develop a successful brand in higher education, in addition to improving service functions, can help universities to attract and retain students (Sultan & Yin Wong, 2014). In fact, education represents a special type of service with intensified contact between the students and the institutions as service providers (Khanna *et al.*, 2014). What higher education is offering includes intangible, heterogeneous and perishable characteristics (Dean, Arroyo-Gamez, Punjaisri & Pich, 2016), and HEB must pay attention to these aspects of educational services (Williams & Omar, 2014). To promote HEB, service ideas should be shaped according to experiences and expectations (Furey, Springer & Parson, 2014). At the same time, branding can help service providers to refocus a service on the goals and objectives and improve the service experiences and make users feel valued (Hood & Henderson, 2005).

This study seeks to provide an overview of HEB and to link the relationships among branding, service and education while examining the role of the service design process in HEB. Because little work has been done to combine education literature with marketing research and service management (Stodnick & Rogers, 2008), this study contributes to the literature through an application of the service approach construct in the higher education context. The research commences with a narrative literature review to obtain the necessary background information about branding in the higher education sector and also to investigate the role of the service design approach. The gaps and deficiencies that still exist in this area are then identified.

#### 2.2. Literature Review

This review integrated a range of theoretical works across branding and service and categorised them under the following broad headings: Higher Education; Higher Education Branding; Higher Education Stakeholders and customers; Marketing and Business Approach; and Service Approach.

#### 2.2.1. Higher Education

Talking about '*Education*' generally starts by mentioning its significance, to the extent that the value and importance of higher education seems indisputable (Vrontis, Thrassou & Melanthiou, 2007). Meanwhile, education is not a commodity that can be purchased, but a creative and complex process (Saunders, 2014).

Many benefits have been intended for higher education, such as: raising welfare (Lange & Topel, 2006); higher quality of life (Vrontis *et al.*, 2007); social relationships, interactions and personal growth (Pekrun, Frenzel, Goetz & Perry, 2007); qualifications (Biesta, 2009); credibility to get a better job (Ng & Forbes, 2009); leading the scientific developments (Bozyigit & Akkan, 2014); country competitiveness (Rauschnabel *et al.*, 2016) and development (Ayoubi & Loutfi, 2018); transferring knowledge to and developing students (Hsu, Wang, Cheng & Chen, 2016); and financial benefits and gainful employment (Blanco Ramírez, 2016).

The demand for new and varied disciplines has been created because of globalisation and a digital revolution in the education sector (Butt & Rehman, 2010). As the major objective of education systems, the emphasis should be on students' cognitive development to promote team values, citizenship attitudes, emotional development and communication skills and to transform learning outcomes into capabilities (Hsu *et al.*, 2016). Indeed, universities hold the power not merely to educate the student but in the broader sense, they serve to educate the whole society (Ng & Forbes, 2009). The university aims to create new knowledge and train people for society, which make it of interest to society, as it involves all people (Plungpongpan *et al.*, 2016).

Bok (1990) noted the important role of the university as advanced training, to solve our civilisation's many urgent problems by producing knowledge. The ultimate objective of all universities is to develop and improve society (Plungpongpan *et al.*, 2016). Therefore, students should be equipped with skills, knowledge and theoretical tools to exploit more executive education (Azoury, Daou & Khoury, 2014).

As O'Banion and Wilson (2011) believed, the key mission of higher education and the transcendent value of educational activities is learning. The core service of the university experience is embodied in the learning experience (Pinar *et al.*, 2011; Ng & Forbes, 2009) and in this regard, learning is not an outcome, but a process (Kolb & Kolb,

2005). However, it should be noted that there is an '*ideological gap*' between what the consumer wants and what the institutions believe the consumers should receive, as well as whether higher education service should be designed towards fulfilling students' expectations or higher education institutions' beliefs (Ng & Forbes, 2009).

#### 2.2.2. Higher Education Branding

The importance of branding:

In marketing strategy, brands play a prominent role as valuable assets and sources of differentiation and competitive advantage (O'Cass & Grace, 2004; Tas & Ergin, 2012). Marketing research and practice have paid increasing attention to the process of building a relationship between the consumer and brand (Mourad *et al.*, 2011). It is important for an organisation to differentiate itself from competitors (Sataøen, 2015), and branding allows them to do that (Stephenson, Heckert & Yerger, 2016).

Wæraas and Solbakk (2009, p. 451) considered that "*an important goal of branding is to create strong emotional ties with consumers and thereby satisfy functional as well as symbolic needs*". In establishing a brand, it is necessary to recognise the essence of the organisation and how to meet the needs of customers; these understandings should then be transformed into words, images, strategic messages, personal engagement and customer service (Tolbert, 2014).

#### Branding in higher education:

In today's competitive academic environment, brand is an important differentiating factor in higher education (Dean *et al.*, 2016; Erdoğmuş & Ergun, 2016; Mampaey *et al.*, 2015; Stephenson *et al.*, 2016; Valitov, 2014), and competition creates the need for universities to focus on clearly articulating and developing their brands (Hemsley-Brown, Melewar, Nguyen & Wilson, 2016). Sultan and Yin Wong (2014) have noted that in this competitive market, the survival of a university depends on students' perceptions of the university brand. Because higher education institutions need to attract resources to survive and to secure these resources, they must communicate with their environments, branding becomes important (Mampaey *et al.*, 2015).

Universities today are increasingly developing their brands to attract students and faculty and to appeal to corporate partners and governmental regulators (Aula, Tienari &

Wæraas, 2015). In fact, higher education institutions have adopted branding as dynamic practice of the business sector (Stephenson & Yerger, 2015), in response to trends in global student mobility, diminishing university funding and government-backed recruitment campaigns (Hemsley-Brown & Goonawardana, 2007).

#### Complexity of higher education branding:

Higher education brands typically consist of complex bundles of benefits, most notably academic and social benefits (Palmer, Koenig-Lewis & Asaad, 2016). Colleges and universities have much to gain from successful branding (Hemsley-Brown *et al.*, 2016), such as evoking a specific reputation in the minds of constituents (Tolbert, 2014), positioning themselves in the field of higher education (Sultan & Yin Wong, 2014), helping prospective students to simplify their decision-making process and creating the perception of excellent quality (Casidy, 2014a) while communicating key values (Stephenson & Yerger, 2015).

Previous research on university branding reveals studies with different focus points: successful university branding as well as perception issues (Chapleo, 2004; 2005; 2007; 2008); university brand harmonisation in the international market (Hemsley-Brown and Goonawardana, 2007); choice-model of college students in developed countries (Vrontis *et al.*, 2007); university brand components based on the views of university marketing directors (Ali- Choudry, Bennett and Savani, 2009); positioning of university brands in Asian countries (Gray, Fam and Llanes, 2003); conceptual model of brand building for Indian management schools (Shahaida *et al.*, 2009).

Although HEB is a relatively new area for research, it has become a prevalent issue in recent years receiving increased researchers attention (Aula *et al.*, 2015; Mampaey *et al.*, 2015; Sataøen, 2015) and it is in its earliest stages (Wæraas & Solbakk, 2009) recognizing that additional investigation into the university branding construct is needed (Melewar & Akel, 2005; Casidy, 2014a; Chapleo, 2011; Hemsley-Brown & Goonawardana, 2007; Khanna *et al.*, 2014; Sataøen, 2015). There is considerable potential for the application of branding in higher education (Furey *et al.*, 2014), new branding concepts, theories and frameworks (Hemsley Brown *et al.*, 2016). The complexity of the HEB context is due to the fact that the offered product is not tangible (Dean *et al.*, 2016) and the value of education itself is missing among financial and competing issues. Education itself is not a business or market, but rather a process that helps students be prepared for professional markets. Some studies (e.g. Liliy *et al.*, 2015) have claimed that the attractiveness of higher education for students is determined by their expectations of receiving higher wages and pursuing successful careers in the future. Other studies have, however, focused on alumni involvement and financial donations in branding (i.e. McAlexander, Koenig & Schouten, 2005; Stephenson & Bell, 2014), but financial performance or indicators alone are insufficient in making or measuring university brand success (De Chernatony, Drury & Segal-Horn, 2005; Sharrock, 2000).

### 2.2.3. Higher Education Customers/ Stakeholders Students as customers or stakeholders:

As Williams and Omar (2014) have claimed, stakeholders live the brand. Although the identification of customers and stakeholders is critical for the higher education sector, different categories have been considered for higher education customers and stakeholders in different studies. Kanji, Malek and Tambi (1999) classified them as the students, the employees, the employers, the public sector, the industry and the wider community. Dean *et al.* (2016) considered two key stakeholders: employees (academic and non-academic staff) and students. In the research of Hemsley-Brown *et al.* (2016) stakeholders included faculty, students, alumni, employers, and others.

Although various stakeholders have been considered within the higher education sector, there is general agreement that students are of particular interest. As Ayoubi and Massoud (2012) have noted, the concept of student as customer (e.g. Hill, 1995; Hsu *et al.*, 2016; Lau, 2016; Plungpongpan *et al.*, 2016; Sadeh & Garkaz, 2015; Wang, Chen & Chen, 2012) and academic studies about student satisfaction and student choice became very common in market-oriented higher education.

A review of HEB over time suggests that more emphasis is placed on the customers, their experience and the value created for them (e.g. De Chernatony, 2009; Guilbault, 2016; Khanna *et al.*, 2014; Ng & Forbes, 2009; Pinar *et al.*, 2011; Wæraas & Solbakk, 2009; Watjatrakul, 2014). Highlighting the importance of students, Pesch, Calhoun,

Schneider and Bristow (2008) declared that customer orientation in education means looking at the educational experience from the perspective of the student.

Supporters of the 'student as customer' perspective provide several reasons: Projecting the image of students' theoretical knowledge in a business context as an important asset for the university (Azoury *et al.*, 2014); serving students as the core customers by universities (Guilbault, 2016); teaching students as the primary mission of higher education institutions (Sung & Yang, 2008); shopping educational opportunities by students (Tolbert, 2014). Watjatrakul (2014) provided financial proof and claimed that universities consider students as customers to increase their income and improve the educational process. Kahl (2014, p. 325) stated "*university only exists because of its students*", while Saunders (2014) believed that if students are conceptualised as customers, they will be given a sense of power to shape their education.

#### Concept in conflict:

The discussion about positioning the student-customer orientation in higher education institutes is polarised (Koris & Nokelainen, 2015) and many still do not accept that students should be viewed as a customer, at least not like customers in a business (Brennan & Bennington, 2000). Watjatrakul (2014) has also stated that the argument of whether or not students should be treated as customers is equivocal.

Adverse results arising from the adoption of the student-as-customer concept have been expressed in several studies, and the prominent concern has focused on the: reduction and degradation of educational quality (Watjatrakul, 2014), damaging the learning process (Mark, 2013), ease of course achievement and good grades (George, 2007; Watjatrakul, 2014), shifting from teaching and learning to student satisfaction (Saunders, 2014), exchanging money for services (Saunders, 2014; Sharrock, 2000), damaging educator-student relationships (Watjatrakul, 2014) and making passive students (Beatty, 2004; Watjatrakul, 2014; Wueste & Fishman, 2010). Sultan and Yin Wong (2014) have reasoned that students are not customers, as the goal of education is not to delight the students, while Koris and Nokelainen (2015, p. 115) have also stated, *"students expect to be treated as customers in some, but not all categories of educational experience*".

#### *Customers' choice and satisfaction:*

Several studies identified different features influencing students' choices and satisfaction. Some of the features that are most mentioned in choice include academic reputation (Khanna *et al.*, 2014; Mupemhi, 2013; Stephenson *et al.*, 2016), availability of courses (Khanna *et al.*, 2014; Stephenson *et al.*, 2016), job outcomes and career prospects (Khanna *et al.*, 2014; Tas & Ergin, 2012), costs and financial considerations (Khanna *et al.*, 2014; Mupemhi, 2013; Stephenson *et al.*, 2016), programme quality (Mupemhi, 2013), up-to-date technology and facilities (Mupemhi, 2013; Rauschnabel *et al.*, 2016), the attractiveness of the campus (Khanna *et al.*, 2014; Rauschnabel *et al.*, 2016), recommendation and word of mouth from satisfied alumni (Khanna *et al.*, 2014; Lau, 2016; Sadeh & Garkaz, 2015) and location or closeness to home (Khanna *et al.*, 2014; Mupemhi, 2013; Stephenson *et al.*, 2016).

Although researchers have long been interested in identifying the factors effective in satisfying students (Wilkins, Butt, Kratochvil & Balakrishnan, 2016), as Pullman and Gross (2004) have claimed, satisfaction is a complex and affective state, not a simple cognitive measure. When perceived performance meets or exceeds the student's expectations, satisfaction will occur, but identifying students' expectations is an important issue (Mark, 2013). Some empirical evidence has indicated that service quality has a positive impact on student satisfaction (e.g. Casidy, 2014b). Lau (2016) has also pointed to the enthusiasm of teachers, the teaching delivery mode, learning from real-life situations, the experience of being respected, a fun learning environment and the fairness of assessment as factors that relate to satisfaction. Satisfied customers engage in positive word-of-mouth advertising by sharing their favourable experiences (Hsu *et al.*, 2016) and become a source of competitive advantage (Sadeh & Garkaz, 2015).

It should be noted that recruitment is just the beginning of a long-term relationship, and the promotion of higher education institutions is not limited to the period during which students attend the programmes, but also beyond graduation (Dennis, Papagiannidis, Alamanos & Bourlakis, 2016). Williams and Omar (2014) have found that HEB not only provides a sense of identification to alumni but a way for alumni to define themselves as lifelong organisation members. In addition, measuring alumni's satisfaction is a significant issue and has several benefits for university branding (Hsu *et al.*, 2016) and they should be included in HEB (Pinar *et al.*, 2011).

As Mupemhi (2013) suggested, universities should visit the organisations and companies where their graduates work and evaluate the level of participation and individual performance and get feedback. Hsu *et al.* (2016) explored the determinants of alumni satisfaction in higher education using a decomposed alumni satisfaction model, and the results showed that the quality of course design needs the most attention to be more relevant to the real world. The long-term relationship between the institution and students can be continued after students leave the university through donations or cooperation (Dennis *et al.*, 2016; Hsu *et al.*, 2016). Considering alumni in HEB can have some benefits, like evaluating the curricular relevance to job requirements, helping educational institutions financially, providing positive word-of-mouth effects and evaluating the institution's performance over time (Hsu *et al.*, 2016).

# 2.2.4. Marketing and Business Approaches

Appropriate marketing:

Marketing research in the field of higher education has come a long way (Vrontis *et al.*, 2007). As universities are exposed to competitive market forces, the concept of marketing and the market orientation of higher education have grown in importance and intensified globally (Gibbs, 2007; Hemsley-Brown & Oplatka, 2006; Khanna *et al.*, 2014; Ng, 2016; Tolbert, 2014; Wilkins & Huisman, 2015; Williams & Omar, 2014). Guilbault (2016) mentioned some of the factors that have led to the marketisation approach in higher education, such as increased competition, decreased government funding and the increased cost of education.

Unfortunately, many educational institutions and universities do not have a proper understanding of marketing (Hayes, 2007). They take marketing to mean giving lip service or producing brochures and thus implement marketing principles inadequately (Ng & Forbes, 2009). Universities typically associate branding with marketing, which has often led to advertising. They often think that branding is another marketing exercise (Whisman, 2009). While it is essential for universities to be aware that they have a unique learning brand, they should think more broadly, as Hemsley-Brown and Oplatka (2006, p. 333) claimed: "*The notion of branding has barely made its mark in higher education marketing*". Enhancing reputation, having a positive influence on ranking and attracting students are the chief reasons for shifting towards engagement in marketing and branding programmes for universities (Azoury *et al.*, 2014). According to Guilbault (2016), an understanding of the customer is necessary to market any product, included higher education. Koris and Nokelainen (2015) have also acknowledged that articles written on the marketing concept concede that customer orientation is important for any organisation that wants to be successful. The marketing approach in higher education can have positive effects in terms of increasing levels of focus on students and responsiveness to their needs (Ng, 2016), enhancing the marketability of programmes/courses, improving student attraction and retention status and improving brand reputation (Sultan & Yin Wong, 2014), controlling satisfaction and efficiency (Gibbs, 2007) and communicating a university's ideology (Ng & Forbes, 2009). Marketing helps universities respond to market forces (Tolbert, 2014), and it remains a valuable research area.

#### The risk of marketisation and business approach:

Many authors are optimistic and consider branding as an instrument to improve competitiveness and reputation (Wæraas & Solbakk, 2009). There is, however, some evidence of negative feelings and resistance, which highlight serious concern about marketisation and marketing activities or the application of business sector models to the higher education sector (Chapleo, 2010; Hemsley-Brown & Goonawardana 2007; Hemsley-Brown & Oplatka, 2006; Mourad *et al.*, 2011; Watjatrakul, 2014; Whisman, 2009).

Opponents of the marketisation of higher education and the use of business terminology believe that this approach contradicts the values of education (Hemsley-Brown & Goonawardana, 2007) and that the purpose of universities is different from that of businesses. They argue that considering higher education as a market and the assumption of dominant competitive pressures are simplistic (Mampaey *et al*, 2015). The commercialisation of the university as an economic and political process of transformation has little to do with education, knowledge production and personal growth (Gibbs, 2007). As Saunders (2014) warns, there is a risk that course assignments and discussions will lose their value and importance and will only be useful to get a good grade.

#### Shifting towards service approach:

Higher education branding is complex, so the application of commercial approaches may be over-simplistic and not well adapted to the specific needs of the education sector or the nature of higher education contexts (Chapleo, 2010, 2011; Rauschnabel *et al.*, 2016). Chapleo (2010) has claimed that the existing work that has been undertaken to apply branding theory to higher education institutions has borrowed from non-education sectors with little empirical work to establish what underpins a successful university brand. In fact, HEB practice has been entirely borrowed from commercial concepts (Sultan & Wong, 2014), and there has been limited effort to domesticate branding theory to the higher education sector.

In the context of successful brand management, there is relatively little research (Williams & Omar, 2014), and there has also been little empirical literature on the aims of branding in universities, so it is not easy to measure how successful university brands are (Chapleo, 2010). The process of brand building also depends on customers, so the critical success factors of branding are not specified (Khanna *et al.*, 2014). It is worth mentioning that universities' branding attempts may not necessarily lead to successful results because of unique service characteristics of universities (Pinar *et al.*, 2011). Nonetheless, as Hood and Henderson (2005, p. 22) have mentioned, "*The relationship between perception and experience is critical to the success of branding services*". Sadeh and Garkaz (2015) have also suggested that if higher education institutes consider the students' satisfaction and loyalty as the critical goal, their business success may be guaranteed. This will happen when higher education institutions as service providers place the service users and their experiences at the core of the service process (Trischler & Scott, 2016).

### **2.2.5. Service Approach in Higher Education** The concept of service in education:

Although services are currently at the forefront of the economy, and the term '*service*' is widely used, it comprises several definitions in different domains (Yahia, Bertin, Deschrevel & Crespi, 2006). Services represent perishable and intangible experiences which are inseparable from production and consumption (Ng & Forbes, 2009). These characteristics, including intangibility, perishability, inseparability and

heterogeneity, are also possessed by higher education (Ling, Chai & Piew, 2010). Higher education institutions are considered as service organisations (Sadeh and Garkaz, 2015; Williams and Omar, 2014), or as Watjatrakul (2014) has pointed, universities are service providers that ensure students (as service receivers) experience positive service encounters. Education could therefore be considered as a service provided to customers, and students change into customers (Balaji & Sadeque, 2016). The nature of the service, education included, is based on relationships with customers (Hemsley Brown & Oplatka, 2006) and service concept mediate between customer's needs and an organization's strategic intent (Goldstein, Johnston, Duffy & Rao, 2002).

Pullman and Gross (2004) have suggested that to achieve a competitive advantage in service sector, the focus must be on the design and management of customer experience. The increasing competition in the higher education sector is changing the attitude of universities (Ayoubi & Loutfi, 2018) and is forcing them to pay more attention to service quality (Casidy, 2014a; Green, 2014; Ng & Forbes, 2009). There is evidence suggesting that service quality leads to customer satisfaction (Arambewela & Hall, 2009; Spreng & Mackoy, 1996), while the core claim of Parasuraman, Zeithaml and Berry (1985) was that the differences between perceived performance and expected performance determine overall service quality.

In many studies, the undeniable relationship between service and experience has been accepted implicitly. Thus Pine and Gilmore (1998, p. 98) have considered the '*transition from selling services to selling experiences*' and pointed to the role of staging experiences as the next competitive battleground. Customer experience, as a holistic concept surrounding every aspect of a company's offering, has become increasingly important for service organisations as a source of sustainable competitive advantage (Schmitt, 2011; Teixeira *et al.*, 2012). As Pullman and Gross (2004) have noted, in the service sector, the interest in creating experiences for customers has increased recently. Consumers are now more experience-oriented, and a positive experience can give customers an incentive to repurchase, leading to brand loyalty (Choudhury, 2019). Experience is one of the dimensions mentioned most frequently for branded services (O'Cass & Grace, 2004). Broader and more accurately, Brakus, Schmitt and Zarantonello (2009) have mentioned the concept of '*brand experience*' and conceptualised it as subjective responses of consumers evoked by brand-related experiential attributes.

Pullman and Gross (2004) believe experiences are inherently emotional and personal and successful experiences are unique, memorable and sustainable over time. In terms of the experience economy, Pin and Gilmore (1998) have also drawn attention to designing richer and memorable experiences.

Education can be classified as special type of experiential service in which teaching is a service and learning is an experience (Khodayari, 2011). Researchers have mentioned the importance of service marketing or service branding by citing the challenges of the basic characteristics of services (e.g. Casidy, 2014a; Jan, 2012) and concluded that the marketing of higher education services should be different from the marketing of products (Hemsley-Brown & Oplatka, 2006). In the field of service marketing, the importance of the customer needs and expectations and the important participative and co-production roles of customers remain to be considered (Jan, 2012; Mark, 2013).

In revising the definition of a brand, the concept of experience has found a place (Khanna *et al.*, 2014), as De Chernatony (2009, p. 104) has defined the brand as "*a cluster of values that enables a promise to be made about a unique and welcomed experience*", while Brakus *et al*, (2009, p. 63) mentioned that "*if a brand evokes an experience, this alone may lead to satisfaction and loyalty*". Hood and Henderson (2005) have also claimed that branding enhances the user experience, helps to promote services and may bring advantages such as awareness, loyalty, promotion, prestige and clarity.

The importance of research to understand service brands has been growing, because it is vital to develop and manage strong and unique service brand associations (O'Cass & Grace, 2004). Chapleo (2010) has noted that, while the theory and techniques of product branding have been developed, their application to the service sector is debatable. Despite considerable research on product branding, some researchers believe that there has not been sufficient attention to service branding, and there are several gaps in the service branding literature (Casidy, 2014a; Hemsley-Brown & Goonawardana, 2007; O'Cass & Grace, 2004). Although research on services may be accepted in the higher education sector, few studies have directly focused on service marketing in universities or HEB (Mupemhi, 2013; Ng & Forbes, 2009), to the extent that Whisman (2009) accused universities of adopting a product brand strategy.

#### Service design:

Service design is a multidisciplinary subject (Sun & Runcie, 2016), and has been described as an approach that focuses on the end-user and views their experience holistically (Radnor, Osborne, Kinder & Mutton, 2014). Trischler and Scott (2016) have underlined the important of involving users in service design. Service design is also defined as 'applying design methods and principles to the design of services' (Holmlid & Evenson, 2008, p. 341). Service design arranges service elements to help customers to co-create the desired experiences (Teixeira et al., 2012). It is also associated with experience design, user experience, a human-centred approach, customer interactions and co-creation (Pullman & Gross, 2004; Teixeira et al., 2012; Wetter-Edman et al., 2013). Service design projects require multidisciplinary teams, interdisciplinary tools and complex methods to assemble a coherent set of elements or clues along the customer journey to provide the desired experience (Teixeira et al., 2012). It may appear difficult to design intangible experiences fuelled by need fulfilment, but the psychological consequences are inevitable (Hassenzahl et al., 2013). Zomerdijk and Voss (2010) have discussed that the experiential aspects are increasingly important in the service design process.

A holistic approach is required to study all of the elements, to form customer experience and to support service design (Teixeira *et al.*, 2012), but there is a lack of knowledge about service experience design (Wetter-Edman *et al.*, 2013). The scarcity of research about customer experiences is mirrored in the methods used by service design researchers to collect and depict experience data, which frequently remain a collection of incoherent service fragments, unable to properly provide a service experience (Patrício, Fisk & Falcão e Cunha, 2008). A considerable amount of marketing research has examined how brands create experiences, but there is limited research focusing on the influences of experience design and management in the service sector (Pullman & Gross, 2004). Nevertheless, a comprehensive approach that can be effective in service design is the concept of service process, which is described by Stickdorn, Schneider, Andrews and Lawrence (2011, p. 33) thus: "*every service process follows a three step transition of preservice period (getting in touch with a service), the actual service period (when the customers actually experience a service) and the subsequent post-service period"*. With HEB in mind, this study proposes to focus on the service design process, considering

higher education institutions and universities as providers of special service for students (in separate stages) as their primary stakeholders.

#### 2.3. Methodology

This research reviews HEB with a service design approach to gather, summarise and synthesise the extant literature. The narrative literature review (Cronin *et al.*, 2008) approach was therefore adopted to provide a comprehensive background about HEB. To clarify any potential link between HEB and the service design process, a narrative literature review will be invaluable (Baumeister & Leary, 1997). Narrative overview reviews pull pieces of information together and present a broad perspective on the topic (Green, Johnson & Adams, 2006). This review can help to identify gaps or inconsistencies as Cronin *et al.* (2008) claimed.

This study was descriptive in design, seeking to answer the question whether higher education institutions and universities necessarily use marketing approaches in branding or if they should be considered as service providers, with particular characteristics and responsibilities.

As the first step in writing a narrative overview, a preliminary search of the literature was performed to help the authors refine the topic and provide an objective for the overview. Electronic databases like Google Scholar, Scopus and Web of Science were searched as sources of information. To establish boundaries and be sure that relevant studies were retrieved, the primary concepts and themes of the topic were turned into search terms, including higher education (higher education institution, and university), branding (brand) and service (service design, service quality, and service experience). To keep the paper focused, the inclusion criteria for selecting articles were: published in English and having appropriate topics with direct links to HEB or service issues. This procedure conducted to a sample of 110 articles.

Figure 2.1 shows the number of related articles that were reviewed in the literature and the degree of overlap among their subjects. Figure 2.1 shows that from the sample of 110 selected papers, the number of articles dealing with branding in the field of higher education (N=33; 30.0%) is much greater than the number of articles examining the relationship between services and branding (N=19; 17.3%) in the same field. These proportions and differences are further supported at the population level given the

inferential statistics performed on the two group proportions. In particular, the 95% confidence interval for the population percentage of papers dealing with branding and higher education falls is [21.4%, 38.6%], whereas the confidence interval for articles addressing the relationships between services and branding in higher education is [10.2%, 24.3%]. Since there is almost no overlap between the two confidence intervals, such results highlight the statistically significant lack of and potential use of the service concept in HEB literature.

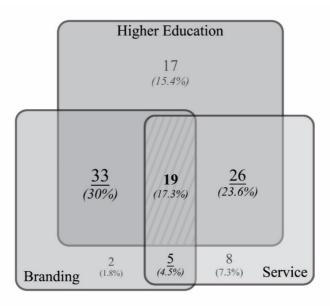


Figure 2.1. The number and proportion of articles reviewed and the extent of their overlap in three main concepts: Higher Education, Branding, and Service.

## 2.4. Discussion

Before considering the objectives of HEB, the following basic question should be answered: what represents the value of education nowadays and what approaches are more practical to provide educational services? According to Wæraas and Solbakk (2009), a university must define its essential characteristics or brand essence first. The importance of the first stage or focal point in brand building has been mentioned in various studies, although different terms have been used, such as branded differentiator (e.g. Aaker, 2003), core values (e.g. Dean *et al.*, 2016; Hutchinson & Bennett, 2012; Pinar *et al.*, 2011), mission/vision statements (e.g. Hutchinson & Bennett, 2012), visions, values and culture (e.g. Sataøen, 2015). Although there are still contradictions about the student-as-customer approach, universities should provide services based on students' needs because the only reason for the existence of universities are students (Pinar *et al.*, 2011). To make a difference and build a successful higher education brand, universities should fill the service expectation gap (Voss, Gruber & Szmigin, 2007) through a holistic brand development process (Pinar *et al.*, 2011) with students' learning experiences as the driving force (Pinar *et al.*, 2011). Based on this review and the claims of several researchers (e.g. Chapleo, 2015; Sultan & Wong, 2014), a holistic and comprehensive model for HEB is still lacking. A branding framework for universities has not yet been presented that considers important influential factors (Pinar *et al.*, 2011).

Although a number of theoretical frameworks have been suggested to implement effective consumer-centred marketing, these models have a tendency to conceptualise product branding, with minimal referring to services (O'Cass & Grace, 2004); indeed, *"The literature on higher education marketing is incoherent, even inchoate, and lacks theoretical models that reflect upon the particular context of higher education and the nature of their services"* (Hemsley Brown & Oplatka, 2006, p. 316). Brand management models and theoretical models of higher education marketing are lacking as well (Williams & Omar, 2014). As Chapleo (2010) suggested, working on the objectives of HEB programmes is still an important area.

By looking at higher education as an experiential service, Khanna *et al.* (2014) have proposed a brand touchpoint wheel; in this model the contact between the consumer (student) and the service provider (higher education institute) occurs through multiple touchpoints throughout the consumer's journey. However, the research sample was limited to students studying in one management education school in Mumbai and, as the authors acknowledged, there could be other influencing touchpoints in different stages. To design experiences in the higher education sector, 'what students have to expect' is as important as what 'they expect'. This is where the value of education should be considered.

The literature of HEB is full of articles emphasising the importance of competition, student satisfaction and service quality, but practical tools and methods to show how universities should establish and develop a competitive brand are scarce. The result of this review indicates that no study has yet considered a holistic model for HEB through

service design. It also became clear that most of the research on HEB or service quality selected students in specific and limited disciplines as statistical samples, including business (e.g. Clewes, 2003; Koris & Nokelainen, 2015; Ling *et al.*, 2010; Shahaida *et al.*, 2009; Woodall, Hiller & Resnick, 2014; Yusoff, McLeay & Woodruffe-Burton, 2015) or management (e.g. Khanna *et al.*, 2014; Wilkins *et al.*, 2016), which limits their generalisability.

It seems that non-profit universities have not been studied in most statistical samples of HEB (e.g. Mark, 2013; Ling *et al.*, 2010; Wilkins *et al.*, 2016). More research is thus needed in this realm (Hemsley-Brown *et al.*, 2016). As Casidy (2014b) has mentioned, studies which examined the moderating effects of brand orientation in the nonprofit higher education context are limited.

Another fundamental issue in branding, service design and educational experiences is the concept of time. The higher education sector provides long-term services with complex relationships to multiple stakeholders such as students, alumni, parents, instructors, industries, professional institutes and government. While establishing a brand needs long-term hard work and scientific exploration (Wang *et al.*, 2012); brand building thus represents a time-consuming process as well. Service quality is also evaluated by service experience and designing an educational experience as a service takes shape over time. Most students decide on a university as a high involvement service only once in their life time (Plungpongpan *et al.*, 2016), but it is hard for them to evaluate services in advance (Mourad *et al.*, 2011). The perceived value of educational services cannot be assessed until students enter the workplace, because the knowledge and skills have a value-added effect that is delayed until the educational process is complete (Hsu *et al.*, 2016). As Khanna *et al.* (2014) have emphasised, the customer experience journey starts before and ends after the sales experience or transaction.

## 2.4.1. Gaps and Deficiencies

Selecting and reviewing the 110 relevant studies and qualitative synthesises revealed gaps and deficiencies which are helpful in developing a conceptual framework and presenting a broad perspective on HEB to reach an appropriate service approach. This study identified several gaps and deficiencies in the literature, which are stated in Table 2.1. Studies on the source column are those articles that pointed out the gaps and deficiencies of HEB and educational services.

	Gaps and deficiencies	Source
1	Studies on branding in higher education are still limited	Casidy, 2014a; Chapleo, 2007; 2010; 2015; Furey et al., 2014; Hemsley-Brown & Goonawardana, 2007; Hemsley-Brown et al., 2016; Khanna et al., 2014; Sataøen, 2015; Sultan & Wong, 2014; Wæraas & Solbakk, 2009.
2	Studies on service marketing and service branding are limited	Casidy, 2014a; Endo <i>et al.</i> , 2019; Hemsley-Brown & Goonawardana, 2007; Mupemhi, 2013; Ng & Forbes, 2009; O'Cass & Grace, 2004; Shahaida <i>et al.</i> , 2009; Whisman (2009).
3	There are contradictions about the student-as-customer approach	Beatty, 2004; Brennan & Bennington, 2000; George, 2007; Koris & Nokelainen, 2015; Mark, 2013; Saunders, 2014; Sharrock, 2000; Sultan and Yin Wong, 2014; Watjatrakul, 2014; Wueste & Fishman, 2010.
4	Marketing and business models conflict with the nature of education	Chapleo, 2010; Gibbs, 2007; Hemsley-Brown & Goonawardana, 2007; Hemsley-Brown & Oplatka, 2006; Mampaey <i>et al.</i> , 2015; Mourad <i>et al.</i> , 2011; Saunders, 2014; Watjatrakul, 2014; Whisman, 2009.
5	There is an ideological gap in the goal of education	DeShields <i>et al.</i> , 2005; Ng & Forbes, 2009; Sadeh and Garkaz, 2015; Sultan and Yin Wong, 2014.
6	The perceptions of the higher education sector about branding and marketing are superficial and inadequate	Hayes, 2007; Hemsley-Brown & Oplatka, 2006; Ng & Forbes, 2009; Whisman, 2009.
7	There is barely any holistic and comprehensive model for HEB	Chapleo, 2015; Hemsley Brown & Oplatka, 2006; Pinar <i>et al.</i> , 2011; Sultan & Wong, 2014; Williams & Omar, 2014.
8	Most studies are focused on students in specific and limited disciplines	Clewes, 2003; Khanna <i>et al.</i> , 2014; Koris & Nokelainen, 2015; Ling <i>et al.</i> , 2010; Shahaida <i>et al.</i> , 2009; Woodall <i>et al.</i> , 2014; Wilkins <i>et al.</i> , 2016; Yusoff <i>et al.</i> , 2015.
9	Most studies focus on samples in private universities	Al Hallak <i>et al.</i> , 2019; Anabila, Kastner, Bulley & Allan, 2020; Casidy, 2014b; Hemsley-Brown <i>et al.</i> , 2016; Mark, 2013; Ling <i>et al.</i> , 2010; Wilkins <i>et al.</i> , 2016.
10	The critical role of time in the process of HEB as a service experience is not properly considered	Hsu <i>et al.</i> , 2016; Khanna <i>et al.</i> , 2014; Plungpongpan <i>et al.</i> , 2016; Wang <i>et al.</i> , 2012.

Table 2.1. Gaps and deficiencies of HEB research

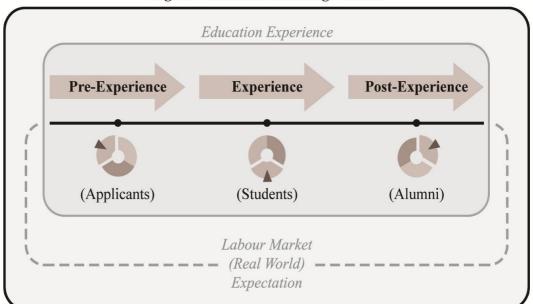
All of these issues reveal the importance of knowing the exact needs, expectations and behaviours of students as the most important stakeholders of higher education institutions, because one of the primary missions is to encourage students to learn more and be more cocreative in their personal and professional life. Considering relevant appeals of existing and prospective students also assists in developing a strong university brand (Casidy, 2014a).

## 2.4.2. Service Scope

It is worth mentioning that students' roles and perspectives change as they move from the status of applicant to enrolled student and thence to graduated alumni (Dholakia & Acciardo, 2014), and measuring repeated purchases for university education does not seem appropriate because most students only purchase a university education service once (McAlexander, *et al.*, 2005). Clewes (2003) considered three distinct stages in the educational service experience: the pre-course position (service expectations), the incourse experience and the post-course service (value assessment). By investigating the three periods of service process, adopting a service design approach will help use the education experience to define different aspects of HEB (see also Sultan & Yin Wong, 2014, p. 506). For universities, the three stages of the customer experience \_ pre-purchase or pre-service, purchase or actual service (or usage) and post-purchase or post-service (Khanna *et al.*, 2014; Stickdorn *et al.*, 2011), turn into: a pre-experience stage for applicants, the experience stage for students and the post-experience stage for alumni. Because universities have the potential to serve and educate society as a whole (Ng & Forbes, 2009) and even support the social, economic and cultural progress of a country (Alcaide-Pulido *et al.*, 2017), universities should, however, be able to go beyond these three stages in the branding process and consider the needs of the real world of business and labour market.

It may be possible, from this perspective, to look at education as a service and higher education institutions as a place or community with special characteristics and responsibilities. Leading institutions, which align the expectations of both students and the labour market (Hall & Witek, 2016) and meet the needs at different stages, will be distinctive enough to differentiate themselves from others and real branding will take place. Guided by these various perspectives and concentrating on the student, Figure 2.2 illustrates the three stages of education experience to create branding for higher education as a service, aligned with the expectations of the labour market.

The stages with high potential for further research could be beneficial for HEB and its profitability and long-term value. This process may help to determine the real value indicators of higher education brands for the main stakeholders, redefine the mission of higher education institutions, and create effective and pleasurable educational service experiences. When higher education institutions and universities, as service providers, know how to present educational experiences as services, they will be evaluated by students as consumers (considering all three stages), will meet the expectations of labour market and will be able to influence these evaluations and expectations successfully.



#### **Higher Education Branding Domain**

Figure 2.2. Considering three stages of service process in education experience, aligned with labour market expectation in HEB domain (Based on three-step transition of service process, Stickdorn, *et al.*, 2011)

#### 2.5. Conclusion

This study provided further insight into the role of service branding within the higher education sector by developing awareness of the service approach for educational experiences as part of the HEB process. Higher education branding is like an incomplete puzzle with missing parts. If higher education is considered as the primary stage in the real world, it should include all specifications, such as knowledge, practices and skills, competitions, communications, co-creations, interactions, creativity and career launching. The question raised in this paper was whether higher education institutions and universities necessarily use marketing approaches to be a brand or whether they should be considered as service providers with particular characteristics and responsibilities.

The simple application of business or commercial approaches is not well adapted to the specific needs of the education sector and may overlook the potential differences in strategic issues of educational institutions (El Alfy & Abukari, 2020). In fact, many of the concepts used in business are not easily transferable or directly applicable to higher education (Calma & Dickson-Deane, 2020). It is conceivable to look at education as a unique service and higher education institutions as a special community with special responsibilities to students and society as a whole. The leading institutions, which try to serve valuable experiences in different stages, will be distinctive enough to differentiate themselves, so they are more likely to become a brand.

Universities perform a critical role in the future of students and can direct them on the best way in life with their services. For many students, going to university and leaving home for the first time is a time of many changes and new experiences (Liu & Jia, 2008; McAlexander *et al.*, 2005). The appropriate holistic perspective on education and learning in university branding, through entrepreneurial, innovative and enjoyable activities, (and considering all partners), may affect the whole personal and professional life of students, enhance public opinion about the importance of education and also ensure economic benefits for society as a whole.

This study contributes linking the relationship between branding, service and education by revealing the role of service design and service process in HEB. In particular, this study adds knowledge to the research field about the relationship between branding and service approach in the higher education sector, exposing that a holistic and comprehensive model for HEB is still missing in the literature. It is also suggested that, in addition to addressing the educational experiences and student requirements (Arambewela & Hill, 2009; Bowden & D'Alessandro, 2011; DeShields *et al.*, 2005; Jones, Reichard & Mokhtari, 2003), universities must also consider the primary purpose of education and align it with these ever-changing educational needs. Trying to balance academic integrity with student requirements (Moogan, 2011; Orîndaru, 2015) and considering the expectations of the labour market (Hall & Witek, 2016; Shahaida *et al.*, 2009) are both necessary for the overall success of a university brand.

This review was an exploratory study to establish a foundation for future research to explore the concept of service design in relation to brand and customer experience. Further research should focus on the process of exploring dimensions of education as a service in pre-experience, experience and post-experience stages as it relates to HEB. By trying to identify dimensions within the customer's experience, greater knowledge of the meaning of brands to students (aligned with the value of education) would be achieved.

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# Chapter 3. A HOLISTIC CONCEPTUAL MODEL FOR HIGHER EDUCATION BRANDING

#### **3.1. Introduction**

Higher education branding (HEB) is becoming increasingly important, owing to its primary function of differentiating and communicating competitive advantage (Dholakia & Acciardo, 2014; Hemsley-Brown & Goonawardana, 2007). Moreover, the prominent role of branding in the marketing strategies of educational institutions, makes it an expanding area of research (Mampaey *et al.*, 2015). Investing in branding efforts and the brand management process would be beneficial to universities (Balaji *et al.*, 2016). Some of the significant advantages of branding in higher education include: to provide a sense of belonging to students and alumni through life-long membership (Stephenson & Yerger, 2014a), evoking a specific reputation in the minds of constituents (Tolbert, 2014), to develop strong student-university identification in order to enhance the students' university supportive behaviors (Balaji *et al.*, 2016) and to provide more satisfaction for the consumers and competitive advantages to higher education institutions (Goi *et al.*, 2014).

Authors of research on HEB frequently pointed to "competition" between higher education institutions (Alam, Faruq, Alam & Gani, 2019; Alcaide-Pulido et al., 2017; Bowden & D'Alessandro, 2011; Butt & Rehman 2010; Casidy, 2014c; Chalcraft et al., 2015; Curtis et al., 2009; Dollinger, Lodge & Coates, 2018; Finney & Finney, 2010; Hsu et al., 2016; Judson, Aurand, Gorchels & Gordon, 2008; Lafuente-Ruiz-de-Sabando, Zorrilla & Forcada, 2018; Mampaey et al., 2015; Rauschnabel et al., 2016; Wæraas & Solbakk, 2009; Williams & Omar, 2014; Wilson & Elliot, 2016). The decline in university-going population (Balaji et al., 2016; Dholakia & Acciardo, 2014), shrinking financial support from governments (Balaji et al., 2016; Dholakia & Acciardo, 2014; Hemsley-Brown & Goonawardana, 2007; Hemsley-Brown et al., 2016; Lafuente-Ruizde-Sabando et al., 2018), globalization (Butt & Rehman, 2010; Hemsley-Brown et al., 2016; Lafuente-Ruiz-de-Sabando et al., 2018; Lockwood & Hadd, 2007; Nguyen, Yu, Melewar & Hemsley-Brown, 2016), internationalization (Arambewela & Hill, 2009; Hemsley-Brown et al., 2016), digital revolution (Butt & Rehman, 2010), technological change (Nguyen et al., 2016), and widespread changes in an educational environment (Balaji et al., 2016) are all factors that contribute to increased competition in the educational environment.

This competition leads universities to differentiate themselves from competitors (DeShields *et al.*, 2005; Mampaey *et al.*, 2015; Wæraas & Solbakk, 2009), build a competitive advantage (El Ansari & Moseley, 2011; Hsu *et al.*, 2016; Melewar & Akel, 2005) and indirectly improves overall service quality and continuous improvements in the higher education sector (Brennan & Bennington, 2000; Butt & Rehman, 2010; Casidy, 2014a; Joseph, Yakhou & Stone, 2005; Sanoff, Usher, Savino & Clarke, 2007). Past research consistently demonstrated increasing attention to service quality and its important role as a means to create a competitive advantage within the higher education sector (Brochado, 2009; Casidy, 2014a; Clewes, 2003). In this way, to stay competitive in the higher education market, universities must focus on high-quality, satisfaction-creating service experiences (Bowden & D'Alessandro, 2011). Dollinger *et al.*, (2018) believe that student experiences continue to be an essential performance mechanism to understand the quality of service, as the higher education market becomes more competitive.

As Ng and Forbes (2009) claimed, the idea that customer needs should be served efficiently is at the core of marketing. Higher education institutions should better consider the needs and expectations of their participating customers (DeShields *et al.*, 2005; Vrontis *et al.*, 2007). In addition to understand the students' needs and expectations (Arambewela & Hill, 2009; Bowden & D'Alessandro, 2011; Letcher & Neves, 2010), universities should design the courses to meet the contemporary challenges and needs of the market (Butt & Rehman, 2010) and at the same time, should consider the effective students' learning (Yusoff *et al.*, 2015).

Furthermore, in addition to quality and customers' needs, the brand is also one of the sources for achieving a competitive advantage (Chapleo, 2007, 2015; Franzak, Makarem & Jae, 2014; Sultan & Yin Wong, 2014). While competition is not a new phenomenon among universities, branding is a recent marketing tool for universities to position themselves in the field of higher education (Sultan & Yin Wong, 2014). Branding as a solution in dealing with today's global challenges (Pinar *et al.*, 2011) is important to set a specific institution apart from other universities (Hayes, 2007).

Many studies have emphasized the importance of adopting marketing and branding strategies to establish and develop a strong brand for universities (i.e. Balaji *et al.*, 2016; Butt & Rehman, 2010; Hemsley-Brown *et al.*, 2016; Rauschnabel *et al.*, 2016; Watkins

& Gonzenbach, 2013; Wilson & Elliot, 2016). Universities require strong brands to differentiate themselves from competitors (Yuan *at al.*, 2016) to relieve the risk and simplify the decision-making process (Mourad *et al.*, 2011), to capture customer preference and loyalty (Pinar *et al.*, 2011), to enhance awareness of their existence and course offerings (Chapleo, 2015).

Pinar *et al.*, (2011) believed that the main aspects for branding institutions have to be described in a branding framework. A number of authors have also argued that there is a lack of brand model and theoretical frameworks for HEB (Chapleo, 2015; Hemsley Brown & Oplatka, 2006; Williams Jr & Omar, 2014; Wilson & Elliot, 2016). Building on this gap, this study aims to create a conceptual holistic model of HEB. The research design is shaped by concepts in higher education, service and branding, and the factors and items results from the existing literatures. The result is a comprehensive branding model that incorporates the components and scales of the branding process for universities as service providers.

## **3.2. Higher Education Branding Background**

#### 3.2.1. Higher Education

Higher education service is an exception in branding context, for a variety of reasons. Higher education organizations are complex (Chapleo, 2010; Wæraas & Solbakk, 2009) and offers a variety of services (Chalcraft *et al.*, 2015; Chapleo, 2015). Education as a service is unique (Pinar *et al.*, 2011), which assess its consumers on part of the service outcome (Brennan & Bennington, 2000; Delucchi & Korgen, 2002; Ng & Forbes, 2009; Sharrock, 2000). Furthermore, it seems that there is a difference or ideological gap between what students expect and what university administration believe students should expect (Dholakia & Acciardo, 2014; Ng & Forbes, 2009). Students may have not realistic expectations of what they need to learn (Brennan & Bennington, 2000; Sander, Stevenson, King & Coates, 2000) and universities have to provide students with what they need in the long term rather than what they want in the short run (Lomas, 2007; Brennan & Bennington, 2000). Students' expectations and perceptions of service quality at the beginning of the course may also be different from the end of the educational experience (Letcher & Neves, 2010; Sander *et al.*, 2000). Therefore the idea that the

customer is always right may not be easily applied within the educational setting (Orîndaru, 2015; Delucchi & Korgen, 2002).

Higher education, however, is a unique service in that its value cannot be evaluated prior to consumption, until the entire educational process is complete and students enter the work (Dollinger *et al.*, 2018; Hsu *et al.*, 2016; Mourad *et al.*, 2011). Another distinction between educational and non-educational services is that it is not easy to move quickly to another service provider if students are not satisfied with the universities (Lomas, 2007; Brennan & Bennington, 2000). Education is self-service (Halbesleben & Wheeler, 2009) and students as co-creators can contribute to the quality of their learning outcomes and experiences (Dholakia & Acciardo, 2014; Orîndaru, 2015). Actually, they co-produce their education (Sharrock, 2000).

Educational services are complex since students' effort, abilities, motivations, interactions and co-creations determines the quality of services provided by the university (Ng & Forbes, 2009; Temple, 2006; Trischler & Scott, 2016). Students are both consumers of education and at the same time the product of education (Dholakia & Acciardo, 2014). One of the major challenges for universities is to consider the expectations of the labor market and make a balance between the requirements of students and market needs (Hall & Witek, 2016; Shahaida *et al.*, 2009). Universities should equip students with relevant skills with project- based works (Uncles, 2018) so that graduates match the required skills to compete in today's interconnected, global marketplace (Trischler & Scott, 2016).

## 3.2.2. Higher Education Branding

The review of literature of higher education, branding and service reveals a strong consensus of effective dimensions/items for considering HEB as a multidimensional concept. To achieve a holistic branding model, several concepts have been considered:

#### Brand – Higher education brand/branding:

Although the dimensions of brands have been less precisely conceptualized in the higher education context (Palmer *et al.*, 2016), brands are regarded as indicators of quality (Casidy, 2014a) which differentiate higher education institutions from their competitors

(Mampaey *et al.*, 2015). Consequently, many institutions invest in brand building activities (Dholakia & Acciardo, 2014).

The importance of HEB, as an expanding area of research, has increased significantly (Ghobehei *et al.*, 2019; Mampaey *et al.*, 2015; Stephenson *et al.*, 2016). Many studies have reached the consensus that marketization and business approach are not appropriate and consistent with the nature and objectives of education (i.e. Mampaey *et al.*, 2015; Mourad *et al.*, 2011; Saunders, 2014) and university branding different from commercial branding (Chapleo, 2015) or commercial marketing (Dholakia & Acciardo, 2014).

## Experience – Educational experiences:

There has been an increasing interest in understanding and managing the experiences of the students over the last decade (Bowden & D'Alessandro, 2011). According to Pinar *et al.* (2011), the core of HEB is the students' experience. Some authors consider two types of experience for education: academic and non-academic experiences (Chalcraft *et al.*, 2015; Pinar *et al.*, 2011). Palmer *et al.* (2016) believed that universities' branding efforts should focus on the academic experience, while Uncles (2018) assumed that higher education is a holistic experience for students.

## Satisfaction - Students' satisfaction:

Customer satisfaction is defined as the fulfillment of customers' expectations with provided services (Bowden & D'Alessandro, 2011; Stephenson & Yerger, 2014b). In higher education sector, satisfaction is based on students' evaluation of the experience (Bowden & D'Alessandro, 2011; Letcher & Neves, 2010). Students' satisfaction is a critical factor influencing the achievements of universities, including student attraction, motivation, and retention (El Ansari & Moseley, 2011), increasing positive word of mouth (Clemes, Gan & Kao, 2008), having favourable ranking (Yusoff *et al.*, 2015) and providing valuable information to management (Hsu *et al.*, 2016).

#### Quality – Service quality:

Joseph *et al.* (2005) believed that improving the quality of services is the key to competitive success. Service quality improvement leads to different results: higher-

quality experiences for students, better reputation for universities, better trained graduates (Stodnick & Rogers, 2008), satisfaction (Brochado, 2009; Clemes *et al.*, 2008) and, better design of service delivery (Brochado, 2009). Improving service quality results in increasing students' loyalty as well (Casidy, 2014b; Stodnick & Rogers, 2008) and donations, co-operation and positive word-of-mouth communications are long term benefits of students' loyalty (Bowden & D'Alessandro, 2011).

#### Service design - Process:

Service design as a multidisciplinary field focuses on the complete landscape of experience factors (Teixeira *et al.*, 2012) and creates holistic service experiences for customers (Trischler & Scott, 2016). A brand can be thought of as customer experience (Stephenson *et al.*, 2016) and the university brand depends on student experiences (Pinar *et al.*, 2011). The service design process that put different customer group at the center and follows a three step transition of the pre-service period, the actual service and the subsequent post-service period (Stickdorn *et al.*, 2011) is gradually applied in educational service experiences and branding (i.e. Clewes, 2003; Khanna *et al.*, 2014).

#### 3.2.3. Literature Deficiencies and Research Novelty

Brand success is a complex, multidimensional construct that comprises business based and consumer based criteria and the overall success should be assessed over the long-term and in relation to both the brands' stakeholders and its competitors (Chapleo, 2005; de Chematony, Dall'Olmo Riley & Harris, 1998; Plungpongpan *et al.*, 2016). A strong and successful brand as a powerful differentiator for universities with all the advantages and challenges mentioned, requires a holistic and comprehensive model. Universities have potential for strong brands (Chapleo, 2015) but university experiences are multidimensional as a service (Clemes *et al.*, 2008) and the models developed in the business world does not fit the brands in higher education sectors (Hemsley-Brown & Goonawardana, 2007; Watjatrakul, 2014).

In higher education literature, branding models and frameworks are still ongoing debates and authors emphasize that specific models and theoretical frameworks for HEB are few in number (Chapleo, 2015; Kaushal & Ali, 2019; Pinar *et al.*, 2011; Wilson & Elliot, 2016). The models presented so far only address some aspects of HEB and have

their limitations. Kaushal and Ali (2019) proposed a model and investigated how university brand components (reputation, brand attachment and brand personality) translate into student loyalty in the context of higher education. Alcaide-Pulido *et al.* (2017) developed a theoretical model that measures university image. Dollinger *et al.* (2018) presented the first conceptual model of value co-creation in higher education which according to the authors, needs to be empirically tested in authentic situations and environments. The study of Ebrahim, Ghoneim, Irani and Fan (2016) sought to develop a model that provides an understanding of how brand knowledge and brand experience determine brand preference and to investigate its impact on brand repurchase intention. Simiyu, Bonuke and Komen (2020) evaluated the indirect effect of brand personality on the relationship between social media and students' behavioral intentions to enroll in postgraduate studies.

#### **3.3. Model Conceptualizing Procedure**

In the continuation of the second chapter, which achieved a broad review of the literature about HEB and educational services, the conceptualization of the HEB model (Figure 2.1) began with the determination of the frequent themes and concepts of HEB and their relations (Table 2.1, Figure 2.2). Common dimensions of these themes/concepts then were identified (Table 3.2). The scattering of these dimensions and the various phrases and expressions used for each of them created the need to interpret and recategorize them. For this purpose, attention was paid to the marketing and branding of services and categories provided in these areas. In the transition from the traditional marketing framework and the 4P's of marketing mix (Goi, 2009), researchers added more topics in the service sector. Ivy (2008) considered the marketing mix as marketing tools that consists of everything that universities do to influence the demand for their offered services. In order to satisfy the needs of the customers by service providers, a 7P approach is used including product, price, place, promotion, people, physical facilities and processes. In explaining the 9P's of marketing, Londre (2017) has considered both the product and the service, mentioned to Planning/Process, People/Target Market, Product, Price/Pricing, Promotion, Place/Distribution, Partners, Presentation, and Passion. Although Soetan (2018) examined the trends of higher education financing, he has emphasized the importance of the 9P's of marketing in higher education programs as well, including Product, Price, Place, Promotion, People, Programming, Positioning,

Partnership, and Packaging. Based on these P's of marketing and the main content of each dimension, the recategorization led to 9P's of HEB (Table 3.3, Figure 3.3). In the following, components and scales of 9P's were regenerated.

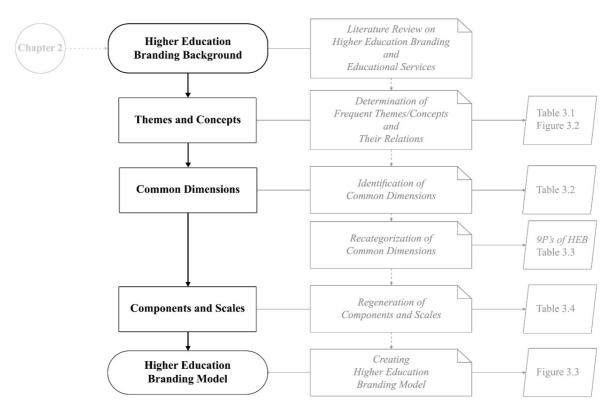


Figure 3.1. Methodological procedure of conceptualizing HEB model

Since the main concepts of branding in different researches were expressed with different terms and phrases (i.e. Further education, Attend new courses, Continuing education), they needed to be interpreted. For this purpose, qualitative content analysis which is a method that can be used at varying levels of abstraction and interpretation and presenting categorized results (Graneheim, Lindgren & Lundman, 2017) was used at different steps of determination of frequent themes/concepts and recategorization of dimensions. Multiple review and content analysis of literature on HEB and educational service quality determined and categorized the frequent themes, concepts and dimensions that were commonly utilized in different areas and contexts.

Various models and frameworks have also been proposed to examine the relevance of key branding concepts (i.e. Dennis *et al.*, 2016; Kaushal & Ali, 2019; Sultan & Wong, 2014). However, in each of these models, only a few number of these concepts have been addressed. From these models and frameworks (References of Table 2.1), the connection of common concepts of HEB and services was aggregated (Table 3.1) and prepared as a network (Figure 3.2).

-	1 4		Jwn elab	oration based on Lit	
C	Concept A	affects	· ·	Concept B	References
	Brand Equity	$\rightarrow$	Loyalty		Mourad <i>et al.</i> , 2011.
	Brand Image	$\rightarrow$ $\rightarrow$	Loyalty Satisfaction	on	Temizer & Turkyilmaz, 2012. Clemes <i>et al.</i> , 2008; Dennis <i>et al.</i> , 2016; Schlesinger, Cervera & Pérez-Cabañero, 2017; Temizer & Turkyilmaz, 2012; Wang <i>et al.</i> , 2012.
	Brand Image	$\rightarrow$	Service Q	uality	Clemes <i>et al.</i> , 2008.
		$\rightarrow$	Trust		Dennis et al., 2016; Schlesinger et al., 2017.
		$\rightarrow$	WOM		Jiewanto et al., 2012.
Brand	Brand Identification	$\rightarrow$	WOM		Polyorat, 2011.
	Brand Identity	$\rightarrow$	Satisfacti	on	Dennis et al., 2016.
		$\rightarrow$	Trust		Dennis et al., 2016.
	Brand Meaning	$\rightarrow$	Satisfacti	on	Dennis <i>et al.</i> , 2016.
		$\rightarrow$	Trust		Dennis et al., 2016.
	Brand Performance	$\rightarrow$	Reputatio	n	Nguyen <i>et al.</i> , 2016.
	Brand	$\rightarrow$	Loyalty		Brakus <i>et al.</i> , 2009.
	Personality	$\rightarrow$	Satisfacti		Brakus <i>et al.</i> , 2009.
			Brand	Brand Meaning Brand Performance	Berry, 2000.
		$\rightarrow$	Drafid		Ebrahim et al., 2016.
Experie	ence	$\rightarrow$	Detention	Brand Personality & Return	Brakus <i>et al.</i> , 2009. Ebrahim <i>et al.</i> , 2016.
•				& Keturn	Brakus <i>et al.</i> , 2009.
		$\xrightarrow{\rightarrow}$	Loyalty Satisfaction	20	Brakus <i>et al.</i> , 2009. Brakus <i>et al.</i> , 2009; DeShields <i>et al.</i> , 2005.
		$\rightarrow$			Marzo Navarro, Pedraja Iglesias & Rivera Torres,
Loyalty		$\rightarrow$	Recomme	endation	2005.
Loyung		$\rightarrow$	Retention	or Return	Marzo Navarro et al., 2005.
				Brand Identity	Dennis et al., 2016.
Reputa	tion	$\rightarrow$ Brand	Brand Image	Dennis et al., 2016.	
•				Brand Meaning	Dennis et al., 2016.
				Brand Equity	Dennis et al., 2016.
		$\rightarrow$	Brand	Brand Identification	Stephenson & Yerger, 2014a; Stephenson & Yerger 2015.
		Diana	Brand Image	Stephenson & Yerger, 2015, Sultan & Yin Wong, 2014.	
				Brand Performance	Sultan & Yin Wong, 2014.
Satisfaction		$\rightarrow$	Loyalty		Arambewela & Hall, 2009; Bowden & D'Alessandro, 2011; Brakus et al., 2009; Casidy, 2014c; Hsu et al., 2016; Kaushal & Ali, 2019; Letcher & Neves, 2010; Marzo Navarro et al., 2005 Schlesinger et al., 2017; Temizer & Turkyilmaz, 2012.
		$\rightarrow$	Reputatio	n	Letcher & Neves, 2010.
		$\rightarrow$		or Return	Arambewela & Hall, 2009; Clemes et al., 2008; DeShields et al., 2005.
		$\rightarrow$	Trust		Schlesinger <i>et al.</i> , 2017; Sultan & Yin Wong, 2014.
		$\rightarrow$	WOM or	Recommendation	Arambewela & Hall, 2009; Clemes <i>et al.</i> , 2008; Eldegwy, Elsharnouby & Kortam, 2018; Hsu <i>et al.</i> , 2016; Jiewanto <i>et al.</i> , 2012.
				Brand Identity	Dennis et al., 2016.
		$\rightarrow$	Brand	Brand Image (University Image)	Dennis et al., 2016, Jiewanto et al., 2012.
				Brand Meaning	Dennis et al., 2016.
Service Quality		$\rightarrow$	Loyalty		Casidy, 2014b.
		$\rightarrow$	Satisfacti	on	Casidy, 2014b; Clemes <i>et al.</i> , 2008; Jiewanto <i>et al.</i> , 2012; Sadeh & Garkaz, 2015; Sigala <i>et al.</i> , 2006; Spreng & Mackoy, 1996; Sultan & Yin Wong, 2014 Temizer & Turkyilmaz, 2012.
		$\rightarrow$	Trust		Sultan & Yin Wong, 2014.
		$\rightarrow$	WOM		Casidy, 2014b; Ho & Foon, 2012; Jiewanto <i>et al.</i> , 2012.
æ		$\rightarrow$ Brand		Brand Equity	Dennis et al., 2016.
Trust				Brand Performance	Sultan & Yin Wong, 2014.
***** -		$\rightarrow$	Loyalty		Schlesinger <i>et al.</i> , 2017.
WOM		$\rightarrow$	Retention	or Return	Ho & Foon, 2012.

**Table 3.1.** Relations of common concepts/themes of HEB and Service models

 Source: Own elaboration based on Literature review

In Figure 3.2 the central concepts in HEB are presented and the connections between them are outlined to clarify these concepts specifically. Although several factors seem to play a role in HEB, as will be explained below, many of these factors overlap and express common issues.

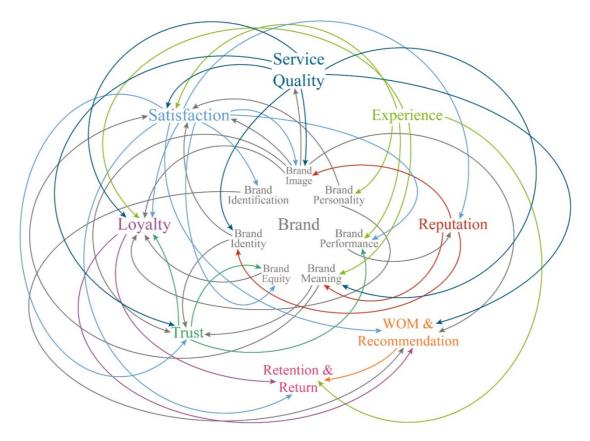


Figure 3.2. Network of common concepts in HEB and service models Source: own elaboration from the literature review

Each of the above-mentioned concepts consists of different dimensions. These common dimensions were identified through the qualitative content analysis of HEB and service quality models. Qualitative content analysis as one of the qualitative methods available for analyzing data and interpreting the meaning (Elo *et al.*, 2014) and helping with reducing the amount of material (Schreier, 2013), was applied to supplement the issues related to HEB (Table 3.2).

Source: own elaboration				
Common Dimensions	Area / Context / Approach / Concepts	<b>References</b> / <b>Resources</b>		
Administrative Services	Brand Building, Brand Equity, Brand Identity, Brand Reputation, Choice, College Choices, Complaints, HEdPERF, Higher Education Institution Image, Perceive Service Quality, Quality, Quality of Education, Quality Values, Reputation, Satisfaction, Selection, Service Expectation, Service Quality, Student Choice, Student Experience Satisfaction, Student Recruitment, Student Satisfaction, Student- Customer Orientation, University Advertising Materials, University Image, University Success, Value of University Experience.	Abdullah, 2006; Alcaide-Pulido et al., 2017; Arambewela & Hall, 2009; Brewer & Zhao, 2010; Brochado, 2009; Chen, 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; Dolinsky, 1994; Duarte, Alves & Raposo, 2010; Elliott & Shin, 2002; Ford, Joseph & Joseph, 1999; Galeeva, 2016; Gatfield, Barker & Graham, 1999; Goi et al., 2014; Hill, 1995; Ivy & Naude, 2004; Ivy, 2001; Koris & Nokelainen, 2015; Kwan & Ng, 1999; Lau, 2016; Leblanc, & Nguyen, 1997; Letcher & Neves, 2010; Ling et al., 2010; Mai, 2005; O'Neill & Palmer, 2004; Ogunnaike et al., 2018; Oldfield & Baron, 2000; Parahoo, Harvey & Tamim, 2013; Parasuraman et al., 1985; Parasuraman, Zeithaml & Berry, 1988; Pinar, Trapp, Girard & Boyt, 2014; Ramseook-Munhurrun, Lukea-Bhiwajee & Naidoo, 2010; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Shahaida et al., 2009; Shank, Walker & Hayes, 1996; Sigala et al., 2006; Soutar & Turner, 2002; Sultan & Yin Wong, 2014; Suomi, 2014; Tas & Ergin, 2012; Telford & Masson, 2005; Vrontis et al., 2007; Wang et al., 2012; Woodall, Hiller & Resnick, 2014; Yousapronpaiboon, 2014; Yusoff et al., 2015.		
Admission and Registration	Choosing, College Choices, Complaints, Institutional Image, Quality Values, Satisfaction, Service Quality, Student Satisfaction, Students' Choice, Students Decision Making, Students' Perception, University Brand, University Image, University Ranking, University Reputation.	Alcaide-Pulido et al., 2017; Alessandri, Yang & Kinsey, 2006; Ali- Choudhury et al., 2009; Azoury et al., 2014; Bennett & Ali- Choudhury, 2009; Binsardi & Ekwulugo, 2003; Çakır, Acartürk, Alaşehir & Çilingir, 2015; Chen, 2008; De Jager & Gbadamosi, 2010; Dill & Soo, 2005; Dolinsky, 1994; El Alfy & Abukari, 2020; Elliott & Shin, 2002; Ford et al., 1999; Green, 2014; Joseph et al., 2005; Joseph, Mullen & Spake, 2012; Kazoleas, Kim & Anne Moffitt, 2001; Lau, 2016; Leblanc & Nguyen, 1997; Letcher & Neves, 2010; Marzo Navaro et al., 2005; Moogan, 2011; Sadiq Sohail & Shaikh, 2004; Saginova & Belyansky, 2008; Telford & Masson, 2005; Wilkins & Huisman, 2015; Yusoff et al., 2015.		
Assessments	Quality Values, Satisfaction, Service Quality, Student Satisfaction, University Brand Loyalty, University Image, University Ranking.	Alcaide-Pulido <i>et al.</i> , 2017; Çakır <i>et el.</i> , 2015; El Ansari & Moseley, 2011; Erdoğmuş & Ergun, 2016; Hill, 1995; Letcher & Neves, 2010; Telford & Masson, 2005.		
Campus	Alumni Satisfaction, Brand Equity, Brand Identification (Alumni), Brand Image, Brand Reputation, Brand Touchpoint (Service), Branding, Choice, Choice of University, College Choices, Complaints, Corporate Identity, Educational Quality, HEdPERF, Institution Quality, Institutional Image, Quality, Quality of College Life, Satisfaction, Selection, Self-Branding, Service Quality, Student Experience Satisfaction, Student Recruitment, Student Satisfaction, Students' Choice, Students Decision Making, University Advertising Materials, University Brand, University Brand Loyalty, University Branding, University Image, University Success, Value of University Experience.	Abdullah, 2006; Aghaz, Hashemi & Sharifi Atashgah, 2015; Alcaide-Pulido <i>et al.</i> , 2017; Ali-Choudhury <i>et al.</i> , 2009; Angell, Heffernan & Megicks, 2008; Azoury <i>et al.</i> , 2014; Bennett & Ali- Choudhury, 2009; Brady & Cronin Jr, 2001; Chen, 2008; Clemes <i>et al.</i> , 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Dolinsky, 1994; Duarte <i>et al.</i> , 2010; Elliott & Shin, 2002; Erdoğmuş & Ergun, 2016; Ford <i>et al.</i> , 1999; Gatfield <i>et al.</i> , 1999; Gray <i>et al.</i> , 2003; Green, 2014; Ho & Foon, 2012; Holmberg & Strannegård, 2015; Hsu <i>et al.</i> , 2016; Ivy & Naude, 2004; Joseph <i>et al.</i> , 2005; Joseph <i>et al.</i> , 2012; Kazoleas <i>et al.</i> , 2001; Khanna <i>et al.</i> , 2014; Lau, 2016; Leblanc, & Nguyen, 1997; Letcher & Neves, 2010; Ling <i>et al.</i> , 2011; Mupemhi, 2013; O'Neill & Palmer, 2004; Oldfield & Baron, 2000; Parasuraman <i>et al.</i> , 1985; Pinar <i>et al.</i> , 2014; Price, Matzdorf, Smith & Agahi, 2003; Ravindran & Kalpana, 2012; Royo-Vela & Hünermund, 2016; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Saginova & Belyansky, 2008; Sirgy, Grzeskowiak & Rahtz, 2007; Soutar & Turner, 2002; Stephenson & Yerger, 2014b; Stephenson <i>et el.</i> , 2016; Suomi, 2014; Tas & Ergin, 2012; Vrontis <i>et al.</i> , 2007; Wang <i>et al.</i> , 2012; Wilkins & Huisman, 2015; Woodall <i>et al.</i> , 2014; Yusoff <i>et al.</i> , 2015.		
Commitment and Loyalty	Brand Equity, Higher Education Institution Image, Loyalty, Perceived Brand Orientation, Satisfaction, Service Branding, Student Loyalty, Value of University Experience.	Casidy, 2013; Grace & O'Cass, 2005; Hennig-Thurau, Langer & Hansen, 2001; Ivy, 2001; Liu & Jia, 2008; Marzo Navarro <i>et al.</i> , 2005; Pinar <i>et al.</i> , 2014; Woodall <i>et al.</i> , 2014.		
Content	Alumni Satisfaction, Brand Attachment, Brand Identity, Brand Reputation, Branding, College Choices, Quality of Education, Quality Values, Satisfaction, Selection, Self- Branding, Service Quality, Student Experience Satisfaction, Student Satisfaction, Students Decision Making, University Advertising Materials, University Brand, University Image.	Alcaide-Pulido et al., 2017; Ali-Choudhury et al., 2009; Angell et al., 2008; Clemes et al., 2008; Clewes, 2003; Dennis et al., 2016; El Alfy & Abukari, 2020; Elliott & Shin, 2002; Ford et al., 1999; Galeeva, 2016; Gatfield et al., 1999; Goi et al., 2014; Green, 2014; Hill, 1995; Holmberg & Strannegård, 2015; Hsu et al., 2016; Kwan & Ng, 1999; Lau, 2016; Leblanc & Nguyen, 1997; Letcher & Neves, 2010; Ling et al., 2010; Moogan, 2011; Soutar & Turner, 2002; Suomi, 2014; Telford & Masson, 2005.		
Cost of Education	Choice, Choice of University, College Choice, Higher Education Institution Image, Institution Quality, Institutional Image, Quality Management, Quality Values, Satisfaction, Service Branding,	Al Hallak, Ayoubi, Moscardini & Loutfi, 2019; Alcaide-Pulido et al., 2017; Angell et al., 2008; Azoury et al., 2014; Bennett & Ali- Choudhury, 2009; Binsardi & Ekwulugo, 2003; Chen, 2008; Clemes et al., 2008; De Jager & Gbadamosi, 2010; Duarte et al., 2010; Elliott & Shin, 2002; Ford et al., 1999; Goi et al., 2014; Grace &		

Table 3.2. Dimensions and references	s of HEB and service quality surveys
Source: own	elaboration

	Service Quality, Student Enrolment, Student Orientation, Student Recruitment, Student Satisfaction, Students' Choice, Students' Perception – Choosing, University Brand, University Branding, University Image, University Success, Value of University Experience.	O'Cass, 2005; Gray et al., 2003; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Joseph et al., 2012; Kalimullin & Dobrotvorskaya, 2016; Kanji et al., 1999; Kazoleas et al., 2001; Khanna et al., 2014; Lau, 2016; Ling et al., 2010; Mourad et al., 2011; Mupemhi, 2013; Nguyen et al., 2016; Pesch et al., 2008; Pinar et al., 2014; Ravindran & Kalpana, 2012; Roga, Lapiņa & Müürsepp, 2015; Royo-Vela & Hünermund, 2016; Saginova & Belyansky, 2008; Schtemberg, 2018; Stephenson et el., 2016; Tas & Ergin, 2012; Telford & Masson, 2005; Vrontis et al., 2007; Wilkins & Huisman, 2015; Woodall et al., 2014; Yusoff et al., 2015.
Courses and Degrees	Academic Success, Brand Identity, Brand Reputation, Choice, College Choices, Complaints, Course Evaluations, HEdPERF, Higher Education Institution Image, Quality, Satisfaction, Service Quality, Student Choice, Student Recruitment, Students' Perception (Choosing), Students Satisfaction, University Advertising Materials, University Brand, University Brand Loyalty, University Branding, University Image, University Ranking, University Success.	Abdullah, 2006; Aghaz et al., 2015; Alcaide-Pulido et al., 2017; Ali- Choudhury et al., 2009; Bennett & Ali-Choudhury, 2009; Binsardi & Ekwulugo, 2003; Butt & Rehman, 2010; Çakır et al., 2015; Chen, 2008; Curran & Rosen, 2006; De Jager & Gbadamosi, 2010; Dolinsky, 1994; Duarte et al., 2010; Elliott & Shin, 2002; Erdoğmuş & Ergun, 2016; Ford et al., 1999; Finney & Finney, 2010; Gatfield et al., 1999; Goi et al., 2014; Gray et al., 2003; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Lau, 2016; Leblanc, & Nguyen, 1997; Ling et al., 2010; Price et al., 2003; Royo-Vela & Hünermund, 2016; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Stephenson et al., 2016; Suomi, 2014; Tas & Ergin, 2012; Wilkins & Huisman, 2015.
Curriculum Planning	Academic Success, Alumni Satisfaction, Brand Equity, Brand Identity, Brand Image, Brand Reputation, Brand Strategy, Choice, Choice of University, College Choices, HEdPERF, Institutional Image, Quality Management, Quality of College Life, Quality Values, Satisfaction, Service Quality, SERVQUAL, Student Choice, Student Experience Satisfaction, Student Satisfaction, Student-Customer Orientation, Student-Customer Orientation, Students' Choice, Students' Perception, University Advertising Materials, University Image, University Ranking, University Success.	Abdullah, 2006; Aghaz et al., 2015; Arambewela & Hall, 2009; Binsardi & Ekwulugo, 2003; Chen, 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; DeShields et al., 2005; Dill & Soo, 2005; El Alfy & Abukari, 2020; Elsharnouby, 2015; Ford et al., 1999; Galeeva, 2016; Gatfield et al., 1999; Finney & Finney, 2010; Goi et al., 2014; Hill, 1995; Ho & Foon, 2012; Hsu et al., 2016; Ivy & Naude, 2004; Joseph et al., 2005; Joseph et al., 2012; Kalimullin & Dobrotvorskaya, 2016; Kanji et al., 2012; Kalimullin & Dobrotvorskaya, 2016; Lau, 2016; Leblanc, & Nguyen, 1997; Letcher & Neves, 2010; Ling et al., 2010; Lockwood & Hadd, 2007; Mai, 2005; Mostafa, 2006; Mupemhi, 2013; Parahoo et al., 2013; Pinar et al., 2014; Sadiq Sohail & Shaikh, 2004; Sirgy et al., 2007; Suomi, 2014; Telford & Masson, 2005; Vrontis et al., 2007; Wang et al., 2012; Yeo, 2009; Yusoff et al., 2015.
Environments and Physical Facilities	Alumni Satisfaction, Brand Elements, Brand Equity, Brand Identification (Alumni), Brand Identity, Brand Image, Choice, College Choices, Complaints, Consumer Complaints, Course Evaluations, Customer Complaints, HEdPERF, Higher Education Institution Image, Institutional Image, Quality, Quality of College Life, Quality of Education, Quality Values, Satisfaction, Service Expectation, Service Quality, SERVQUAL, Student Enrolment (Choice), Student Experience Satisfaction, Student Satisfaction, Students' Choice, Student Satisfaction, Students' Choice, Students Decision Making, Students' Perception, University Advertising Materials, University Brand, University Brand Loyalty, University Branding, University Image, University Success, Value of University Experience.	Abdullah, 2006; Al Hallak et al., 2019; Alcaide-Pulido et al., 2017; Ali-Choudhury et al., 2009; Angell et al., 2008; Arambewela & Hall, 2009; Bennett & Ali-Choudhury, 2009; Binsardi & Ekwulugo, 2003; Butt & Rehman, 2010; Casidy, 2014a; Clemes et al., 2008; Clewes, 2003; Curran & Rosen, 2006; De Jager & Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Dolinsky, 1994; Douglas, Douglas & Barnes, 2006; El Alfy & Abukari, 2020; El Ansari & Moseley, 2011; Elliott & Shin, 2002; Erdoğmuş & Ergun, 2016; Ford et al., 1999; Galeeva, 2016; Gatfield et al., 1999; Goi et al., 2014; Gray et al., 2003; Green, 2014; Hill, 1995; Hsu et al., 2016; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Joseph et al., 2012; Kazoleas et al., 2001; Kwan & Ng, 1999; Lau, 2016; Leblanc, & Nguyen, 1997; Letcher & Neves, 2010; Ling et al., 2010; Mai, 2005; Moogan, 2011; Mostafa, 2006; Parasuraman et al., 1988; Pinar et al., 2014; Price et al., 2003; Ramseook-Munhurrun et al., 2010; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Saginova & Belyansky, 2008; Shank et al., 1996; Sigala et al., 2006; Sirgy et al., 2007; Stephenson & Yerger, 2014b; Stodnick & Rogers, 2008; Sultan & Yin Wong, 2014; Telford & Masson, 2005; Valitov, 2014; Wang et al., 2012; Wilkins & Huisman, 2015; Woodall et al., 2014; Yang, Becerik-Gerber & Mino, 2013; Yusoff et al., 2015.
Financial Circumstances	Chriversity Experience. Choice, College Choices, Complaints, Higher Education Institution Image, Quality Values, Satisfaction, Service Quality, Student Experience Satisfaction, Student Recruitment, Students' Perception (Choosing), Students' Choice, University Image, University Ranking, University Social Responsibility, University Success, Value of University Experience.	Alcaide-Pulido et al., 2017; Angell et al., 2008; Arambewela & Hall, 2009; Binsardi & Ekwulugo, 2003; Çakır et el., 2015; Chen, 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Dill & Soo, 2005; Dolinsky, 1994; Ford et al., 1999; Hill, 1995; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Joseph et al., 2012; Lau, 2016; Letcher & Neves, 2010; Ling et al., 2010; Parasuraman et al., 1985; Plungpongpan et al., 2016; Price et al., 2003; Ramseook-Munhurrun et al., 2010; Roga et al., 2015; Sigala et al., 2006; Sung & Yang, 2008; Tas & Ergin, 2012; Telford & Masson, 2005; Vrontis et al., 2007; Woodall et al., 2014; Yusoff et al., 2015.
Geographic Region	Brand Elements, Brand Identity, Choice, College Choices, Corporate	Alcaide-Pulido et al., 2017; Ali-Choudhury et al., 2009; Angell et al., 2008; Arambewela & Hall, 2009; Bennett & Ali-Choudhury, 2009; Binsardi & Ekwulugo, 2003; Chen, 2008; De Jager &

	Identity, Higher Education Institution Image, Quality Management, Quality Values, Satisfaction, Service Quality, Student Satisfaction, Students Decision Making, Students' Perception, Students' Choice, University Advertising Materials, University Brand, University Branding, University Image, Value of University Experience.	Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Duarte <i>et al.</i> , 2010; Foroudi <i>et al.</i> , 2017; Gatfield <i>et al.</i> , 1999; Gray <i>et al.</i> , 2003; Ivy, 2001; Kanji <i>et al.</i> , 1999; Lau, 2016; Letcher & Neves, 2010; Mahmoud <i>et al.</i> , 2019; Melewar & Jenkins, 2002; Moogan, 2011; Price <i>et al.</i> , 2003; Roga <i>et al.</i> , 2015; Telford & Masson, 2005; Valitov, 2014; Woodall <i>et al.</i> , 2014.
Image and Identity of the University	Brand Attachment, Brand Elements, Brand Equity, Brand Experience, Brand Identification (Alumni), Brand Identity, Brand Image, Brand Personality, Branding, Choice, Choice of University, Educational History, Higher Education Institution Image, Quality of College Life, Satisfaction, Selection, Self-Branding, Service Branding, Service Quality, Student Recruitment, Student Satisfaction, Students Decision Making, Students' Perception (choosing), Students' Choice, University Brand, University Branding, University Image, University Ranking.	Aghaz et al., 2015; Alcaide-Pulido et al., 2017; Ali-Choudhury et al., 2009; Andreini, Pedeliento, Zarantonello & Solerio, 2018; Arambewela & Hall, 2009; Azoury et al., 2014; Bennett & Ali-Choudhury, 2009; Binsardi & Ekwulugo, 2003; Chen, 2008; De Jager & Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Dennis et al., 2016; Dill & Soo, 2005; Duarte et al., 2010; Elsharnouby, 2015; Farhana, 2012; Ford et al., 1999; Foroudi et al., 2017; Galeeva, 2016; Goi et al., 2014; Grace & O'Cass, 2005; Gray et al., 2003; Ho & Foon, 2012; Holmberg & Strannegård, 2015; Ivy, 2001; Joseph et al., 2005; Joseph et al., 2010; Lukman, Krajne & Glavič, 2010; Moogan, 2011; Mourad et al., 2011; Mupemhi, 2013; Nguyen et al., 2016; O'Cass & Grace, 2004; Parahoo et al., 2013; Parasuraman et al., 1985; Pinar et al., 2014; Polat, 2011; Price et al., 2003; Rauschnabel et al., 2016; Roga et al., 2015; Sirgy et al., 2007; Soutar & Turner, 2002; Stephenson & Yerger, 2014b; Sung & Yang, 2008; Tas & Ergin, 2012; Wang et al., 2012; Watkins & Gonzenbach, 2013.
Lecturer	Alumni Satisfaction, Brand Equity, Brand Identity, Branding, Self- Branding, College Choices, Course Evaluations, HEdPERF, Higher Education Institution Image, Higher Education Quality, Perceive Service Quality, Perceived Brand Orientation, Quality, Quality of College Life, Quality of Education, Quality Values, Satisfaction, Service Expectation, Service Quality, SERVQUAL, Student Experience Satisfaction, Student Satisfaction, Student-Customer Orientation, Students' Expectations, University Advertising Materials, University Brand, University Brand Loyalty, University Branding, University Image, University Success.	Abdullah, 2006; Aghaz et al., 2015; Alcaide-Pulido et al., 2017; Angell et al., 2008; Arambewela & Hall, 2009; Bennett & Ali- Choudhury, 2009; Brady & Cronin Jr, 2001; Butt & Rehman, 2010; Casidy, 2014a; Clemes et al., 2008; Clewes, 2003; Curran & Rosen, 2006; De Jager & Gbadamosi, 2010; DeShields Jr et al., 2005; Douglas et al., 2006; Duarte et al., 2010; Elliott & Shin, 2002; Elsharnouby, 2015; Erdoğmuş & Ergun, 2016; Ford et al., 1999; Galeeva, 2016; Gatfield et al., 1999; Goi et al., 2014; Gray et al., 2003; Green, 2014; Hill, Lomas & MacGregor, 2003; Holmberg & Strannegård, 2015; Hsu et al., 2016; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Koris & Nokelainen, 2015; Kwan & Ng, 1999; Lau, 2016; Leblanc, & Nguyen, 1997; Ling et al., 2010; Mai, 2005; Marzo Navarro et al., 2005; Mostafa, 2006; Nguyen et al., 2014; Oldfield & Baron, 2000; Parahoo et al., 2013; Pinar et al., 2014; Polat, 2011; Sadeh & Garkaz, 2015; Sander et al., 2000; Shank et al., 1996; Sigala et al., 2006; Sirgy et al., 2007; Stodnick & Rogers, 2008; Sultan & Yin Wong, 2014; Telford & Masson, 2005; Voss et al., 2007; Wang et al., 2012; Yousapronpaiboon, 2014; Yusoff et al., 2015.
Management	Brand Identity, Brand Orientation, Brand Reputation, Brand Touchpoint (Service), Institutional Image, Perceived Brand Orientation, Quality, Quality Management, Quality of Education, Successful Brand, University Brand, University Image, University Ranking, University Reputation, University Social Responsibility.	Alessandri et al., 2006; Bennett & Ali-Choudhury, 2009; Çakır et al., 2015; Casidy, 2014a; Chapleo, 2005, 2008, 2010; Dill & Soo, 2005; Ewing & Napoli, 2005; Goi et al., 2014; Kanji et al., 1999; Kazoleas et al., 2001; Khanna et al., 2014; Kwan & Ng, 1999; Lukman et al., 2010; Plungpongpan et al., 2016; Sadeh & Garkaz, 2015; Sung & Yang, 2008; Suomi, 2014.
Market Considerations	Achievement, Alumni Satisfaction, Brand Elements, Brand Equity, Brand Orientation, Brand Reputation, Brand Touchpoint (Service), Branding, Co- creating Value, College Choices, Commitment, Corporate Identity, HEdPERF, Higher Education Institution Image, Institutional Image, Internal Capabilities, Perceived Brand Orientation, Quality of Education, Satisfaction, Selection, Self-Branding, Service Quality, Student Recruitment, Student Satisfaction, Students Decision Making, University Advertising Materials, University Brand, University Brand Loyalty, University Branding, University Image, University Ranking, University Social Responsibility, Value of University Experience.	Abdullah, 2006; Aghaz et al., 2015; Alcaide-Pulido et al., 2017; Ali- Choudhury et al., 2009; Angell et al., 2008; Ayoubi & Massoud, 2012; Azoury et al., 2014; Bennett & Ali-Choudhury, 2009; Bowden & D'Alessandro, 2011; Casidy, 2013; Casidy, 2014a; Clemes et al., 2008; De Jager & Gbadamosi, 2010; DeShields et al., 2005; Dill & Soo, 2005; Duarte et al., 2010; Erdoğmuş & Ergun, 2016; Ewing & Napoli, 2005; Ford et al., 1999; Galeeva, 2016; Gatfield et al., 1999; Gray et al., 2003; Hill, 1995; Holmberg & Strannegård, 2015; Hsu et al., 2016; Ivy, 2001; Kazoleas et al., 2001; Khanna et al., 2014; Kwan & Ng, 1999; Lau, 2016; Letcher & Neves, 2010; Lukman et al., 2010; Melewar & Jenkins, 2002; Moogan, 2011; Pinar et al., 2014; Plungpongpan et al., 2016; Sigala et al., 2006; Soutar & Turner, 2002; Suomi, 2014; Tas & Ergin, 2012; Wilkins et al., 2016; Woodall et al., 2014.

Organizational Culture	Brand Orientation, Brand Touchpoint (Service), Choice, Perceived Brand Orientation, Quality Management, Quality Values, Satisfaction, Service Quality, Student Orientation, Students' Choice, Successful Brand, University Image.	Alcaide-Pulido <i>et al.</i> , 2017; Casidy, 2013; Casidy, 2014b; Chapleo, 2005; Ewing & Napoli, 2005; Galeeva, 2016; Kanji <i>et al.</i> , 1999; Khanna <i>et al.</i> , 2014; Leblanc, & Nguyen, 1997; Letcher & Neves, 2010; Pesch <i>et al.</i> , 2008; Price <i>et al.</i> , 2003; Roga <i>et al.</i> , 2015; Sadiq Sohail & Shaikh, 2004; Telford & Masson 2005.
Personal Outcomes and Achievements (of Graduated Students/Alumni)	Achievement, Alumni Satisfaction, Brand Building, Brand Equity, Brand Identification, Brand Identification (Alumni), Brand Touchpoint (Service), Choice, Co-creating Value, Commitment, Institutional Image, Loyalty, Quality, Quality of Education, Quality Values, Satisfaction, Service Quality, Student Choice, Student Satisfaction, University Brand, University Brand Community, University Brand Loyalty, University Image, University Ranking, University Reputation, Value of University Experience.	Alcaide-Pulido et al., 2017; Alessandri et al., 2006; Bennett & Ali- Choudhury 2009; Bowden & D'Alessandro, 2011; Chen, 2008; Clemes et al., 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; DeShields et al., 2005; Dill & Soo, 2005; Elliott & Shin, 2002; Erdoğmuş & Ergun, 2016; Ford et al., 1999; Hsu et al., 2016; Kalimullin & Dobrotvorskaya, 2016; Kazoleas et al., 2001; Khanna et al., 2014; Kwan & Ng, 1999; Letcher & Neves, 2010; Liu & Jia, 2008; Mai, 2005; McAlexander et al., 2005; Ogunnaike et al., 2018; Palmer et al., 2016; Pinar et al., 2014; Shahaida et al., 2009; Stephenson & Yerger, 2014b; Telford & Masson, 2005; Voss et al., 2007; Wilkins et al., 2016; Woodall et al., 2014; Yusoff et al., 2015.
Practices	Brand Reputation, Quality of College Life, Quality of Education, Quality Values, Satisfaction, Service Quality, Student Experience Satisfaction, Student Satisfaction, University Brand, University Image.	Ali-Choudhury et al., 2009; Azoury et al., 2014; Clewes, 2003; Duarte et al., 2010; El Ansari & Moseley, 2011; Galeeva, 2016; Kwan & Ng, 1999; Sirgy et al., 2007; Suomi, 2014; Telford & Masson, 2005; Yusoff et al., 2015.
Ranking of the University	Brand Reputation, Brand Touchpoint (Service), Choice, Educational Quality, Higher Education Institution Image, Perceive Service Quality, Service Quality, Student Recruitment, Students' Choice, University Image, University Ranking, University Success.	Alcaide-Pulido <i>et al.</i> , 2017; Çakır et el., 2015; Chen, 2008; De Jager & Gbadamosi, 2010; Dill & Soo, 2005; Duarte <i>et al.</i> , 2010; Ivy & Naude, 2004; Ivy, 2001; Joseph <i>et al.</i> , 2005; Joseph <i>et al.</i> , 2012; Khanna <i>et al.</i> , 2014; Lukman <i>et al.</i> , 2010; Mourad <i>et al.</i> , 2011; Sultan & Yin Wong, 2014; Suomi, 2014; Tas & Ergin, 2012; Vrontis <i>et al.</i> , 2007.
Resources	Brand Touchpoint (Service), Perceive Service Quality, Quality of Education, Quality Values, Satisfaction, Service Quality, Student Satisfaction, University Image.	Duarte <i>et al.</i> , 2010; El Ansari & Moseley, 2011; Galeeva, 2016; Khanna <i>et al.</i> , 2014; Kwan & Ng, 1999; Sultan & Yin Wong, 2014; Telford & Masson 2005; Yusoff <i>et al.</i> , 2015.
Social Relations	Brand Equity, Brand Identity, Brand Touchpoint (Service), Branding (University Promotion), College Choices, Customer Complaints, Higher Education Communication, Higher Education Institution Image, Institutional Image, Internal Branding, Quality of College Life, Quality of Education, Quality Values, Satisfaction, Service Branding, Service Quality, Student Experience Satisfaction, Students' Choice, Students Decision Making, Students' Choice, University Advertising Materials, University Brand, University Brand Loyalty, University Image, University Success, Value of	Alcaide-Pulido et al., 2017; Arambewela & Hall, 2009; Clewes, 2003; De Jager & Gbadamosi, 2010; Dolinsky, 1994; Duarte et al., 2010; Erdoğmuş & Ergun, 2016; Ford et al., 1999; Foroudi et al., 2017; Gatfield et al., 1999; Gibbs & Dean, 2015; Goi et al., 2014; Gray et al., 2003; Ivy & Naude, 2004; Ivy, 2001; Joseph et al., 2005; Joseph et al., 2012; Judson, Gorchels & Aurand, 2006; Kazoleas et al., 2010; Khanna et al., 2014; Kwan & Ng, 1999; Lau, 2016; Ling et al., 2010; Moogan, 2011; O'Cass & Grace, 2004; Pinar et al., 2014; Roga et al., 2015; Sigala et al., 2006; Sirgy et al., 2007; Telford & Masson 2005; Valitov, 2014; Wilkins & Huisman, 2015; Woodall et al., 2014.
Staff	University Experience. Brand Attachment, Brand Equity, Brand Identity, Choice, College Choices, Corporate Branding, Corporate Identity, Educational Quality, HEdPERF, Perceived Brand Orientation, Quality, Quality of Education, Satisfaction, Service Branding, Service Quality, Student Loyalty, Student Satisfaction, University Brand, University Image.	Abdullah, 2006; Aghaz et al., 2015; Alcaide-Pulido et al., 2017; Angell et al., 2008; Bennett & Ali-Choudhury, 2009; Brochado, 2009; Casidy, 2014a; De Jager & Gbadamosi, 2010; Dennis et al., 2016; DeShields Jr et al., 2005; El Alfy & Abukari, 2020; Elliott & Shin, 2002; Elsharnouby, 2015; Goi et al., 2014; Grace & O'Cass, 2005; Green, 2014; Harris & De Chernatony, 2001; Hennig-Thurau et al., 2001; Joseph et al., 2005; Kwan & Ng, 1999; Lau, 2016; Leblanc, & Nguyen, 1997; Ling et al., 2010; Mai, 2005; Melewar & Jenkins, 2002; Mourad et al., 2011; Nguyen et al., 2016; O'Neill & Palmer, 2004; Oldfield & Baron, 2000; Parahoo et al., 2013; Parasuraman et al., 1985; Parasuraman et al., 1988; Pinar et al., 2014; Price et al., 2003; Ramseook-Munhurrun et al., 2010; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Yousapronpaiboon, 2014; Yusoff et al., 2015.
Student	Academic Success, Achievement, Alumni Satisfaction, Brand Attachment, Brand Equity, Brand Reputation, Brand Touchpoint	Angell et al., 2008; Arambewela & Hall, 2009; Brady & Cronin Jr, 2001; Clewes, 2003; Curran & Rosen, 2006; Dennis et al., 2016; El Alfy & Abukari, 2020; Elsharnouby, 2015; Erdoğmuş & Ergun, 2016; Finney & Finney, 2010; Hill, 1995; Hill et al., 2003; Hsu et al., 2016; Khanna et al., 2014; Koris & Nokelainen, 2015; Kwan &

	(Service), Choice of University, College Choices, Commitment, Course Evaluations, Higher Education Quality, Quality of Education, Quality Values, Satisfaction, Service Quality, Student Experience Satisfaction, Student Satisfaction, Student- Customer Orientation, University Brand Loyalty, Value of University Experience.	Ng, 1999; Lau, 2016; Letcher & Neves, 2010; Mai, 2005; Mupemhi, 2013; Ogunnaike <i>et al.</i> , 2018; Parahoo <i>et al.</i> , 2013; Pinar <i>et al.</i> , 2014; Suomi, 2014; Telford & Masson, 2005; Wilkins <i>et al.</i> , 2016; Woodall <i>et al.</i> , 2014.
Support Facilities for Enhancement Services	Alumni Satisfaction, Brand Elements, College Choices, Complaints, HEdPERF, Higher Education Institution Image, Institutional Image, Perceive Service Quality, Quality, Quality of College Life, Quality of Education, Quality Values, Satisfaction, Service Quality, Student Enrolment (Choice), Student Experience Satisfaction, Student Satisfaction, Students' Choice, University Advertising Materials, University Brand, Value of University Experience.	Abdullah, 2006; Al Hallak <i>et al.</i> , 2019; Ali-Choudhury <i>et al.</i> , 2009; Angell <i>et al.</i> , 2008; Clewes, 2003; De Jager & Gbadamosi, 2010; de Jager & Gbadamosi, 2013; Dolinsky, 1994; Ford <i>et al.</i> , 1999; Galeeva, 2016; Gatfield <i>et al.</i> , 1999; Green, 2014; Hill, 1995; Hsu <i>et al.</i> , 2016; Ivy, 2001; Joseph <i>et al.</i> , 2005; Kwan & Ng, 1999; Lau, 2016; Leblanc, & Nguyen, 1997; Ling <i>et al.</i> , 2010; Parahoo <i>et al.</i> , 2013; Roga <i>et al.</i> , 2015; Sadeh & Garkaz, 2015; Sadiq Sohail & Shaikh, 2004; Saginova & Belyansky, 2008; Sigala <i>et al.</i> , 2006; Sirgy <i>et al.</i> , 2007; Sultan & Yin Wong, 2014; Telford & Masson, 2005; Valitov, 2014; Woodall <i>et al.</i> , 2014; Yusoff <i>et al.</i> , 2015.
Teaching	Alumni Satisfaction, Brand Building, Brand Equity, Brand Reputation, Brand Touchpoint (Service), College Choices, Course Evaluations, Higher Education Institution Image, Perceive Service Quality, Quality, Quality of College Life, Quality Values, Satisfaction, Selection, Service Quality, Student Experience Satisfaction, Student Satisfaction, Student-Customer Orientation, Students Decision Making, University Advertising Materials, University Brand, University Image.	Aghaz et al., 2015; Arambewela & Hall, 2009; Clewes, 2003; Curran & Rosen, 2006; Duarte et al., 2010; El Ansari & Moseley, 2011; Galeeva, 2016; Gatfield et al., 1999; Hill, 1995; Hsu et al., 2016; Ivy, 2001; Khanna et al., 2014; Koris & Nokelainen, 2015; Lau, 2016; Letcher & Neves, 2010; Marzo Navarro et al., 2005; Moogan, 2011; Nguyen et al., 2016; Ogunnaike et al., 2018; Pinar et al., 2014; Schtemberg, 2018; Shahaida et al., 2009; Sirgy et al., 2007; Soutar & Turner, 2002; Sultan & Yin Wong, 2014; Suomi, 2014; Telford & Masson, 2005; Voss et al., 2007; Yousapronpaiboon, 2014; Yusoff et al., 2015.
University Communications	Brand Attachment, Brand Equity, Brand Identity, Brand Reputation, Brand Strategy, Brand Touchpoint (Service), Branding (University Promotion), Choice, College Choices, Higher Education Communication, Internal Branding, Loyalty, Self- Branding, Service Branding, Students Decision Making, University Image, University Ranking, University Success.	Alcaide-Pulido et al., 2017; del Rocío Bonilla, Perea, del Olmo & Corrons, 2020; Dennis et al., 2016; Dholakia & Acciardo, 2014; Duarte et al., 2010; Foroudi et al., 2017; Gibbs & Dean, 2015; Goi et al., 2014; Gray et al., 2003; Holmberg & Strannegård, 2015; Ivy & Naude, 2004; Judson et al., 2006; Khanna et al., 2014; Lau, 2016; Liu & Jia, 2008; Lukman et al., 2010; Moogan, 2011; Mourad et al., 2011; O'Cass & Grace, 2004; Pinar et al., 2014; Royo-Vela & Hünermund, 2016; Suomi, 2014; Wilkins & Huisman, 2015.
University Strategic Planning	Brand Attachment, Brand Identity, Brand Orientation, Brand Reputation, Corporate Identity, Institutional Image, Perceived Brand Orientation, Quality Management, Service Quality, Successful Brand, University Brand, University Image, University Ranking, University Reputation, University Social Responsibility.	Aghaz et al., 2015; Alessandri et al., 2006; Bennett & Ali- Choudhury, 2009; Çakır et al., 2015; Casidy, 2013; Casidy, 2014c; Chapleo, 2005, 2008, 2010; De Jager & Gbadamosi, 2010; Dennis et al., 2016; Ewing & Napoli, 2005; Goi et al., 2014; Green, 2014; Kanji et al., 1999; Kazoleas et al., 2001; Melewar & Jenkins, 2002; Plungpongpan et al., 2016; Sung & Yang, 2008; Suomi, 2014.

Abovementioned dimensions in Table 3.2 were scattered with various phrases and expressions (i.e. Gainful employment, Work wages, Satisfactory salary, High incomes) so interpretation and recategorization of them were necessary. By considering branding as the practice of marketing (Chapleo, 2015) and education as a unique service (Chapter 2), the recategorization was inspired by the 7P's of business school marketing mix (Ivy, 2008), 9P's of marketing (Londre, 2017), 7P's of marketing mix in brand building (Mallik & Achar, 2020) and 9P's of marketing in higher education programs (Soetan, 2018).

Since, qualitative content analysis as a method to analyze qualitative data, can help to present the results as categories and/or themes (Graneheim *et al.*, 2017), the result of applying content analysis of common dimensions, comparing with P's of marketing, and the recategorization led to create 9 key concepts, including People, Physical and support facilities, Place, Policy, Price, Process, Product, Promotion and Prospect (Table 3.3). The difference among these new concepts and P's of marketing was due to the distinctive and exceptional nature of higher education services (Chalcraft *et al.*, 2015; Dholakia & Acciardo, 2014) and the extensive dimensions that were frequently mentioned in the field of HEB, educational experiences and service quality studies.

On the way to convert qualitative findings to measurable items which is a mixing strategy consists of qualitative investigation and validation (Zhou, 2019), the 9P's of HEB and their dimensions were validated in a two-step validation process. First they were studied by a panel of 4 experts and academic professionals in the field of marketing, branding, management and design. Then, the dimensions and respective items were presented to a panel of about 20 academics in the areas of marketing, management and economics, PhD students, professors and researchers. The validated results are presented in Table 3.3.

Common Dimensions	Description	Key Concepts	
(From Branding and Service literature) Lecturers	-		
Staff	Main Partners	People	
Students	Main 1 arthers	reopie	
Environments and Physical Facilities			
Support Facilities for Enhancement	Infrastructures, Environments and	Physical and	
Support Pacifics for Elinancement	Equipments	Support Facilities	
Geographic Region	Location: Country, City and		
Campus	Campus	Place	
University Strategic Planning	Cumpus		
Organizational Culture	Strategy of University	Policy	
Management	Management	roncy	
Cost of Education			
Financial Circumstances	Financial Aspects	Price	
Admission and Registration	Internal Process and Service		
Administrative Services	Delivery	Process	
Courses and Degrees			
Curriculum Planning			
Content			
Teaching	Content and Pedagogy	Product	
Resources			
Practices			
Assessments			
University Communications			
Social Relations	University Communication,	Duantation	
Image and Identity of the University	Image, Identity and Ranking	Promotion	
Ranking of the University			
Market Considerations			
Personal Outcomes and Achievements	Expectations and Service	Drosport	
(of Graduated Students/Alumni)	Outcomes	Prospect	
Commitment and Loyalty			

**Table 3.3.** Categories of common dimensions

 Source: Own elaboration inspired by 9P's of Marketing

Among 9P's of HEB, the Prospect and Policy were the concepts that have received less attention in marketing mix and the HEB context. According to Constantinides (2006) two limitations of marketing mix are common in all domains: internal orientation and the lack of personalization. In order to overcome these limitations, this study added aspects including the market expectations and considerations, personal and professional outcomes and achievements of alumni in the concept of Prospect. Furthermore, since branding is considered as a strategy (Dholakia & Acciardo, 2014) and universities adopt market orientation strategy to differentiate the offerings from competitors (DeShields *et al.*, 2005), developing a strong brand should be an important component of universities marketing strategy (Watkins & Gonzenbach, 2013). Thus, the concept of Policy was also added to the 9P's of HEB that deals with university management strategies and organizational culture.

## 3.4. Higher Education Branding Conceptual Model

In this way, the 9P's of HEB was formed according to the commonalities of the abovementioned studies (Table 3.2), in the fields of HEB and educational services. Based on the new categories of 9P's, the dimensions, components and scales of HEB was regenerated and reorganized (Table 3.4).

Concepts	Dimensions	Components	Scales / Items
1. People	1. Lecturers	1. Lecturers Knowledge	1. Knowledgeable and informed lecturers
		2. Lecturers Experience	2. Impressive experience and expertise of lecturers
		3. Lecturers Reputation	3. Reputable and famous lecturers
		4. Lecturers Teaching Skills	<ol> <li>Skillful and well trained lecturers</li> <li>Enthusiastic and</li> </ol>
		5. Lecturers Performance	6. Successful communication of
			7. Reliable and disciplined
			8. Fair and valuable feedback from lecturers
		6. Lecturers Behavior	<ol> <li>Caring and empathetic lecturers</li> <li>Responsive lecturers</li> </ol>
			11. Courteous and polite lecturers
		7. Lecturers Accessibility	12. Approachable and accessible lecturers
		8. Lecturers Appearance	13. Well dressed and neat appearance of lecturers
	2. Staff	9. Staff Knowledge & Skill	14. Knowledgeable and well trained Staff
		10. Staff Performance	15. Helpful and conscientious Staff
		11. Staff Behavior	<ol> <li>Prompt and punctual Staff</li> <li>Caring and friendly Staff</li> <li>Courteous and polite Staff</li> </ol>
		12. Staff Accessibility	19. Approachable and accessible Staff
		13. Staff Appearance	20. Well dressed and neat appearance of Staff
	3. Students	14. Students Attitude	21. Positive attitude of students towards learning
		15. Students Interactions and Collaborations	22. Effective interactions and collaborations of students
		16. Students Commitment	23. Students' commitment to study and practice
		17. Students Relationships	24. Warm and friendly relationships among Students
		18. Students Community and Union	25. Supportive Students (of community and unions)
2. Physical and Support	<ol> <li>Environments and Physical Facilities</li> </ol>	19. Classrooms and Learning Environments	26. Proper layout of classrooms
Facilities	5		27. Appropriate size of classrooms
			<ol> <li>Necessary amenities in classrooms</li> <li>Pleasant and appealing</li> </ol>
			classrooms 30. Well-equipped and up-to-
			date facilities in classrooms
		20. Library, Study Room and Book Store	31. Comfortable and accessible library and study rooms

**Table 3.4.** Definition of scales/items in HEB and service quality surveys

 Source: own elaboration

			32. Accessible bibliograp resources at library a	
			study rooms 33. Adequate facilities in	ı
		21. Lab	library and study roo           34.         Accessible labs           (Computer labs, Study)	
			Workshops,) 35. Well-equipped technological facilitie	
		22. Accommodation and Dormitory	labs           36.         Suitable and availabl accommodation and	e
		200000	dormitory at the campus 37. Proper facilities in accommodation	
		23. Sport Center	38. Good sport facilities campus	at the
		24. Overall Appearance of Facilities	<ol> <li>Visually appealing of physical facilities at the campus</li> </ol>	
	5. Support Facilities for Enhancement	25. Transportation	40. Available transportat and parking at/aroun- campus	
	Services	26. Catering	41. Adequate catering an refectory facilities at campus	
		27. Health Center	42. Proper healthcare facilities at the camp	
		28. Recreation and Leisure	43. Suitable recreational leisure facilities at th campus	
3. Place	6. Geographic Region	29. Geographic Location	44. Good geographic loc 45. Physical attractivene (Landscape, Heritage	ss
		30. Culture and Life Style	46. Diverse and welcomiculture 47. Compatible lifestyle	
		31. Economic Features	48. Affordable cost of in 49. Availability of employment or casua jobs (for students)	-
		32. Political Features	50. Consistent political procedures 51. Security and safety	
		<ol> <li>Public Facilities and Services</li> </ol>	52. Availability of public facilities and services	
	7. Campus	34. Campus Location	<ul> <li>53. Convenient location campus</li> <li>54. Accessible location campus</li> </ul>	
		35. Safety and Security	55. Personal safety on campus 56. Campus security	
		36. Design and Architecture	56. Campus security 57. Well-designed and attractive campus	
		37. Size	58. Appropriate size (University or Camp	us)
		<ol> <li>Maintenance and Cleanliness</li> </ol>	59. Continuous maintena and cleanliness	nce
		39. Ambience and Characteristics	60. Positive social atmosphere	
			61. Valuable cultural diversity	
4. Policy	8. University Strategic Planning	40. Plan and Goal	<ul> <li>62. University long-term strategic plans</li> <li>63. Clear mission and vis</li> </ul>	
			64. Encouraging marketi strategy towards bett	
	9. Organizational Culture	41. Culture and Value	65. Progressive organizational cultur values	e and
		42. SAC Approach	66. Student centeredness	
	10. Management	43. Leadership	67. Strong and supportiv leadership	
		44. Quality Management	<ul> <li>68. Commitment to impr service performance</li> <li>69. Competitiveness</li> </ul>	ove

		45. Financial Management	70.	Proper financing and budgeting
5. Price	11. Cost of Education	46. Value of Education	71.	Good value for money
		47. Tuition Fee	72.	Reasonable and
	12. Financial	48. Payment	73.	affordable tuition fees Accurate and reliable
	Circumstances	-		payment modalities
	Chedinstantees	49. Funding and Financial Motivations	74.	Available financial aid and scholarship
		50. Expenditure	75.	Reasonable expenditure (Books, stationery, print costs, canteen pricing,)
6. Process	13. Admission and Registration	51. Admission Process	76.	Fast and easy admission process
		52 D : ( ( ) D	77.	Adequate entry qualification requirements Convenient and error-free
	14. Administrative	52. Registration Process      53. Service Delivery	78.	registration process Prompt and on-time
	Services	55. Service Derivery		services
	Services	54. Instructions and Procedures	80.	Simple and clear instructions and procedures
			81. 82.	Accurate records Flexible exchange programs
			83.	Convenient opening hours
		55. Assessment and Grading	84.	Fair and accurate assessment and grading system
		56. Counseling and Advising	85.	Valuable and helpful counseling and advising services
		57. Graduation	86.	Reasonable and acceptable graduation time
7. Product	15. Courses and Degrees	58. Offered Courses	87.	Available courses in a wide variety of subjects
		59. Academic Degrees	88.	Wide range of academic degrees
	16. Curriculum Planning	60. Curriculum & Course Design	89.	Updated and internationally standard
		-	90.	courses Well-structured curriculum and course design
		61. Programs and Schedules	91.	Well-known and high- quality programs
	15.0		92. 93.	Convenient and explicit schedules (for students) Valuable and suitable
	17. Content	62. Course Content		course content
		63. Course Orientation	94.	Orientation of content (Practical and Theoretical materials available to students)
	18. Teaching	64. Teaching Methods and Quality	95. 96.	High quality teaching Innovative teaching methods
		65. Lectures and Presentations	s 97.	Informative and impressive lectures
			98. 99.	Interactive and entertaining lectures Visually appealing
	19. Resources	66. Materials	100.	presentations Available resource material - Hardcopy
			101.	Available Online resource material
		67. Scientific Events	102.	Significant scientific events that students can attend
	20. Practices	68. Homework and Workload	103. 104.	Appropriate workload High level of difficulty of homework and projects
	21. Assessments	69. Quality of Education	105.	Assessments and feedback of education
8. Promotion	22. University Communications	70. Recommendation and WOM / EWOM	106.	Convincing recommendation and WOM/EWOM (about the university)
		71. Advertising and Social Media	107.	Active participation of the university in advertising and social media

		72. Website	108. Informative and helpful website of the university
		73. Visual and Vocal Materials	109. Impressive promotional materials of the university (Visual and Vocal media)
	23. Social Relations	74. University Social Relations	<ol> <li>Extensive public relations of the university</li> <li>Social and leisure events and activities</li> <li>Appropriate sports</li> </ol>
	24. Image and Identity	75. Reputation	activities 113. Good reputation of the university
	of the University	76. Prestige	114. Social and academic prestige of the university
		77. History and Record	115. Long history and academic records
		78. Visual Identity & Brand Design	116. Distinctive and memorable design (Visual Identity & Brand)
	25. Ranking of the University	79. Publications and Researches	117. Influential publications and researches
		80. Accreditation	<ol> <li>Academic credit (University league tables and rankings)</li> </ol>
		81. Internationalization	119. International participation and networking
		82. Population	<ol> <li>Standard population and optimal ratio (Student per faculty, Graduation rate, )</li> </ol>
9. Prospect	26. Market Considerations	83. Real world of work	<ul> <li>121. Preparation of students for work in the real world</li> <li>122. Career opportunities and employability (for/of graduates)</li> </ul>
		84. Market Connections	123. Effective contact of the university with the market
	27. Personal Outcomes and Achievements (of Graduated	85. Professional Outcomes and Achievements	<ol> <li>Progress and career success</li> <li>Creditable degree</li> <li>Satisfactory income</li> </ol>
	Students/Alumni)	86. Educational Outcomes and Achievements	
		87. Personal Outcomes and Achievements	128. Intellectual growth and skill development
		88. Social Outcomes and Achievements	<ol> <li>Satisfying relations and friendships</li> <li>Fun and pleasant</li> </ol>
	28. Commitment and	89. Alumni Commitment and Loyalty	131. Willingness to pursuit further education (at the
	Loyalty	Loyany	same university) 132. Alumni's donation and support

Accordingly, based on 9P's of HEB, the conceptual model for HEB with 28 dimensions, 89 components and 132 scales was created (Figure 3.3).

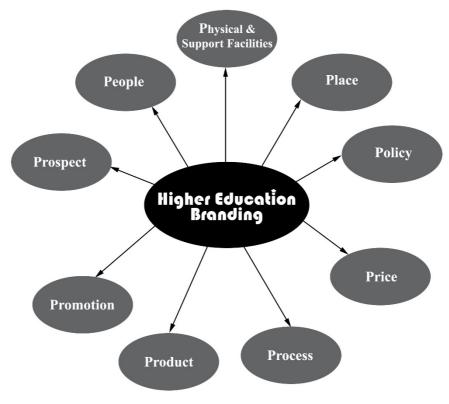


Figure 3.3. HEB Conceptual Model

# 3.5. Discussion

This conceptual study reviewed the literature related to HEB and educational services, identified frequently repeated important concepts and determined the influential dimensions. Among the concepts presented in this conceptual model of HEB, some concepts have been discussed in previous studies: Promotion, Price, People and Place (Ivy, 2008; Londre, 2017; Mallik & Achar, 2020; Soetan, 2018). Concepts such as Process (Londre, 2017; Mallik & Achar, 2020), Product (Soetan, 2018), and Physical facilities (Mallik & Achar, 2020) have been less addressed. By assisting the service design process and three stages, before, during and after educational experience, this study considered a wider range of HEB domains (Chapter 2), including the real world and market expectations and personal outcomes (Prospect) and also university strategic planning and management toward branding (Policy). Thus, the two concepts of Policy and Prospect were added as concepts that have received less attention. Yet, in other P's of HEB, more diverse dimensions were considered in accordance with educational services. Categorization of these dimensions and generation of their components led to the scale of HEB.

Therefore, this research is more comprehensive than previous and even recent research, in which only parts of the concepts related to HEB are addressed, such as developing and validating brand equity scale (Yousaf, Fan & Laber, 2020), visualizing and web-based marketing and branding (Blanco & Metcalfe, 2020), brand communication (Broucker, De Wit & Mampaey, 2020) and brand equity dimensions (Khoshtaria, Datuashvili & Matin, 2020).

# **3.6.** Conclusion and Implication

The model offered in this paper provides a holistic approach to developing a university brand by focusing on higher education and service branding and integrating contributions from studies and frameworks in various fields. This model was conceptually developed to represent the different aspects of HEB as a service experience holistically.

The originality of this study is that it comprehensively considers many aspects of the higher education brand as a long-term and unique experience and aggregates many approaches, models and frameworks. The findings of this study provide further insights into the significance of branding within the higher education context. Obviously the model presented here is indicative/conceptual and future research should attempt to empirically test this model in authentic situations and environments. The model can be revised further by adding other scales or items based on the empirical study and can be tested or validated in different cases, with different samples, such as applicants, undergraduate and graduate students, lecturers, staff, educational managers, clients and employers.

The authors propose to validate the conceptual model with a sample of students and alumni through an empirical study. The results of an empirical study could help universities in developing a strong university brand.

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Chapter 4. HIGHER EDUCATION BRANDING MODEL: A CONTRIBUTION TO SCALE DEVELOPMENT AND TESTING

## 4.1. Introduction

The intense competition prevailing in the higher education sector has not only led higher education institutions to become innovative in courses, delivery methods, and student support services, but has also created the need for them to be market-oriented (Vaikunthavasan *et al.*, 2019). Branding increasingly becomes important for higher education institutions that need to attract resources and communicate with their environments to survive (Mampaey *et al.*, 2015). The primary function of branding for educational institutions is differentiating and communicating competitive advantage and plays a prominent role in their marketing strategies (Dholakia & Acciardo, 2014). Universities have turned to branding as a solution to develop sustainable strategies (Pinar *et al.*, 2011).

As higher education is far from being a market (Mampaey et al., 2015), simplistic wholly commercial models clearly do not fit with universities (Chapleo, 2015). Despite abundant research into the marketing and branding of higher education in recent decades, in the context of branding models, yet clear brand models and theoretical frameworks are lacking (Williams Jr & Omar, 2014; Wilson & Elliot, 2016). By reviewing the literature related to higher education branding (HEB) and educational services, frequently repeated and influential dimensions were determined, even though in a dispersed way (Chapter 3). In a recent study (Chapter 3), HEB is conceptualized as a holistic model to developing a university brand, integrating contributions from previous studies and frameworks from various fields of branding and marketing (i.e. Ivy, 2008; Londre, 2017; Mallik & Achar, 2020; Soetan, 2018). Specifically, the authors propose categorizing the dimensions of HEB into the following nine main concepts (9P's) - People, Physical and support facilities, Place, Policy, Price, Process, Product, Promotion and Prospect - inspired by the P's of marketing. According to the authors, these dimensions compose the High Education Branding model. They also propose 132 items to measure these dimensions and their sub-dimensions.

The primary purpose of this research is to fill the gaps and shortage of empirical and theoretical literature on branding in higher education (Khoshtaria *et al.*, 2020) as a mental stimulus type of service (Hashim *et al.*, 2020), and to create a comprehensive model appropriate to the nature of education and experience of educational services. This study contributed to develop and test reliable and valid scales for measuring HEB

proposed in Chapter 3, through a mixed-method research design. This empirical study was organized in two stages based on the conceptual model of HEB. Stage 1 refines the initial scales of the HEB model through survey using Iranian fresh alumni responses to a structured questionnaire. In stage 2, partially least squares-path modeling (PLS-PM) is conducted to provide support for the reduced scales resulting from stage 1, with 112 items, using data collected from students of Iran and Portugal. Finally, the theoretical contributions and practical implications of the study are discussed.

# 4.2. Theoretical Background

# 4.2.1. Higher Education Brand

The brand is an important differentiating factor in the higher education competitive environment (Dean, Griffin & Kulczynski, 2016; Erdoğmuş & Ergun, 2016; Stephenson *et al.*, 2016; Valitov, 2014). Higher education institutions and universities need strategies to maintain and enhance their competitiveness (Melewar & Akel, 2005), so they focus on articulating and developing their brands (Hemsley-Brown *et al.*, 2016) and increasingly apply branding to differentiate themselves from competitors (Mampaey *et al.*, 2015). Higher education institutions and universities, as service providers, which align the expectations of both students and the labour market (Hall & Witek, 2016) and provide long-term services (Plungpongpan *et al.*, 2016) will remain competitive within the sector (Bowden & D'Alessandro, 2011) and develop brands which differentiate them from their competitors (Mampaey *et al.*, 2015).

# 4.2.2. Higher Education Branding Model

Although today, universities accept and practice marketing and branding, there is considerable debate and uncertainty about marketization and marketing activities or the application of business models to the higher education sector (Mourad *et al.*, 2011; Watjatrakul, 2014; Yousaf *et al.*, 2020). Practical tools and methods to show how universities should establish and develop a competitive brand are scarce in the literature (Chapter 2) and brand management models and theoretical models of higher education marketing are also lacking (Kaushal & Ali, 2019; Williams & Omar, 2014), as well as a holistic and comprehensive model for HEB (Chapleo, 2015; Sultan & Wong, 2014). The models presented so far only address some aspects of HEB and have their limitations (i.e.

Alcaide-Pulido *et al.*, 2017; Dollinger *et al.*, 2018; Ebrahim *et al.*, 2016; Kaushal & Ali, 2019; Simiyu *et al.*, 2020) and a conceptual holistic model of HEB is still missing (Chapter 3).

#### 4.2.3. Proposed Model for Higher Education Branding

HEB model was proposed as a conceptual one, providing a holistic approach to develop a university brand by focusing on higher education and service branding (Chapter 3). HEB model supports the nature of educational experiences and services, providing an integrated approach to the branding process and comprehensively considers many aspects of higher education as a long-term and unique experience, integrating contributions from different fields of HEB and educational services. Furthermore, HEB model relies on 9 key dimensions (9P's) that can be measured using 28 sub-dimensions (Figure 4.1).

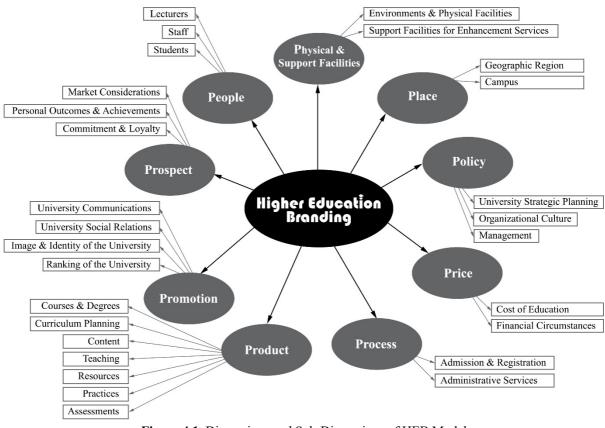


Figure 4.1. Dimensions and Sub-Dimensions of HEB Model (Source: Own elaboration - Chapter 3)

Based on this model each of the 9P's consists of two or more sub-dimensions. For the 'People' concept, the main and most mentioned partners of the university were considered, including lecturers, staff and students. 'Physical and support facilities' include the necessary infrastructures, environments and equipment that help provide educational and non-educational services. The location of the university, including the country, city and campus conditions are included in the concept of 'Place'. The concept of 'Policy' refers to university strategic management in connection with branding. Dimensions related to costs and financial aspects are included in the 'Price' concept. The 'Process' concept deals with administrative service delivery in admission, registration and education stages. All dimensions related to the course, degree, planning and programs, content and resource, teaching, practice and assessment that have a direct impact on the educational experience are included in the 'Product' concept. The 'Promotion' deals with identity, image, ranking and every aspect related to university communication and relation. The 'Prospect', as a concept that has received less attention in the HEB context, refers to the expectations and outcomes of educational services and includes market considerations, personal outcomes and achievements, commitments and loyalty.

# 4.3. Methodology

# 4.3.1. Scale Generation, Refinement and Validation

The reliable and valid scales/items for HEB model were developed based on the scale development procedures of Churchill (1979) which involves 3 stages. At stage 1, concepts, dimensions, and scales of HEB were explored to create a holistic and comprehensive conceptual model, using a service approach cultivated through branding and marketing literature, which led to developing 9 key concepts and regenerating 132 scales of HEB model (Chapter 3). In the current study, the focus is on stages 2 and 3 of Churchill's procedure (Figure 4.2).

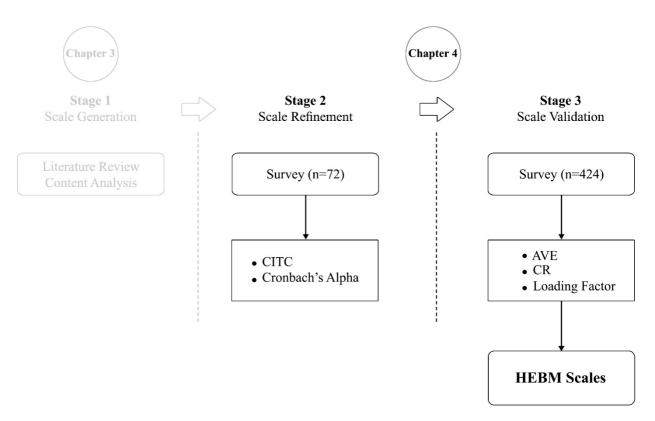


Figure 4.2. Methodological procedure of scale refinement and validation for HEB model

# 4.3.2. Stage 1: Scale Generation

In stage 1 the literature related to HEB and educational services were reviewed, frequently repeated important concepts were identified and the influential dimensions were determined. Categorization of dimensions (9P's of HEB) and regeneration of components led to scales of HEB. The HEB model provides a holistic approach to developing a university brand by focusing on higher education and service branding and represents different aspects of HEB as a service experience holistically (Chapter 3).

# 4.3.3. Stage 2: Scale Refinement

# 4.3.3.1. Data collection and participants:

A survey questionnaire was designed, asking the participants to which extent do they agree or disagree that each item of HEB model is helpful to build a strong and successful higher education brand. The questionnaire consisted of 11 sections, one section for the cover letter, nine sections for 9P's items and one section for personal information. A pilot test was conducted with ten fresh alumni in Design departments in Iran, to test how potential respondents understand, interpret and respond to each item (Gehlbach & Brinkworth, 2011). The questionnaire comprising of the five-point Likert-type scale ranging from "1 (strongly disagree)" to "5 (strongly agree)" was developed, based on the capacity of Likert type measurement to easily measure the attitude of the respondents and a wide range of constructs (Subedi, 2016). The questionnaire containing the nine key concepts with 132 scales of the HEB model (Chapter 3) was set up on Google forms and distributed online. Google Forms was chosen because as the best tool for online survey, it can be easily published on the Web and can be embedded in blogs and websites (Mansor, 2012). The questionnaire was accompanied by a cover letter explaining the purpose of the study, the voluntary nature of participation, and assurance about the confidentiality of the responses.

At this stage, Iranian design fresh alumni who had graduated during the last year (2020) were considered as a statistical population to collect the data for three reasons. The first reason was the qualification of the main researcher in Design and accessibility to the sample. The second reason was to consider a sample from a bachelor degree other than management or business because, since in most previous research, these disciplines were selected to collect the data (i.e. Clewes, 2003; Khanna *et al.*, 2014; Koris & Nokelainen, 2015; Ling *et al.*, 2010; Shahaida *et al.*, 2009; Woodall *et al.*, 2014; Wilkins *et al.*, 2016; Yusoff *et al.*, 2015). Third, authors considered fresh alumni because they had just completed their educational experience as students and had just encountered the real world of business and market. In fact, fresh alumni can be assumed the middle ground between the students and the alumni, as well as former students and consumers of high education experience provided by universities (Pedro & Andraz, 2021).

By collecting the email addresses of fresh alumni from five universities (three public universities and two private universities), the questionnaire was set up online. Using the convenience sampling method (Etikan, Musa & Alkassim, 2016), the data were collected between November 11, 2020, and January 24, 2021. This method allowed to collect data from 72 respondents. This sample size was considered adequate because it almost provides 72% of the fresh alumni population (counting 20 alumni per year for each department) of these universities in 2020.

The descriptive statistics of the sample are summarized in Table 4.1. There were 34 (47.2%) males and 38 (52.8%) females. The respondents' ages were between 22 and 57 years old. 54.2% of respondents were local students at the time of their studies and

68.1.8% of them had graduated from public universities. The respondents mainly worked as freelancers (37.5%).

Measure	Option	Frequency	Percentage
Gender	Male	34	47.2
	Female	38	52.8
Age	22-27	37	51.4
-	28-32	8	11.1
	33-38	13	18.1
	39-44	8	11.1
	45 or over	6	8.3
Nationality Classification	Local	39	54.2
-	National	31	43.0
	International	2	2.8
Type of University	Public	49	68.1
	Private	23	31.9
Employment Status	Employed	16	22.2
	Freelancer	27	37.5
	Self-Employed	19	26.4
	Unemployed	10	13.9

T 11 44 D . . 0.1

4.3.3.2. Data analysis and results:

The internal reliability of the HEB dimensions and their items were examined using SPSS 25.0. Following the Churchill (1979) procedure, items were included or rejected based on the Corrected Item-Total Correlations (CITC) (Lord & Novick, 2008) and the Cronbach's alpha coefficients (Cronbach & Shavelson, 2004). CITC assesses the level of correlation, and thus the coherence between an item and the other items of the construct (Clark & Watson, 1995; Bagozzi, 1981). Although CITC serves as a criterion for initial assessment and purification, various cut-off points have been adopted (Ladhari, 2010). In this study, a value of 0.4 was considered for CITC (Loiacono, Watson & Goodhue, 2002; Ladhari, 2010).

Applying the 0.4 cut-offs, results showed that the CITC of 109 items was greater than the recommended value of 0.4. On the contrary, 23 items reported a CITC lower than 0.4. However, it was decided that 3 of the 23 items would not be removed due to their importance and would be re-examined at stage 2. Two deleted items were "Accessible labs" and "Well-equipped technological facilities in labs" in the concept of Physical and Support Facilities. Since the comprehensiveness of the model and its evaluation and measurement for practical disciplines were also targeted, these two items were not omitted for measurement in the next step. Another item that was kept was "Informative and helpful website of the university" in the concept of Promotion. In

addition to the importance of this item in many previous articles (i.e. Alcaide-Pulido *et al.*, 2017; Dennis *et al.*, 2016; Goi *et al.*, 2014), due to the special circumstances at the time of this research (Coronavirus pandemic) and the widespread use of E-learning and virtual education around the world, it was decided that this item will also be re-measured.

Regarding the Cronbach's alpha for each construct, and after merging some subdimensions, they all surpassed the 0.7 accessible threshold (Gliem & Gliem, 2003; Guilford, 1965), indicating the acceptable reliability of the HEB model dimensions and sub-dimensions (Table 4.2).

Concept	Factor	Item/Scale	Corrected Item Total Correlation
People	Lecturers	Knowledgeable and informed lecturers	0.565
(21 items)	$(\alpha=0.914)$	Skillful and well trained lecturers	0.624
(21 items)	(a=0.914)	Enthusiastic and innovative lecturers	0.563
		Successful communication of lecturers	0.758
		Reliable and disciplined lecturers	0.756
		Fair and valuable feedback from lecturers	0.784
		Caring and empathetic lecturers	0.744
		Responsive lecturers	0.729
		Courteous and polite lecturers	0.702
		Approachable and accessible lecturers	0.747
		Well dressed and neat appearance of lecturers	0.507
	Staff	Knowledgeable and well trained Staff	0.635
	$(\alpha = 0.896)$	Helpful and conscientious Staff	0.840
	(4 0.090)	Prompt and punctual Staff	0.756
		Caring and friendly Staff	0.701
		Courteous and polite Staff	0.741
		Approachable and accessible Staff	0.715
		Well dressed and neat appearance of Staff	0.577
	Students	Effective interactions and collaborations of students	0.479
	$(\alpha = 0.660)$	Warm and friendly relationships among Students	0.515
		Supportive Students (of community and unions)	0.478
Physical	Environments and	Proper layout of classrooms	0.588
and	Physical Facilities	Appropriate size of classrooms	0.528
Support	$(\alpha = 0.810)$	Pleasant and appealing classrooms	0.558
Facilities		Well-equipped and up-to-date facilities in classrooms	0.587
(14 items)		Comfortable and accessible library and study rooms	0.531
(1 Thems)		Adequate facilities in library and study rooms	0.628
		Accessible labs (Computer labs, Studios, Workshops,)	0.227
		Well-equipped technological facilities in labs	0.166
		Good sport facilities at the campus	0.455
		Visually appealing of physical facilities at the campus	0.567
	Support Facilities for	Available transportation and parking at/around the campus	0.446
	Enhancement	Adequate catering and refectory facilities at the campus	0.655
	Services	Proper healthcare facilities at the campus	0.593
	(α=0.749)	Suitable recreational and leisure facilities at the campus	0.507
Place	Geographic Region	Physical attractiveness (Landscape, Heritage,)	0.479
(15 items)	(α=0.767)	Diverse and welcoming culture	0.537
` ´ ´		Compatible lifestyle	0.514
		Availability of employment or casual jobs (for students)	0.452
		Consistent political procedures	0.491
		Security and safety	0.504
		Availability of public facilities and services	0.513
	Campus	Convenient location of campus	0.443
	(α=0.775)	Accessible location of campus	0.502
		Personal safety on campus	0.475
		Campus security	0.551
		Well-designed and attractive campus	0.411
		Appropriate size (University or Campus)	0.546
		Continuous maintenance and cleanliness	0.472
	· · · · ·	Positive social atmosphere	0.437
Policy	University Strategic	University long-term strategic plans	0.684
(8 items)	Planning &	Clear mission and vision for the university	0.803
	1	Encouraging marketing strategy towards better reputation	0.644

Table 4.2. Corrected Item-Total Correlation and Cronbach's Alpha of refined items/scales

	Organizational Culture ( $\alpha$ =0.857)	Progressive organizational culture and values	0.683
	Management	Strong and supportive leadership	0.603
	(α=0.756)	Commitment to improve service performance	0.676
	(	Competitiveness	0.446
		Proper financing and budgeting	0.554
Price	Cost of Education &	Good value for money	0.665
(4 items)	Financial	Reasonable and affordable tuition fees	0.562
	Circumstances	Available financial aid and scholarship	0.434
	(α=0.729)	Reasonable expenditure (Books, stationery, print costs, canteen,)	0.436
Process	Admission,	Adequate entry qualification requirements	0.415
(10 items)	Registration	Convenient and error-free registration process	0.572
· /	& Administrative	Prompt and on-time services	0.544
	Services	Simple and clear instructions and procedures	0.605
	(α=0.858)	Accurate records	0.655
	(a 01020)	Flexible exchange programs	0.493
		Convenient opening hours	0.592
		Fair and accurate assessment and grading system	0.633
		Valuable and helpful counseling and advising services	0.562
		Reasonable and acceptable graduation time	0.626
Product	Courses, Degrees	Available courses in a wide variety of subjects	0.577
(15 items)	& Programs	Wide range of academic degrees	0.694
	(α=0.754)	Well-known and high-quality programs	0.507
	Content, Resources	Valuable and suitable course content	0.553
	& Practices	Orientation of content (Practical and Theoretical materials)	0.505
	(α=0.756)	Available resource material - Hardcopy	0.434
	(	Available Online resource material	0.538
		Significant scientific events that students can attend	0.572
		Appropriate workload	0.455
		High level of difficulty of homework and projects	0.435
	Teaching &	High quality teaching	0.556
	Assessments	Innovative teaching methods	0.517
	(α=0.772)	Informative and impressive lectures	0.590
		Interactive and entertaining lectures	0.603
		Assessments and feedback of education	0.505
Promotion	University	Convincing recommendation and WOM/EWOM (about the university)	0.476
(14 items)	Communications	Active participation of the university in advertising and social media	0.694
	(α=0.725)	Informative and helpful website of the university	0.255
		Impressive promotional materials of the university (Visual and Vocal)	0.665
	University Social	Social and leisure events and activities	0.752
	Relations (a=0.852)	Appropriate sports activities	0.752
	Image and Identity of	Good reputation of the university	0.499
	the University	Social and academic prestige of the university	0.482
	(a=0.659)	Long history and academic records	0.458
		Distinctive and memorable design (Visual Identity & Brand)	0.433
	Ranking of the	Influential publications and researches	0.498
	University	Academic credit (University league tables and rankings)	0.519
	(α=0.714)	International participation and networking	0.566
<b>D</b> .		Standard population and optimal ratio (Student per faculty, Graduation rate)	0.462
Prospect	Market	Preparation of students for work in the real world	0.673
(11 items)	Considerations	Career opportunities and employability (for/of graduates)	0.582
	(a=0.787)	Effective contact of the university with the market	0.673
	Personal Outcomes	Progress and career success	0.549
	and Achievements	Satisfactory income	0.447
	(a=0.785)	Valuable and practical knowledge	0.495
	l`´´	Intellectual growth and skill development	0.723
		Satisfying relations and friendships	0.618
		Fun and pleasant experiences	0.479
	Commitment and	Willingness to pursuit further education (at the same university)	0.653
	Loyalty ( $\alpha$ =0.782)	Alumni's donation and support	0.653

Thus, reliability coefficient ( $\alpha > 0.7$ ) and coherence between each item and the others (CITC > 0.4) allow reducing the 28 initial sub-dimensions to 21. The initial 132 items were now reduced to 112.

#### 4.3.4. Stage 3: Scale Validation

#### 4.3.4.1. Data collection and participants:

At this stage, the refined questionnaire, comprising the nine key dimensions, 21 sub-dimensions and 112 items resulting from stage 1 was designed using Google forms. Give the pandemic situation and required social distance, the questionnaire was again distributed online, in four public and two private universities with the help of university staff in Iran and Portugal (professional authors' place of work), between April 21 and May 30, 2021. This sample included 424 available students in different fields of study (design, marketing and management, economics and sociology).

As in stage 2, participants were asked to which extent do they agree or disagree that each factor/item help to build a strong and successful higher education brand and they should respond to each item using a five-point Likert-type scale ranging from "1 (strongly disagree)" to "5 (strongly agree)".

The descriptive statistics of the sample (424 students) are summarized in Table 4.3. There were 207 (48.8%) students from Iran (47.2%) and 217 (51.2%) from Portugal. 268 (63.2%) females and 156 (36.8%) males participated in the survey. The respondents' ages were between 18 and 64 years old and 86.3% of respondents were single. Students from different disciplines participated in the survey and 56.6% of them were studying in fields related to design. There were 360 (84.9%) bachelor students and 64 (15.1%) master students. The respondents mainly were second-year students (29.7%) and local ones (59.2%). Most of the respondents were studying at public universities (88.0%) and they mainly were unemployed (54.5%).

Measure	Option	Frequency	Percentage
Country	Iran	207	48.8
	Portugal	217	51.2
Gender	Male	156	36.8
	Female	268	63.2
Age	18-24	288	67.9
-	25-31	83	19.6
	32-38	26	6.1
	39-45	16	3.8
	46 or Over	11	2.6
Marital Status	Single	366	86.3
	Married	56	13.2
	Divorced	2	0.5
Field of Study	Design	240	56.6
	Management	135	31.8
	Economy	28	6.6
	Sociology	21	5.0
Academic Degree	Bachelor	360	84.9
	Master	64	15.1
Current Year of Study	1 (First-year student)	108	25.5
	2 (Second-year student)	126	29.7
	3 (Third-year student)	82	19.3
	4 (Fourth-year student)	108	25.5
Nationality Classification	Local	251	59.2
	National	150	35.4
	International	23	5.4
Types of University	Public	373	88.0
	Private	51	12.0
Employment Status	Employed	85	20.0
-	Freelancer	72	17.0
	Self-Employed	36	8.5
	Unemployed	231	54.5

Table 4.3. Descriptive statistics of the respondents – Iranian and Portuguese Students

# 4.3.4.2. Data analysis and results:

As represented in Figure 3.3, HEB is proposed as a third order hierarchical construct, measured by the nine key dimensions (9P's) which are, in most cases, second-order constructs. For example, the dimension People is measured by three first-order constructs, Lecturers, Staff and Students, which, in turn, are measured by the list of items (Table 4.2). PLS-PM was used to estimate the HEB model due two reasons. First, because it is particularly indicated for complex models, which is the case as we are in the presence of a hierarchical third order model. Secondly, because our data do not follow a normal distribution (Kolmogorov-Smirnov and Shapiro-Wilk's test: p-value = 0.000), a condition to apply covariance based confirmatory factor analysis (Hair, Risher, Sarstedt & Ringle, 2019). In general, the average responses are around 4, meaning agreement with the items. Table 4.4 shows descriptive statistics for each item.

Most agreements were about 2 scales of Product: valuable and suitable course content (mean = 4.69) and high quality teaching (mean = 4.64). It is worth mentioning that the least agreement was also with one of the Product items: high level of difficulty of homework and projects (mean = 3.58). According to the respondents, successful communication of lecturers was also one of the items in People concept, that contribute to the success of the university brand (mean = 4.65). Less agreement were reported with well-dressed and neat appearance of lecturers in People concept (mean = 3.63) and compatible lifestyle of the Place concept (mean = 3.81).

In a recent paper, Crocetta et al. (2021) compare different methods to estimate high order constructs using PLS-PM. One method that is recommended is using the "mixed two step approach", proposed by Cataldo et al. (2017), which was followed in our study. According to the authors, this method is employed in two steps. In step 1, each secondorder construct (for example, People) is linked to its first-order constructs (in this case, Lecturers, Staff and Students) and it is measured using their indicators (in this example, the 21 items listed in Table 4.2). This procedure will allow to estimate scores for the firstorder constructs (Lecturers, Staff and Students). Then these scores will be used as indicators of the second-order construct, consubstantiating step 2. This procedure was implemented to seven key dimensions (People, Physical and support facilities, Place, Policy, Product, Promotion and Prospect). Price and Process were the exceptions because they don't have sub-dimensions, i.e., they are first-order constructs. This method also allowed to estimate the scores for the aforementioned seven dimensions that, in an ultimate step, were used as indicators of the final construct of the model, HEB. In the two phases, the constructs were considered as reflective, which means that the indicators (the items) are a consequence of the construct (Hair, Ringle & Sarstedt, 2011).

Table 4.4 shows the results of the final measurement model in stage 1. According to Hair *et al.* (2011), only items with factor loadings equal or higher than 0.707 are individually reliable and should be retained (Table 4.8, in indexes shows the loading for all original items in that step). Then, construct reliability (CR) indexes were analyzed and, as shown in Table 4.4, they exceed the recommended threshold of 0.7 (Hair *et al.*, 2017). To test for convergent validity, the significance of factor loading was first verified. As Table 4.4 shows, all items are statistically significance at a level of 0.05 (all bootstrapping *p*-values = 0.000). Then, the average variance extracted (AVE), that should

surpass 0.5 (Hair *et al.*, 2011), was analyzed, and this requirement is also accomplished with AVEs ranging from 0.597 and 0.853.

	Table 4.4. Descriptive and results				· · · ·			
Concept	Dimensions and Items	Mean	SD	Loading	CR	AVE	t	Sig.
	Lecturers ( $\alpha = 0.888$ )				0.913	0.600		
	LEC1. Successful communication of lecturers	4.65	0.647	0.743			23.180	0.000
	LEC2. Reliable and disciplined lecturers	4.39	0.794	0.782			33.306	0.000
	LEC3. Fair and valuable feedback from lecturers	4.44	0.823	0.784			32.963	0.000
	LEC4. Caring and empathetic lecturers	4.33	0.887	0.716			20.517	0.000
	LEC5. Responsive lecturers	4.39	0.791	0.730			25.237	0.000
	LEC6. Courteous and polite lecturers	4.37	0.821	0.743			24.114	0.000
	LEC7.Approachable and accessible lecturers	4.33	0.803	0.788			35.767	0.000
P	$Staff(\alpha = 0.868)$				0.901	0.604		
People	STF1. Knowledgeable and well trained Staff	4.36	0.756	0.703			20.205	0.000
le	STF2. Helpful and conscientious Staff	4.54	0.651	0.786			29.995	0.000
	STF3. Prompt and punctual Staff	4.43	0.744	0.798			33.325	0.000
	STF4. Caring and friendly Staff	4.36	0.792	0.740			22.507	0.000
	STF5. Courteous and polite Staff	4.45	0.773	0.806			27.912	0.000
	STF6. Approachable and accessible Staff	4.42	0.798	0.784			30.109	0.000
	Students ( $\alpha = 0.767$ )				0.866	0.683		
	STD1. Effective interactions and collaborations of students	4.55	0.699	0.842			51.354	0.000
	STD2. Warm and friendly relationships among Students	4.26	0.843	0.851			41.369	0.000
	STD3. Supportive Students (of community and unions)	4.36	0.805	0.784			28.131	0.000
	Environments & Physical Facilities ( $\alpha = 0.848$ )				0.892	0.623		
	EPF1. Proper layout of classrooms	4.33	0.806	0.725			21.891	0.000
	EPF2. Pleasant and appealing classrooms	4.28	0.825	0.734			28.674	0.000
Ph	EPF3. Well-equipped and up-to-date facilities in classrooms	4.46	0.777	0.826			25.293	0.000
ysi	EPF4. Comfortable and accessible library and study rooms	4.53	0.750	0.797			21.717	0.000
cal	EPF5. Adequate facilities in library and study rooms	4.54	0.717	0.825			32.384	0.000
ane	EPF6. Well-equipped technological facilities in labs	4.59	0.671	0.840			22.513	0.000
SE	EPF7. Visually appealing of physical facilities at the campus	4.10	0.955	0.708			26.167	0.000
Physical and Support Facilities	Support Facilities for Enhancement Services ( $\alpha = 0.785$ )	1.10	0.755	0.700	0.861	0.607	20.107	0.000
or	SFE1. Available transportation and parking at/around the	4.33	1		0.001	0.007	1	
Ē	campus	1.55	0.856	0.766			23.673	0.000
ici1	SFE2. Adequate catering and refectory facilities at the	4.45	1				1	
itie	campus		0.752	0.759			22.406	0.000
ŝ	SFE3. Proper healthcare facilities at the campus	4.35	0.817	0.820			37.505	0.000
	SFE4. Suitable recreational and leisure facilities at the	4.19					1	
	campus		0.851	0.771			34.610	0.000
	Attributes of the Place ( $\alpha = 0.773$ )				0.868	0.687		
	AOP1. Consistent political procedures	4.33	0.827	0.753			28.117	0.000
	AOP2. Security and safety	4.64	0.663	0.730			25.855	0.000
_	AOP3. Availability of public facilities and services	4.46	0.720	0.768			33.452	0.000
Place	Campus Characteristics ( $\alpha = 0.786$ )				0.862	0.609		
ĉe	CMC1. Convenient location of campus	4.40	0.740	0.851	0.000	0.007	25.298	0.000
	CMC2. Accessible location of campus	4.50	0.694	0.861			26.803	0.000
	CMC3. Personal safety on campus	4.58	0.701	0.764			14.898	0.000
	CMC4. Campus security	4.63	0.624	0.724			23.025	0.000
	University Strategic Planning ( $\alpha = 0.848$ )		0.02.	0.72	0.898	0.687	201020	0.000
	USP1. University long-term strategic plans	4.38	0.762	0.834	0.070	0.007	38.705	0.000
	USP2. Clear mission and vision for the university	4.43	0.759	0.864			50.735	0.000
	USP3. Encouraging marketing strategy towards better	4.34						
Po	reputation	1.5 1	0.786	0.781			25.396	0.000
Policy	USP4. Progressive organizational culture and values	4.35	0.745	0.834			41.040	0.000
~	Management ( $\alpha = 0.820$ )				0.894	0.737		
	MNG1. Strong and supportive leadership	4.43	0.766	0.814			31.876	0.000
	MNG2. Commitment to improve service performance	4.56	0.681	0.886	1	1	60.979	0.000
	MNG3. Proper financing and budgeting	4.52	0.704	0.804	İ	İ	34.331	0.000
	Cost of Education & Financial Circumstances ( $\alpha = 0.808$ )				0.874	0.634		
	CST1. Good value for money	4.44	0.712	0.780			31.702	0.000
$\mathbf{P_{I}}$	CST2. Reasonable and affordable tuition fees	4.47	0.827	0.802			27.029	0.000
Price	CST3. Available financial aid and scholarship	4.56	0.745	0.805			33.043	0.000
	CST4. Reasonable expenditure (Books, stationery, print costs,	4.38			1	1		· · · · ·
	canteen,)		0.874	0.797			32.756	0.000
	Registration & Administrative Services ( $\alpha = 0.915$ )		ſ		0.930	0.597	[	
	RAS1. Convenient and error-free registration process	4.46	0.743	0.768			25.834	0.000
	RAS2. Prompt and on-time services	4.57	0.670	0.797			35.561	0.000
	RAS3. Simple and clear instructions and procedures	4.50	0.731	0.796			27.243	0.000
$\mathbf{Pr}$	RAS4. Accurate records	4.33	0.830	0.773			28.453	0.000
Process	RAS5. Flexible exchange programs	4.27	0.866	0.701	1	1	23.236	0.000
SSS	RAS6. Convenient opening hours	4.39	0.779	0.803			40.078	0.000
	RAS7. Fair and accurate assessment and grading system	4.48	0.799	0.789			30.912	0.000
	RAS8. Valuable and helpful counseling and advising	4.41						
	services		0.750	0.753			27.684	0.000
	RAS9. Reasonable and acceptable graduation time	4.46	0.707	0.729			28.330	0.000
	Courses, Degrees & Programs ( $\alpha = 0.748$ )				0.873	0.633		
οrΡ	CDP1. Available courses in a wide variety of subjects	4.29	0.975	0.792			22.100	0.000
	* *							

Table 4.4. Descriptive and results of the measurement model (Step 1)

	CDP2. Wide range of academic degrees	4.39	0.838	0.830			32.996	0.000
	CDP3. Well-known and high-quality programs	4.48	0.030	0.810			38.068	0.000
	Content, Resources & Practices ( $\alpha = 0.806$ )	7.70	0.772	0.010	0.851	0.656	56.000	0.000
	CRP1. Valuable and suitable course content	4.69	0.601	0.788	0.051	0.050	32.800	0.000
	CRP2. Orientation of content (Practical and Theoretical materials)	4.56	0.696	0.802			37.559	0.000
	CRP3. Available Online resource material	4.60	0.641	0.302			23.895	0.000
	CRP4. Significant scientific events that students can attend	4.50	0.681	0.712			16.684	0.000
	Teaching & Assessments ( $\alpha = 0.884$ )	1.50	0.001	0.712	0.915	0.683	10.001	0.000
	TEA1. High quality teaching	4.64	0.662	0.799	0.715	0.005	30.558	0.000
	TEA2. Innovative teaching methods	4.60	0.002	0.860			38.752	0.000
	TEA3. Informative and impressive lectures	4.48	0.727	0.848			42.869	0.000
	TEA4. Interactive and entertaining lectures	4.39	0.818	0.814			33.532	0.000
	TEA5. Assessments and feedback of education	4.45	0.785	0.810			34.423	0.000
	University Communications ( $\alpha = 0.738$ )	7.75	0.705	0.010	0.851	0.656	54.425	0.000
	COM1. Active participation of the university in advertising	4.01		1	0.001	0.050		
	and social media	4.01	0.950	0.826			41.841	0.000
	COM2. Informative and helpful website of the university	4.55	0.686	0.739			28.258	0.000
	COM3. Impressive promotional materials of the university	4.07	0.960	0.770			27.282	0.000
	(Visual and Vocal)		0.900	0.770			27.202	0.000
	University Social Relations ( $\alpha = 0.824$ )				0.919	0.850		
	SOR1. Social and leisure events and activities	4.27	0.820	0.928			116.222	0.000
Pro	SOR2. Appropriate sports activities	4.11	0.938	0.916			68.236	0.000
Promotion	Image & Identity of the University ( $\alpha = 0.768$ )				0.867	0.687		
otic	IMI1. Good reputation of the university	4.56	0.695	0.834			44.430	0.000
on	IMI2. Social and academic prestige of the university	4.59	0.695	0.854			41.524	0.000
	IMI3. Distinctive and memorable design (Visual Identity & Brand)	4.28	0.832	0.732			26.171	0.000
	Ranking of the University ( $\alpha = 0.836$ )				0.891	0.673		
	RNK1. Influential publications and researches	4.46	0.716	0.827	0.071	0.075	34.157	0.000
	RNK2. Academic credit (University league tables and rankings)	4.47	0.804	0.854			40.924	0.000
	RNK3. International participation and networking	4.53	0.762	0.858			46.260	0.000
	RNK4. Standard population and optimal ratio (Student per							
	faculty, Graduation rate,)	4.34	0.849	0.736			21.880	0.000
	Market Considerations ( $\alpha = 0.913$ )				0.945	0.853		
	MRK1. Preparation of students for work in the real world	4.61	0.739	0.935			99.059	0.000
	MRK2. Career opportunities and employability (for/of graduates)	4.60	0.743	0.928			77.558	0.000
	MRK3. Effective contact of the university with the market	4.60	0.701	0.907			52.661	0.000
_	Personal Outcomes & Achievements ( $\alpha = 0.894$ )				0.926	0.758		
Prospect	POA1. Progress and career success	4.53	0.721	0.855	0.7 - 0	0.7.2.0	61.685	0.000
spe	POA2. Satisfactory income	4.39	0.834	0.803			36.005	0.000
čt	POA3. Valuable and practical knowledge	4.61	0.669	0.840			51.511	0.000
	POA4. Intellectual growth and skill development	4.61	0.644	0.867			51.131	0.000
	Commitment & Loyalty ( $\alpha = 0.702$ )				0.870	0.771		
	CML1. Willingness to pursuit further education (at the same university)	4.31	0.878	0.874	0.070	0.7.72	49.776	0.000
	CML2. Alumni's donation and support	4.18	0.896	0.882			53.888	0.000
	Civitizz, r training 5 donation and support	7.10	0.070	0.002	1	I	55.000	5.000

For discriminant validity analysis, the Fornell and Larcker (1981) criterion was first verified, under which the square root of each AVE should exceed the correlations between each construct and the other constructs. Table 4.9 in indexes, shows that this is verified for all first order constructs. This Table also present the Heterotrait-Monotrait Ratio (HTMT) values that should not exceed the threshold of 0.9, but they are better when lower than 0.85. (Henseler, Ringle & Sarstedt, 2015). All HTMTs fulfill this criterion with the exception of one, for the pair "Market considerations" – "Personal outcomes & Achievements" that slightly exceeds this value (Henseler *et al.*, 2015). So, the conclusion is that each construct reports strong discriminant validity.

Once concluded step 1 of the "mixed two step approach", the scores for the latent constructs were saved as new variables and used to estimate the seven second order constructs (People, Physical and support facilities, Place, Policy, Product, Promotion and Prospect) as well as the third order construct, HEB. Table 4.5 shows the results for the

second-order constructs. Results in Table 4.5 show that the second order constructs report adequate levels of reliability, individual (since all loadings exceed 0.707), and construct reliability (since the CRs are all larger than 0.7), and convergent validity (since all loadings are statistically significant and AVEs surpass 0.5). Cronbach's coefficient alpha estimates for the dimensions (the second-order constructs) of HEB ranged between 0.720 and 0.846, exceeding the minimum value of 0.70 (Hair *et al.*, 2017).

Table 4.5. Results for the second order constructs (Step 2)							
Dimensions and Sub-dimensions	Loadings	CR	AVE	t	Sig.		
<b>People</b> ( $\alpha = 0.785$ )		0.875	0.701				
Lecturers	0.871			61.882	0.000		
Staff	0.882			63.864	0.000		
Students	0.754			19.276	0.000		
Physical and Support Facilities ( $\alpha = 0.720$ )		0.877	0.781				
Environments & Physical Facilities	0.886			78.740	0.000		
Support Facilities for Enhancement Services	0.882			68.890	0.000		
<b>Place</b> ( $\alpha = 0.770$ )		0.897	0.813				
Attributes of the Place	0.901			89.973	0.000		
Campus Characteristics	0.902			96.811	0.000		
<b>Policy</b> ( $\alpha = 0.807$ )		0.912	0.838				
University Strategic Planning	0.911			81.333	0.000		
Management	0.920			91.950	0.000		
<b>Product</b> ( $\alpha = 0.824$ )		0.896	0.743				
Courses, Degrees & Programs	0.755			25.738	0.000		
Content, Resources & Practices	0.907			86.189	0.000		
Teaching & Assessments	0.915			110.262	0.000		
<b>Promotion</b> ( $\alpha = 0.846$ )		0.897	0.684				
University Communications	0.806			37.275	0.000		
University Social Relations	0.817			45.354	0.000		
Image & Identity of the University	0.840			48.351	0.000		
Ranking of the University	0.845			43.292	0.000		
<b>Prospect</b> ( $\alpha = 0.822$ )		0.895	0.742				
Market Considerations	0.899			85.275	0.000		
Personal Outcomes & Achievements	0.927			113.836	0.000		
Commitment & Loyalty	0.749			21.167	0.000		

Findings in Table 4.6 show that the second-order constructs also fulfill the discriminant validity criteria. Indeed, the Fornell and Larcker (1981) criterion is verified because the square root of each AVE exceeded the correlations between each construct and the other constructs. In addition, almost all HTMT values are lower than 0.85, with the exception of one, for the pair "Product" – "Prospect" that somewhat exceeds the threshold of 0.9.

	People	Physical & Support facilities	Place	Policy	Product	Promotion	Prospect
People	0,837*						
Physical & Support facilities	0,597  0.791**	0,884*					
Place	0,509  0.653**	0,569  0.765**	0,902*				
Policy	0,564  0.708**	0,656  0.860**	0,611  0.774**	0,916*			
Product	0,582  0.716**	0,648  0.838**	0,531  0.662**	0,687  0.830**	0,862*		
Promotion	0,518  0.637**	0,649  0.832**	0,534  0.662**	0,647  0.783**	0,725  0.866**	0,827*	
Prospect	0,488  0.607**	0,605  0.783**	0,534  0.669**	0,652  0.798**	0,780  0.936**	0,690  0.828**	0,862*

Table 4.6. Correlations among second order constructs

\*Diagonal values correspond to the squared root value of AVE for each latent variable in order to assess the Fornell-Larker's criterion. \*\*HTMT values.

Finally, Table 4.7 presents the results for the final construct, HEB. The nine dimensions present loadings higher than 0.707 and are significantly associated to the construct (all bootstrapping p-values = 0.000). Notably, HEB is highly manifested in the dimensions Product (loading = 0.880) and Process (loading = 0.868). Dimensions with lower impact are People (loading = 0.724), Place (loading = 0.743) and Price (loading = 0.777). The CR and the AVE report the desired values and exceed 0.7 and 0.5, respectively.

Dimensions and Sub-dimensions	Loadings	CR	AVE	t	Sig.
HEB ( $\alpha = 0.935$ )		0.946	0.659		
Product	0.880			67.593	0.000
Process	0.868			60.512	0.000
Policy	0.843			51.325	0.000
Prospect	0.834			42.412	0.000
Promotion	0.815			33.121	0.000
Physical and Support Facilities	0.810			39.972	0.000
Price	0.777			28.887	0.000
Place	0.743			23.973	0.000
People	0.724			24.455	0.000

**Table 4.7.** Results for the third order constructs (HEB)

# 4.4. Discussion

The results provide empirical evidence that there are nine key concepts (People, Physical and support facilities, Place, Policy, Price, Process, Product, Promotion and Prospect) of HEB, with 21 sub-dimensions. The results of the structural model test determine the relationship between these nine concepts (9P's) and 21 sub-dimensions and the relationship between 9P's and overall HEB. The statistically significant evidence in the data analysis indicates that the proposed model of branding in the higher education domain is valid. The results of this study increase support for the use of a hierarchical structure, and conceptualize and measure branding in the context of higher education. Among the 9P's of marketing and branding, the previous research (Ivy, 2008; Londre, 2017; Mallik & Achar, 2020; Soetan, 2018) referred to seven of them, although sporadically with different expressions and not all together, but two of them were less examined, Policy and Prospect. The results of this study showed that these two concepts had a high impact after Product and Process. This shows the importance of influencing university strategies, management and planning to achieve successful brand. Also, paying attention to the needs of the labor market and constantly measuring the achievements of alumni can play an important role in the branding process of the university. Exceeding the proposed models (i.e. Alcaide-Pulido *et al.*, 2017; Kaushal & Ali, 2019), this model has approached the goal of comprehensiveness in the field of HEB. Although there have been studies related to higher education and branding, few authors studied service branding in educational sector (Endo *et al.*, 2019). This model has taken into account the specific characteristics of educational services and experiences that can affect the success of a university brand.

#### 4.5. Conclusion

Following the procedures proposed by Churchill (1979), this research provides a reliable conceptualization and valid scales for HEB. A three-stage study was conducted (stage 1 in Chapter 3 and stages 2 and 3 in Chapter 4) and 87 items, 21 sub-dimension and nine dimension received support. The proposed model seeks to fill the existing gaps in the HEB literature (Kaushal & Ali, 2019; Wilson & Elliot, 2016) by measuring a model for the study of the branding in the higher education segment. The purpose of this study is to test the proposed HEB model by developing scales for measuring branding in the higher education context.

Reliability and validity of the measurement scales are established using a survey and analysis of data from 424 students and indicates that the proposed model fits the data well. This study extends the literature on HEB by providing a comprehensive model and measurement scale and fills the conceptual void existing in this area. Eventually, the main hypothesis supported evidence that HEB is positively related to 9P's. This means that HEB framework based on service design process, involving customers' needs and expectations (Stickdorn *et al.*, 2011), can lead to provide distinctive educational services and create a successful brand for universities. Whilst this proposed model has emerged from deep investigations in the literature of HEB, educational services and experiences, the empirical and theoretical basis for developing higher education brands have potential yet which can be investigated. Further work is required to explore the extent to which other universities adopt this branding model, in different fields of study and test it with other stakeholders and partners such as applicants, alumni, university administrators, academic staff, employers and clients or even parents.

The proposed model has wide application for practitioners as they constantly strive to provide high quality educational experiences and allows the analysis of branding at different stages of pre-experience, experience and post-experience. Therefore, the study of HEB can provide universities and higher education institutions with a powerful measurement tool to obtain their competitive advantages and reach a strong and successful brand.

The results of this study showed that preparation of students for work in the real world and career opportunities and employability for alumni, play an important role in the success of a higher education brand. Thus, it is necessary for universities to consider the post-experience stage of educational services in their branding process. On the other hand, the high impact of factors such as social, leisure and sports activities and events showed that universities should provide such services in addition to educational services. Accordingly, the need to make a balance between the requirements of students and market needs (Hall & Witek, 2016) and equip students with relevant skills (Uncles, 2018), as well as attention to emotional dimensions of brand along with functional ones (Palmer, Koenig-Lewis & Asaad, 2016) are challenges that can affect the success and strength of a higher education brand.

However, this study provides a number of important factors to the literature of branding in the higher education context, there are certain limitations. The explanatory factor analysis (EFA) was not used at first step of scale refinement due to the reduced sample size. Normally the ratio of respondents to variables should be at least 10:1 and that the factors are considered to be stable and to cross-validate with a ratio of 30:1 (Yong & Pearce, 2013). However, as previously explained, due to the prevalence of coronavirus at the time of this study and the lack of access to large sample size, the first stage of scale refinement was performed with 72 fresh alumni.

Although HEB model provides clearly structured and inclusive dimensions of HEB, there may be some other dimensions or scales that have not been identified in the conceptual model of this study. Future researchers should seek to identify additional factors that significantly impact the HEB that have not been identified in this study. Since the structure of HEB model was measured only in six universities in two countries, with special limitations of the pandemic period, to ensure the generalizability of the HEB scales, future research should expand sample sizes and explore them in different educational and cultural contexts.

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# Chapter 5. GENERAL CONCLUSION

The main purpose of this thesis was to create a holistic and comprehensive model considering service design process and develop scale for HEB. Although higher education institutions and universities increasingly apply branding to compete for reputation, resources and to attract students and staff, academic and empirical papers, clear models and theoretical frameworks about branding in the higher education context as a service are still scarce. This research began by providing an overview of HEB following a service design approach to find significant gaps and deficiencies in the literature. In the following, this research explored concepts, dimensions, and scales of HEB to create a holistic and comprehensive conceptual model, using a service design process cultivated through branding and marketing literature. For this purpose, while supporting the nature of educational experiences and services, this research integrated contributions from different fields of HEB and educational services. Eventually, to empirically test the model, the proposed scales of the HEB were refined and validated.

#### 5.1. Theoretical Contribution

This thesis contributes to theory by using a holistic approach to branding in higher education context with regard to the educational service experiences. For this purpose, three coherent studies were conducted with related objectives. In this way, first, the HEB literature was reviewed and the role of the service design process in the development of HEB was studied. Second, the HEB model was created based on the different stages of the educational service experiences and the needs of students, applicants, alumni, as well as the expectations of the labour market. Finally, the application of this model in HEB was evaluated.

The first study provided further insight into the role of service branding within the higher education sector by developing awareness of the service approach for educational experiences as part of the HEB process. This study linked branding, service, and education and added knowledge about the relationship between branding and service approach in the higher education sector, at the same time, identified gaps and deficiencies that still exist in the field of educational services branding. This review established a foundation for future research to explore the concept of service design concerning brand and customer experience.

The second study was conducted in line with the first study to improve some of the gaps raised in the first study such as lacking studies on branding in higher education as a

service and comprehensive model appropriate to the nature of education and experience of educational services (Kaushal & Ali, 2019; Trischler & Scott, 2016; Williams & Omar, 2014). The originality of the second study was that it comprehensively considers many aspects of the higher education brand as a long-term and unique experience and aggregated many approaches, models and frameworks. The findings of this study provide further insights into the significance of branding within the higher education context and provided a holistic model to develop a successful brand in the higher education context.

The third study developed a reliable model for HEB, composing of dimensions and sub-dimensions. This study extended the literature on HEB and measurement scales and filled the empirical void existing in this area. The main hypothesis supported evidence that HEB is positively related to nine key concepts (People, Physical and support facilities, Place, Policy, Price, Process, Product, Promotion and Prospect). By using a survey and analysis of data from 424 students of four public and two private universities in Iran and Portugal, reliability and validity of the measurement scales were established and indicated that the proposed model fits the data well. This means that HEB model based on service design can lead to provide distinctive educational services and create a successful brand for universities.

#### 5.2. Managerial Implications

One of the most important and practical implications of this research for branding in the higher education context is the acknowledgment of the appropriateness of the use of service approach in three stages of pre-experience, experience and post-experience of educational services, along with the importance of considering the expectations of the labour market and education achievements in the real world. According to the findings of this thesis, it can be argued that the followings are the most considerable aspects to develop a model for HEB:

Despite many studies relating to higher education and branding, it is still claimed that few authors have studied service branding in educational sector (Endo *et al.*, 2019). However, branding in higher education as an area that may be controversial (Sultan & Wong, 2014), plays a prominent role in the marketing strategies of educational institutions (Dholakia & Acciardo, 2014).

Although services marketing has developed to help service firms in delivering quality services and sustaining a competitive advantage (Ng & Forbes, 2009), marketing in the service sector is challenging due to the unique characteristics of the service (Mourad *et al.*, 2011) and branding as a practices of marketing (Chapleo, 2015) is still young in educational services (Shahaida *et al.*, 2009).

Higher education services should be considered as an exception in branding context for various reasons such as complexity of education organizations (Chapleo, 2010; Wæraas & Solbakk, 2009), variety of provided services (Chapleo, 2015; Chalcraft *et al.*, 2015), uniqueness of education as a service (Pinar *et al.*, 2011), assessing the students as a part of the service outcome (Ng & Forbes, 2009; Brennan & Bennington, 2000; Sharrock, 2000; Delucchi & Korgen, 2002), changing the expectations and perceptions of students of educational service over time (Letcher & Neves, 2010; Sander *et al.*, 2000) and the complexity of the process of the branding initiative (Alam, *et al.*, 2019).

Regardless of the equivocal argument of whether or not students should be treated as customers (Watjatrakul, 2014), universities should address the educational experiences and student requirements (Arambewela & Hill, 2009; Bowden & D'Alessandro, 2011; DeShields *et al.*, 2005), considering the three stages of the customer experience, prepurchase or pre-service, purchase or actual service and post-purchase or post-service (Khanna *et al.*, 2014; Stickdorn *et al.*, 2011), as well as meeting the expectations of the labour market (Hall & Witek, 2016).

A strong and successful brand as a powerful differentiator for universities, requires a holistic and comprehensive model. Although universities have potential for strong brands but there is a lack of a model that captures their essence (Chapleo, 2015) and clear brand management models to build a brand a strategic administrative goal, are still lacking (Williams Jr & Omar, 2014).

The proposed conceptual model which adapted several concepts of HEB and educational services, were analysed using quantitative methods and found to be statistically significant, meaning HEB is respectively related to Product (content and pedagogy), Process (internal process and service delivery), Policy (strategy of university management), Prospect (expectations and service outcomes), Promotion (university communication, Image, identity and ranking), Physical and support facilities (infrastructures, environments and equipments), Price (financial aspects), Place (location: country, city and campus), and People (main partners) (Figure 5.1 in Appendix 5).

In summary, the higher education branding model provides a complete set of items to measure the brand strength and success of universities (whether public and private). Aligning the expectations of students (in different stages of educational experiences) and the labour market (real world) gives directions to universities to develop valuable experiences with long-term impacts and help them to be distinctive enough and differentiate themselves from competitors and thus real branding will take place.

#### 5.3. Limitations and Suggestions

Although in this research, an attempt was made to take a comprehensive approach to HEB, it has some limitations that can be remedied by future studies. Despite identifying diverse and extensive items of branding in the higher education context, there may be some other dimensions or scales that have not been considered in the model. Future researchers should seek to determine additional items that significantly impact the HEB. Since the structure of the proposed model was measured only in six universities in two countries, with special limitations of the pandemic period, to ensure the generalizability of the scales, future research could focus on expanding sample sizes and examining the model in different educational and cultural contexts.

An extension of this thesis could include a broader study, by collecting data of students in different fields of study and considering the views of university applicants, managers and administrators, academic staff, as well as employers and clients of alumni.

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# **APPENDIXES**

### Chapter 4 – Stage 2 Questionnaire Iranian Fresh Alumni– English Version

#### "A survey of Alumni' opinions on Higher Education Branding"

At the Research Centre for Tourism, Sustainability and Well-being (CinTurs), The University of Algarve.

Dear Participant,

You are invited to take part in this survey in the field of Higher Education Branding. This will involve a questionnaire, where you will be requested to present your views and experiences concerning factors/items which are important in higher education branding.

What this Research is about?

This research presents the first conceptual model of Higher Education Branding and identifies and categorizes the items and factors that are effective in the performance and understanding of the University Brand.

The aim of this survey is to validate these scales.

Your answers will not be used for any other purpose than for our academic research and they will be processed anonymously. For any questions related to this study, please send an email to: <u>armitaserajzahedi@gmail.com</u>

*Thank you so much for your cooperation, Research Team.* 

Imagine that a University/Higher Education Institution tends to be a Strong and Successful Brand. Then, please choose to what extent do you agree or disagree with the following factors/items to be considered.

<b>People (Main Partners)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongl Agree (5)
Lecturers:					
1. Knowledgeable and informed lecturers	0	0	0	0	0
2. Impressive experience and expertise of lecturers	0	0	0	0	0
3. Reputable and famous lecturers	0	0	0	0	0
4. Skillful and well trained lecturers	0	0	0	0	0
5. Enthusiastic and innovative lecturers	0	0	0	0	0
6. Successful communication of lecturers	0	0	0	0	0
7. Reliable and disciplined lecturers	0	0	0	0	0
8. Fair and valuable feedback from lecturers	0	0	0	0	0
9. Caring and empathetic lecturers	0	0	0	0	0
10. Responsive lecturers	0	0	0	0	0
11. Courteous and polite lecturers	0	0	0	0	0
12. Approachable and accessible lecturers	0	0	0	0	0
13. Well dressed and neat appearance of lecturers	0	0	0	0	0
Staff:					
14. Knowledgeable and well trained Staff	0	0	0	0	0
15. Helpful and conscientious Staff	0	0	0	0	0
16. Prompt and punctual Staff	0	0	0	0	0
17. Caring and friendly Staff	0	0	0	0	0
18. Courteous and polite Staff	0	0	0	0	0
19. Approachable and accessible Staff	0	0	0	0	0
20. Well dressed and neat appearance of Staff	0	0	0	0	0
Students:	0	0	0	0	Ũ
21. Positive attitude of Students towards learning	0	0	0	0	0
22. Effective interactions and collaborations of					
Students	0	0	0	0	0
23. Students' commitment to study and practice	0	0	0	0	0
24. Warm and friendly relationships among Students	0	0	0	0	0
25. Supportive Students (of community and unions)	0	0	0	0	0
<b>Physical and Support Facilities</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strong Agree (5)
Environments and Physical Facilities:					
26. Proper layout of classrooms	0	0	0	0	0
27. Appropriate size of classrooms	0	0	0	0	0
			0	0	0
28. Necessary amenities in classrooms	0	0	0		0
<ol> <li>Necessary amenities in classrooms</li> <li>Pleasant and appealing classrooms</li> </ol>	0	0	0	0	0
28. Necessary amenities in classrooms				0	0
<ol> <li>Necessary amenities in classrooms</li> <li>Pleasant and appealing classrooms</li> <li>Well-equipped and up-to-date facilities in</li> </ol>	0	0	0		
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and</li> </ol>	0	0	0	0	0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> </ol>	0 0 0	0 0 0	0 0 0	0	0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios,</li> </ol>	0 0 0 0	0 0 0	0 0 0	0	0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> </ol>	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> <li>35. Well-equipped technological facilities in labs</li> </ol>	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> <li>35. Well-equipped technological facilities in labs</li> <li>36. Suitable and available accommodation and</li> </ol>	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> <li>35. Well-equipped technological facilities in labs</li> <li>36. Suitable and available accommodation and dormitory at the campus</li> </ol>	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> <li>35. Well-equipped technological facilities in labs</li> <li>36. Suitable and available accommodation and dormitory at the campus</li> <li>37. Proper facilities in accommodation</li> </ol>	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0		0 0 0 0 0 0 0	0 0 0 0 0 0
<ol> <li>28. Necessary amenities in classrooms</li> <li>29. Pleasant and appealing classrooms</li> <li>30. Well-equipped and up-to-date facilities in classrooms</li> <li>31. Comfortable and accessible library and study rooms</li> <li>32. Accessible bibliographic resources at library and study rooms</li> <li>33. Adequate facilities in library and study rooms</li> <li>34. Accessible labs (Computer labs, Studios, Workshops,)</li> <li>35. Well-equipped technological facilities in labs</li> <li>36. Suitable and available accommodation and dormitory at the campus</li> </ol>	0 0 0 0 0 0 0 0 0			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0

Support Facilities for Enhancement Services:					
40. Available transportation and parking at/around the					
campus	0	0	0	0	0
41. Adequate catering and refectory facilities at the	0	0	0	0	0
campus           42. Proper healthcare facilities at the campus	0	0	0	0	0
42. Proper heating are facilities at the campus 43. Suitable recreational and leisure facilities at the	0	0	0	0	0
campus	0	0	0	0	0
<u>^</u>					
Place (Location: country, city and campus)	Strongly				Strongly
To which extent do you agree/disagree that the	Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Agree (5)
following factors/items help to build a strong and	(1)	(2)	(3)	(4)	(3)
successful higher education brand?					
Geographic Region (Country and City):					
44. Good geographic location	0	0	0	0	0
45. Physical attractiveness (Landscape, Heritage,)	0	0	0	0	0
46. Diverse and welcoming culture	0	0	0	0	0
<ul><li>47. Compatible lifestyle</li><li>48. Affordable cost of living</li></ul>	0	0	0	0	0
48. Anordable cost of hving 49. Availability of employment or casual jobs	0	0	0	0	0
50. Consistent political procedures	0	0	0	0	0
51. Security and safety	0	0	0	0	0
52. Availability of public facilities and services	0	0	0	0	0
Campus:	0	0	0	0	0
53. Convenient location of campus	0	0	0	0	0
54. Accessible location of campus	0	0	0	0	0
55. Personal safety on campus	0	0	0	0	0
56. Campus security	0	0	0	0	0
57. Well-designed and attractive campus	0	0	0	0	0
58. Appropriate size (University or Campus)	0	0	0	0	0
59. Continuous maintenance and cleanliness	0	0	0	0	0
60. Positive social atmosphere	0	0	0	0	0
61. Valuable cultural diversity	0	0	0	0	0
	~ .				~ .
Policy (Strategy of university management)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
To which extent do you agree/disagree that the	(1)	(2)	(3)	(4)	(5)
following factors/items help to build a strong and			. ,		
successful higher education brand? University Strategic Planning:					
62. University long-term strategic plans	0	0	0	0	0
63. Clear mission and vision for the university	0	0	0	0	0
64. Encouraging marketing strategy towards better			-		-
reputation					
Organizational Culture:					
65. Progressive organizational culture and values	0	0	0	0	0
66. Student centeredness	0	0	0	0	0
Management:		~			
67. Strong and supportive leadership	0	0	0	0	0
68. Commitment to improve service performance	0	0	0	0	0
69. Competitiveness	0	0	0	0	0
70. Proper financing and budgeting	0	0	0	0	0
Dries (Finance)	Strongly				Strongly
Price (Finance)	Disagree	Disagree	Neutral	Agree	Agree
To which extent do you agree/disagree that the following factors/items help to build a strong and	(1)	(2)	(3)	(4)	(5)
successful higher education brand?					
Cost of Education:					
71. Good value for money	0	0	0	0	0
	0	0	0	0	0
72. Reasonable and affordable tuition fees	0				

Financial Circumstances:					
73. Accurate and reliable payment modalities	0	0	0	0	0
74. Available financial aid and scholarship	0	0	0	0	0
75. Reasonable expenditure (Books, stationery, print costs, canteen pricing,)	0	0	0	0	0

<b>Process (Internal Process and Service Delivery)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Admission and Registration:					
76. Fast and easy admission process	0	0	0	0	0
77. Adequate entry qualification requirements	0	0	0	0	0
78. Convenient and error-free registration process	0	0	0	0	0
Administrative Services:					
79. Prompt and on-time services	0	0	0	0	0
80. Simple and clear instructions and procedures	0	0	0	0	0
81. Accurate records	0	0	0	0	0
82. Flexible exchange programs	0	0	0	0	0
83. Convenient opening hours	0	0	0	0	0
84. Fair and accurate assessment and grading system	0	0	0	0	0
85. Valuable and helpful counseling and advising services	0	0	0	0	0
86. Reasonable and acceptable graduation time	0	0	0	0	0
1					
<b>Product (Content and Pedagogy)</b> To which extent do you agree/disagree that the	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
following factors/items help to build a strong and	(1)	(2)	(3)	(4)	(5)
successful higher education brand?					
Courses and Degrees:					
87. Available courses in a wide variety of subjects	0	0	0	0	0
88. Wide range of academic degrees	0	0	0	0	0
Curriculum Planning:	0	0	0	0	0
89. Updated and internationally standard courses	0	0	0	0	0
90. Well-structured curriculum and course design	0	0	0	0	0
91. Well-known and high-quality programs	0	0	0	0	
92. Convenient and explicit schedules (for students)	-				0
	0	0	0	0	0
Content:					
93. Valuable and suitable course content	0	0	0	0	0
94. Orientation of content (Practical and Theoretical materials available to students)	0	0	0	0	0
Teaching:					
95. High quality teaching	0	0	0	0	0
96. Innovative teaching methods	0	0	0	0	0
97. Informative and impressive lectures	0	0	0	0	0
98. Interactive and entertaining lectures	0				
		0	0	0	0
99. Visually appealing presentations Resources:	0	0	0	0	0
100. Available resource material - Hardcopy	0	0	0	0	0
	0	0	0	0	0
101. Available Online resource material 102. Significant scientific events that students can attend	0	0	0	0	0
Practices:					
103. Appropriate workload	0	0	0	0	0
104. High level of difficulty of homework and projects	0	0	0	0	0
Assessments:	5	5	9	5	5
105. Assessments and feedback of education	0	0	0	0	0
	-	-	-	-	-

Promotion (University: Communications,					
Image, Identity and Ranking)	Strongly				Strongly
To which extent do you agree/disagree that the	Disagree	Disagree	Neutral	Agree	Agree
following factors/items help to build a strong and	(1)	(2)	(3)	(4)	(5)
successful higher education brand?					
University Communications:					
106. Convincing recommendation and WOM/EWOM	0	0	0	0	0
(about the university) 107. Active participation of the university in advertising					
and social media	0	0	0	0	0
108. Informative and helpful website of the university	0	0	0	0	0
109. Impressive promotional materials of the university (Visual and Vocal media)	0	0	0	0	0
University Social Relations:					
110. Extensive public relations of the university	0	0	0	0	0
111. Social and leisure events and activities	0	0	0	0	0
112. Appropriate sports activities	0	0	0	0	0
Image and Identity of the University:					
113. Good reputation of the university	0	0	0	0	0
114. Social and academic prestige of the university	0	0	0	0	0
115. Long history and academic records	0	0	0	0	0
116. Distinctive and memorable design (Visual Identity & Brand)	0	0	0	0	0
Ranking of the University:					
117. Influential publications and researches	0	0	0	0	0
118. Academic credit (University league tables and rankings)	0	0	0	0	0
119. International participation and networking	0	0	0	0	0
120. Standard population and optimal ratio (Student per faculty, Graduation rate,)	0	0	0	0	0

<b>Prospect (Expectations)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Market Considerations:					
121. Preparation of students for work in the real world	0	0	0	0	0
122. Career opportunities and employability (for/of graduates)	0	0	0	0	0
123. Effective contact of the university with the market	0	0	0	0	0
Personal Outcomes and Achievements (of Graduated Stud	dents/Alum	ni):			
124. Progress and career success	0	0	0	0	0
125. Creditable degree	0	0	0	0	0
126. Satisfactory income	0	0	0	0	0
127. Valuable and practical knowledge	0	0	0	0	0
128. Intellectual growth and skill development	0	0	0	0	0
129. Satisfying relations and friendships	0	0	0	0	0
130. Fun and pleasant experiences	0	0	0	0	0
Commitment and Loyalty:					
131. Willingness to pursuit further education (at the same university)	0	0	0	0	0
132. Alumni's donation and support	0	0	0	0	0
**					
Personal Information					
Place of Residence: (Country / City)					
Field of study:					
University/Universities:					
Gender: Male Female					
Age:					
Marital status: Single Married					

 Year of Graduation:

 While you were studying, you were a/an ...

 Local student (same city/town)

 National student (same country)

 International student (other country)

 Employment status:

 Employed

 Freelancer

 Self-employed

 Unemployed

 (If you are employed, it is ... Full-time or Part-time )

(If you have a job/work, it is ... related to your education or not related to your education )

Thank you so much for your time.

### Chapter 4 – Stage 3 Questionnaire Iranian & Portuguese Students – English Version

#### "A survey of Students' opinions on Higher Education Branding"

At the Research Centre for Tourism, Sustainability and Well-being (CinTurs), The University of Algarve.

Dear Participant,

You are invited to take part in this survey in the field of Higher Education Branding. This will involve a questionnaire, where you will be requested to present your views and experiences concerning factors/items which are important in higher education branding.

What this Research is about?

This research presents the first conceptual model of Higher Education Branding and identifies and categorizes the items and factors that are effective in the performance and understanding of the University Brand.

The aim of this survey is to validate these scales.

Your answers will not be used for any other purpose than for our academic research and they will be processed anonymously. For any questions related to this study, please send an email to: <u>armitaserajzahedi@gmail.com</u>

*Thank you so much for your cooperation, Research Team.* 

Imagine that a University/Higher Education Institution tends to be a Strong and Successful Brand. Then, please choose to what extent do you agree or disagree with the following factors/items to be considered.

People (Main Partners)					
To which extent do you agree/disagree that the	Strongly	D:	Nanataral		Strongly
following factors/items help to build a strong and	Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Agree (5)
successful higher education brand?	(1)	(-)	(0)	()	(5)
Lecturers:					
1. Knowledgeable and informed lecturers	0	0	0	0	0
2. Skillful and well trained lecturers	0	0	0	0	0
3. Enthusiastic and innovative lecturers	0	0	0	0	0
4. Successful communication of lecturers	0	0	0	0	0
5. Reliable and disciplined lecturers	0	0	0	0	0
6. Fair and valuable feedback from lecturers	0	0	0	0	0
7. Caring and empathetic lecturers	0	0	0	0	0
8. Responsive lecturers	0	0	0	0	0
9. Courteous and polite lecturers	0	0	0	0	0
10. Approachable and accessible lecturers	0	0	0	0	0
11. Well dressed and neat appearance of lecturers	0	0	0	0	0
Staff:					
12. Knowledgeable and well trained Staff	0	0	0	0	0
13. Helpful and conscientious Staff	0	0	0	0	0
14. Prompt and punctual Staff	0	0	0	0	0
15. Caring and friendly Staff	0	0	0	0	0
16. Courteous and polite Staff	0	0	0	0	0
17. Approachable and accessible Staff	0	0	0	0	0
18. Well dressed and neat appearance of Staff	0	0	0	0	0
Students:					
19. Effective interactions and collaborations of Students	0	0	0	0	0
20. Warm and friendly relationships among Students	0	0	0	0	0
	0				
21. Supportive Students (of community and unions)	0	0	0	0	0
21. Supportive Students (of community and unions)	0	0	0	0	0
	Strongly	-	0	0	O Strongly
Physical and Support Facilities To which extent do you agree/disagree that the	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Physical and Support Facilities	Strongly	-			Strongly
<b>Physical and Support Facilities</b> To which extent do you agree/disagree that the	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Physical and Support Facilities</b> To which extent do you agree/disagree that the following factors/items help to build a strong and	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Physical and Support Facilities</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms         24. Pleasant and appealing classrooms         25. Well-equipped and up-to-date facilities in	Strongly Disagree (1) O	Disagree (2)	Neutral (3) 0 0	Agree (4) 0 0	Strongly Agree (5)
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms         24. Pleasant and appealing classrooms         25. Well-equipped and up-to-date facilities in classrooms         26. Comfortable and accessible library and study rooms	Strongly Disagree (1) O O O	Disagree (2)	Neutral (3) 0 0 0	Agree (4) 0 0 0	Strongly Agree (5)
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms         24. Pleasant and appealing classrooms         25. Well-equipped and up-to-date facilities in classrooms         26. Comfortable and accessible library and study rooms         27. Adequate facilities in library and study rooms         28. Accessible labs (Computer labs, Studios,	Strongly Disagree (1)	Disagree (2)	Neutral (3) 0 0 0	Agree (4)	Strongly Agree (5)
Physical and Support Facilities         To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?         Environments and Physical Facilities:         22. Proper layout of classrooms         23. Appropriate size of classrooms         24. Pleasant and appealing classrooms         25. Well-equipped and up-to-date facilities in classrooms         26. Comfortable and accessible library and study rooms         27. Adequate facilities in library and study rooms         28. Accessible labs (Computer labs, Studios, Workshops,)	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs</li></ul>	Strongly Disagree (1) O O O O O O O O O O	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the</li></ul>	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the campus</li></ul>	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the campus Support Facilities for Enhancement Services: 32. Available transportation and parking at/around the</li></ul>	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the campus 32. Available transportation and parking at/around the campus 33. Adequate catering and refectory facilities at the</li></ul>	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the campus 33. Adequate catering and refectory facilities at the campus 33. Adequate catering and refectory facilities at the campus</li></ul>	Strongly       Disagree         Disagree       (1)         0       0	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
<ul> <li>Physical and Support Facilities To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand? Environments and Physical Facilities: 22. Proper layout of classrooms 23. Appropriate size of classrooms 24. Pleasant and appealing classrooms 25. Well-equipped and up-to-date facilities in classrooms 26. Comfortable and accessible library and study rooms 27. Adequate facilities in library and study rooms 28. Accessible labs (Computer labs, Studios, Workshops,) 29. Well-equipped technological facilities in labs 30. Good sport facilities at the campus 31. Visually appealing of physical facilities at the campus 32. Available transportation and parking at/around the campus 33. Adequate catering and refectory facilities at the</li></ul>	Strongly Disagree (1) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)

<b>Place (Location: country, city and campus)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
successful higher education brand? Attributes of the Place (Country/City):					
36. Physical attractiveness (Landscape, Heritage,)	0	0	0	0	0
<ol> <li>37. Diverse and welcoming culture</li> </ol>	0	0	0	0	0
<ol> <li>S7. Diverse and welcoming current</li> <li>Compatible lifestyle</li> </ol>	0	0	0	0	0
<ol> <li>39. Availability of employment or casual jobs</li> </ol>	0	0	0	0	0
40. Consistent political procedures	0	0	0	0	0
40. Consistent pointeal procedures 41. Security and safety	0	0	0	0	0
41. Security and safety 42. Availability of public facilities and services	0	0	0	0	0
Campus Characteristics:	0	0	0	0	0
43. Convenient location of campus	0	0	0	0	0
44. Accessible location of campus			-	-	-
44. Accessible location of campus 45. Personal safety on campus	0	0	0	0	0
, , , , , , , , , , , , , , , , , , ,	0	0	0	0	0
46. Campus security	0	0	0	0	0
47. Well-designed and attractive campus	0	0	0	0	0
48. Appropriate size (University or Campus)	0	0	0	0	0
49. Continuous maintenance and cleanliness	0	0	0	0	0
50. Positive social atmosphere	0	0	0	0	0
<b>Policy (Strategy of university management)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
University Strategic Planning:					
51. University long-term strategic plans	0	0	0	0	0
52. Clear mission and vision for the university	0	0	0	0	0
53. Encouraging marketing strategy towards better reputation	0	0	0	0	0
54. Progressive organizational culture and values	0	0	0	0	0
Management:					
55. Strong and supportive leadership	0	0	0	0	0
56. Commitment to improve service performance	0	0	0	0	0
57. Competitiveness	0	0	0	0	0
58. Proper financing and budgeting	0	0	0	0	0
<b>Price (Finance)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Cost of Education and Financial Circumstances:		~	-	~	
59. Good value for money	0	0	0	0	0
60. Reasonable and affordable tuition fees	0	0	0	0	0
61. Available financial aid and scholarship	0	0	0	0	0
62. Reasonable expenditure (Books, stationery, print costs, canteen pricing,)	0	0	0	0	0
<b>Process (Internal Process and Service Delivery)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongl Agree (5)
Registration and Administrative Services:					
63. Adequate entry qualification requirements	0	0	0	0	0
64. Convenient and error-free registration process	0	0	0	0	0
65. Prompt and on-time services	0	0	0	0	0
66. Simple and clear instructions and procedures	0	0	0	0	0
67. Accurate records	0	0	0	0	0

68. Flexible exchange programs	0	0	0	0	0
69. Convenient opening hours	0	0	0	0	0
70. Fair and accurate assessment and grading system	0	0	0	0	0
71. Valuable and helpful counseling and advising services	0	0	0	0	0
72. Reasonable and acceptable graduation time	0	0	0	0	0
<b>Product (Content and Pedagogy)</b> To which extent do you agree/disagree that the following factors/items help to build a strong and successful higher education brand?	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Courses, Degrees and Programs: 73. Available courses in a wide variety of subjects	0	0	0	0	0
74. Wide range of academic degrees	0	0	0	0	0
75. Well-known and high-quality programs	0	0	0	0	0
Content, Resources and Practices:	Ű	Ŭ	Ŭ	0	<u> </u>
76. Valuable and suitable course content	0	0	0	0	0
77. Orientation of content (Practical and Theoretical materials available to students)	0	0	0	0	0
78. Available resource material - Hardcopy	0	0	0	0	0
79. Available Online resource material	0	0	0	0	0
80. Significant scientific events that students can attend	0	0	0	0	0
81. Appropriate workload	0	0	0	0	0
82. High level of difficulty of homework and projects	0	0	0	0	0
Teaching and Assessments:					
83. High quality teaching	0	0	0	0	0
84. Innovative teaching methods	0	0	0	0	0
85. Informative and impressive lectures	0	0	0	0	0
86. Interactive and entertaining lectures	0	0	0	0	0
87. Assessments and feedback of education	0	0	0	0	0

Promotion (University: Communications,					
Image, Identity and Ranking)	Strongly				Strongly
To which extent do you agree/disagree that the	Disagree	Disagree	Neutral	Agree	Agree
following factors/items help to build a strong and	(1)	(2)	(3)	(4)	(5)
successful higher education brand?					
University Communications:					
88. Convincing recommendation and WOM/EWOM (about the university)	0	0	0	0	0
89. Active participation of the university in advertising and social media	0	0	0	0	0
90. Informative and helpful website of the university	0	0	0	0	0
91. Impressive promotional materials of the university	0	0	0	0	0
(Visual and Vocal media)	0	0	0	0	0
University Social Relations:					
92. Social and leisure events and activities	0	0	0	0	0
93. Appropriate sports activities	0	0	0	0	0
Image and Identity of the University:					
94. Good reputation of the university	0	0	0	0	0
95. Social and academic prestige of the university	0	0	0	0	0
96. Long history and academic records	0	0	0	0	0
97. Distinctive and memorable design (Visual Identity	0	0	0	0	0
& Brand)				Ť	
Ranking of the University:					
98. Influential publications and researches	0	0	0	0	0
99. Academic credit (University league tables and rankings)	0	0	0	0	0
100. International participation and networking	0	0	0	0	0

101. Standard population and optimal ratio (Student per faculty, Graduation rate,)	0	0	0	0	0
Prospect (Expectations)					
To which extent do you agree/disagree that the following factors/items help to build a strong and	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
successful higher education brand? Market Considerations:	(-)	(-)	(-)	()	(*)
102. Preparation of students for work in the real world	0	0	0	0	0
103. Career opportunities and employability (for/of graduates)	0	0	0	0	0
104. Effective contact of the university with the market	0	0	0	0	0
Personal Outcomes and Achievements (of Graduated Stu-	dents/Alum	ni):			
105. Progress and career success	0	0	0	0	0
106. Satisfactory income	0	0	0	0	0
107. Valuable and practical knowledge	0	0	0	0	0
108. Intellectual growth and skill development	0	0	0	0	0
109. Satisfying relations and friendships	0	0	0	0	0
110. Fun and pleasant experiences	0	0	0	0	0
Commitment and Loyalty:					
111. Willingness to pursuit further education (at the same university)	0	0	0	0	0
112. Alumni's donation and support	0	0	0	0	0
Place of Residence: (Country / City)         Field of study:         Degree: Bachelor       Master         University/Universities:         Gender: Male       Female         Age:         Marital status: Single       Married         Current year of study:         Year 1					
Year 2 Year 3					
Year 4 and above You are a/an Local student (same city/town) National student (same country) International student (other country) Employment status: Employed Freelancer Self-employed Unemployed					
(If you are employed, it is Full-time or Part (If you have a job/work, it is related to your educ		or not rela	ated to your	r educatio	n )

Thank you so much for your time.

# Chapter 4 – Table 8

	Table 4.8. Descriptive and all result		e measu		nodel (	Step 1)		
Concept	Dimensions and Items	Mean	SD	Loading	CR	AVE	t	Sig.
	Lecturers ( $\alpha = 0.896$ )				0.915	0.501		
	LEC1. Knowledgeable and informed lecturers	4.63	0.606	0.694			19.208	0.000
	LEC2. Skillful and well trained lecturers	4.55	0.636	0.661			16.906	0.000
	LEC3. Enthusiastic and innovative lecturers	4.61	0.717	0.669			18.839	0.000
	LEC4. Successful communication of lecturers	4.65 4.39	0.647 0.794	0.743 0.782			23.180 33.306	0.000
	LEC5. Reliable and disciplined lecturers LEC6. Fair and valuable feedback from lecturers	4.39	0.794	0.782			32.963	0.000
	LEC7. Caring and empathetic lecturers	4.33	0.823	0.716			20.517	0.000
	LEC8. Responsive lecturers	4.39	0.791	0.730			25.237	0.000
	LEC9. Courteous and polite lecturers	4.37	0.821	0.743			24.114	0.000
	LEC10.Approachable and accessible lecturers	4.33	0.803	0.788			35.767	0.000
Pe	LEC11.Well dressed and neat appearance of lecturers	3.63	1.108	0.385			7.448	0.000
People	$Staff(\alpha = 0.863)$				0.996	0.554		
Ċ,	STF1. Knowledgeable and well trained Staff	4.36	0.756	0.703			20.205	0.000
	STF2. Helpful and conscientious Staff	4.54	0.651	0.786			29.995	0.000
	STF3. Prompt and punctual Staff	4.43	0.744	0.798			33.325	0.000
	STF4. Caring and friendly Staff	4.36	0.792	0.740			22.507	0.000
	STF5. Courteous and polite Staff	4.45	0.773	0.806			27.912	0.000
	STF6. Approachable and accessible Staff	4.42 3.82	0.798 1.045	0.784			30.109 10.07	0.000 0.000
	STF7. Well dressed and neat appearance of Staff Students ( $\alpha = 0.767$ )	3.82	1.045	0.564	0.866	0.682	10.07	0.000
	STD1. Effective interactions and collaborations of students	4.55	0.699	0.842	0.000	0.002	51.354	0.000
	STD2. Warm and friendly relationships among Students	4.26	0.843	0.851			41.369	0.000
	STD2. warm and mendry relationships among students STD3. Supportive Students (of community and unions)	4.36	0.805	0.784			28.131	0.000
	<i>Environments &amp; Physical Facilities</i> ( $\alpha = 0.890$ )		0.005	0.704	0.910	0.504	20.131	0.000
	Environments & Physical Facilities ( $\alpha = 0.890$ ) EPF1. Proper layout of classrooms	4.33	0.806	0.684	0.910	0.304	21.891	0.000
	EPF1. Proper layout of classrooms EPF2. Appropriate size of classrooms	4.33	0.868	0.636			18.698	0.000
	EPF3. Pleasant and appealing classrooms	4.28	0.825	0.751			28.674	0.000
	EPF4. Well-equipped and up-to-date facilities in classrooms	4.46	0.777	0.764			25.293	0.000
Phy	EPF5. Comfortable and accessible library and study rooms	4.53	0.750	0.721			21.717	0.000
/sic	EPF6. Adequate facilities in library and study rooms	4.54	0.717	0.776			32.384	0.000
al	EPF7. Accessible labs (Computer labs, Studios, Workshops,)	4.50	0.711	0.692			19.103	0.000
and	EPF8. Well-equipped technological facilities in labs	4.59	0.671	0.724			22.513	0.000
nS	EPF9. Good sport facilities at the campus	4.09	0.930	0.624			17.956	0.000
ppc	EPF10. Visually appealing of physical facilities at the	4.10	0.955	0.708			26.167	0.000
rt I	campus		0.755	0.700			20.107	0.000
Physical and Support Facilities	Support Facilities for Enhancement Services ( $\alpha = 0.785$ )				0.861	0.607		
liti.	SFE1. Available transportation and parking at/around the	4.33	0.856	0.766			23.673	0.000
es	campus SFE2. Adequate catering and refectory facilities at the	4.45						<u> </u>
	campus	4.45	0.752	0.759			22.406	0.000
	SFE3. Proper healthcare facilities at the campus	4.35	0.817	0.820			37.505	0.000
	SFE4. Suitable recreational and leisure facilities at the	4.19						
	campus		0.851	0.771			34.610	0.000
	Attributes of the Place ( $\alpha = 0.777$ )				0.838	0.432		
	AOP1. Physical attractiveness (Landscape, Heritage,)	3.96	0.918	0.499			8.314	0.000
	AOP2. Diverse and welcoming culture	4.08	0.847	0.663			15.640	0.000
	AOP3. Compatible lifestyle	3.81	1.095	0.484			8.535	0.000
	AOP4. Availability of employment or casual jobs (for	4.24	0.857	0.642			15.776	0.000
	students) AOP5. Consistent political procedures	4.33	0.827	0.753			28.117	0.000
	AOP6. Security and safety	4.64	0.663	0.730		1	25.855	0.000
P	AOP7. Availability of public facilities and services	4.46	0.720	0.768			33.452	0.000
Place	Campus Characteristics ( $\alpha = 0.829$ )				0.870	0.456	-	
	CMC1. Convenient location of campus	4.40	0.740	0.722			25.298	0.000
	CMC2. Accessible location of campus	4.50	0.694	0.726			26.803	0.000
	CMC3. Personal safety on campus	4.58	0.701	0.627			14.898	0.000
	CMC4. Campus security	4.63	0.624	0.720			23.025	0.000
	CMC5. Well-designed and attractive campus	4.18	0.869	0.623			16.400	0.000
	CMC6. Appropriate size (University or Campus)	4.29	0.778	0.631			17.116	0.000
	CMC7. Continuous maintenance and cleanliness	4.49	0.728	0.678	<b> </b>		20.688	0.000
	CMC8. Positive social atmosphere University Strategic Planning ( $\alpha = 0.848$ )	4.58	0.617	0.665	0.898	0.607	19.319	0.000
	University Strategic Planning ( $\alpha = 0.848$ ) USP1. University long-term strategic plans	4.38	0.762	0.834	0.898	0.687	38.705	0.000
	USP2. Clear mission and vision for the university	4.38	0.762	0.854			50.735	0.000
	USP3. Encouraging marketing strategy towards better	4.43			1			
-0	reputation		0.786	0.781			25.396	0.000
Policy	USP4. Progressive organizational culture and values	4.35	0.745	0.834	L	İ	41.040	0.000
су	Management ( $\alpha = 0.812$ )				0.877	0.643		T
	MNG1. Strong and supportive leadership	4.43	0.766	0.814			31.876	0.000
	Winder. Strong and supportive readership	1.15	01700					
	MNG2. Commitment to improve service performance	4.56	0.681	0.886			60.979	0.000
				0.886 0.690 0.804			60.979 17.581 34.331	0.000 0.000 0.000

 Table 4.8. Descriptive and all results of the measurement model (Step 1)

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ProceCST2. Reasonable and affordable tuition fees4.4CST3. Available financial aid and scholarship4.50CST4. Reasonable expenditure (Books, stationery, print costs, canteen,)4.31Registration & Administrative Services ( $\alpha = 0.916$ )RAS1. Adequate entry qualification requirementsRAS2. Convenient and error-free registration process4.44RAS3. Prompt and on-time services4.55RAS4. Simple and clear instructions and procedures4.56RAS5. Accurate records4.32RAS6. Flexible exchange programs4.22RAS7. Convenient opening hours4.33RAS8. Fair and accurate assessment and grading system4.44RAS9. Valuable and helpful counseling and advising4.4RAS10. Reasonable and acceptable graduation time4.44COUP3. Well-known and high-quality programs4.44CDP1. Available courses in a wide variety of subjects4.22CDP2. Wide range of academic degrees4.33CDP2. Orientation of content (Practical and Theoretical materials)4.56CRP2. Orientation of content (Practical and Theoretical materials)4.56CRP5. Significant scientific events that students can attend4.56CRP5. Significant scientific events that students can attend4.57CRP7. High level of difficulty of homework and projects3.83Teaching & Assessments ( $\alpha = 0.884$ )4.66TEA1. High quality teaching4.66TCP5. Significant scientific events that students can attend4.56CRP6. Appropriate workload4.33TEA3. Informative and hel	7     6       8     0       6     7       0     3       7     9       8     1       6     9       9     8       9     9       6     9       9     0       0     1       15     4       0     8       9     9	0.827 0.745 0.874 0.753 0.743 0.670 0.731 0.830 0.866 0.779 0.799 0.750 0.707 0.707 0.707 0.707 0.975 0.838 0.772 0.601 0.641 0.641 0.681 0.874 1.005 0.727 0.784	0.802           0.805           0.797           0.639           0.797           0.797           0.798           0.701           0.703           0.793           0.794           0.795           0.791           0.701           0.701           0.702           0.792           0.792           0.803           0.792           0.802           0.543           0.744           0.712           0.675           0.457           0.799           0.860	0.852	0.657	27.029 33.043 32.756 16.423 25.834 35.561 27.243 28.453 23.236 40.078 30.912 27.684 28.330 22.100 32.996 38.068 32.800 37.559 11.643 23.895 16.684 19.529	0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000000 0.00000 0.00000000
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	6         8         0         6         7         9         8         1         6         9         9         8         9         9         8         9         9         0         0         1         5         4         0         8         9         0         8         9	0.745 0.874 0.753 0.743 0.670 0.731 0.830 0.779 0.779 0.799 0.750 0.799 0.750 0.790 0.797 0.799 0.750 0.707 0.799 0.750 0.838 0.772 0.601 0.641 0.681 0.874 1.005 0.662 0.727 0.784	0.805 0.797 0.639 0.768 0.797 0.796 0.797 0.796 0.701 0.803 0.789 0.753 0.729 0.753 0.729 0.792 0.830 0.810 0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860	0.852	0.657	33.043 32.756 16.423 25.834 35.561 27.243 28.453 23.236 40.078 30.912 27.684 28.330 22.100 32.996 38.068 32.800 37.559 11.643 23.895 16.684 19.529	0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000
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$ \begin{array}{c} \mbox{CDP1. Available courses in a wide variety of subjects} & 4.29 \\ \mbox{CDP2. Wide range of academic degrees} & 4.39 \\ \mbox{CDP3. Well-known and high-quality programs} & 4.44 \\ \mbox{Content, Resources & Practices ($a$ = 0.806) \\ \mbox{CRP1. Valuable and suitable course content} & 4.66 \\ \mbox{CRP2. Orientation of content (Practical and Theoretical materials)} & 4.56 \\ \mbox{CRP3. Available resource material - Hardcopy} & 4.09 \\ \mbox{CRP4. Available Online resource material} & 4.66 \\ \mbox{CRP5. Significant scientific events that students can attend} & 4.56 \\ \mbox{CRP6. Appropriate workload} & 4.33 \\ \mbox{CRP7. High level of difficulty of homework and projects} & 3.83 \\ \mbox{Teaching & Assessments ($a$ = 0.884) \\ \mbox{TEA1. High quality teaching} & 4.66 \\ \mbox{TEA2. Innovative teaching methods} & 4.66 \\ \mbox{TEA3. Informative and impressive lectures} & 4.43 \\ \mbox{TEA4. Interactive and entertaining lectures} & 4.44 \\ \mbox{TEA4. Interactive and tentraining lectures} & 4.45 \\ \mbox{COM1. Convincing recommendation and WOM/EWOM} \\ \mbox{(about the university)} & 4.00 \\ \mbox{(about the university)} & 4.01 \\ \mbox{COM2. Active participation of the university in advertising} \\ \mbox{and social media} & 4.01 \\ \mbox{COM4. Impressive promotional materials of the university} & 4.55 \\ \mbox{COM4. Impressive and helpful website of the university} \\ \mbox{Visual and Vocal} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \mbox{SOR1. Social and leisure events and activities} & 4.27 \\ \$	9 8 9 6 9 0 0 1 5 4 0 8 9 9 1 5 5 5 6 9 9 1 5 9 9 9 9 9 9 9 9 9 9 9 9 9	0.838 0.772 0.601 0.696 1.017 0.641 0.681 1.005 0.662 0.727 0.784	0.830 0.810 0.788 0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860	0.857	0.469	32.996 38.068 32.800 37.559 11.643 23.895 16.684 19.529	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
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Content, Resources & Practices ( $\alpha = 0.806$ )       4.69         CRP1. Valuable and suitable course content       4.69         CRP2. Orientation of content (Practical and Theoretical materials)       4.51         CRP3. Available resource material - Hardcopy       4.00         CRP4. Available online resource material       4.60         CRP5. Significant scientific events that students can attend       4.53         CRP6. Appropriate workload       4.33         CRP7. High level of difficulty of homework and projects       3.83         TEA0. Informative aching       4.66         TEA2. Innovative teaching       4.66         TEA3. Informative and impressive lectures       4.43         TEA4. Interactive and entertaining lectures       4.43         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.01         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities       4.22	9 6 9 0 0 0 1 5 5 4 0 8 8 9	0.601 0.696 1.017 0.641 0.681 0.874 1.005 0.662 0.727 0.784	0.788 0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860			32.800 37.559 11.643 23.895 16.684 19.529	0.000 0.000 0.000 0.000 0.000 0.000
CRP1. Valuable and suitable course content       4.69         CRP2. Orientation of content (Practical and Theoretical materials)       4.50         CRP3. Available resource material - Hardcopy       4.00         CRP4. Available online resource material       4.60         CRP5. Significant scientific events that students can attend       4.60         CRP5. Significant scientific events that students can attend       4.50         CRP6. Appropriate workload       4.3         CRP7. High level of difficulty of homework and projects       3.83         TEA0. Appropriate workload       4.60         TEA1. High quality teaching       4.66         TEA2. Innovative teaching methods       4.60         TEA3. Informative and impressive lectures       4.33         TEA4. Interactive and entertaining lectures       4.33         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         (about the university)       4.00         COM1. Convincing recommendation and WOM/EWOM       4.02         (about the university)       4.01         COM3. Informative and helpful website of the university       4.55         COM4. Impressive promotional materials of the university       4.02         University Social Relations ( $\alpha = 0.824$ )       50 </td <td>6 9 0 1 5 4 0 8 9</td> <td>0.696 1.017 0.641 0.681 0.874 1.005 0.662 0.727 0.784</td> <td>0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860</td> <td></td> <td></td> <td>37.559 11.643 23.895 16.684 19.529</td> <td>0.000 0.000 0.000 0.000 0.000</td>	6 9 0 1 5 4 0 8 9	0.696 1.017 0.641 0.681 0.874 1.005 0.662 0.727 0.784	0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860			37.559 11.643 23.895 16.684 19.529	0.000 0.000 0.000 0.000 0.000
$ \begin{array}{c} \hline \mbox{CRP2. Orientation of content (Practical and Theoretical materials)} & 4.50 \\ \hline \mbox{CRP3. Available resource material - Hardcopy} & 4.00 \\ \hline \mbox{CRP4. Available Online resource material} & 4.60 \\ \hline \mbox{CRP5. Significant scientific events that students can attend} & 4.50 \\ \hline \mbox{CRP6. Appropriate workload} & 4.3 \\ \hline \mbox{CRP7. High level of difficulty of homework and projects} & 3.8: \\ \hline \mbox{Teaching & Assessments ($\alpha = 0.884$)} & 1 \\ \hline \mbox{TEA1. High quality teaching} & 4.66 \\ \hline \mbox{TEA2. Innovative teaching methods} & 4.66 \\ \hline \mbox{TEA2. Innovative teaching methods} & 4.66 \\ \hline \mbox{TEA2. Informative and impressive lectures} & 4.43 \\ \hline \mbox{TEA5. Assessments and feedback of education} & 4.44 \\ \hline \mbox{TEA5. Assessments and feedback of education} & 4.44 \\ \hline \mbox{University Communications ($\alpha = 0.754$)} & 0 \\ \hline \mbox{COM2. Active participation of the university in advertising} \\ \mbox{and social media} & 0 \\ \hline \mbox{COM3. Informative and helpful website of the university} & 4.55 \\ \hline \mbox{COM4. Impressive promotional materials of the university} & 4.07 \\ \hline \mbox{Visual and Vocal} & 0 \\ \hline \mbox{University Social Relations ($\alpha = 0.824$)} \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline \mbox{SOR1. Social and leisure events and activities} & 4.22 \\ \hline SOR1.$	6 9 0 1 5 4 0 8 9	0.696 1.017 0.641 0.681 0.874 1.005 0.662 0.727 0.784	0.802 0.543 0.744 0.712 0.675 0.457 0.799 0.860	0.915	0.683	37.559 11.643 23.895 16.684 19.529	0.000 0.000 0.000 0.000 0.000
$\begin{tabular}{ c c c c c c } \hline CRP3. Available resource material - Hardcopy 4.09 \\ \hline CRP4. Available Online resource material 4.66 \\ \hline CRP5. Significant scientific events that students can attend 4.50 \\ \hline CRP6. Appropriate workload 4.3 \\ \hline CRP7. High level of difficulty of homework and projects 3.82 \\ \hline Teaching & Assessments ($\alpha$ = 0.884$) \\ \hline TEA1. High quality teaching 44.64 \\ \hline TEA2. Innovative teaching methods 4.66 \\ \hline TEA2. Innovative teaching methods 4.66 \\ \hline TEA3. Informative and impressive lectures 4.43 \\ \hline TEA4. Interactive and entertaining lectures 4.49 \\ \hline TEA5. Assessments and feedback of education 4.44 \\ \hline University Communications ($\alpha$ = 0.754$) \\ \hline COM1. Convincing recommendation and WOM/EWOM (about the university) \\ \hline COM2. Active participation of the university in advertising and social media \\ \hline COM3. Informative and helpful website of the university 4.55 \\ \hline COM4. Impressive promotional materials of the university 4.07 (Visual and Vocal) \\ \hline University Social Relations ($\alpha$ = 0.824$) \\ \hline SOR1. Social and leisure events and activities 4.22 \\ \hline SOR1. Social and leisure events and activities 4.22 \\ \hline COM2. Relations ($\alpha$ = 0.824$) \\ \hline COM3. Informative and helpful website of the university 4.07 (Visual and Vocal) \\ \hline University Social Relations ($\alpha$ = 0.824$) \\ \hline SOR1. Social and leisure events and activities 4.22 \\ \hline COM3. Informative and helpful website of the university 4.25 \\ \hline COM4. Impressive promotional materials of the university 4.07 (Visual and Vocal) \\ \hline University Social Relations ($\alpha$ = 0.824$) \\ \hline SOR1. Social and leisure events and activities 4.22 \\ \hline COM3. Informative and helpful website of the university 4.25 \\ \hline COM4. Impressive promotional materials of the university 4.07 \\ \hline COM4. Impressive promotional materials of the university 4.07 \\ \hline COM5. Social and leisure events and activities 4.22 \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline COM5. \\ \hline$	9 0 1 5 4 0 8 9	1.017           0.641           0.681           0.874           1.005           0.662           0.727           0.784	0.543 0.744 0.712 0.675 0.457 0.799 0.860	0.915	0.683	11.643 23.895 16.684 19.529	0.000 0.000 0.000 0.000
CRP4. Available Online resource material       4.60         CRP5. Significant scientific events that students can attend       4.51         CRP6. Appropriate workload       4.3         CRP7. High level of difficulty of homework and projects       3.83         Teaching & Assessments ( $\alpha = 0.884$ )       1         TEA1. High quality teaching       4.66         TEA2. Innovative teaching methods       4.66         TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.43         University Communications ( $\alpha = 0.754$ )       0         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.01         COM3. Informative and helpful website of the university       4.55         COM4. Impressive promotional materials of the university       4.02         (Visual and Vocal)       50R1. Social and leisure events and activities       4.22	0 0 1 5 4 0 8 9	0.641 0.681 0.874 1.005 0.662 0.727 0.784	0.744 0.712 0.675 0.457 0.799 0.860	0.915	0.683	23.895 16.684 19.529	0.000 0.000 0.000
CRP6. Appropriate workload       4.3         CRP7. High level of difficulty of homework and projects       3.8;         Teaching & Assessments ( $\alpha = 0.884$ )       1         TEA1. High quality teaching       4.66         TEA2. Innovative teaching methods       4.40         TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.00         University Social Relations ( $\alpha = 0.824$ )       50         SOR1. Social and leisure events and activities       4.22	0 1 5 4 0 8 9	0.681 0.874 1.005 0.662 0.727 0.784	0.712 0.675 0.457 0.799 0.860	0.915	0.683	16.684 19.529	0.000 0.000
CRP6. Appropriate workload       4.3         CRP7. High level of difficulty of homework and projects       3.8;         Teaching & Assessments ( $\alpha = 0.884$ )       1         TEA1. High quality teaching       4.66         TEA2. Innovative teaching methods       4.40         TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.00         University Social Relations ( $\alpha = 0.824$ )       50         SOR1. Social and leisure events and activities       4.22	1 5 4 0 8 9	0.874 1.005 0.662 0.727 0.784	0.675 0.457 0.799 0.860	0.915	0.683	19.529	0.000
CRP6. Appropriate workload       4.3         CRP7. High level of difficulty of homework and projects       3.8;         Teaching & Assessments ( $\alpha = 0.884$ )       1         TEA1. High quality teaching       4.66         TEA2. Innovative teaching methods       4.40         TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.00         University Social Relations ( $\alpha = 0.824$ )       50         SOR1. Social and leisure events and activities       4.22	5 4 0 8 9	1.005 0.662 0.727 0.784	0.457 0.799 0.860	0.915	0.683		
Teaching & Assessments ( $\alpha = 0.884$ )         TEA1. High quality teaching         TEA2. Innovative teaching methods         4.66         TEA2. Innovative teaching methods         4.61         TEA3. Informative and impressive lectures         4.43         TEA4. Interactive and entertaining lectures         4.44         TEA5. Assessments and feedback of education         4.45         University Communications ( $\alpha = 0.754$ )         COM1. Convincing recommendation and WOM/EWOM         (about the university)         COM2. Active participation of the university in advertising and social media         COM3. Informative and helpful website of the university         Visual and Vocal)         University Social Relations ( $\alpha = 0.824$ )         SOR1. Social and leisure events and activities	4 0 8 9	0.662 0.727 0.784	0.799 0.860	0.915	0.683	8.749	
TEA1. High quality teaching       4.64         TEA2. Innovative teaching methods       4.66         TEA3. Informative and impressive lectures       4.41         TEA4. Interactive and entertaining lectures       4.33         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.02         COM1. Convincing recommendation and WOM/EWOM       4.02         (about the university)       4.01         COM2. Active participation of the university in advertising and social media       4.02         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.02         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities	0 8 9	0.727 0.784	0.860	0.915	0.683		0.000
TEA2. Innovative teaching methods       4.60         TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.01         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities	0 8 9	0.727 0.784	0.860			20.550	0.000
TEA3. Informative and impressive lectures       4.44         TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.44         University Communications ( $\alpha = 0.754$ )       4.00         COM1. Convincing recommendation and WOM/EWOM       4.00         (about the university)       4.00         COM2. Active participation of the university in advertising and social media       4.00         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.00         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities	8 9	0.784				30.558	0.000
TEA4. Interactive and entertaining lectures       4.39         TEA5. Assessments and feedback of education       4.41         University Communications ( $\alpha = 0.754$ )       4.01         COM1. Convincing recommendation and WOM/EWOM (about the university)       4.02         COM2. Active participation of the university in advertising and social media       4.02         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university (Visual and Vocal)       4.02         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities	9		0.848			38.752 42.869	0.000 0.000
TEA5. Assessments and feedback of education       4.4:         University Communications ( $\alpha = 0.754$ )       4.0:         COM1. Convincing recommendation and WOM/EWOM       4.0:         (about the university)       COM2. Active participation of the university in advertising and social media       4.0:         COM3. Informative and helpful website of the university       4.5:       4.5:         COM4. Impressive promotional materials of the university       4.0:         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities		0.818	0.814			33.532	0.000
University Communications ( $\alpha = 0.754$ )         4.02           COM1. Convincing recommendation and WOM/EWOM         4.02           (about the university)         4.02           COM2. Active participation of the university in advertising and social media         4.02           COM3. Informative and helpful website of the university         4.52           COM4. Impressive promotional materials of the university (Visual and Vocal)         4.02           University Social Relations ( $\alpha = 0.824$ )         50R1. Social and leisure events and activities	5	0.785	0.810			34.423	0.000
COM1. Convincing recommendation and WOM/EWOM       4.02         (about the university)       4.02         COM2. Active participation of the university in advertising       4.02         and social media       4.02         COM3. Informative and helpful website of the university       4.52         COM4. Impressive promotional materials of the university       4.02         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities		0.785	0.010	0.845	0.577	54.425	0.000
(about the university)       4.0         COM2. Active participation of the university in advertising and social media       4.0         COM3. Informative and helpful website of the university       4.5         COM4. Impressive promotional materials of the university (Visual and Vocal)       4.0         University Social Relations (α = 0.824)       4.0         SOR1. Social and leisure events and activities       4.2	2			0.075	0.077		
and social media       4.5         COM3. Informative and helpful website of the university       4.5         COM4. Impressive promotional materials of the university       4.0         (Visual and Vocal)       4.0         University Social Relations ( $\alpha = 0.824$ )       5         SOR1. Social and leisure events and activities       4.2	-	0.915	0.699			22.363	0.000
COM3. Informative and helpful website of the university       4.5         COM4. Impressive promotional materials of the university       4.0'         (Visual and Vocal)       4.0'         University Social Relations ( $\alpha = 0.824$ )       50R1. Social and leisure events and activities	1	0.950	0.826			41.841	0.000
COM4. Impressive promotional materials of the university (Visual and Vocal) $4.0^{\circ}$ University Social Relations ( $\alpha = 0.824$ ) $4.2^{\circ}$ SOR1. Social and leisure events and activities $4.2^{\circ}$						-	
(Visual and Vocal)         University Social Relations ( $\alpha = 0.824$ )         SOR1. Social and leisure events and activities         4.2'		0.686	0.739			28.258	0.000
University Social Relations ( $\alpha = 0.824$ )           SOR1. Social and leisure events and activities         4.2'	7	0.960	0.770			27.282	0.000
SOR1. Social and leisure events and activities 4.2				0.919	0.850		<u> </u>
SOR1. Social and reistice events and activities 4.2 SOR2. Appropriate sports activities 4.1	7	0.820	0.928	0.919	0.850	116.222	0.000
		0.938	0.916			68.236	0.000
Image & Identity of the University ( $\alpha = 0.768$ )	1	0.750	0.910	0.852	0.593	00.250	0.000
IMI1. Good reputation of the university     4.50	6	0.695	0.834	0.002	0.075	44.430	0.000
IMI2. Social and academic prestige of the university 4.59		0.695	0.854			41.524	0.000
IMI3. Long history and academic records 3.9		0.989	0.640			16.245	0.000
IMI4. Distinctive and memorable design (Visual Identity & 4.23	8	0.022	0.722			26 171	0.000
Brand)		0.832	0.732			26.171	0.000
<i>Ranking of the University</i> ( $\alpha = 0.836$ )				0.891	0.673		
RNK1. Influential publications and researches 4.4		0.716	0.827			34.157	0.000
RNK2. Academic credit (University league tables and rankings) 4.4'		0.804	0.854			40.924	0.000
RNK3. International participation and networking 4.5.	3	0.762	0.858			46.260	0.000
RNK4. Standard population and optimal ratio (Student per	4	0.849	0.736			21.880	0.000
$\frac{1}{Market Considerations (\alpha = 0.913)}$				0.945	0.853		
Market considerations $(a - 0.913)$ MRK1. Preparation of students for work in the real world 4.6	1	0.739	0.935	0.743	0.055	99.059	0.000
MRK1. Treparation of students for work in the real work 4.0 MRK2. Career opportunities and employability (for/of 4.60	0						
graduates)		0.743	0.928			77.558	0.000
MRK3. Effective contact of the university with the market 4.60	0	0.701	0.907			52.661	0.000
Personal Outcomes & Achievements ( $\alpha = 0.872$ )				0.904	0.615		
POA1. Progress and career success 4.5		0.721	0.855			61.685	0.000
POA2. Satisfactory income     4.3       POA3. Valuable and practical knowledge     4.6       POA4. Valuable and practical knowledge     4.6		0.834	0.803			36.005	0.000
POA3. Valuable and practical knowledge 4.6		0.669	0.840			51.511	0.000
POA4. Intellectual growth and skill development 4.6.		0.644	0.867			51.131	0.000
POA5. Satisfying relations and friendships 4.3.		0.777	0.661			16.936	0.000
POA6. Fun and pleasant experiences $4.44$ Commitment & Loyalty ( $\alpha = 0.702$ )		0.689	0.646	0.870	0.771	14.580	0.000
Commitment & Loyalty ( $\alpha = 0.702$ ) CML1. Willingness to pursuit further education (at the same 4.3)	4		0.874	0.070	0.771		<u>├</u> ────
university)	1	0.070	0.0/4			49.776	0.000
CML2. Alumni's donation and support 4.15	1	0.878					

# Chapter 4 – Table 9

21. University Strategic Planning	20. Teaching & Assessment	19. Support Facilities for Enhancement Services	18.Students	17.Staff	16. Social relations	15.Ranking	14. Process (Registration & Administrative Services)	13. Price (Cost of Education & Financial Circumstances)	12. Personal outcomes & Achievements	11. Market Considerations	10. Management	9. Lecturers	8. Image & Identity	7. Environments & Physical Facilities	6. Courses, degrees & programs	5. Content, Resources & Practices	4.Communications	3. Commitment & Loyalty	2.Campus Characteristics	1.Attributes of the Place	Construct
0.497  0.637	0.436  0.528	0.463  0.589	0.312  0.402	0.391  0.472	0.413  0.514	0.399  0.497	0.531  0.628	0.562  0.711	0.464  0.555	0.447  0.531	0.517  0.652	0.357  0.424	0.358  0.462	0.406  0.495	0.302  0.383	0.454  0.576	0.414  0.539	0.359  0.485	0.625  0.793	0.829*	1
0.481  0.610	0.443  0.529	0.479  0.604	0.358  0.461	0.472  0.571	0.411  0.508	0.401  0.495	0.567  0.664	0.514  0.643	0.424  0.502	0.438  0.513	0.521  0.650	0.407  0.487	0.410  0.526	0.467  0.567	0.347  0.440	0.468  0.586	0.375  0.487	0.341  0.458	0.815*		2
0.439  0.593**	0.500  0.635	0.390  0.521=	0.336  0.460	0.353  0.451	0.433  0.567	0.495  0.645	0.511  0.637	0.437  0.578	0.536  0.676	0.462  0.576	0.427  0.563	0.337  0.426	0.459  0.627	0.374  0.480	0.406  0.544	0.500  0.664	0.420  0.579	0.878*			3
0.519  0.684**	0.507  0.621	0.476  0.618	0.392  0.520	0.347  0.426	0.623  0.796	0.527  0.666	0.523  0.631	0.426  0.546	0.421  0.514	0.404  0.486	0.471  0.598	0.348  0.428	0.537  0.714	0.474  0.584	0.472  0.621	0.467  0.604	0.810*				4
0.545  0.684	0.797  0.941	0.452  0.566	0.355  0.454	0.462  0.554	0.503  0.618	0.615  0.751	0.689  0.798	0.587  0.723	0.675  0.790	0.688  0.798	0.671  0.823	0.515  0.613	0.543  0.687	0.576  0.690	0.502  0.616	0.810*					5
0.344  0.426**	0.521  0.611	0.433  0.559	0.303  0.395	0.367  0.439	0.434  0.549	0.457  0.555	0.533  0.629	0.479  0.599	0.506  0.598	0.402  0.462	0.387  0.467	0.357  0.429	0.435  0.548	0.409  0.487	0.796*						6
0.516 0.623**	0.593  0.676	0.562  0.675	0.367  0.453	0.434  0.506	0.460  0.541	0.522  0.612	0.541  0.604	0.519  0.620	0.528  0.600	0.580  0.653	0.589  0.698	0.455  0.521=	0.528  0.643	0.774*							7
0.486  0.633**	0.539  0.653	0.406  0.524	0.347  0.453	0.366  0.445	0.539  0.678	0.688  0.854	0.495  0.588	0.458  0.579	0.518  0.620	0.540  0.640	0.441  0.554	0.337  0.409	0.829*								8
0.405  0.482**	0.546  0.618	0.536  0.640	0.464  0.558	0.691  0.783	0.414  0.484	0.376  0.443	0.600  0.665	0.424  0.501	0.441  0.498	0.410  0.458	0.501  0.587	0.774*									9
0.677  0.837	0.692  0.814	0.511  0.633	0.381  0.478	0.477  0.568	0.440  0.534	0.544  0.656	0.659  0.757	0.606  0.743	0.592  0.690	0.609  0.703	0.859*										10
0.503  0.591*	0.715  0.795	0.439  0.516	0.223  0.264	0.386  0.436	0.451  0.518	0.598  0.682	0.627  0.682	0.554  0.644	0.821  0.907	0.923*											11
0.498  0.589**	0.720  0.809	0.431  0.514	0.275  0.332	0.389  0.444	0.507  0.590	0.630  0.727	0.630  0.695	0.601  0.709	0.871*												12
0.510  0.636	0.573  0.677	0.471  0.588	0.349  0.446	0.411  0.490	0.418  0.509	0.476  0.578	0.641  0.744	0.796*													13
0.620  0.728**	0.703  0.780	0.623  0.733	0.427  0.510	0.559  0.624	0.578  0.665	0.564  0.644	0.773*														14
0.528  0.653	0.624  0.725	0.375  0.460	0.302  0.381-	0.342  0.407	0.556  0.668	0.820*															15
0.484  0.603	0.563  0.658	0.550  0.680	0.349  0.438	0.383  0.451	0.922*																16
0.405  0.489	0.480  0.550	0.466  0.562**	0.492  0.599	0.777*																	17
0.419  0.544	0.336  0.408	0.379  0.487	0.826*																		18

 Table 4.9. Correlations among latent variables

0.506  0.639	0.480  0.575	0.779*										19
0.550  0.658	0.826*											20
0.836*												21

\*Diagonal values correspond to the squared root value of AVE for each latent variable in order to assess the Fornell-Larker's criterion. \*\*HTMT values.

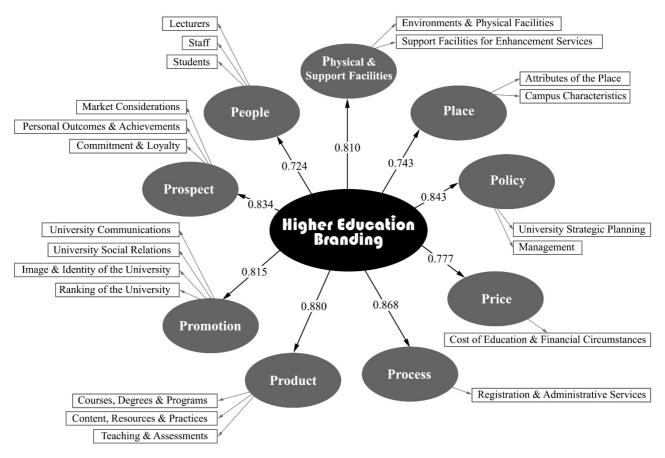


Figure 5.1. HEB validated model

*"When educating the Minds of our youth, We must not forget to educate their Hearts."* 

(Dalai Lama)