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TESIS DOCTORAL

Influence of the Sense of Belonging and other Variables in the Modeling of the Repurchase Intention : an Application in the Context of Higher Education

Influencia del sentido de pertenencia y otras variables en la modelización de la intención de recompra: una aplicación en el contexto de la educación superior

MEMORIA PARA OPTAR AL GRADO DE DOCTOR

PRESENTADA POR

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UNIVERSIDAD COMPLUTENSE DE MADRID

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Dedicatoria

"Digno eres, Señor y Dios nuestro, de recibir la gloria y el honor y el poder, porque Tú creaste todas las cosas, y por tu voluntad existen y fueron creadas".

Apocalipsis, 4:11

A Marisol, mis padres y mi hermana:
Sois y siempre seréis los pilares de mi vida.

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PROPÓSITO NO ACADÉMICO

Sea este trabajo mi pequeño aporte para que la Educación de quienes tomarán las riendas de nuestro mundo sea la mejor posible. Solo la Educación nos hará más libres, mejores personas y capaces de contribuir a hacer un mundo mejor cada día.

ABSTRACT

This research seeks through empirical testing to confirm the relationship between the sense of belonging to a company or institution and the likelihood of repurchasing. With this end in mind, we consider the context of Higher Education (HE), looking for the variables which may influence the repurchase intention, that is the returning to the same college, university, or business school where a student had previously studied. Our study has been carried out with more than 350 responses obtained from the alumni of three small and medium-sized institutions in Spain, the United States of America, and Colombia. The questionnaire designed for this study included questions regarding quality and value perceived as well as student satisfaction, in addition to questions referring to sense of belonging and repurchase intention. Moreover, a sequence of moderator and mediator variables, such as demographic and social variables, have been included in the study. In order to model these relationships, we apply the partial least square (PLS) method using SmartPLS software. The applied model takes into consideration reflective indicators for each variable. The results obtained allow us to affirm that the pride or sense of belonging felt by the alumni can be a good predictor of the repurchase intention (returning to the HE Institution) and, therefore, these results allow us to propose this variable as a useful tool for marketing in the future. The final objective of this research is to enable the managers of HE institutions to focus on the development of strategies which would increase the sense of belonging in the alumni.

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CHAPTER 1

1. INTRODUCTION

Through this investigation we have looked for the possible relationship that could exist between the repurchase intention and the sense of belonging that any loyal customer would feel towards a company. The first of these variables, the intention to buy, repurchase or recurrence is one of the behavioral aspects that are frequently studied from the concept of loyalty. However, this does not happen with the concepts of belonging, sense of belonging, or pride of belonging, which until now has not been incorporated as a formal variable of marketing analysis.

Some indicators or components of this variable have been present in some investigations related to loyalty, but up to this moment, no investigation has proposed setting a variable with indicators related to behaviors, affiliations and attitudes, thereby creating a variable that could measure a client's cognitive, even sentimental level: What level of belonging can a client feel towards a company? Which would these indicators be? Which role will new technologies, social networks, or the environment in which we are living play? Therefore, is there a possibility to measure the sense of belonging of customers and through it predict their future purchasing behavior? This work will try to provide knowledge through empirical research that would allow us to answer these questions and, at the same time, create the expectation that the sense of belonging can be incorporated into marketing as a variable and as a management objective.

We approach this research with the aim of providing a new construct for marketing, or at least, contributing to the modeling of the repurchase intention through the sense of belonging. From our predilection and passion for marketing and business management, and also with a deep sense of humility and academic respect, with our research we intend to contribute with some findings to improve the management, the results, and the services that companies render to their clients. We sincerely hope that the contribution will be positive for firms, particularly Higher Education (HE) institutions, and in general for the whole society. From this point of view, we present this work taking HE as a context, where new scenarios begin to emerge as a new reality and responds to a new framework that should encourage HE institutions to strive for excellence in their daily performance in order to direct their students towards new learning opportunities.

Today there is a constant need to learn and acquire new competences. We are all living in the digital age, and technological advances have occurred at a faster rate in the last twenty years than at any other time in human history. This is not only a clear challenge for all educational institutions in the world, but also an opportunity and a responsibility for the professional development of managers and executives. At the turn of the century, the issue was described, for example, as "*executive education is undergoing a radical transformation. Programs operating today are far more innovative, learner centered and relevant to immediate company needs than ever before*" (Conger & Xin, 2000). Therefore, today executive training has the potential to play an even greater role as a main tool to facilitate strategic changes in organizations. Conger and Xin (2000) pointed out that since the 1970s, executive education has changed greatly. In the early 1980s, executive education consisted primarily of college programs or seminars offered by specialized training organizations. Participants learned the latest theories and techniques for effective management mostly by studying cases and listening to classroom lectures by academics and practitioners. The content of the training was integrated through courses on strategy and functional skills, such as finance, human resources, and marketing. These courses were basically designed as abridged MBAs. The experience itself was considered sufficient to attend these types of courses. The shift in executive education accelerated in the 1990s. The transformation was acquiesced by new challenges brought about by global competition, rapid technical advances, merges and acquisitions, an increasing importance in cutting costs, and the popularity of the alliances among corporations (Conger & Benjamin, 1999; Conger & Xin, 2000). All of this meant a change of perspective towards leadership competencies for the future (Vicere, 1998) and in particular, the Master in Business Administration (MBA) degree was a widely accepted qualification in business management (Baruch & Peiperl, 2000). Topics such as globalization, employee diversity, alliances, organizational learning, and e-commerce have grown in importance since the 1990s. Later, the economic crisis of 2007, with the Lehman Brothers crack, brought about a new change in the insight of executive and managerial education, and new educative challenges emerged for the purpose of training new executives in values as sustainability and conscious capitalism, and ever since, HE institutions increasingly promote sustainability (Pashby & de Oliveira Andreoti, 2016). On November 9, 2014, the International Conference on HE for Sustainable Development was held in Nagoya, Japan. Participants representing government and university groups as well as UN organizations produced a declaration promoting a "*transformative role of higher education towards sustainable development" through "transformative learning and research*" (HE for Sustaintable Development Conference HESD, 2014).

After the Lehman Brothers crisis, but before the COVID-19 pandemic, the world demanded a new generation of managers and executives, who could manage suitable and profitable businesses which would positively impact on the triple bottom line (economic, social, and environmental). This paradigm shift and the continuous development of the digital environment meant that human beings (executives or not, managers or not) have to recycle themselves by acquiring new knowledge and skills. Therefore, the training of executives and professionals was no longer a reward, but an obligation to fulfill their mission.

Executive education is a booming market and the demand for training is present nowadays. Education and learning should be understood as a basic need of society, such as health, but in addition, we suggest that the marketing of education can be tackled under parameters of service marketing, which is used for other economic activities, such as banking, insurance, leisure, or tourism. Quality, value, or customer satisfaction are extremely important variables in the management of these activities, as they are for education. Thus, we propose to consider this issue in terms of marketing in order to develop useful strategies. Service marketing may develop new strategies to attract alumni to their universities and educational institutions. It also occurs in other different sectors mentioned above (healthcare, fashion, banking, tourism, leisure, etc.). Therefore, this research is linked to service marketing and our main objective is the sense of belonging and its possible consequences, such as repurchase.

Authors have debated extensively whether or not students are considered as customers, and although the debate is polarized, advocates consider that students are customers and should be treated as such, while reviewers consider that the incursion of the *customer* concept into HE degrades educational standards and prejudices educator/student relationships (Clayson & Haley, 2005; Eagle & Brennan, 2007; Melewar & Akel, 2005).

Therefore, the main purpose of this research is to explore strategies that universities and HE institutions may implement to increase the rate of former students returning to study new programs.

In this research, we are considering repurchase as a key variable in the marketing of any business. This variable is directly linked to the behavior of the customers and their loyalty and their cognitive and intellectual perceptions, as we describe below. Therefore, this research is based on the study of the repurchase variable, its meaning, and how certain marketing variables can influence the repurchase behavior of alumni. For both academics and practitioners in the HE context, the repurchase intention should emerge as a key variable in managing universities and schools from a managerial point of view.

Through this research, we model repurchase behavior or intention in the context of HE using pride, or proud of belonging, as a contribution to marketing. The sense of belonging is a construct associated mainly with psychology, sociology, or politics. As a starting point, we argue that the sense of belonging can be used as a marketing variable, and in addition, we try to apply other variables related to marketing services, such as perceived quality, student satisfaction and perceived value, to analyze possible relationships with the repurchase intention.

Initially, the planned objectives for this research were based on the following research question: Does the sense of belonging of the alumni influence the repurchase intention in the context of HE? In addition, we are very interested in understanding how other variables influence the repurchase intention.

Based on these proposals, the main objective of this research is to link sense of belonging with repurchase intention. Other objectives designed for this study are the analysis of the relationship between perceived quality and loyalty (sense of belonging and repurchase), the relationship between perceived value and loyalty, and student satisfaction and loyalty as well. Other specific objectives are the construction of the sense of belonging variable that allows us to establish a marketing insight for this construct, and in the end, to measure the influence of moderating and mediating variables in the relationship between sense of belonging and repurchase intention.

After the emergence of HE marketing, most educational institutions now recognize the need to market in a competitive climate, since universities often find themselves situated in a global environment. A substantial literature has been developed on the transfer of marketing concepts and practices from other sectors to HE (Gibbs, 2002; Hemsley-Brown & Oplatka, 2006). Gibbs (2002) argued that marketing in HE is best done in a transactional market, within a model of collaborative relationships whose vision is of a humanistic process of change.

In the 1980s, literature on marketing education emerged in the UK and the USA as theoretical-normative in nature and was based on models developed by users in the business sector (Hemsley-Brown & Oplatka, 2006; Oplatka & Hemsley-Brown, 2004; 2012). Books on this topic continued to be available throughout the 1990s, and up to today (Hemsley-Brown & Oplatka, 2006). We consider that this issue is still of interest as a subject, which the authors continue to address. "*Research that began to emerge in the 1990s interpreted marketing within the narrower definition of marketing communications and was based on the assumption that in order for any HE institution to market itself successfully, managers would need to examine the decision-making process and potential students' search for information*" (Hemsley-Brown & Oplatka, 2006).

Research done in the second decade of the 21st century have continued approaching loyalty and repurchase intention issues in the HE context. These studies have been carried out even outside the Anglo-Saxon environment, mainly in Asia and Eastern Europe (Binnawas *et al*., 2020; Dlâcic *et al*., 2014; Chandra *et al.*, 2018; Fares *et al*., 2013; Hsu *et al*., 2015).

The references indicated above allow us to assert that the proposed topics are addressed in the literature and are object of certain interest on the part of academics and researchers: loyalty in the context of HE is present in several studies and repurchase intention together with alumni are treated as a marketing objective.

Before developing the theoretical framework for this research, we will point out three main lines of our research in this introduction. First of all, we propose to start with a reference about alumni as customers. We argue that without customers no marketing principle can stand on its own and, therefore, we suggest that alumni can be fully viewed as customers from a marketing perspective.

Secondly, we will focus on the meanings of pride, or sense of belonging, as the main objective for the research. The theoretical framework will show the different perspectives from which the issue of belonging has been approached. From this state of the art, we hope to show that the sense of belonging can be used as a marketing variable to predict customer behaviors.

Thirdly, we highlight the importance of repurchase for management, not only as it applies to any business or activity, but also to HE institutions. Repurchase intention is the main motivation for us; therefore, we believe that repurchase is the real effect of loyalty, and hence the guarantee of profitability and stability for any business. It is our belief that a real repurchase is the goal of any customer-centric marketing policy.

1.1. Alumni as a Marketing Objective

It is motivating for this research to address the issue of alumni and students as marketing objectives and its significance, especially when students demand to be treated as customers in the classroom "to uphold their rights". Such a situation can even be awkward for teachers and instructors; however, beyond what happens in the classroom, this issue is widely debated both from the perspective of education and from the perspective of marketing, with contrasting arguments in one direction and the other.

Both insights are possible and necessary; nevertheless, it is decisive to consider the possibility that a student is in fact a customer, since without customers it is not feasible to contribute any idea to marketing; but yes, when the customer is on stage, we can then think in terms of marketing. Thus, we dedicate a part of the theoretical framework below to point out the importance of considering students as consumers, and also, why it is necessary to study them in terms of quality, value, and satisfaction. Students have many options and HE institutions must take an innovative approach in order to attract—and maintain—students.

A first approach to admit that a student can be considered as a client would start from the use of marketing as a management tool in HE institutions. Since marketing in HE is well established, it would follow that this means that there is a focus on the customer (Guibault, 2016). Students should be considered as customers from the point of view of attraction towards the institution, that is, from the application to enter an institution to the final choice to study there. For this sequence, the marketization should be used as a tool of management, as a useful tool to maximize efforts focused on recruiting the best students for each institution and university, without considering the subsequent relationship between students and teachers.

Most of the research on relationship marketing success has focused on relationships that (1) are primarily economic in nature, (2) involve business-to-business marketing, and (3) involve for-profit firms. However, relationship marketing is a viable strategy in such contexts as those involving high levels of social exchange, business-to-consumer marketing and nonprofit marketing (Arnett *et al*., 2003). In this context, HE institutions could be considered as a nonprofit market, although they could seek profit in any case.

Furthermore, in the the context of HE, Arnett *et al.* (2003) argued that *success* as a university consists in generating cooperative and supportive behaviors of graduates. Important behaviors include making financial contributions and promoting the university to others (i.e., providing positive word of mouth) (Mael & Asforth, 1992).

To achieve success, universities and HE institutions must find paths to promote supportive behaviors among its alumni. It means that institutions should design marketing plans which include their alumni as a marketing objective: first of all, knowing their opinion about their experience in the institution; then, offering new programs according to their needs; and concluding with plans focused on the return to their institutions, as possible actions following managerial decisions. OECD estimates that number of degree-holders worldwide will reach 300 million by 2030.

That is, alumni who are satisfied with their university experiences are more likely to place a university identity higher in their hierarchy of identities (Arnett *et al.,* 2003) developing a sense of belonging.

In the next chapter, Theoretical Framework, we describe and develop the significance of alumni for HE institutions and how they become the most important objective for marketing.

1.2. Repurchase as a Main Objective of Science Marketing and Management

As indicated in the title of this work, The Influence of the Sense of Belonging and other Variables in the Modeling of the Repurchase Intention: An Application in the Context of

Higher Education, repurchase intention is a main part of this work. We point out that different variables appear relating to customer behaviors and have been analyzed for a long time by authors in books, papers, and research. These concepts and variables are, for example: brand preference, expected switching cost, customer loyalty, customer satisfaction, perceived value, perceived quality, and repurchase intention (Hellier *et al.*, 2003) and these issues have provided a great number of arguments, theories and ideas for the marketing. Hellier *et al*. (2003), who addressed the relations among variables mentioned, defined repurchase intention as "*The individual's judgement about buying again a designated service from the same company, taking into account his or her current situation and likely circumstances*", and we want to add that repurchase intention should be considered as a strategic objective for any firm looking to achieve financial stability and viability for a business.

Research associated with services have been undertaken for years, mainly linking repurchase intention with loyalty and behavioral intentions of customers (Cronin Jr *et al*., 2000) towards products and services inside sectors, such as within the tourism, hospitality and leisure sector (Chen & Tsai, 2007; Hutchinson *et al*., 2009; Ryu *et al*., 2008; Tarn, 1999; Tian-Cole, *et al*., 2002; Wu *et al*., 2018), or in other sectors, such as mobile telecom or e-commerce, which have enormous importance nowadays (Aydin & Özer, 2005; Hu, 2011; Kuo *et al.*, 2009; Lai *et al*., 2009; Pham *et al*., 2018).

The large number of academic papers and studies on behavioral intentions and repurchase are a good indication of the significance of this topic. Nevertheless, it is possible that, among that abundant production, original contributions are difficult to find. This is the reason why we have to look for new evidence that would allow us to affirm that our research represents a contribution to areas that have not yet been investigated or at least scarcely studied. Therefore, this is the gap in the research which our study will attempt to fill. Repurchase intention is a variable also treated in the studies to determine the favorable attitude and behavior towards the HE institution (Dlâcic *et al*., 2014) or consider a return to HE institutions as a significant competitive advantage for colleges, business schools and universities (Rojas-Méndez *et al*., 2009).

We develop this study considering the Dlâcic *et al*. (2014) contributions as highly interesting. The main purpose of this work was to empirically investigate the relationship among concepts, such as perceived quality, perceived value, and repurchase intention in a HE context using structural equation modeling: "*The results support the proposed concept model, showing that perceived service quality and customer-perceived value have a positive and significant influence on repurchase intention, in much the same way that perceived service quality has a positive and significant impact on customer-perceived value*." The latter study was undertaken in Bosnia and Herzegovina and Croatia, and subsequently other works have emerged to treat repurchase intention and student loyalty from differents insights (Binnawas *et al*., 2020, Hsu *et al*., 2015, Nguyen *et al*., 2016).

Therefore, we believe that there is sufficient reason to continue studying this issue inside marketing. Throughout this work, we have also undertaken to review the insights regarding repurchase intention in relation with customer behavior. A significant number of concepts have emerged in the literature relating repurchase with customer behavior: engagement, loyalty, attitudinal behaviors, etc., and this is an issue which we treat in this research in order to establish a framework which would allow us to clarify concepts.

1.3. Sense of Belonging as Predictor Variable of the Repurchase

As aforementioned, the main objective of this study is to incorporate a new marketing variable, which would allow us to predict repurchase intention. We believe that the sense of belonging could very well be this variable, which can be added to a list of variables and used as an explanatory variable for marketing. Moreover, it is the gap that was found, once we checked the numerous studies about loyalty, behavioral intentions, and repurchase of former students in the context of HE.

The concept of pride, or sense of belonging (pride and sense may used undifferently in this text), appears in the literature as something related to psychology, sociology or even politics, but without any reference to marketing or management. Although this absence could indicate that this idea is not interesting enough to be considered a marketing variable, we nevertheless believe that the sense of belonging can indeed be relevant in certain customer behaviors and attitudes towards some brands, as evidenced in luxury items, professional sports fans and in other different areas of consumption. Likewise, the sense of belonging—or sense of ownership—with respect to consumer behavior could be interesting to analyze through investments or the exchange of stocks, but currently, this consideration is outside the scope of this work.

We believe that certain customer behaviors can be excellent indicators of belonging as will be explained in Chapter 3 under defining variables. Previous to that, the Theory of Sense of Community and of the Sense of Belonging for Education, as well as the significance of the pride of belonging for alumni, will be analyzed in depth.

The emergence of social media has actually been the driver which allows us to assume that the sense of belonging can also be a form of loyalty. The indicator *social media use* together with other behaviors can build the referenced variable. Word of mouth (WOM), participation in social events and the events themselves, membership in an alumni association, donations for institutional development, or recommending recruiting scholarship recipients, become indicators clearly identified with loyal behaviors, largely related to pride of belonging to an institution of HE. In summary, we hope that this construct has a useful dimension for marketing, and as such, can be considered in future work and research related to consumer behavior regarding repurchase intention.

Furthermore, we will review the literature concerning the sense of belonging in the context of HE, and its possible significance in marketing. As a starting point, we will keep in mind the references considered in the literature about the sense of belonging concept, that examine *belonging* from psychological, sociological, physical, or even spiritual perspectives. After this consideration, the authors point out that belonging is an internal affective or evaluative feeling, or perception (Anant, 1966).

According to the aforesaid, belonging evidently entails several perceptions. Psychological and mental health are two incredibly important ones that are beyond the scope of this research. Other interesting perspectives are psychological, social, and organizational (Dávila de León & Jiménez García, 2014), or sense of belonging to the community, and more specifically, to a college or university (Strayhorn, 2018).

However, this sense of belonging that has been described, is associated with the academic performance and success achieved during the stay in a college or university (Strayhorn, 2015). Strayhorn´s point of view on sense of belonging is based on the heightened importance in certain contexts, for certain people, at certain moments. The sense of belonging is of vital importance when someone feels alone and isolated, for example, and a student's personal situation influences the performance and possible success during the academic time. Thus, this sense of belonging concept is not connected in any moment to a commercial behavior, although the author considers that sense of belonging is present in retention rates to continue studies in the referred colleges or universities (Strayhorn, 2015).

In order to introduce the sense of belonging of former students to their HE institutions, professional associations are taken as a valid reference as a starting point to study the sense of belonging from a marketing perspective. Certain components of commitment are present in professional organizations that are also part of the sense of belonging that we are trying to model: affective or continuance components, for example (Gruen *et al*., 2000). Other studies also point to the importance of the brand community, which includes crucial relationships between the customer and the brand, between the customer and the company, between the clients and the product in use, and among other customers (McAlexander *et al*., 2002).

Therefore, we take on the challenge of using the sense of belonging as a predictor of repurchase behavior. We believe that customers develop attitudes and behaviors linked to loyalty, whose result is the intention to repurchase back over time in a special context as HE.

In order to achieve this goal, we have established a variable that through monitoring social media, memberships in alumni associations, participation in social events, financial support or recruitment of scholarship holders for the companies where they are working gives meaning to this construct as a predictor of alumni repurchase intention to the institutions of HE where they were students at an earlier time.

1.4. Personal Motivations

We undertook this research with an enormous spirit of joy and commitment to the work. Marketing and HE have been associated with our lives for more than twenty years, and this opportunity has presented itself at our best moment. On the one hand, we want to address a topic that we consider of paramount importance in maintaining colleges and universities, not only financially, but also from the point of view of their reputation and sustainability.

On the other hand, we live in challenging times, which require the permanent training of all professionals, not only executives or businessmen, but also all university graduates. For almost twenty years, I have been working and teaching in small HE institutions, and I consider it important to also study their sustainability and look for ways that allow them to grow and improve as business schools, for example.

We believed that education would have to face great challenges in the future, but that is happening today. Beyond the problems that have arisen in the education sector during the COVID-19 pandemic, changes have occurred in recent times. In 1965, the founder of Intel, Gordon E. Moore, established an empirical principle that predicted how technology would change in the following years, and those changes indeed influenced computers, mobile phones and any digital device. Obviously, the effect of Moore´s law has a lot to do with the future of education, so the framework that HE institutions have is quite different from those of the past.

We believe that, in no time at all, HE will undergo profound changes. The digital age brings with it, not only new topics to be studied and questions to be answered, but also new settings in where to study. Digitalization is a new tool, enabling universities to relocate their campus, to customize their offering: in short, HE institutions will start a truly disruptive process. For us, everything is an exciting challenge. Probably, the University of the future will be quite different in some aspects from the University in which we have all studied. Nevertheless, its essence as a source of knowledge must be maintained forever.

That said, we can only add that we begin this research with an optimistic mind, expecting to get some answers about alumni behavior. We hope to contribute some ideas that can be used from a marketing perspective, and also that our contribution will serve to increase science and knowledge.

Finally, we declare our sincere passion for Marketing and Higher Education institutions, and this research gives us the opportunity to work on both together.

CHAPTER 2

2. THEORETICAL FRAMEWORK

This theoretical framework is based on the need to connect two realities. One is the topic of the repurchase and the different elements that are related to it, from the review of HE as a market and its development to the analysis of the concepts that lead to the repurchase; the other is the review of the topic of pride of belonging. Together, they are the two topics that entail the main arguments of this research: how repurchase and pride of belonging are connected in the context of HE.

The repurchase behavior in the HE involves starting to analize what it means in itself and what it means as an economic activity and if it is considered feasible. Moreover, it is required to study the role of the students and alumni in this context and whether they are considered as customers.

Our research is related to marketing, a science which studies the concept of market and the concept of customer. Therefore, it will be important for this research to define these concepts as the first stage of the theoretical framework. From now on, we will refer to HE as a market and students and alumni as customers, and we will show references about them from the academic literature.

The repurchase, as one of the key issues in marketing and sales studies, will be reviewed in depth, especially the constructs that comprise it. Our theoretical framework includes two insights which are always very present in the repurchase behavior definition: loyalty and engagement.

By reviewing these two concepts, we hope to find a way to include the pride of belonging construct, linked to repurchase in the context of HE, as a marketing tool. With the review of the pride of belonging in this context, we also hope to make a clear theoretical framework that allows us to formulate a research question and its answer, which should provide enough information to understand the problem we plan to address.

2.1. Repurchase Behavior in the Higher Education Context

Universities are in a competitive global marketplace (Melewar & Akel, 2005). Use of marketing theories, which have been gradually applied by many universities, allows HE institutions to gain competitive edge and a larger share of the international market (Waeraas & Soldbakk, 2009). However, the literature on HE marketing is “incoherent”, even inchoate, and lacks theoretical models that reflect upon the context of HE the nature of their services (Hemsley-Brown & Oplatka, 2006).

Prior to introducing the repurchase issue in this context, educational institutions recognized the need to market themselves in a climate of competition, that for universities is frequently a global one, and substantial literature on the transfer of the practices and concepts of marketing from other sectors to HE has been developed (Gibbs, 2002).

Gibbs (2002) highlighted that HE marketing embraces a competitive business model almost without questioning the suitability of the tools it uses. Most educational institutions recognize that they do need to approach to “market” themselves under market conditions. A substantial literature about the transfer of practices and concepts of marketing from other sectors to HE has emerged since almost thirty years ago: market attractiveness (Baimbridge, 1997), competitive advantage (Mazzoral & Soutar, 1999); market mapping (Gumport, 1997); student needs (Lin, 1997); capitalism on tangible assets (Coates, 1998); advertising (Berger & Wallingford, 1997; Jugenheimer, 1995); image management (Koku, 1997; Symes, 1998); tangibility (Yost Jr & Tucker, 1995); products (Chan & Imrie, 1995; Hesketh & Knight, 1999); ITC (Selwyn, 1999); and market expansion (Antonazzi, 1998; Bagwell, 1998; Shinn *et al*., 1999).

In addition, there are antecedents in the American Marketing Association´s symposia on the Marketing of Higher Education, in the annual Higher Education External Relations Associations conferences, plus texts on general education and higher education regarding strategic planning and marketing (Koetler & Fox, 1995; Ryans & Shanklin, 1986).

In sum, a lot of marketing topics have been addressed a long time ago; however, questions related to loyalty and repurchase intention have not been treated until more recently for the HE context (Dlâcic *et al*., 2014; Hsu *et al*., 2015).

2.2. Higher Education as Research Context for Marketing

HE has undergone a major transformation in support of the knowledge economy, at least in the last 20 years. Technological changes have fueled the globalization of HE and the General Agreement on Trade in Services (GATS) is likely to accelerate the transforming of HE into a commodity, attracting international customers, private investment, and creating a global scale (Maringe & Gibbs, 2009).

Keeping this line, Maringe and Gibbs (2009) pointed to commodification to explain the production and delivery of goods and services for monetized exchange by capitalistic firms in pursuit of profit to explain the new scenario of HE.

In marketing theory, the commodity is an indistinct product for which there are many suppliers and many buyers, which is traded in a market where the price is variable, and supply and demand are elastic. The idea of selling the commodity of HE is thus a little over-worked (Maringe and Gibbs, 2009).

However, in this context, other ideas have emerged, in which HE institutions strive to increase the value of their brands, as a first step of marketing strategy. Topics as brand identity, meaning, image, and reputation will enable brand owners to communicate more effectively with stakeholders including alumni (Hemsley-Brown *et al*., 2016), improving the public image and goodwill (Melewar & Akel, 2005).

The evolution of HE is associated with the development of the knowledge economy that is widespread and has emerged to establish in the Organization for Economic Co-Operation and Development (OECD) countries, from industrial countries to post-industrial economies. New information and communication technologies and increasing globalization allow “knowledge economies” to focus upon knowledge-intensive activities: the production, processing and transfer of knowledge and information (Nowotny *et al*., 2013).

In a knowledge economy, knowledge is valued for its potential to generate economic development and prosperity through innovation. But the degree of incorporation of knowledge and information into economic activity is now so great that it is inducing quite profound structural and qualitative changes in the operation of the economy and transforming the basis of competitive advantage. The rising knowledge intensity of the world economy and our increasing ability to distribute that knowledge have increased its value to all participants in the economic system (Houghton & Sheehan, 2000).

This instrumentalization of knowledge has meant that the kind of knowledge that is particularly prized in a knowledge economy is that which is readily transformable into marketable products and services. This re-situation of knowledge as a tradeable product radically changes the role of university research (Nowotny *et al*., 2013) and it makes it possible for knowledge to be considered as a marketable good or service.

Government policy initiatives are increasingly geared towards promoting education and research in the key innovation areas of information and communications technologies. Universities are playing a key role in strategies for building a world innovation system. The logic of economic growth through the creation and transfer of knowledge is both persuasive and pervasive (Maringe & Gibbs, 2009).

That said, universities are now responding to the demands of professional people at work. For over fifty years, there has been a steady growth of professional doctorates in the UK, for example, (Scott *et al*., 2004) and master´s degrees that focus on professional areas of learning. Scott *et al.* (2004) addressed some questions in reference to the influence of the professional doctorates impact of the development of professional knowledge on the employment culture of the students or how universities organize doctoral level programs that facilitate professional learning and development, and finally, what is the most appropriate relationship between professional and academic knowledge, and how universities can develop practice which best reflects this.

Furthermore, there is another phenomenon within the realm of professional and practitioner doctorates, where middle to senior executives undertake doctoral research through an action research approach in and on their own organizations. Coghlan (2007) described the fact as follows:

> *This phenomenon occurs in schools of business, education, public administration, nursing, to name a few, and programmes are part-time programs where participants combine their regular organizational jobs with their studies and research. Participants typically attend classes or seminars on a monthly or bi-monthly basis. In these programs' participants undertake a research project as insiders of their own organizations, frequently through an action-oriented approach, such as action learning and action research*. (p. 293)

Many universities are responding to the demands of professionals at work, with a broader connection between the world of practitioners and the academic world. In fact, many researches could not occur without a link between them. Firms and HE institutions have opened an extremely broad avenue of collaboration, with a valuable knowledge exchange that is within the framework of the knowledge economy (Coghlan & Brannick, 2014; Coghlan *et al.*, 2004; Gosling & Asthon, 1994).

The *globalization of HE*, on the other hand, refers to the evolutionary and transformative nature of the delivery and production of knowledge. However, what is clear is that the formation of world and offshore universities coupled with other forms of cross-border HE has brought new definitions to the world of HE (Denman, 2007):

> *Globalization and its colonial antecedents have played a role in shaping the structures and functions of HE institutions. Historically, although each institution has its own story of founding, universities have been bound geographically by the communities they serve and their original role to disseminate knowledge to a select few. For those institutions which have survived the trials of war, famine, disease, and time, the spectrum of institutional types has included—in its most general form—public, private, and religious-affiliated entities as well as historic (pre-1900s), contemporary (1900-1970), and those identified as 'new' (1970-present). The present-day impact of globalization forces upon HE has created new pressures on systems, institutions, and students, which has in turn brought demands for analysis of these circumstances*. (p. 4)

Adopted in 1995 under the World Trade Organization (WTO), the General Agreement on Trade in Services (GATS) clearly identifies education as a service to be liberalized and regulated by trade rules. While its supporters see GATS as an opportunity, others view it more as a threat. For some, the notion of HE as a tradable commodity is a challenge to the traditional values of HE, especially the idea of HE as a public good and a public responsibility.

In the background papers prepared by the WTO for ongoing negotiations, education services are viewed as falling into five main categories: *primary education*, *secondary education, higher education*, *adult education*, and *other educational services*.

According to these criteria, HE is defined as the teaching of the practical skills in postsecondary, sub-degree technical, and vocation education institutions, and education services provided by universities, colleges, and specialized professional schools.

One subject of globalization is the growing importance and power of the WTO in promoting the liberalization of trade. Of interest to us in relation to education is the General Agreement on Trade in Services (GATS), a process that begun in 1994 and aimed at reaching a multilateral agreement over the liberalization of trading in services, which had emerged with renewed vigor in the Millennium Round. The major reasons for making GATS the object to be mentioned here are that:

1. It is not as well known as other supranational organizations that affect national education policies, such as the World Bank, the Organization for Economic and Cooperative Development (OECD), and UNESCO.
2. It operates in quite a different manner from those organizations in that it works through binding rules, rather than persuasion or leverage.
3. It has the potential to affect education systems and practices across a greater range of activities than any of the other supranational organizations we have become used to reading about in the comparative education literature have.

In terms of the nature of the activity that is legally protected under GATS, there are four aim categories of trade in education:

1. *Cross-border supply.* Includes any type of course that is provided through distance education or the Internet, any type of testing service and education materials that can cross borders.
2. *Consumption abroad.* Involves the education of foreign students and is the most common form of trade in education services.

3. *Commercial presence.* The actual presence of foreign investors in a host country. This would include foreign universities setting up courses or entire institutions in another country.
4. *Presence of natural persons.* The ability of people to move among countries to provide education services.

According to these issues, barriers concerning consumption abroad are those that restrict student mobility—that is, the education of foreign students—abroad. It is here that the most visible tip of the education services market can be recognized (Robertson *et al*., 2002).

At institutional levels, HE institutions which develop their international efforts in response to market shifts and competition also experience increased pressure from key stakeholders who impose quality control and assurance standards on international HE development. Multilateral agreements such as the GATS and the Bologna Declaration have been broadly designed to foster great potential for international educational opportunity and engagement, but include hard-to-implement obligations to maintain academic quality and integrity (Denman, 2007).

Cox recognized the need for regulation, but considers the restructuring of world production through international education and training '*as an integral aspect of economic globalization'* (Cox, 1997). Didou-Aupetit and Mallea concurred with the economic aspects of international higher education, citing that North America will become inextricably linked to North American Free Trade Agreement (NAFTA) (Didou-Aupetit & Mallea, 2003:165). Czinkota advocated the relaxing conditions for institutions taking advantage of economic opportunities in cross-border education and argues that multilateral agreements should not be too restrictive. He stated that *"...academia is special and should be treated differently in the process of international services negotiations. Apparently, the key principles of the GATS framework, such as free competition, transparency, non-discrimination and national treatment should not apply*" (Czinkota, 2005:4).

Since the signing of the GATS, in an international "global" context in Higher Education, global interdependence has become increasingly valued, particularly in terms of economy, and its change has demonstrated the importance of the internationalization process in the HE context (Welch, 2002). In brief, between 1950 and 2009, internationally mobile students increased from 107,000 to 3.4 million; approximately half of this growth was in the last decade (UNESCO Institute for Statistics, 2011). Much literature situates international student mobility in the context of the "global knowledge economy" or the "information society" in which an increasing share of economic and social life centers on the exchange of information or intellectual property rather than goods (Shields, 2013).

The globalization of HE has also meant an opportunity for student mobility, and it has also entailed more opportunities for the improvement of relationships, networks, work opportunities, knowledge of cross-border cultures, and acquisition of specialist knowledge which is not available in the home country, and a survey reveals students´ preferences for international work placements (Sison & Brennan, 2012).

According to the foregoing, knowledge is nowadays understood as "a commodity" in Higher Education. Commodification, or the commercialization of academic knowledge, and more broadly the marketization of HE, has been an extensively studied topic at least since the mid-1990s (Baldini *et al*., 2006; Goldfarb & Herekson, 2003; Kauppinen, 2014; Naidoo, 2003; Naidoo *et al*., 2014; Sappey, 2005; Slaughter *et al*., 2004).

Nevertheless, other authors have moved in the opposite direction, confirming the need to debate about the insight of marketing in the education sector, and more particularly in the HE sector. The intellectual ideal has been compromised by successive processes of reform privileging paradigms of managerialism and commodification at the expense of intellectualism in shaping and defining HE, especially in the developing countries (Maringe & Gibbs, 2009; Byrne & Bond, 2014).

Focused on the commodification of the education world, authors cited, like Baldini *et al*. (2006), stated the importance of university entrepreneurship and commercialization of high-level consulting services, that induce technology transfer activity and can also play a fundamental role in increasing universities' *human capital resources, by reinforcing the campus'* reputation of excellence in different areas of influence, thus contributing to recruit the smartest students and the brightest faculty (Florida, 1999). This idea will be very present when dealing with the pride of belonging, which we address in this research.

One piece of evidence about the commodification of the HE is the branding process in progress in many universities. Research shows how branding efforts, imported from the business sector, are contextualized within HE and the implications for academics, faculty, managers, professional staff, and very specially for students, who use this criterion to select an institution (Jevons, 2006; Naidoo *et al*., 2014; Temple, 2006; Waeraas & Soldbakk, 2009).

In an era of rankings, metrics and student fees, it is suggested that branding has become an important means through which HE leaders and managers (re)negotiate the perceived value of different forms of capital and their relative positions within the field. Whilst branding operates at a largely ideological level, it has a material effect on the allocation of power and resources within institutions. This is an important development in a sector that has typically privileged scientific capital and contributes towards an understanding of the ways in which leadership is “distributed” within Universities (Naidoo *et al*., 2014).

Kauppinen (2014) pointed out that there are at least two modes of commodification of knowledge. Commodification affects a variety of aspects of HE, such as research, teaching, administration, and even nonacademic activities (Radder, 2010). First, the commodification of knowledge refers to *commodification of academic research*. This category, in turn, refers to *commercialization, that is, the pursuit of profit by academic institutions through selling expertise of their researchers and the results of their inquiries* (Radder, 2010). Second, commodification of HE refers to commodified educational products as delivered by HE institutions. Commodification of educational products implies that students are increasingly seen as customers whose “*needs and wants [are placed] at the center of organizational focus and strategy*” (Sappey, 2005: 496).

Given the technological advancements since the 1970s, distribution of knowledge via global communication networks has become easier, which has in turn increased the opportunities to commodify educational products, for instance in the form of distance learning. In other words, technological development has increased the possibilities to develop activities through which HE services can be sold in the global marketplace (Kauppinen, 2014).

Overall, Kauppinen (2014) concluded the need to be careful in the conceptualizations. In the field of higher education, the economic status of knowledge cannot be dealt with through the simplistic dichotomy of public good vs. private good.

In short, the expression *knowledge as commodity* can mean several things and they cannot be assimilated to some overarching conception. This topic clearly needs further research on both theoretical and empirical levels. Equally, it is assumed the insight of commodification of HE services is a debate opened by academic authors and researchers, although this landscape is maintained mainly in works about policy and management of education and so, not in terms of marketing, staying out of the objective set for this research.

2.3. The Student as a Customer

In academic literature there is debate that examines the student role as a customer. This debate emerges with the same force that marketing begins to have for HE institutions. To contextualize this debate, it is necessary to move backwards.

If there is any truth to this issue, treating students as customers in the sense that *the customer is always right* would clearly be corrosive to the educational process if education is taken to be the acquisition of knowledge and skills for both intrinsic and instrumental purposes (Eagle & Brennan, 2007) in opposite to other authors who maintain that the students have not to be (just) considered as customers (Sharrock, 2000).

Several implications of the *students as customers* conception for classroom teaching, particularly for the practices of the critical pedagogues, arguing that while the consumerist orientations of students help to anchor the model of student as consumer, the model itself also provides students with a basis for critiquing the services that they receive from educational institutions.

The consumer role is ascendant, especially as HE systems become more institutionally diverse, complex, inclusive, and expansive. In this environment, students and their patrons (parents, governments, etc.) demand more responsive and flexible institutional forms, which some sociologists have argued reflects the advent of an increasingly *reflexive society* (Wellen, 2005). On the other hand, getting HE “right” demands that we not assume that the *customer is always right* even although more students view themselves as active purchasers of academic services, and are calling for stronger quality assurance standards and “valued” credentials, as it is shown in a report of Government of Ontario published in 2004 (Ontario Postsecondary Review Secretariat & Rae, 2004).

Pressured, mainly, by financial constraints and by market logic (emphasis on efficiency, effectiveness, quality and competition), HE assumes on a new field of inter-institutional competition, of which the effort to attract students represents one of its most structuring components for certain universities, colleges, mainly in the Anglo-Saxon environment. In this sense, besides HE supplies diversification, institutions also tend, progressively, to change the way they perceive education and students themselves (Cardoso *et al*., 2011; Newson, 2004; Pitman, 2000; Robertson, 2000; Sharrock, 2000).

Education has been viewed as past and current knowledge passed to future generations through instruction designed by teachers and for which students were to be eternally grateful. The teacher is who, possessing all the knowledge, transmits it to the students and prepares them for life after school (Maringe & Gibbs, 2009). From there, the concept of alumni should acquire great importance according to this gratitude. Further on, we will take into account this idea to develop a large part of our theory about the sense of belonging.

In the past, marketing was only understood from the promotion and advertising perspective. Today, however, its meaning is more broad-based and about creating, communicating, and delivering value to those with whom the organization has a relationship, and hence knowledge is this value in this context roundly. It is often the historical roots and understanding of marketing that shape the criticisms and arguments associated with its emergence in education (Maringe & Gibbs, 2009). According to what has been described in the last paragraphs, knowledge is that value that is aimed at those who require to grow in competences and who understand it more as a need.

Essentially, there are four overarching forces that have driven HE to embrace the marketing idea (Smith *et al*., 1995) and they appear to have operated both in the HE environments of developed and less developed countries (Maringe & Foskett, 2002). These four broad principles provide a focus on developing a strong customer orientation in the university sector:

1. Students may not always be right but understand where they are coming from.
2. Students´ expectations and perceptions of service quality need to be managed.
3. Student satisfaction should be at the heart of the educational delivery service.
4. Research directions in the area of student as customer.

Within this new insight of HE and the new trend to apply marketing concepts and strategies in the management of the fundamental activity, centered on the student, there have been works that have also proposed models that adapt to the particularities that HE has (Ivy, 2008).

Ivy (2008) even proposed that a marketing for education based on the 7Ps model could be enough to approach the marketing for MBA programs. The initial variable described in this 7Ps model for business schools should include the following components:

- *Premiums:* accommodation, modules, exchange programs, computer facilities, residential requirements, class sizes.
- *Programme:* range of electives, range of majors.
- *Prospectus:* hard copy of prospectus, direct mail.
- *Promotion:* press advertising, publicity, electronic marketing.
- *Price:* payment arrangements, tuition fees, flexible tuition approaches, program duration.
- *People:* Face-to-face tuition, personal contact, open days.
- *Prominence:* academic staff reputations, league tables, on-line information.

Nguyen *et al.* (2016) argued that when students choose to commit for the study of a postgraduate degree, a variety of factors influence their decision, of which the brand performance and brand image constructs play major roles; interestingly, brand reputation is less important. "*The framework helps university managers in designing appropriate strategies to influence students' commitment towards the university to, for example, continue their postgraduate studies*" (Nguyen *et al*., 2016:1).

The study's researchers proposed and empirically tested a model of brand ambidexterity in the context of higher education, focusing on students' commitment toward continuing their postgraduate studies at the same university. Ambidexterity variables (i.e., exploratory and exploitative) indirectly affect commitment through brand performance, which in turn affect commitment directly as well as indirectly through its influence variables associated with the student perceptions, that is, brand image and reputation. The study's results thus confirm that ambidexterity is possible within a non-profit institution, and that such a strategy may lead to increased brand performance. As the study shows, such ambidexterity leads to improved brand image and reputation with both exploratory and exploitative strategies all directly affecting commitment. Several contributions are made to the existing literature in the field (Nguyen *et al.*, 2016*)*.

Moreover, the University Brand Personality Scale (UBPS), a six-dimensional scale, relates to brand love, positive word of mouth, and students' intention to support their university as alumni (Rauschnabel *et al.*, 2016), variables that are linked to customer behavior.

HE institutions are considered service organizations, providing education services to students (Gruber *et al.*, 2010). While many stakeholders of an institution can all be viewed as customers (parents, sponsors or patrons of researches, society, government, employers and faculty) (Hsu *et al*., 2015), students are the main one (Gruber, *et al.*, 2010; Ho & Weam, 1995; Quinn *et al.*, 2009).

In their paper, Quinn *et al*. (2009) noted that students of an institution of HE are probably the most obvious customers, while many other stakeholders also function as customers for varying areas of operations and would be commonly recognized as customers of a HE institution within the following groups with customer attributes:

- *Students:* Pay for service, receive educational instruction (service), utilize administrative functions, purchase auxiliary services (lodging, food, etc.).
- *Parents*: Select (or assist in selection of) service provider, pay for service, can be primary points of contact during some service interactions.
- *Research Sponsors:* Provide fund in exchange for information, service, or activities. Often have contractual arrangement.
- *State and Government*: Provide funds for university to engage in service. Exercise some influence over service/product design.
- *Society:* Benefit from the services provided, pay (through taxes) for portions of the service.
- *Future Employers of Students*: "Purchase" the end product of the service process, sometimes provide funding and advise in service design.
- *Disciplinary Academic Communities*: Benefit from scholarly activity of faculty members.
- *Accreditation Bodies*: Exercise control over product and service design.

- *Staff and Faculty Members*: Control some of product and service design, consume some services.

Owlia and Aspinwall (1997) surveyed 124 people involved in educational quality efforts in the United States, Europe, India, and Australia. The results identified students as the primary customer, followed by employers, society, faculty, and families in descending order of relative importance. In a previous research, Helms and Key (1994) interviewed students at Wright State University to assess how students perceived their role at the university. Students strongly identified themselves as the customers in HE and were hesitant to even acknowledge others as possible legitimate customer groups, and so, summarizing, in the postsecondary education, students choose institutions, pay for the product, select programs and schools within institutions, and choose courses and instructors, therefore, the category of customers is undeniable.

Education, and HE itself, is also being driven towards commercial competition imposed by economic forces. This competition is the result of the development of global education markets on the one hand, and the reduction of governmental funds that force public organizations to seek other financial sources, on the other. Considering the similarities among experiences encountered in the commercial world and those faced in HE, the phrase *market-orientation* is often used to describe the new situation in which a combination of quality and price determines the competition factors (Williams, 1993; Owlia & Aspinwall, 1997).

"*In addition to the competition for customers mentioned above, different aspects of university operations serve different customers. For example, residence hall facilities cater almost exclusively to students (and to a more limited extent parents) as customers. Other stakeholders have little or no interest in interacting with this part of the university. Administrative areas of the university also have specific internal and external customers. For example, the university's office of sponsored research serves internal faculty, staff and graduate student customers as well as external research sponsors and governmental agencies*". (Quinn *et al*., 2009:140).

The Wright State University survey to assess how students perceived their role in college, which concluded that students strongly identified themselves as customers in HE (Helms & Key, 1994), is opposed to another study which described that teachers were hesitant to take seriously students as clients (Ewell, 1993).

In the late 1990s, literature was focused on quality management related to HE and considered that customers were several groups linked to universities and institutions: students, parents, faculty, other stakeholders as State and Government, and society in general (Ho & Wearn, 1995; Pitman *et al.*, 1996; Quinn, *et al*., 2009). Educational institutions deal with multiple levels of customers and, therefore, must address, in some way, the needs and concerns of all customers (Pitman *et al*., 1996). From these groups or levels of customers, there is one that is always missing but should be included in the discussion: the alumni of HE institutions.

The emphasis on who is the end customer or primary customer is a serious point of disagreement. On the one hand, in the paradigm of education, students are the primary customer, and a partnership between faculty and students needs to be fostered in a discovery and learning process (Brower, 1991). On the other hand, other authors object to define the student as the prime customer (Marchese, 1991), admitting that in an educational institution there are different expectations for the internal customers. Pitman *et al*. (1996) stressed the importance of addressing the needs of all customer groups and to deal with the multiple customers in higher education, Ho and Wearn (1995) recommended that universities consider the relative importance of competing customers to balance quality improvement efforts.

In this framework, where several groups linked to higher educational institutions are considered as costumers, one of these groups, the alumni, is linked to their universities forever, therefore, they should also be seen as particularly important for HE institution marketing. Alumni, as a group related to their universities, should receive special attention, and in the global education market, universities will be able to obtain different results depending both on the preferences of this group and on how his group is managed.

2.3.1. Student as Customer and Perception of Quality

"*A review of the literature that describes quality efforts in HE found that most authors agree that the difficulty of defining higher education's customers is a major barrier to quality improvement efforts*" (Quinn *et al*., 2009:140).

Quality has often been related only to manufacturing or only to design, assuming that quality was the lack of defects, and that quality design was related, above all, to compliance with procedures and requirements. However, this point of view associated with the operative world and the production world has also become related to the commercial world. Quality in the commercial environment has much to do with the expectation, perception, and satisfaction of the final customer, and above all, in service marketing, in our view.

Quality is especially related to the expectation that the customer has and with the value proposition received, being of "inferior quality" when the expectation is greater than the proposal and of "superior quality" when the proposal of value received is greater than the expectation.

Owlia and Aspinwall (1997) examined the differences between HE and industry in their work, and how those differences affect cross-application of quality process. While industry quality techniques often suggest studying the market (the real needs of customers) and focusing on quality to meet these needs, the motivation of the academic world is independent of what the market requires. Ewell (1993) pointed out that the skeptical nature of the academy makes “fashionable” industry quality techniques suspect.

Nevertheless, over the last few years this idea has been reversed. There are already many educational institutions that are certified and use the criteria established in the procedures and quality models as guides for their management. The education market assumes these criteria normally and understands that quality certifications are criteria that are positively valued by future students at the time of choosing an institution.

Indeed, this means that customers (also students) have gone further, becoming the active element in judging products and services regarding the quality, and therefore, their value, and of their possible success or possible failure.

After the descriptions given above, this research continues analyzing the different ideas that have emerged about quality in education and its influence on the relationship between students-as-customers and their institutions.

The terms *service quality* and *quality in education* are difficult to define. Perceptions of service quality often differ based on the requirements of the service’s individual customer. In the educational setting, one customer might consider a certain class, curriculum, or university a high-quality educational experience while another might find the same experience mediocre (Quinn *et al*., 2009).

The literature suggests that HE began focusing on quality improvement efforts during the 1990s, owing to increased competition for students and operational funds. The competition for funding, resources, and good students has intensified (Hwarng & Teo, 2001) and institutions face a fast-changing world with ever-changing needs and ever-increasing demands for capable and competent graduates. Consequently, an institution must be operated effectively and efficiently and be able to deliver quality programs (Hwarng & Teo, 2001).

Owlia and Aspinwall (1997) stated that HE is being driven towards industry-style competition because of changing economic conditions. During the 1990s, students were becoming more savvy and discriminating, state funding formulas were changing, and non-governmental funding sources were becoming more selective, leading to the increased focus on quality (Canic & McCarthy, 2000).

In the HE context, where this research is carried out, there are quality techniques under consideration that can be more appropriate:

- TQM, that seeks to improve core processes, “including leadership, commitment, total customer satisfaction, continuous improvement, total involvement, training and education, ownership of problems, reward and recognition, error prevention and teamwork (Ho & Wearn, 1995)” (Quinn *et al*., 2009:142-143). The literature highlights TQM as the most widely used quality technique in HE, perhaps because some working definitions of TQM are so broad that administrations lump any quality effort under the TQM umbrella (Sahney *et al*., 2004).

- QFD, Quality Function Deployment (QFD), which is used to translate customer requirements and expectations into product or service attributes and quality (Sahney *et al*., 2004). The four-stage QFD process includes transferring:
  - Customer requirements into product/service features.
  - Product features into design requirements.
  - Design requirements into process requirements; and

- Process requirements into process/methods (Hwarng & Teo, 2001).

"The QFD process determines and prioritizes customer values so that the voice of the customer can direct the design of the product or service (Pitman *et al*., 1996). The QFD process involves a cross-functional team that works to define the customer, and the customer´s wants—the *whats*. Next, the team determines the *hows*—the mechanisms to satisfy the customer´s wants" (Quinn *et al*., 2009:143).

QFD has been used in a variety of different settings within higher education. Of the techniques studied, QFD was the technique most often applied in instructional settings, making it unique among quality initiatives. QFD has also been successfully used in higher education´s administrative quality effort (Quinn *et al*., 2009).

Indeed, QFD has been applied to university and other educational institutions in North America, Europe and the Pacific since the late 1980s, and a brief history of QFD efforts in HE was provided, beginning with what is believed to be one of the first applications—the Mechanical Engineering Department at the University of Wisconsin-Madison in 1991 (Muzar, 1996).

Also, a pilot study using QFD to improve the MBA program at Grand Valley State University in Michigan showed promising results (Pitman *et al.*, 1996).

In conclusion, QFD can be used to improve all levels of university education activity, from degree program design, to curriculum, to specific courses (Muzar, 1996).

- Six Sigma is a systematic methodology for process improvement. Schroeder *et al.* (2007) outlined the commonly accepted Six Sigma steps as:
  - Define process.
  - Measure quality variable value by customer – set improvement goals.
  - Analyze root causes of current defect levels – consider process change alternatives.
  - Improve process – check and improve; and

- Control – monitor over time.

The Six Sigma process requires a trained quality improvement specialist, or "Black Belt" to lead a cross-functional improvement team (Schroeder *et al.*, 2010) (Schroeder, et al., 2010).

Six Sigma methodology has seen broad acceptance in industry, although little has been published about its use in HE and, even though some indicate that the methodology would be applicable to HE (Raifsnider & Kurt, 2004), their approach is limited to a specific administrative setting. Lean Six Sigma may be applied in the university setting to improve process in curriculum delivery, business and auxiliary services, admissions and enrollment management, and research (Hess & Benjamin, 2015). Lean Six Sigma also can identify the key attributes of the higher education, which need to be understood for imbibing quality excellence, serving as an excellent resource for researchers and HE professionals (Sunder, 2016).

The complexity of universities, the difficulties of interpreting notions such as the client, added value, and the connections between teaching and research, make the implementation of Lean Six Sigma approaches difficult. While the few measured results available suggest that they do hold promise, their impact remains to be determined (Nadeua, 2017). In a review of experiences in HE, this author demonstrated the emergent character of the introduction of lean methods, Six Sigma and Lean Six Sigma philosophies into university settings, as well as their rather localized deployment within the complex systems under examination. Several challenges stand in the way of their successful application, including proper definition of the client, of added value, and of the associations between teaching and research.

In brief, institutions of HE may be hesitant to attempt using Six Sigma methodology because implementation typically requires a full-time professional to lead the quality improvement team, and HE settings are likely to be less lucrative consulting clients than for-profit corporations (Quinn *et al.*, 2009).

- “ISO 9001 is an international quality standard, administered through the International Organization for Standardization (ISO). ISO 9001 certifies a process, not a product or service (Schroeder *et al*., 2010). ISO provides a set of standards for process quality improvements that includes 20 elements, including attention to customer requirements, continuous improvement, adherence to applicable regulatory requirements, and management leadership (www. iso.org). This is one way for an organization to be recognized for their quality management efforts”. (Quinn *et al*., 2009:153)

The first university to achieve ISO 9001 certification was the University of Wolverhampton in the United Kingdom in 1994. There are few other examples in the literature of institutions of HE receiving ISO 9001 certification, particularly in the United States. An Internet search highlighted several certified universities in the United Kingdom and in the Philippines, as well as institutions in Sweden, Singapore, and Bangladesh (Quinn *et al*., 2009).

Closer to the United States, ISO 9001 implementation was examined in an engineering department in a Canadian university, based on standard concepts (Karapetrovic & Willborn, 1999).

This system outlined seven standards, including interface with the customer, design, acquisition of resources, deployment of resources, service delivery, service quality control, and service quality improvement (Karapetrovic & Willborn, 1999).

ISO 9001 certification requires a tremendous amount of effort. Karapetrovic and Willborn (1999) noted that ISO 9001 is often criticized for having too many required procedures and too much required documentation.

For quality assurance, as the zero-defect goal, the applicability and development for an ISO 9001 quality system should be researched. The applicability of different techniques in meeting the zero-defect goal, such as quality function deployment, statistical process control, and design of experiments, for instance, can also be examined (Karapetrovic & Willborn, 1997).

In the academic arena, the rewards of ISO 9001 certification are less obvious than the business and financial opportunities that can come with certification in industry. In higher education, rewards are found more in general process and system improvement. Both certification pressures and rewards could increase as education becomes more international and standards become more important. At present, ISO 9001 certification of HE institutions is an area where no cost/benefit data are available to judge implementation value accurately. (Quinn *et al*., 2009:149)

Many institutions have used a variety of techniques for quality improvement; each institution had to overcome similar obstacles with each implementation. Customer definition is at the center of this debate and the literature shows the different roles that can be assumed by students, academics, staff, and other figures in the educational institution, which are summarized below.

Table 2.1. Antecedents and tools of quality management applied to HE

Authors	**Methods**	**Outcomes**
Ewell, 1993	Quality as process the improvement	TQ does seem to contain new insights about how we can and should operate in HE.
Ho & Wearn, 1995	TQM	TQM excellence (HETQMEX) developed model for HE and training based on fundamental concepts of service quality.
Karapetrovic & Willborn, 1997	ISO	Applicability and development of quality system based on ISO 9001 to achieve zero-defect goal and universities' processes.
Owlia & Aspinwall, 1997	TQM	Review of the published literature on theories and applications of TQM in HE.
Karapetrovic & Willborn, 1999	ISO	Implementation of ISO 9000 international standards in the university environment, and presents examples of developing a quality system based on these standards in a Canadian university department

Authors	Methods	Outcomes
Canic & McCarthy, 2000	Quality Improvement Cycle	A case of service quality exploring the service environment at Indiana University Southeast.
Hwarng & Teo, 2001	QFD	Three applications found in the Business School at National University of Singapore of service-based quality function deployment (QFD) methodology.
Raifsnider & Kurt, 2004	Lean Six Sigma	An application of proven methodologies to improve quality, remove waste, and quantify opportunities in colleges and universities through Lean Six Sigma in HE.
Sahney *et al*. 2004	TQM	A study conducted on students within selected educational institutions in India to obtain a student perspective of the quality through SERVQUAL methodology.
Quinn *et al*. 2009	AQIP (Academic Quality Improvement Program)	A paper focused on identifying and evaluating techniques used to take on the challenges of the quality improvement in HE.
Hess & Benjamin, 2015	Lean Six Sigma	A comprehensive discussion of the Lean Six Sigma to be applied in the university setting, findings that can facilitate process improvements of HE.
Nadeua, 2017	Lean Six Sigma	Literature review about Lean, Six Sigma and Lean Six Sigma methodology for universities applied on highly localized basis to teaching-related processes or to services.
Davidson *et al*., 2020	Lean Six Sigma	A literature review that identifies the tools and techniques to continuously improve the systems and process that underpin teaching and learning.
Allaoui & Benmoussa, 2020	Lean Six Sigma	A study about the employees´ attitudes toward change with Lean HE in Moroccan public universities

Source: own elaboration

2.3.2. Alumni Role for the Higher Education Institutions

While many stakeholders of an institution can all be viewed as customers (e.g., parents, research sponsors, society, government, employers, or faculty members), students are the main customers (Gruber *et al.*, 2010; Ho & Wearn, 1995; Quinn *et al.*, 2009), and researchers are also increasingly viewing students as consumers of HE services (Sadeh & Garkaz, 2015; Yildiz, 2014).

Thus, this view of the students-as-customers allows to consider the quality as an argument about which any educational institution manager ought to control permanently. Assuming this circumstance, later students finish their stage in the educational institution, they become the future prescribers, and they are the ones who colleges and universities need. The satisfaction of students has become an important chapter and the measurement of student satisfaction can also facilitate the paradigm shifts from teacher-centered learning to student-centred learning (Hs *et al*., 2015).

Instead of directly measuring student satisfaction, Hsu *et al.* (2015) investigated satisfaction from the alumni perspective. In recent years HE institutions increasingly treat their alumni as sources of valuable information and financial support (Volkwein, 2010) and former students are offering important perspectives for evaluating academic programs and student services and their opinions are applied in recruiting and mentoring for the future candidates. Accordingly, researchers are using alumni surveys to assess their college experience (Gaier, 2005; Pettit, 1991).

Alumni studies can provide valuable evidence of institutional effectiveness and lend themselves to both locally designed and commercial survey instruments for data collection (Volkwein, 2010).

Gaier (2005) investigated via a survey with 1,608 alumni from a large state university of 3,397 alumni who received invitations to participate. Participants completed a revised edition of the Comprehensive Alumni Assessment Survey (CAAS) via Internet. The revised CAAS collected data regarding alumni satisfaction with the academic system, demographics, involvement in extracurricular activities, and current involvement as alumni. Data were analyzed in four steps. A first step will be to analyze alumni satisfaction with the academic system; the second step will be to analyze demographic and extracurricular data; the third step will be the analysis alumni responses with age cohorts, and finally a fourth step will be a qualitative analysis of comments made by participating alumni. Findings demonstrated a significant positive relationship between alumni satisfaction with the academic system as undergraduates and current alumni involvement with their alma mater. Simply stated, the higher the level of satisfaction with the academic experience, the more likely alumni are to support and/or participate with the university.

Before this last research, Pettit (1991) briefly reviewed the early efforts at forming association and organizing alumni reunions, describes several surveys used in assessment activities, and concludes with suggestions for conducting such surveys: first, pre-1980 alumni surveys that attempted to measure college outcomes are discussed and next, a list of the goals and measures of institutional effectiveness (from a 1980-1989 literatures review) is provided.

The benefits of understanding and promoting student/alumni are numerous (Hartman & Schimidt, 1995). Firstly, alumni surveys can provide more objective insights into student perceptions of course designs, instructional approaches, learning environment, curricular strengths and weaknesses, and overall satisfaction with the college experience (Hsu *et al.*, 2015). Secondly, satisfied alumni can financially help educational institutions (Gaier, 2005), provide positive word-of-mouth effects, and supply jobs to subsequent graduates (McAlexander & Koenig, 2001).

McAlexander and Koenig (2001) pointed out that managers of HE institutions have begun to adopt more aggressively many of the techniques associated with relationship marketing. This would seem like a perfect strategy for university, as loyal alumni can do such things as offer personal recommendations to help build enrollments, participate in alumni events, purchase university-branded products and enroll in professional education courses. This last topic will be closely linked to the scope of this thesis.

In a Portuguese university, a survey of 2,544 alumni was carried out to find determinants for the commitment relationship between alumni and alma mater. The analyzed data showed that "image of education", "image of communication", and "satisfaction with social and academic environment" are determinants of the commitment relationship, which provide important clues for the marketers´ decision-making process when developing activities geared towards alumni (Pedro *et al.*, 2017).

> *"Most importantly, alumni are better able to evaluate educational services. Unlike general services, the value of the educational services (e.g., skills or knowledge) that students receive cannot usually be evaluated until they enter the workplace.*
>
> *That is, the knowledge and skills gained in an institution have a value-added effect that is delayed until after the entire educational process is completed. Alumni surveys can assess whether the knowledge and skills acquired in the educational program can relate to what is required in the workplace. Unlike general students, alumni are the ones who have the chances to test the outcomes of educational programs in the marketplace. Therefore, universities and researchers are increasingly tapping alumni to provide critical assessments of the institution's performance (Jennings Jr., 1989), and this study aims to explore the determinants of student satisfaction from the perspective of alumni*". (Hsu *et al*., 2015:4).

2.3.3. Customer Satisfaction of Students

Considering students as customers means that academic directors also adopt some concepts usually referring to other service sectors, and even mass consumption. One of these concepts is *customer/student satisfaction*, and therefore, it must be measured and controlled as a management variable.

In fact, how to measure student satisfaction is a critical factor for HE institutions, since a satisfied student is more likely to recommend study programs to other students and to contribute with funds to support their institutions (Dlâcic *et al*., 2014; Yildiz, 2014).

This argument, therefore, is at the center of discussion when the repurchase is a subject for the managers of the HE institutions, as well as how to achieve that alumni return to their universities to extend their training and executive education.

DeShields *et al.* (2005) provided the findings of an empirical study to understand student satisfaction with higher educational institutions, using Herzberg´s two-factor theory. This study was applied at a state university in South Central Pennsylvania. Hartman and

Schmidt (1995) indicated that the formation of satisfaction judgment is a multidimensional process, which is dependent on the degree of goal development that a student has for each aspect of his or her educational experience. If students have poorly formed goals for an aspect of education, they are likely to base their satisfaction judgments on institutional performance.

However, Hsu *et al.* (2015) pointed out that practitioners face a challenge that is to find an appropriate tool to measure student satisfaction. Although the literature reveals the absence of a student satisfaction model that is used normally, the benefit of the Customer Satisfaction Index (CSI) is unanimously recognized.

Another model used is the Swedish Customer Satisfaction Barometer (SCSB), introduced in 1989 as a tool to measure a company´s efforts to reach customer satisfaction (Fornell, 1992), and the successful experience of this Swedish model has motived researchers to design the American Customer Satisfaction Index (CSI). CSI can even serve as a predictor of a company's profitability and market value (Anderson *et al*., 1994, 1997; Eklof *et al*., 1999).

However, it is no surprise that practitioners and academics alike are keen on continuing looking for how to measure customer satisfaction by establishing a robust theoretical model. Until today, limited works have been undertaken to understand the nature of student satisfaction in the educational context (Hsu *et al*., 2015).

HE institutions have the mission to transfer knowledge to students and to emphasize the students' total development (Astin, 1993), although knowledge transference and integral development should be considered as a single unit. Hsu *et al*. (2015) concluded that, to accomplish this mission, HE institutions should collect information about student satisfaction because understanding the students' views can provide valuable information to the management of these institutions to design more attractive programs.

However, other researchers criticize student satisfaction research because it is considered as non-systematic or lacking theoretical underpinning (Bejamin & Hollings, 1997). In this sense, although some attempts to quantify student satisfaction have been made through student questionnaires, these tend to be quite crude and *ad hoc*, one of the common criticisms of student satisfaction research (Duque, 2014).

Hsu *et al*. (2015:14-15) pointed out that "*there is a competitive pressure to provide quality education. This study aims to explore the determinants of alumni satisfaction in higher education. Instead of measuring student satisfaction, this study investigates student satisfaction from the perspective of alumni. The benefits of measuring alumni over student satisfaction are numerous. First, alumni surveys can provide more objective insights. Secondly, alumni can better evaluate the curricular relevance to job requirements. Finally, satisfied alumni can help educational institutions financially, provide positive word-of-mouth effects, and supply jobs to subsequent graduates*".

"In the framework of this research, alumni opinion is especially important, and although there is no alumni satisfaction model, the use of the CSI is unanimously acknowledged. The CSI provides a common set of measures to interpret customer satisfaction. By viewing students as an institution's customers, we can benefit from past studies of CSI by incorporating key concepts into the model. Although the CSI models can measure customer satisfaction, they lack the ability to diagnose areas for improvement. To address this issue, in this study we suggested a decomposed alumni model. Decomposed models provide greater explanatory strength than pure models" (Hsu *et al*., 2015:14-15).

Following the results, Hsu *et al.* (2015) built several strategic management maps to help the department of a HE institution identify areas for continuous improvement. Results showed that course design needed the most attention. And a second survey showed that the improvement was significant, with the score for course design having the greatest improvement.

In a longitudinal survey, Sanders and Kolek (2017) investigated changes in the extent to which students express or reject a customer orientation towards their education from their initial summer orientation to the end of their second year in college. Fifteen of the 19 items associated with a customer orientation included in the survey exhibited statistically significant changes, all in ways consistent with a greater expression of a customer approach. Results also indicated that while students increasingly expressed a customer orientation, overall, they continued not to express beliefs consistent with a customer approach. Implications are discussed within the framework of neoliberal ideology. Lastly, this study has showed an increased expression of a customer orientation as students engage with the institution. Furthermore, it showed that we should not assume an over-determined relationship between neoliberal ideology and students' educational beliefs and behaviors.

Therefore, this result and other studies also referred to allow us to focus solely on the marketing insight of the issue studied: the student as a customer and the management of their processes in HE institutions, without considering other issues related to performance or engagement of students inside the class.

2.3.4. Perceived Value in Higher Education

Perceived value is linked to the customer´s overall assessment of a service or a product. The concept of perceived value is based on equity theory (Can & Erdil, 2018; Christodoulides & De Chernatorny, 2009; Keller, 1993; Lassar *et al*., 1995). In addition, the perceived value factor is the consumer's general evaluation of the value of a product, which is based on consumer's perceptions (Zeithaml, 1988). More specifically, the concept means that there is a difference between received benefits and its costs (e.g., financial and psychological) (Dlâcic *et al*., 2014).

Generally, from the point of wiew of costumers, a product or brand that has superior attributes than other alternatives is selected, because it is expected that product performance will better satisfy consumers' needs, and costumers tend to prefer products with high-perceived value. Perspectives of consumers’ perceived value can be analyzed through functional value, emotional value, social value, and brand loyalty (Hoolbrok & Corfman, 1985; Yeh *et al*., 2016).

In the case of HE, the value based on student´s perceptions would be the via to measure this value beyond the brand equity of institutions. There is no doubt that the brand of universities with a high reputation influence student´s perceptions more, although it is very possible that other students also have a very positive perception of their institutions, because not all students can enroll in the best universities all over the world.

Program quality, staff and faculty, services, hosting, and facilities would be the indicators to determine the perceived value and this assessment influences the perceived value of students.

According to the literature, some researchers have used only a one-dimensional variable to measure the customer’s perceived value, using just one statement (e.g., value for money) for evaluating overall value (Sweeney *et al*., 1997), or as a multi-dimensional variable

(Sweeny & Soutar, 2001). For a number of years, the most common definition of value in marketing was the ratio or trade-off of quality to price (Anderson and Fornell, 1991; Cravens *et al*. 1988, DeSouza, 1989, Dodds, 1991; Dodds and Monroe, 1985; Grewal, *et al.*, 1998; Lichtenstein et al. 1990; Monroe, 1990).

Sweeny and Soutar (2001) described the development of a 19-item measure, PERVAL, that is used to assess customers' perceptions of value: emotional, social, quality /performance (Holbrook, 1999) and price/value for money. This scale was also tested in a post-purchase situation and, as in a pre-purchase situation, the results were found to be both reliable and valid.

When the concept of perceived value is defined in an HE context, the trade-off approach is emphasized (Dlâcic *et al*., 2014). In this aspect, the trade-off of the education is linked to teaching performance and, so, the teaching assessment is the main focal point in improving the educational organization. The existing practices, such as student feedback through the questionnaires and on-site peer evaluation, are mostly limited to in-class teaching performances (Chen *et al*., 2014), and to measure the perceived value other methods and scales without limits could be used.

For instance, the value perceived by a student is the overall evaluation made of the utility of the service. This service is based upon the perception of what is received and what is given could be achieved through all previously mentioned tools (Ledden *et al*., 2007).

Dlâcic *et al*. (2014) concluded that the concept of customer-perceived is multifaceted, and it considers the functional aspects of HE experiences, student emotions, and comparison with alternatives.

2.3.5. Repurchase Concept within the Higher Education Context

The academic literature shows very few significant references about environmental conditions (unemployment, social levels, economic rates, etc.) which would influence repurchase intention in HE context, when it is logical to think that these factors are present. Currently American and European HE systems design remarkably similar proposals for students. Both require a student to study at a first level for three to four years to achieve a

Bachelor's degree, and then study at a second level for one to two years to obtain a Master's degree. According to the INE (*Instituto Nacional de Estadística*-National Statistics Bureau), the Spanish agency of statistical services, young Spanish people entering the labor market are between twenty-five and twenty-nine years old, due to the high unemployment rate and a complex labor market. We were able to find an essay which relates to unemployment and education but without delving into the contributions of HE to the problem (Colombo & Santagati, 2016; Santagati *et al*., 2019).

This sociological problem is an important challenge and means that European HE institutions of Southern Europe, for example, would have the opportunity to attract their alumni who would return to their universities to complete their higher education, even for time periods between the end of a first education period and the incorporation to the labor market, This would be one of the opportunities where marketing must act to create strategies focused on the loyalty, the engagement, and the pride of belonging of students to their universities.

The other challenge is continuing one's education, which is so important today, and which will be even more important in the future. Due to the need for updating that will exist in the future, in a world where everything is changing so rapidly, HE institutions should be a very important actor in the education of thousands of executives and managers around the world. Maybe it is moreso in the American HE system where universities are very linked to companies and firms, but this event will probably appear very soon in Europe, where the HE institutions have understood that the path to the work world is very clearly marked.

Commercialization of HE appears in numerous academic papers relating variables of marketing to the scope of education as a business. This insight has led to a new approach to studying variables that affect students when they take decisions about applying to a university, and very directly, a vision associated with the logic of the service for this purpose has been adopted and a service is a complicated phenomenon (Gronroos, 1988).

If universities think about marketing, large, imaginative, advertising promotion budgets, glossy brochures, and intense selling activities would not be the best way to achieve the objective pursued. "*Fortunately, Marketing has a healthier respect for the consumer than academicians have for Marketing*" (Ng & Forbes, 2009:7). At the heart of marketing is the belief that consumer needs should be met effectively (Kotler and Keller, 2006; Ng & Forbes, 2009).

One of most important factors in the integral human development is the system of HE (universities, colleges and schools) (Dlâcic *et al*., 2014). The decisions of what and where to study are the most important ones that young adults must make. Later on, students studied for several years in the same university and achieved their grades, consequently, a sense of pride in belonging should have emerged from most of the students, which would remain for the rest of their lives. Hence, the fact that some alumni could repeat studies in the same institutions is a remarkably interesting and profitable possibility for universities and institutions of HE, and is more than enough reason to maintain their sustainability and prestige.

In an HE context, student repurchase intention contains an attitudinal and behavioral dimension, and refers to the time both during and after the student's period of study (Dlâcic *et al.*, 2014; Henning-Thurau *et al*., 2001). Students' loyalty to their institutions where they studied is demonstrated by positive word of mouth (recommendations), by offerings jobs to the new graduates and by returning to the institutions to update knowledge later (Dlâcic *et al*., 2014).

Thus, we consider that future repurchases, and therefore the intention of alumni to return to their HE institution, will be an element of profitability and economic sustainability, and hence it will be an important source of value for the management of the institutions.

Marketing researchers have been studying these variables and constructs in depth for several years. In the HE context, some differences among the variables and constructs may be detected as there may be a gap between loyalty and the eventual repurchase behavior, as we will see below.

Thus, considering that student repurchase intention is also linked to an attitudinal and behavioral dimension and also refers to the time both during and after the student´s period of study (Henning-Thurau *et al*., 2001), student repurchase intention can be viewed as an advantage for institutions, because keeping the existing students is less costly than attracting new students to the college or university (Rojas-Mendez *et al*., 2009).

To continue delving into the repurchase concept, it will be analyzed with an insight into the concept of loyalty.

2.3.6. Insight into Repurchase from the Concept of Loyalty

We argued earlier that loyalty is not a pledge of repurchase, nor does the repurchase behavior mean that there will always be a loyal customer. Coincidentally, there may be circumstances that lead to this repurchase without being motivated by loyalty, e.g., when there are no other offers for a same product or service. Most students will probably remain loyal to their HE institutions, but there is no certainty that they will return to these institutions to study again. Likewise, alumni may return to their HE institutions for other factors of advisability.

The conceptualization of repurchase intention has evolved over the years, and it is regarded as one of the consumer behavior outcome variables resulting from high value and satisfaction and resulting in loyalty. The literature review indicates that initial research emphasized only the behavioral dimension loyalty –the repurchase dimension (Caruana, 2002).

However, "*it is assumed that loyal students continue to support the institution after they have completed their formal education by positive word of mouth (recommendations), by offering jobs to new graduates, and by returning to the institution to update their knowledge. Therefore, focusing on customers as sources of value for an HEI is needed"* (Dlâcic *et al.*, 2014:145).

Caruana (2002) pointed out that repurchase of customers is the final effect of service loyalty, being one of the most important constructs in marketing services. Indeed, when loyal customers indulge in repeat purchase, loyalty is the base of any business. Henning-Thurau *et al.* (2001) showed that two variables are key determinants of student loyalty: the quality of teaching services (as perceived by students) and students' emotional commitment to their educational institution and Dlâcic *et al*. (2014) discussed in their study how the concept of students' loyalty is related to repurchase.

Oliver (1999) had suggested that loyalty is a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, despite marketing influences to cause switching behavior. Also, although loyalty is most typically satisfied, satisfaction does not always translate into loyalty. The satisfaction is a necessary way to loyalty. So, students' satisfaction would be a prior step to repurchase.

However, the relationship between satisfaction and loyalty is complex and non-linear (Jones & Sasser, 1995; Yu & Dean, 2001). Jones and Sasser (1995) showed that costumers can be classified into four segments: apostle, terrorist, mercenary or hostage, with the apostle client being the type of customer linked to loyalty (Huete, 2001; Kenney & Khanfar, 2009). Yu and Dean (2001) considered the measuring the cognitive component of customer satisfaction, focusing on the affective component, and explored the role of emotions in satisfaction, and then compared the predictive ability of the cognitive and affective elements.

Loyalty is viewed in the marketing literature as either an attitude or behavioral intention that leads to repurchase intention. Loyalty is viewed as the result of cognitive component as the result of the affective one. Thus, loyalty can be viewed as a psychology attachment to an organization or a company, a tacit pledge between the parties to maintain a relationship (Bansal *et al*., 2004).

Over the years, attitudinal and cognitive dimensions have been incorporated into the study of loyalty (Bowen & Chen, 2001; Caruana, 2002; Hallowell, 1996; Olsen, 2002). Behavioral loyalty is considered as being consistent, repetitious purchase behavior, while attitudinal loyalty reflects an emotional and psychological attachment (Bowen & Chen, 2001), and cognitive loyalty is a higher order dimension and involves the customer’s conscious decision-making process in the evaluation of alternative brands before a purchase is affected (Caruana, 2002).

Thus, this perspective means that customers first become loyal in the cognitive sense, then later in an affective sense, and still later in a conative, action, or behavioral manner (Olsen, 2002). This conceptual framework, based on expectancy-value theory (Eagly & Chaiken, 1993), makes it possible to include several factors, which may mediate or moderate the attitude-behavior relationship (Dick & Basu, 1994), who also affirm that cognitive, affective, and conative antecedents of relative attitude are identified as contributing to loyalty, along with motivational, perceptual, and behavioral consequences.

Dlâcic *et al*. (2014) managed the loyalty concept through repurchase intention, which encompasses both the behavioral and attitudinal dimension. It will be possible that a student’s favorable attitude and behavior towards the HE institution, would imply recommending the faculty to others and that they will be trying to return to the same to continue their education.

Also, Kenny and Khanfar (2009) proposed to study the repurchase intention dimension within HE through the relationship between customer satisfaction and service quality. However, while the relations between loyalty, service quality and satisfaction are well known and have been studied in different sectors, there is a gap in the literature examining this relationship within HE (Kenney & Khanfar, 2009).

Students´ enrollment attraction is a continuous problem for the HE institutions. While researchers have studied this issue from several perspectives, few of them have viewed the problem as a marketing challenge (Kenney & Khanfar, 2009).

2.3.7. Insight into Repurchase from the Concept of Engagement

Four components assess the engagement of a customer with a firm (Kumar *et al.*, 2010). The first component is customer lifetime value (the customer´s purchase behavior, CLV); the second is customer referral value (when one customer refers the firm to another customer, CRV); the third is customer influencer value, including the customer´s behavior to influence other customers, increasing acquisition, retention and share of wallet through word of mouth of existing customers as well as prospects (CIV); and the fourth is customer knowledge value or value added to the company by the feedback from the customer (CKV).

The second and third argument are very related to the *apostle* concept (Huete, 2001) (Kenney & Khanfar, 2009), while that first argument, Customer Lifetime Value (CLV), has been widely studied (Blattberg *et al*., 2009; Verhoef & Lemon, 2013), and its meaning as customer-based value (Braun *et al*., 2015; Gupta, 2009).

Companies are realizing that customer engagement is also a strategy of looking at customer and stakeholder relationship. Engagement refers to the creation of a deeper, more meaningful connection between the company and the customer, and one that endures over time. Engagement is also seen to create customer interaction and participation (Voyles, 2007). This insight is especially interesting for educational institutions where the relationship between students and institutions can bring benefits for all. These benefits are very related to the four components proposed by Kumar *et al.* (2010), where the meaning of repurchase behavior is when some alumni return to their institutions to continue studies.

On the other hand, the term engagement is behavioral in nature and goes beyond transactions and is specially defined as a customer´s behavioral manifestation toward a firm, a brand or a product, beyond purchase, resulting from motivational drivers (Kumar, *et al*., 2010; Van Doorn *et al*., 2010) but it would be incomplete without the inclusion of repurchase.

Kumar *et al*. (2010) describe a “chain of effects” framework for connecting a customer with a firm and which could be applied perfectly in the relationships between students and their institutions. This metric of four components follows the widespread belief in the literature and that affects shareholder value (Berger *et al.*, 2006).

Table 2.2. Four components of repurchase by engagement.

	CLV	**CRV**	**CIV**	**CKV**
Behavioral	Acquisition rate, retention rate, acquisition channel, share of wallet, retention cost, tenure, purchase frequency, cross buying, value of purchase, variance in spending, cost of win-back	CLV of customers acquired from referrals	CLV of customers acquired from influence, number of reviews, product or service expertise, emotional valance of the \ reviews and interactions opinion leadership, tendency to recommend, and use social media and blogs	CLV, product or service
Attitudinal	Satisfaction, purchase intent, brand value or equity, relationship commitment, shopping channel preferences, firm understanding of customer needs, communications channel preference, complaint resolution, reason for leaving	Likelihood to recommend by being an opinion leader, tendency to use social media and blogs.		Likelihood to provide feedback
Networking	Not Applicable	Number of connections and level of interaction with prospects, tendency to be hub versus a weak link across hubs	Number of connections and level of interaction with customers, tendency to be hub versus a weak link across hubs	Number of connections and level of interaction with customers, and prospects, tendency to be hub versus a weak link across hubs

Source: own elaboration

Although used in different circumstances, having various meanings and targeting several domains, engagement several years ago became a big buzzword in marketing (Gordan *et al.*, 2012). Marketers around the world have been witnesses of the birth of a new type of marketing: engagement marketing. Because of the wideness of this idea of marketing, education would be a perfect candidate for engagement marketing tactics because engagement measures have attempted to explain organizational commitment (Bowden, 2009).

Bowden (2009) sought to redirect satisfaction research toward an approach which encompasses an understanding of the role of commitment, involvement, and trust in the creation of engagement and loyalty of clients.

Within the organizational behavior literature, engagement has been defined as "task behaviors that promote connections to work and to others", which are expressed physically, cognitively, and emotionally and which stimulate personal development and increase employee motivation (Khan, 1990). This last research described three psychological conditions – meaningfulness, safety, and availability; all of which are more related to engagement at work, but can also serve to introduce the psychological aspect of customer behavior.

2.4. The Meaning of Pride of Belonging in Marketing

Today, marketing mentions customer communities and uses the membership concept to create links between companies and their clients. Membership, based on the pride of belonging to a brand, can be used as a strategy to retain customers and to change repurchase behavior.

In this chapter, we argue about the possibility of building a marketing strategy based on the pride of belonging. We propose that the pride of belonging that customers feel for a product or a brand can be used especially as arguments for marketing. This pride or sense of belonging has been studied from a point of view based on psychology or sociology, but we point out that this question can be studied from the point of view of marketing, also. Maintaining this line of thought, we have targeted some antecedents that address this issue: a marketplace, for example, can be understood as a community made up of its members entities and the relationships among them. Communities tend to be identified as a basis of commonality or identification among their members (neighborhood, an occupation, a leisure pursuit, or devotion to a brand) (McAlexander *et al.,* 2002). Assuming that the sense of belonging is developed into a marketplace community, then, what effects would the sense of belonging have on customer behavior, and would the sense of belonging influence the repurchase behavior?

Such as is mentioned in the paragraph above about engagement in this thesis, there are some psychological aspects closely related to marketing and psychology. First of all, we have been speaking about the three aspects associated with loyalty and the repurchase intention: cognitive, attitudinal and nature; or physically, affective, and emotional components.

Thus, we believe that there is a wide margin between the repurchase intention and its motivation, and therefore a more profound analysis must be undertaken regarding the aspects that link them. Hence, we propose to add the pride of belonging as an additional step in the repurchase chain decision. Having studied customer satisfaction, perceived value, loyalty and engagement generated, we finally arrive to the last stage: the repurchase intention, but would it be prior to or after, the sense of belonging to one’s own educational institution?

Belonging is a concept that has not been discussed or researched widely. Scant literature addresses the concept, and much of this is narrative rather than empirical (Hagerty *et al.,* 1992). Belongingness implies recognition and acceptance of a member by another member in a group (Anant, 1966).

Academic literature cites the need to identify as many uses of the concept as possible; an initial stage of concept analysis (Walker & Avant, 2005). Belonging can be considered from psychological, sociological, physical, or even spiritual perspectives.

Anant (1966) pointed out that belonging, psychologically, is an internal affective or evaluative feeling, or perception. This could best be described as a sense of belonging when a person´s experience of being valued or important to an external referent and experiencing a fit between self and that referent. Also, sociologically, belonging connotes membership in groups orsystems, that are meaningful. Belonging can be observed and described through behavioral referents such as memberships in groups and social networks.

This component of belonging could be closely related to the world of educational institutions and as such, students and alumni would be linked to them. Moreover, of this sociological aspect, we can find other aspects as the physical sense, that is the possession of objects, persons, or places (Hagerty *et al*., 1992).

Also, the idea of belonging aligns with the corporate branding approach (Curtis *et al*., 2009). As well as building a connection with users, brands must also foster a sense of belonging through interaction and engagement, where engagement can take the form of content which tailors to specific groups of users (Lasorsa *et al*., 2012), for example, prospective students (Rutter *et al.*, 2016).

Therefore, we are considering the meaning of pride as the feeling that some brands and products evoke in their consumers. A brand like Harley-Davison would be the perfect example of the pridethe owners of these motorbikes feel which is easily recognizable. Much like Harley-Davidson consumers, others around the motor world feel a special pride of belonging to their brands (Ferrari, Lamborghini, Porsche, etc.) and this argument is used in customer relationship marketing.

Obviously, we consider that pride can develop the loyalty and engagement of consumers and costumers, and so, it should be a key to understand the repurchase behavior. As the sense of pride in the brand is higher, the repurchase is also probably higher, and more frequent. Objectively, a consumer with high pride or sense of belonging could be a remarkably interesting marketing argument.

The main proposal of the research is that the sense of belonging can be considered as a useful construct for marketing. Just as other constructs are used to identify costumers' behavior: satisfaction, perceived value, or quality, we will use the pride of belonging to model that behavior as well.

Companies should design strategies to develop a sense of belonging to their products such as the brands mentioned (Harley-Davidson, Ferrari, etc.), to which their clients are not only loyal but also feel that they belong to them. This belongingness could be an important driver of profitability for the companies. We argue this point, because there is very little literature about it, when the argument appears very clearly.

Pride of belonging marketing is beyond relationship marketing which when it appeared, was an idea of a business earning the customers favor and loyalty by satisfying their wants and needs (Berry, 1995).

2.4.1. The Pride of Belonging: The Theory of the Sense of Community

Psychology and marketing have written about pride of belonging. In Hillery (1955) the first definitions of community and group cohesiveness appeared. From 1955 until the second decade of the 21$^{st.}$ century the idea of community has changed very much.

McMillan and Chavis (1986:9) defined belonging as a feeling towards the community: "a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together".

The sense of community is very well explained with the following example.

> *Someone puts an announcement on the dormitory bulletin board about the formation of an intramural dormitory basketball team. People attend the organizational meeting as strangers out of their individual needs (integration and fulfillment of needs). The team is bound by place of residence (membership boundaries are set) and spends time together in practice (the contact hypothesis). They play a game and win (successfully shared valent event). While playing, members exert energy on behalf of the team (personal investment in the group). As the team continues to win, team members become recognized and congratulated (gaining honor and status for being members). Someone suggests that they all buy matching shirts and shoes (common symbols) and they do so (influence).* (McMillan & Chavis, 1986:16)

Thus, the elements of sense of community operated in a linear fashion. Individuals sought to meet their needs by integrating them with the needs of others.

Membership boundaries were set and practice sessions for members only were scheduled. This allowed for shared time and space, which in turn provided shared valent events. Winning facilitated reinforcement for being a member, which engendered influence and conformity.

Over time authors have developed Sense of Community Scales (SCS) as:

- A 40-item scale to probe communicative behaviors and attitudes at the community or neighborhood level of social organization (Doolittle & MacDonald, 1978).
- A questionnaire distributed to randomly selected members of the Division of Community Psychology of the American Psychological Association (Glynn, 1981).
- Kasarda and Janowitz (1974) developed a measure with seven items: feeling at home in the community, agreement with the values and beliefs of the community satisfaction with the community, feeling of belonging in the community, interest in what goes on in the community, feeling an important part of the community, and attachment to the community. This scale was found internally consistent (Bachrach & Zautra, 1985; Kasarda & Janowitz, 1974).

Based on these scales and questionnaires, and other surveys used to measure the engagement of alumni with their universities, we propose to develop a scale that allow us to calibrate the belongingness to the institutions and what it means for the marketing.

2.4.2. Sense of Belonging Theory for Education

Another interesting vision of the students' belonging to their HE Institutions has been developed from the sense of belonging that strongly influences the students' performance and behavior, and is closely related to education and psychology: persistence, intentions and interventions (Hausmann *et al.*, 2009) but equally useful to establish the characteristics that can define this construct in the future for marketing. A review of Strayhorn´s (2012) Theory of Sense of Belonging shows that engagement, social support, and academics are all components to students´ feelings of belonging.

Strayhorn (2012) pointed out that sense of belonging is one term with many meanings. Reflecting the difference of opinions is the vast diversity of terms or labels attached to this experience: belongingness, relatedness, membership, community, acceptance, support, and affiliation, to name a few. No matter the term, they all deal with an individual´s psychological experiences, and, importantly, their subjective evaluation of the level of integration in a context such as family, school, or college.

The literature shows a fair amount case of disagreement about a specific definition of sense of belonging. Considering the following:

1. Refers to "a feeling that members matter to one another and to the group and a shared faith that members' needs will be met through their commitment to be together". (Osterman, 2000:324)
2. Characterizes a person´s perceived belief of indispensability within a system (Anant, 1966).
3. It is defined as an individual´s sense of identification or positioning in relation to a group or to the college community, which may yield an effective response (Tovar & Simon, 2010).
4. Refers to students' sense of being accepted, valued, included, and encouraged by others (teachers and peers) in the academic classroom setting and oneself to be an important part of the life and activity of the class (Goodnenow, 1993).

Strayhorn (2012) defined sense of belonging as a basic human need, a feeling that influences behavior. Applied to the university setting, sense of belonging is the perception of their own affiliation and identification with the greater university community (Hausmann *et al*., 2009). The degree to which students feel accepted, respected, valued, and included to the institutions influences their feeling of belonging (Strayhorn, 2018).

A high degree of success and motivation to persist in HE is linked to the sense of belonging such as several studies have demonstrated (Hausmann *et al*., 2007; Morrow & Ackermann, 2012; O'Keeffe, 2013). O´Keeffe (2013) pointed out that the capacity of a student to develop a sense of belonging within the HE is admitted as a critical factor determining student retention and this can be achieved by the development of positive student/faculty relationships.

This Sense of Belonging Theory shows the ways in which students and especially international students develop and experience sense of belonging in their universities. Understanding the sense of belonging can make it easier for universities to find, care for and retain these students (Cisneros *et al*., 2019). Sense of belonging could be defined as students' perception of their own affiliation with the university community, which, in consequence, results in a higher level of persistence, retention and academic success and also relates to normative congruence, suggesting that students seek that their institutions are aligned with their own values, expectations, and attitudes (Strayhorn, 2018).

This approach highlights the importance of understanding sense of belonging related to its impact on one´s experience, learning outcomes, and the intent to persist (Cisneros *et al.*, 2019) and its meaning is more focused on performance aspects of students during courses to achieve their titles than to aspects related to the sense of belonging, after their graduations.

The theory of sense of belonging literature review shows three big keys: the social barriers, engagement with the institution, and their academics. Social support is one of the primary tenets that influences sense of belonging (Strayhorn, 2012) and the social support is easier to find for domestic students than for international students and the sense of belonging would be greater in domestic students than in the international students of HE institutions.

Furthermore, a vast body of research revealed the importance of student engagement regarding civic responsibility and leadership, critical thinking and clarified value, and multicultural expression (Cisneros *et al*., 2019). However, Strayhorn (2012) points out that engagement of students is related to sense of belonging because students participate in purposeful activities that lead to success, dedicating time and energy, and third, through engagement, students are more likely to adapt well to the institutions.

Also, Strayhorn (2012) noted that sense of belonging continually changes and is dependent on the experiences students have in their environment. Sense of Belonging Theory indicated that social support and engagement strongly influence sense of belonging and the academic success of the student rather than the other way around. Furthermore, Cisneros *et al.* (2019) showed that students who felt highly stimulated by the academic environment and academic success, fostered a sense of pride.

Sense of Belonging Theory is a development to explain how students feel about their universities during their stay. The student´s sense of belonging is highly related to the social barriers a student can find at the universities, the level of engagement in their performances and academic success. Beyond these assumptions, the alumni sense of belonging could be considered very linked to the time of stay in the university and it can be assumed that if sense of belonging was high for their stay, this sense of belonging will continue when students leave the university and become ex-students.

2.4.3. *The Pride of Belonging of the Alumni*

A good starting point to build a model based on the sense of belonging to a HE institution could be in professional associations. Gruen *et al.* (2000) conceptualized and empirically examined professional associations´ relationship-building efforts, that are the core service performance, rewards for contributions, dissemination of organizational knowledge, member interdependence enhancement activities and reliance on external membership requirements.

Three components of commitment: affective, continuance, and normative are theorized to mediate differentially the correlation between the associations´ relationship-building efforts and their members´ relationship behaviors (membership retention, exchange-based participation, and cooperatively based coproduction) (Gruen *et al.*, 2000).

There are multiple forms of memberships and membership organizations; professional associations provide and interesting and important context for the development and testing of theories of membership relationships, but surely, we can find other organizations that work with the same principles, some of them very similar to an alumni organization, for example.

These relationships are characterized by a formalized agreement that includes regular dues payments and an annual membership renewal. Members choose their level of participation and consumption of the benefits offered by the association (Gruen *et al*., 2000).

Alumni appear in the academic literature about satisfaction and others marketing insights as a source of valuable information and financial support (Volkwein, 2010). The financial support of alumni should be considered as a sample of belonging and pride too.

Gaier (2005) pointed out as satisfied alumni can financially help educational institutions and McAlexander & Koenig (2001) affirmed that this satisfaction provides positive word-of-mouth effects, and supply jobs to subsequent graduates. These three arguments are clearly linked to the loyal behavior of alumni to their institutions, prior a possible back to their university or college.

Nowadays we think that the follow-up in social networks is another indication of interest and belonging. If a former student is a follower of any social network (Twitter, Facebook, or Instagram), you could assume that there is a link and interest in the institution: sense of belonging, undoubtedly.

The importance of social media as platforms of social interaction, communication and marketing is evident nowadays. Increasing numbers of businesses in various industries have already integrated or plan to integrate social media applications into their marketing programs. HE institutions show increased interest in the potential of social media as a marketing tool (Constantinides & Stagno, 2011).

An important issue for research is to understand how potential students use social media and what their role is in the possible decision-making process of electing a program of study, a University, or College (Constantinides & Stagno, 2011) and particularly this role will be relevant in alumni to approach the possible back to study in their Institutions.

On the other hand, some authors have studied how social networks influence relationships between students and faculty inside the educational institutions (Roblyer *et al*., 2010; Arteaga-Sánchez *et al*., 2014). However, we have not found literature that links social networks and alumni´s pride of belonging to their institutions when it could be an evident argument to research.

Our research aims to develop the pride of belonging to a HE institution, considering that it can be built upon six components: WOM, presence in events, membership to any institution´s association, recommendation for hiring, financial support, and social media follower of some institution platforms.

To finish this theoretical framework, we argue the importance of universities in this context as a community and a place where students develop their commitment, their loyalty, and their engagement. The marketing concepts used for this framework range from arguments as general as customers' satisfaction to the perceived value and the scope of the research is in the universities as a market and the HE as a product.

As a part of HE marketing, we argue that the sense, or pride of belonging must be present in the study of customer behavior and that the sense of belonging can also be described, and measured through six variables as we will describe below. Based on this idea, we argue that pride of belonging is fully covered as a marketing concept, beyond that of sociology or psychology, which have used this concept many times in studies and theories. Furthermore, we believe that this construct is closely linked to customer loyalty and the engagement concept of customers, and they are the ones who can make a possible repurchase in the first place.

CHAPTER 3

3. CONCEPTUAL MODEL, VARIABLES AND HYPOTHESIS DEVELOPMENT

3.1. *Introduction*

This exploratory research seeks to answer the following research question: "Does the sense of belonging affect the behavior of the repurchase and the intention of graduates to return to the same institution to continue their studies?" To answer this question and reject or not the hypotheses, we will build a model that links these variables to each other and to other variables such as quality, satisfaction and value which can be evaluated in relation to the sense of belonging and the intention to repurchase.

We propose a model which represents the subject to research and is able to answer the research question that we have formulated. The main relationships that are discussed in this study are linked to quality service, satisfaction, value perceived and pride or sense of belonging.

This research tries to find the relations between perceived value, customer satisfaction and quality service with the repurchase intention and, on the other hand the relationship between the pride of belonging and repurchase and the positive relations between them. We expect to verify that pride, or sense of belonging exert a positive influence on the repurchase.

This investigation is focused on the effect that the pride of belonging has on repurchase intention and which effect is more important: the quality perception and customers´ satisfaction, or the pride of belonging. Also linked to this variable, we must consider other mediator/moderator variables related to demographic, social and economic factors.

Since the variables of this model cannot be observed directly, it is necessary to create them as latent variables. For the creation of these latent variables, we consider necessary to generate a battery of items or indicators through which the different latent variables will be represented (Bollen, 2014).

In this chapter we explain how this model has been built from other previously proposed models and we explain the variables included in it. At last, we present the hypotheses considered in this research.

3.2. Conceptual Model

In this section we review empirical studies that have analyzed the relationship between satisfaction, quality, and value. The basic criteria used for these models combine perceptual constructs. Empirical evidence suggests a high correlation between perceived quality and satisfaction, while customer equity literature provides the basic rationale for investing in customer relationship. Marketing has moved from a brand-centered approach (Mithas *et al*., 2005) to a customer-centered one.

The ability to acquire, manage, and model customer information is key to sustaining a competitive advantage (Hogan *et al*., 2002), and is an asset of firms, in our case HE Institutions. Thus, the model, which we are proposing for this research, should be the base of information from which, we can analyze results according to the opinions of alumni, and make decisions in order to achieve two objectives:

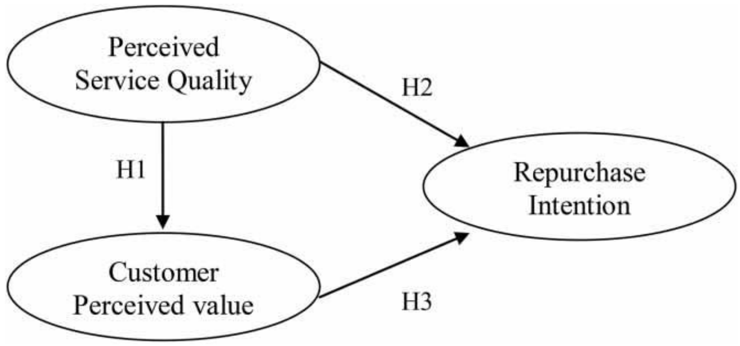
1. The improvement of variables related to the student perceptions (quality, value, and satisfaction), and.
2. The improvement of Institution objectives (sense of belonging and repurchase).

In as much as we will be able to implement a valid model for these objectives, we will be achieving the last objective of this research: to design strategies based on students´ pride of belonging in order for the alumni to return to their HE Institutions to continue studying in the future.

From a general viewpoint, the models are formed by one type of non-observable measurement that includes perception, attitudes and future intentions. Below we show the models on which we have relied to build our model, starting from a general model to a more complex one.

First, we have taken as references Dlâcic´s *et al*. (2014) model and Duque´s (2014). In both we measured behavioral intentions in High Education and its relationship to repurchase intention. Based on a literature review, Dlâcic *et al*. (2014) explored the relationship of perceived service quality with student-perceived value and student repurchase intentions.

Figure 3.1. Conceptual model



Source: Dlâcic *et al*. (2014).

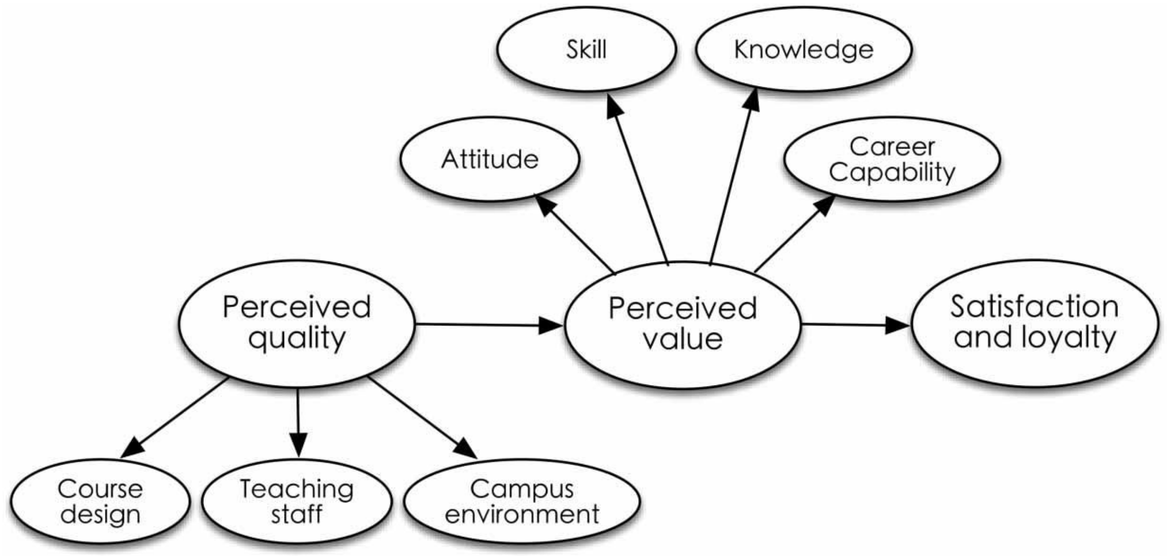
The three hypotheses tested suggest that perceived HE service quality has a direct, positive, and significant effect on student-perceived value; perceived HE service quality has a direct, positive, and significant effect on student repurchase intention, and student-perceived value has a direct, positive, and significant effect on the student repurchase intention. This model simultaneously examined the relationships among three latent concepts; and the results obtained allowed to not reject the hypotheses formulated.

Hsu *et al*. (2015) developed a model extremely close to our research proposal. It includes alumni satisfaction through perceived quality, perceived value, satisfaction, and student loyalty; they developed a decomposed alumni satisfaction model for HE institutions. As there is competitive pressure to provide quality education, Hsu *et al* (2105) model aimed to research satisfaction using the customer index (CSI) that is unanimously satisfactory. These authors suggested a decomposed model that breaks down service quality into three sub-constructs and perceived value into four sub-constructs; decomposed models can provide greater explanatory strength than pure models (Taylor & Baker, 1994).

This model is based on the definition of customer loyalty as a 'deeply held commitment to rebuy or re-patronize preferred product/service consistently in the future' (Oliver, 1999) and that we will use later to develop a new model which will include the sense of belonging.

Customer satisfaction is widely recognized as a key determinant in influencing consumers' future purchase intentions, as a result of loyalty. Also, satisfied customers are more likely to share with others their favorable experience and, thus, engage in the positive word-of-mouth advertising (File & Prince, 1992). In our opinion, this positive relationship between customer satisfaction level and customer loyalty could be seen as a form of pride –we only speak well of it if we positively identify with it, and this leads to a sense of belonging.

Figure 3.2. A conceptual framework for a decomposed model



Source: Hsu *et al* (2015).

In fact, starting from this idea, we propose to analyze the loyalty variable from two perspectives. The first perspective would be linked to the repurchase, when the need exists for the customer, and the second perspective would be linked to pride of belonging, when customers have behaviors which are related to a client's community or the sense of belonging itself.

In chapter 2 of this thesis, we have written about the loyalty as either an attitude or behavioral intention that leads to repurchase intention but, loyalty is also the result of a cognitive component and an affective component.

Attitudinal and cognitive dimensions have been incorporated to loyalty research over the years (Bowen & Chen, 2001; Caruana, 2002; Hallowell, 1996; Olsen, 2002). The result is a behavioral loyalty related to repetitious purchase behavior and an attitudinal loyalty reflected on an emotional and psychological attachment (Bowen & Chen, 2001) and cognitive loyalty is a higher order dimension and involves the customer's conscious decision-making process in the evaluation of alternative brands before a purchase is affected (Caruana, 2002).

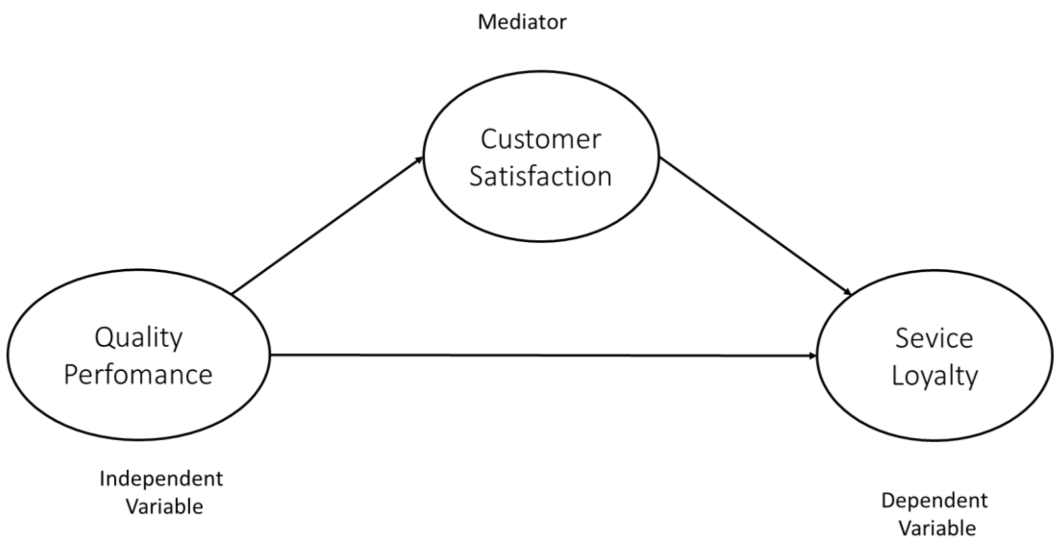
Figure 3.3. Satisfaction-loyalty model

Source: Olsen (2002).

Olsen (2002:240) showed that "*the use of relative attitudes, however, indicated a much stronger relationship between quality, satisfaction, and loyalty than the attitudes toward a product when performed as an individual evaluation*". As expected, the satisfaction-loyalty relationship is weaker than the relationship between quality and satisfaction (Cronin Jr *et al.*, 2000).

On the other hand, Caruana (2002) argued that service loyalty, customer satisfaction and service quality exhibit acceptable psychometric properties in terms of both reliability and validity: service quality is found to act on service loyalty via customer satisfaction.

Figure 3.4. Research model of Caruana



Source: Caruana (2002).

Academic literature points out that these positive relations between relevant constructs influence positively in behavior intentions as the repurchase. However, these four constructs (quality, perceived value, customer satisfaction and behavior attitudes) have not always been studied together. Thus, it is evident that few studies have investigated the multiple direct links among quality, value, satisfaction, and behavioral intentions since these relations have been studied separately. Furthermore, there is no reported investigation of whether any or all these variables directly influence behavioral intentions when the effects of all three are simultaneously considered (Cronin Jr *et al*., 2000). Thus, there is no evidence in any subsequent literature review that shows that these four constructs have been studied together in the HE context. Thus, our first challenge will be the development of a model that includes these four variables in the HE context.

To this end, we build a model that analyzes the influence and relationship of customer satisfaction, quality service and perceived value with repurchase intention, and on the other hand, studies the relationship between the sense of belonging and repurchase. Also, this model will be used to analyze the relationship between customer satisfaction, perceived value, and perceived quality, and sense of belonging.

Our proposed model as a starting point contains relationships that had been tested before in other contexts resulting positive for relationships in a large number of the studies carried out.

- The positive relationship between perceived service quality and customer-perceived value (Andreassen & Lindestad, 1997; Cronin Jr. *et al*., 2000; Hsu *et al.*, 2006; Kuo *et al*., 2009; Sweeny & Soutar, 2001; Petrick & Backman, 2002; Turel & Serenko, 2006; Wang *et al*., 2009; Zeithaml, 1988),
- The positive and significant effect between service quality and repurchase intention. Cronin *et al*. (2000) argue that service quality has a direct influence loyalty and, also, other authors have concluded similarly using studies about tourism, airline services or telecommunications services (Chen & Chen, 2010; Deng, *et al*., 2010; Lee, *et al*., 2005; Lai, *et al*., 2009).
- The positive and significant effect between perceived value and repurchases intention (Roostika & Muthaly, 2010; Sanchéz-Fernández, *et al*., 2010; Woodfall *et al*., 2014).

In this research we consider that there is enough empirical research that supports the evidence of positive relationships between quality, perceived value and repurchase or loyalty. A part of the literature mentions that customer satisfaction is positively related to perceived quality and perceived value, and it also states that this satisfaction is a positive indicator of future buybacks and loyalty behaviors (Cronin Jr *et al*., 2000).

Based on the models mentioned above, our challenge is to propose a model that introduces two new variables of this research: pride of belonging and repurchase intention. Regarding the second variable, we have argued that repurchase is a result of loyalty: Bansal *et al*. (2004) pointed out that loyalty is viewed as an attitude or behavioral interest that leads to repurchase intentions.

Dlâcic *et al.* (2014) mentioned that students' loyalty to their institutions where they have studied is demonstrated by positive word of mouth (recommendations) and by offering jobs to the new graduates. Before we reference these aspects that relate to loyalty, the enquiry requires mentioning the cognitive, attitudinal and nature components which some authors have studied previously.

According to the table below, we interpret that the loyalty construct can be understood by establishing three levels, of which the last two would be extremely related. Caruana (2002) defined a cognitive level as a first level of loyalty for its understanding; Bowen & Chen, (2001) and Olsen (2002) studied the loyalty concept from behavioral level, and Berger et al. (2006) and Kumar et al. (2010) defined an attitudinal level for loyalty in a second level. And in a third level, we would be ranking the effects of loyalty, which are the goals for this research: sense of belonging and repurchase intention.

Table 3.1. Levels of loyalty and relationship with repurchase and belonging

Loyalty **Cognitive Level** (Caruana, 2002)	
Behavioral Level (Bowen & Chen, 2001), (Olsen, 2002)	**Attitudinal Level** (Berger *et al*., 2006), (Kumar *et al*., 2010)
Repurchase (Dlâcic, *et al*., 2014)	**Sense of Belonging** (Strayhorn, 2018) (Alves & Raposo, 2007)

Source: own elaboration.

Prior to this part, we talked about the three aspects related to loyalty and the repurchase intention. We mentioned the cognitive, attitudinal and natural components; or physical, affective and emotional components that loyalty and repurchase intention have. Therefore, we point out attitudes as "the word of mouth" or offering jobs to new graduates as an argument for a sense of belonging which students already have, even before the intention to repurchase

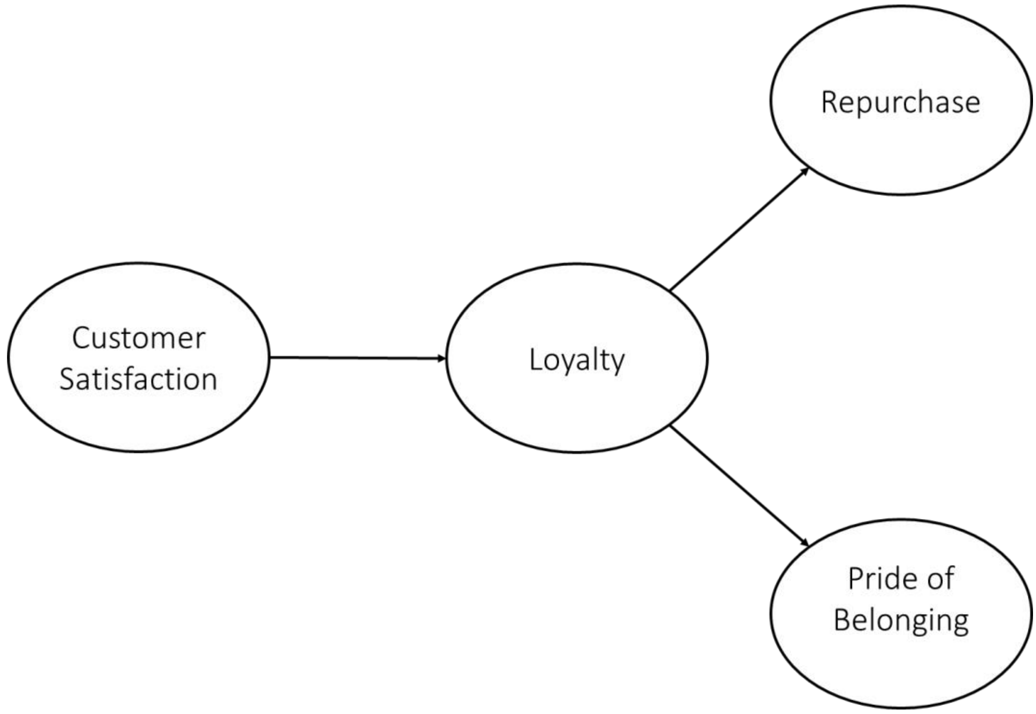
Initially, we should suppose that customer loyalty is difficult to define. In general, there are three distinctive approaches to measure loyalty: behavioral, attitudinal and composite measurements. The behavioral measurement considers consistent, repetitious purchase behavior as indicator of loyalty (Bowen & Chen, 2001), being behavioral measures expressed over time or repurchase patterns the most common assessments of loyalty (Bloemer & Kasper, 1995). However, the only way to understand a single-brand loyalty is to test the belief, affect (attitude), and conative structure of the customers´ orientation to the focal brand (Jacoby & Chestnut, 1978). Indeed, customers first become loyal in the cognitive sense, then later in an affective sense, and still later in a conative, action, or behavioral manner (Olsen, 2002).

Therefore, we argue that to exchange the loyalty variable for two variables: repurchase and sense of belonging, is possible. Both represent two dimensions of loyalty according to the model which we want to test, and the literature also argues that it is possible. We consider that the incorporation of the sense or pride of belonging concept to a model with variables such as quality, satisfaction, value and repurchase is the gap that warrants this research.

Therefore, taking into account the objective of this research, we will consider pride or sense of belonging, as the demonstration of a positive attitude of loyalty. These results are, for example: high probability of recommending, tendency to use social networks and blogs, or the recruiting of fellows and alumni. In addition, the repurchase intention signifies a positive behavior of customer, vis-a vis a product, a brand or a service that had been acquired before.

The following figure represents the extension of the loyalty significance through repurchase (behavioral level) and pride of belonging (attitudinal level), and this model is the previous step to the analysis model that we are going to propose as support for all our hypotheses.

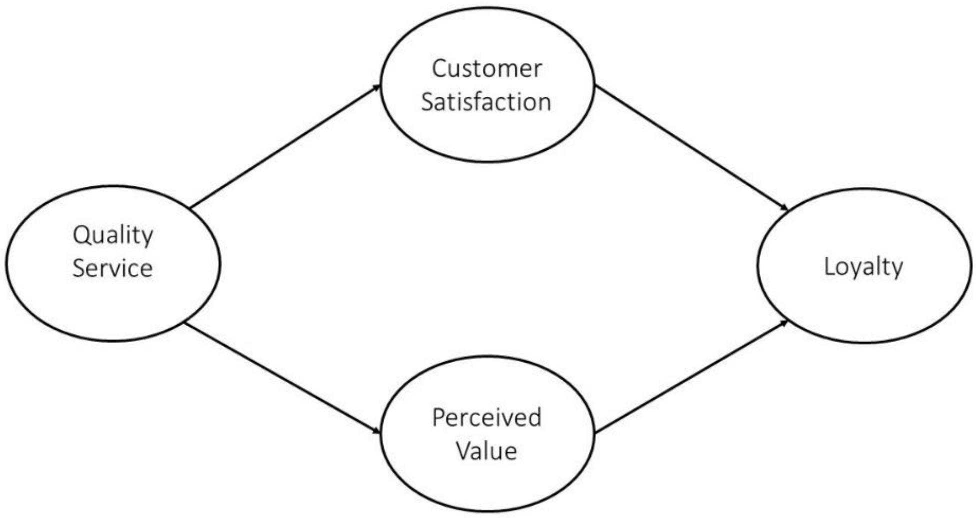
Figure 3.5. Loyalty model through pride of belonging and repurchase



Source: own elaboration.

Based on the foregoing, and following this line of thinking, we want to show the classic model that includes the relation among the variables: quality service, customer satisfaction, perceived value and loyalty, which has been developed by academia over time.

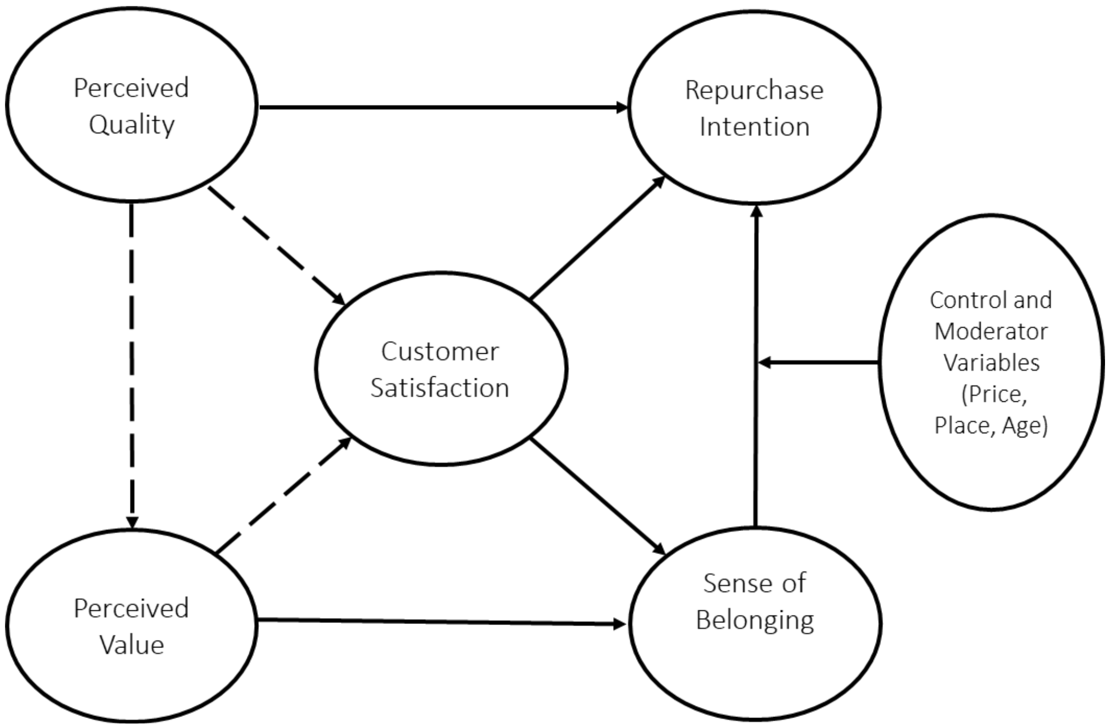
Figure 3.6. Classic model



Source: own elaboration.

Finally, within this section, we proceed to present our model with two subcomponents of the loyalty variable that we want to consider for our research. Clearly, we have three independent variables (quality, satisfaction and value), and two dependent variables of which we want to know their behavior and functionality within the model with respect to the hypotheses that we are going to formulate.

Figure 3.7. Main model to measure the repurchase intention through the sense of belonging



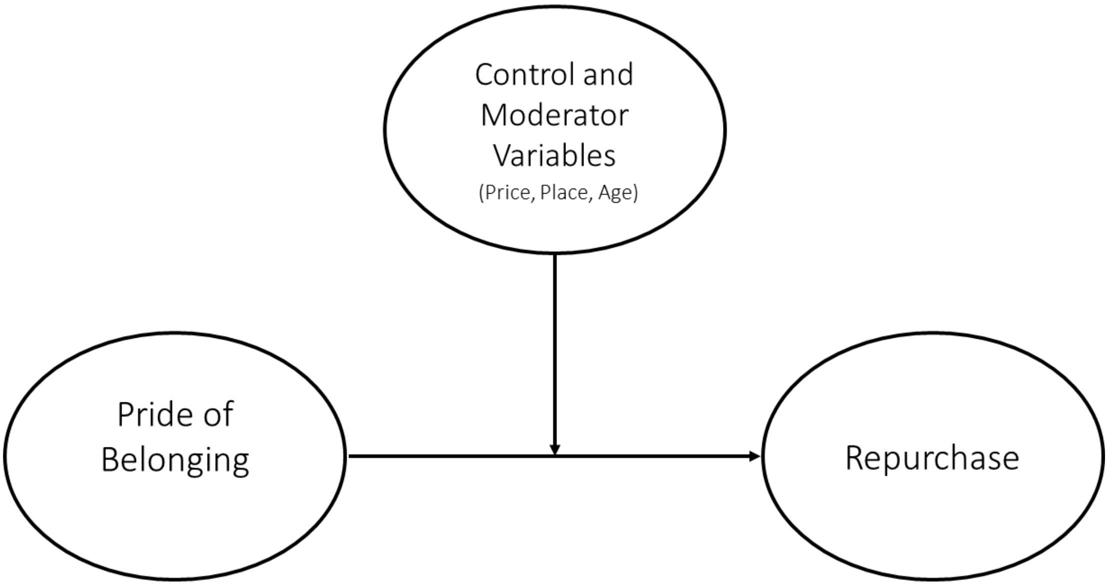
Source: own elaboration.

This graph explains in greater detail how we want to explain the students' pride of belonging to their Institutions with the probability of returning.

Although, we will describe in detail all the variables of the model, we cite the list of components of the pride of belonging variable that we want to include in the variable. These components will be WOM, the following of social media, the membership to the university associations, the fellows´ and alumni recruiting for own firms, or the participation in events of HE institutions. According to what we have seen in the literature, these components could be initially the signals of sense of belonging that marketing on client behavior may use to explain its influence on repurchase intention.

As will be described below, control, as well as moderator and mediator variables will be included in the research about the influence regarding sense of belonging and repurchase intention. In this study we will carry out a survey with a thorough questionnaire that will allow us to get closer to some of these influences.

Figure 3.8. Specific model to measure the influence of pride of belonging on repurchase including control variables and moderator variables



Source: own elaboration.

Thus, our objective is to build a model that includes the main variables linked to repurchase according to academic literature. These variables would be quality, value, and satisfaction, plus the contribution made through this research, that is the sense of belonging, which would be a variable that, we hypothesize, could influence positively in the behavioral loyalty. We show above the proposed model to measure the influence of these variables in the repurchase in HE context (see Figure 3.7).

The development of this model was made based on the following variables that have also been used in other researches, as we have already mentioned: perceived value and quality service (Dlâcic *et al.*, 2014; Hsu *et al.*, 2015), and customer (student) satisfaction (Elliot & Healy, 2001; Smith *et al.*, 1999; Szymanski & Henard, 2001).

3.3. Variables of the Model

By means of the following variables (perceived quality, perceived value, customer satisfaction, pride of belonging and repurchase), we built this model just as we mentioned before. The first four variables are considered as independent variables and the last one is the dependent variable for the research, although we want to prove the possible positive effect of perceived quality and value, and customer satisfaction over sense of belonging.

The five selected variables respond to the need to be measured with a high grade of robustness in order to avoid any possible redundancies. However, this is not always possible because at some point the meaning of the variables is confused. For example, executives and managers apply the concepts without precision, confusing issues such as perceived value with quality or satisfaction.

Therefore, our research is also focused on the understanding of the impact of quality, value and satisfaction, on the probability of repurchase, as well as how the pride of belonging influences such decisions.

The model considers that perceived quality influences customer (student) satisfaction and perceived value, and this last variable would also influence satisfaction. But we will also study how these three variables influence repurchase and sense of belonging.

Before mentioning the variables of this research in detail, we are going to argue other points of view that these variables have in this thesis, since authors in the literature propose different interpretations for each of them, and we consider it important to explain the terms used in the context of this thesis.

In order to better explain our proposal from the starting point, we will also provide our point of view about those variables of the research, which are used frequently without a clear reference about their significance. Firstly, we believe that perceived quality service must focus on the good performance of the systems and their operation. Secondly, perceived value must be understood as a measure of trade-off for what we expected. Thus, we can establish that the perceived value is positive when what is received is greater than expected, and the perceived value is negative when what is received is less than expected according to the possibilities of the HE institutions.

In addition, the customer satisfaction variable is focused on the expectations that customer had and whether these expectations have been exceeded. And at this point, we consider making a few comments about the relationship between quality and value with satisfaction, because in our view, it is possible that quality and perceived value are both high, but it is also likely that the customer is not satisfied if his expectations of the service were higher than the one received.

Table 3.2. Meaning and context of independent variables

Meaning and Context of Independent Variables	
Variable	Meaning and Context
- Quality	Performance of the systems
- Value	Trade-off
- Satisfaction	Expectations

Source: own elaboration

In addition to the variables mentioned above, pride of belonging and repurchase intention will be the main focus of this research, as shown in the title of the dissertation. Since the survey will be carried out only with alumni of several institutions who have not returned to them as of yet, we will always have to refer to the repurchase intention. Therefore, there is a clear difference for the concept: the repurchase variable is not the same, such as a *fait accompli*, as a future intention, that it will happen or not in the future. In sum, repurchase intention must be considered as a *proxy* variable for repurchase.

Finally, in this summary where we introduced variables of this study, we will refer to the sense of belonging as the gap in this research related to repurchase intention. As we have described in the literature review, *sense of belonging* is a concept related to psychology and sociology, however this variable does not appear linked to business and more specifically to marketing science. Therefore, we will try to discover and link this variable to Marketing in order to support new strategies and decisions in marketing management.

3.3.1. *Perceived Quality*

Service quality is at the core of customers´ perceptions that increases the value and leads to higher purchase intention using two main paths. The first one is through loyalty which affects service quality directly as well as indirectly through customer satisfaction. The second one is through a direct effect on behavioral intentions (Carrillat *et al*., 2009).

To measure service quality several scales have been used successfully, although comparisons have always emerged between different scales, for example, SERVQUAL (Parasuraman *et al.*, 1988) scale and SERVPERF, scales of perception-only, (Cronin Jr. & Taylor, 1992) have demonstrated a high reliability and they have shown to appropriately represent customers' overall evaluations (Dabholkar *et al*., 2000).

According to Sultan and Wong (2012), service quality research has been extended to the HE domain. Currently literature describes functional performances of educational services either following the SERVQUAL or the SERVPERF measures.

The following table shows research studies that followed these measures with scales based on SERVQUAL, SERVPERF or modified scales. In order to find the dimensions of service quality, studies have been carried out in various contexts for High Education since 2000 until today. These studies have been published in the last years and have suggested multiple dimensions of HE service quality. Sultan and Wong (2012) carried out some of these researches until 2010 and we have extended this subject until now.

Table 3.3. Studies on HE focusing on the quality concept

ON	Author (date)	Item numbers to measure quality level	Terms for approaching quality	Countries
1	(Oldfield & Baron, 2000)	21 items	Requisite, acceptable and functional	UK.
2	(O'Neill, 2003)	22 items	Empathy, logistics and contact	Australia
3	(Abdullah, 2005), (Abdullah, 2006a) (Abdullah, 2006b)	35 items	Non-academic, academic, reliability and empathy	Malaysia
4	(Abdullah, 2006c)	41 items	Non-academic, academic, reputation, access program and understanding	Malaysia
5	(Smith *et al*., 2007)	22 items	Reliability, assurance, tangibles, empathy, and responsiveness	UK.
6	(Barnes, 2007)	42 items	Responsiveness, assurance, empathy, tangibles, reliability, university, and guidance	UK
7	(Angell *et al*., 2008)	18 items	Academic, leisure, industry links and cost	UK

ON	Author (date)	Item numbers to measure quality level	Terms for approaching quality	Countries
8	(Stodinik & Rogers, 2008)	18 items	Reliability, assurance, tangibles, empathy, and responsiveness	USA
9	(Brown & Mazzoral, 2009)	30 items	Humanware, hardware	Australia
10	(Nadiri *et al.*, 2009)	22 items	Administrative units (registrar, library), faculty, school office, dormitories, sports, and health center	Cyprus
11	(Rojas-Méndez *et al.*, 2009)	18 items	Instructors, program director, secretaries, services attitude, and competence development.	Chile
12	(De Jager & Gbadamosi, 2010)	52 items	Internationalization, marketing and support, access and approachableness of services, international students and staff, academic reputation, student focused, academic quality, variety and reach, location and logistics, accommodation and scholarship, sports reputation and facilities, safety and security, parking, overall satisfaction with university, intention to leave university, trust in management and support	South African
134	(Sultan & Wong, 2010a)	67 items	Dependability, effectiveness, capability, competencies, unusual situation management and semester-syllabus	Japan
14	(Calvo-Porral *et al.*, 2013)	25 items	Tangibility (facilities, comfort, spaciousness, functionality) reliability (responsibility academic services, training, assessment methods), responsiveness (professionalism, teaching ability) assurance (efficiency, quality, speed of service) empathy (ability to understand the needs of students and respond to them)	Spain
15	(Fares *et al.*, 2013)	27 items	Teaching and course content, administrative services, academic facilities, campus infrastructures, and support services of services quality.	Malaysia
16	(Dlâcic *et al.*, 2014)	30 items	Teaching staff and no-teaching staff	Croatia and Bosnia-Herzegovina
17	(Pedro *et al.*, 2018)	20 items	Response capacity, empathy, trustworthiness, guarantee, tangibility.	Portugal
18	(Chandra *et al.*, 2018)	23 items	Teaching, course contents, staffs, facilities, computers/science lab library, campus environment -and security	Indonesian
19	(Hwang & Choi, 2019)	19 items	Physical facilities, equipment, contents, evaluation system, professionalism of lectures, willingness of professors and staff, empathy	South Korea

Source: own elaboration.

The literature shows differences between the perceived quality versus objective quality (Parasuraman *et al.*, 1988). Authors have studied the term quality for many years and they have emphasized some differences between the objective quality and perceived quality. Consumers do not use quality the same way as researchers and marketers, who define it much more as a concept (Hoolbrok & Corfman, 1985).

Many dimensions and factors can be used to measure the perceived quality service in HE and typologies vary depending on the conception of education quality (De Jager & Gbadamosi, 2010). However, these variations do not indicate that all the dimensions have to be always used to measure the service quality levels conception of education quality, the goals further described the quality or the type of institutions or their students claiming the optimal dimensions to measure the perceived quality service in HE institutions.

Perceived service quality is a global judgement relating to the superiority of the service (Parasuraman *et al.*, 1988) and an insight largely important from the quality service is the physical facilities and equipment and employee (teachers and staff) responses (Bitner, 1990).

Also, other authors pointed out that the measure of quality service variable ought to include outcome, interaction and environmental quality, for example nine dimensions as determinants of service quality: attitude, behavior, expertise, ambient conditions, design, social factors, waiting time, tangible and valance (Cronin Jr. & Taylor, 1992).

Although SERVQUAL has had critical reviews over the time, and initially consumers in the focus groups had discussed service quality to define the service performance on the dimensions matched the level of performance that customers are expecting a service should provide (Asubonteng *et al.*, 1996), finally, a great number of researchers have selected SERVQUAL scale to measure the quality service in university and HE institutions with questionnaires distributed to students.

Spreng and Mackoy (1996) pointed out that both satisfaction and service quality literature have described in detail that consumers make a comparison between the performance of the product or service and some reference. The service quality literature has maintained that the difference between perceived service quality and satisfaction is that they use a different standard of comparison (Bitner, 1990; Zeithaml, 1988; Zeithaml *et al.*, 1996). Service quality literature claims the idea that in the case students make a comparison between the performance of the service and some standard, being perceived service quality the result of a comparison of performance and what students feel a HE institutions should provide, such as Spreng and Mackoy (1996) point out when explaining differences between service quality, perceived quality and customer satisfaction (Bitner, 1990; Zeithaml, 1988; Zeithaml, *et al.*, 1996).

By measuring customer expectations and perceived performance, the SERVQUAL method identifies gaps that can be targeted for improvement (Quinn *et al*., 2009) and through these measuring HE institutions can consider the relative importance of the gaps for competing customers in order to balance quality improvement efforts.

Duque (2014) claimed that perceived quality service basically would consist in measuring the functional and a technical dimension, thus that they are linked to educational quality and administrative process quality in the HE context.

Hence, we consider that our focus should be on educational quality in teaching and programs quality perceptions: professors well prepared academically who make the course interesting, programs and course contents clear (Duque, 2014).

On the other hand, administrative quality, equipment and facilities concern the quality perceptions of necessary resource for a good learning in a HE institution: cleanliness of classrooms, administrative process, information of fees, organization and schedule of courses, library services, laboratories, sport facilities, cafeteria, etc.

The use of two overall dimensions (tangible and intangible) for measuring student perceptions of service quality in HE has also been supported by Nadiri et. a*l* (2009) who found that these dimensions would be good predictors of student satisfaction (Duque, 2014; Nadiri, *et al*., 2009), and also of the perceived value.

We expect to propose a measuring scale based on SERVQUAL in its five dimensions that allow us to know the quality perceptions of students of HE Institutions and can support a prior behavior and result about perceived value, satisfaction and repurchase intention.

3.3.2. Perceived Value

Included in the customer-perceived value variable, we can measure the customer´s overall utility of HE as a service for students based on perceptions of what is being received and what is being given during the service and the "*consumer´s overall assessment of the utility of a product or a service based on perceptions of what is received and what is given*": a comparison between "get" and "given" (Zeithaml, 1988).

Value variable can be considered as a ratio, or trade-off, between quality and price, (Age, 1985; Cravens *et al*., 1988; Monroe, 1990; Sweeny & Soutar, 2001) being important enough the concept of relevant education value, not only in the field of health professional education (Nicklen *et al.,* 2016), but in any high education grade where the need to acquire skills and knowledge to compete professionally exists.

We claim that the perceived value has an important link to the price (value for money) and that this perception will depend on the cost for students. According to the fees of HE institutions, students would assess the value of their course as a trade-off between paid and received: in a HE context, when defining the concept of perceived value, this trade-off approach can be emphasized (Dlâcic *et al*., 2014).

Moreover, we claim that the perceived value would be a relationship with other forms of payment other than money. There are other "payments" as, for example, time, the personal sacrifice and the effort of all that is performed to achieve a goal, and so the great question would be if these different payments have their trade-off in the perceived value.

Ledden *et al*. (2007) described the dimensions of the get component of value and divided these dimensions between “get” and “given”. A brief explanation of the dimensions of the get component of value follows below, and five kinds of them are distinguished:

- Functional value (FV) relates to the perceived performance/ utility of a product or service, that is, an offering's ability to fulfill its function, as well as the benefits associated with owning the offering. In the education context, FV is related to students’ expectations that their chosen course of study will gain them employment or career advancement (LeBlanc & Nguyen, 1999; Stafford, 1994).
- Social value (SV) represents the benefits derived through inter-personal/group interactions and can be related to the educational context through the value students receive from forming friendships with course colleagues (LeBlanc and Nguyen, 1999).
- Epistemic value (EPV) refers to benefits derived through an offering's ability to arouse curiosity, provide novelty or satisfy a desire for knowledge. Clearly this dimension is particularly relevant to the

educational context, in which the primary benefit is the acquisition of knowledge (Stafford, 1994).

- Emotional value (EMV) accounts for benefits obtained from an offering's ability to arouse feelings and/or affective states. In the education context EMV is realized through students' sense of gladness and self-achievement in taking their course (LeBlanc and Nguyen, 1999).
- Conditional value (CV) represents the benefits derived in a specific situational context, for example, in the education context, CV can be related to the value perceived by a student (File & Prince, 1992) in terms of teaching materials, such as textbooks (Unni, 2005).

And the concept of the give component comprises both monetary and non-monetary considerations (Cronin *et al.*, 1997), according to (Ledden *et al*., 2007):

- Monetary sacrifice (MS) relates to the sacrifices made in monetary terms, for example, course fees, accommodation costs, purchase of textbooks, etc.
- Non-monetary sacrifice (NMS) associates with non-pecuniary sacrifices, such as time, energy, effort, etc. (Cronin et al., 1997). Examples include students' loss of opportunity to participate in family and social events.

Therefore, while the perceived quality is an evaluation about performance of systems, made in terms of objectivity, the perceived value is a personal evaluation that includes a total internal reflection between the paid and the received value, or the relationship between dimensions of the "got" and the "given".

However, we feel that the role of perceived value for this research must be treated as a multi-dimensional variable, where emotional, social, performance and price/value for money value dimensions, that through PERVAL scale, can be measured (Sweeny & Soutar, 2001).

Sweeny and Soutar (2001) pointed out that value perceptions can be generated before the service being bought or used, while satisfaction depends on experience of having used the product or service. However, this argument is not very clear because, we understand that perceived value is a trade-off between "what is given" and "what is obtained", and therefore, it is not possible to have a perception without a previous delivery of the product or service.

Throughout the literature, some researchers have measured the customer perceived value using a uni-dimensional variable, with just one statement (e.g., value for money), for evaluating overall value (Sweeney *et al*., 1997), or using a multi-dimensional variable (Sweeny & Soutar, 2001). Sweeny and Soutar (2001) described the development of a 19-item measure, PERVAL, that is used to assess customers' perceptions of the value: emotional, social, quality /performance and price/value for money. This scale was also tested in a post-purchase situation, and results were found to be reliable and valid both in a pre-purchase situation and in a post-purchase situation.

As the value concept is multifaceted and complex, being the term *value* extremely abstract and polysemic in nature (Gallarza & Saura, 2006), we affirm that it is convenient to look for an unequivocal meaning. In literature and in different questionnaires, items are used to obtain one dimension linked to another. It means that both variables are applied to the question, when the question asked, for example, is "*Taking into consideration the price I pay (fees, charges, etc.), I believe my university provides quality services",* to measure the perceived value as a trade-off of the price, the quality is being included in the question when this variable is part very probably part of the model that relates all of these variables.

For example, some results have shown that the relationship between the value construct with quality can neither be confirmed nor denied, given that quality could present a redundancy of information regarding the image construct (Alves, 2011).

Table 3.4. Studies on HE focusing on the value concept

ON	Author (date)	Item number to measure value level	Terms for approaching value	Countries
1	(Webb & Jagun, 1997)	2 items	Unidimensional, measured through: • The benefits I receive from XYZ are in line with the sacrifices I must make (e.g., money, time, labor). My association with XYZ has been of value to me.	UK
2	(Martensen *et al*., 2000)	2 items	Unidimensional, measured through: • Value of education in relation to one´s own	Denmark

ON	Author (date)	Item number to measure value level	Terms for approaching value	Countries
			• Value of education in relation to future job and career.	
2	(LeBlanc & Nguyen , 1999)	33 items	Multidimensional, measured through the following dimensions: • Functional value (price/quality) • Epistemic value • Functional value (future goals) • Emotional value • Social value	Canada
4	(Unni, 2005)	1 item	Unidimensional, measured through: Usefulness of a textbook as predictor of value for students	USA
5	(Ledden *et al.*, 2007)	23 items	Multidimensional, measured through the following dimensions: - Get dimension • Functional value • Epistemic value • Conditional value • Emotional value • Social value • Given dimension • Non-monetary sacrifice • Monetary sacrifice	UK
6	(Brown & Mazzoral, 2009)	17 items	Multidimensional, measured through the following dimensions: • Emotional value • Social value • Price/value • Quality/performance	Australia
7	(Alves, 2011)	4 items	Multidimensional, measured through the following dimensions: • Future goals • Trade-off price/quality • Comparison with alternatives • Emotion	Portugal
8	(Nicklen *et al*., 2016)	4 items	Bidimensional, student-centered value: • Perceived gross benefit • User costs • Price paid • Cost to provider	Australia
9	(Dziewanoswska, 2017)	40 items	Multidimensional, measured through the following dimensions: • Functional value • Relational value-fellows • Intrinsic value • Epistemic value • Relational value-staff • Conditional value • Extrinsic value • Emotional value	Poland
10	(Doña-Toledo *et al.*, 2017)	4 items	Multidimensional, measured through the following dimensions: • Teaching staff • Infrastructures • Administration staff • Support services	Spain

ON	Author (date)	Item number to measure value level	Terms for approaching value	Countries
11	(Pham *et al.*, 2019)	3 items	Multidimensional, measured through the following dimensions: • Attainment value • Utility value • Intrinsic value	Vietnam
12	(Butt, 2020)	6 items	Multidimensional, mediating role between quality and satisfaction	Malaysia
13	(Beckett *et al.*, 2020)	18 items	Multidimensional, measured through the following dimensions • Teaching • Learning Curriculum Programs	USA

Source: own elaboration.

3.3.3. Customer Satisfaction

The satisfaction of clients and consumers is always shown as one of the most important paradigms for practitioners and managers linked to the marketing of services. For firms, customer satisfaction is a goal within their mission: to achieve satisfied customers is the first step to claim excellent practices, reliability and pride of brand. Hence, customer satisfaction is the perfect argument for predicting good management and profitability. The core marketing concept aims at satisfying needs and intends to facilitate the exchange of value between the customers and other stakeholders in an organizacion (Oliver, 1999).

For researchers in the services marketing area, customer satisfaction is the result of a comparison with predictive expectation (Bitner, 1990; Parasuraman *et al.*, 1988; Spreng & Mackoy, 1996). The relationship between satisfaction and perceived quality service has been researched in depth (Douglas *et al*., 2008; Nadiri, *et al*., 2009).

Customer satisfaction can be interpreted as a judgement of a pleasure level of consumption-related fulfillment with respect to any aspect of a service experience (Arnould *et al.*, 2002). Based on this view, customer satisfaction must be used to measure a certain happiness for the service received, establishing to what extent students feel that all their expectations have been fulfilled.

Customer satisfaction and service quality can seem very close and be a cause of confusion between both, and in fact literature shows different insights. For example, Dabholkar *et al.* (2000) and Cronin *et al.* (2000) claimed that perceived quality is an antecedent to satisfaction, other authors considered customer satisfaction as an antecedent to service quality (Bitner, 1990; Parasuraman *et al*., 1988). Recognizing the possible ambiguous relationship, we opt for the possibility of considering quality service as a judgement based on the objective performance of the systems and, furthermore, customer satisfaction as a variable subjected to the individual expectations reached. For example, the variables that most influence in student satisfaction in HE is the image, the value and quality perceived (Alves & Raposo, 2007).

Based upon our insight, we will explain further the meaning of customer satisfaction in our model, both for academic use, as well as for practitioner use in the HE sector. When the clients (students) are satisfied, the probability of achieving success is considerably higher and, therefore we can point out that it will be a good signal for the managerial performance.

Table 3.5. Studies on HE focusing on customer satisfaction

ON	Author (date)	Item number to measure satisfaction level	Terms for approaching satisfaction	Country
1	(Aldridge & Rowley, 1998)	21 items	• Personal and course details • Teaching and learning • Teaching and learning support • Teaching and learning development • Services and facilities for students	UK
2	(Tan & Kek, 2004)	17 items	• Course (content and organization) • Assessment • Learning • Teaching and advising • Communicating with the university´s management • School authority • University facilities • University appearance • Social activities	Singapore
3	(DeShields Jr. *et al.*, 2005)	13 items	• Faculty • Advising Staff • Classes	United States
4	(Brown & Mazzoral, 2009)	6 items	• Image • Service Quality (Humanware) Service Quality (Hardware)	Australia
5	(Gruber *et al.*, 2010)	18 items	• Administrative and student services	Germany

			• Atmosphere among students • Attractiveness of surrounding city • Computer equipment • Courses • Library • Lectures • Lecture theatres • Refectory/cafeteria • Relevance of teaching to practice • Reputation of the university • School placements • Support from lectures • The presentation of information • University building	
6	(Hsu *et al*., 2015)	2 items	• Course design • Teaching staff • Campus environment • Attitude • Skill • Knowledge • Career capability • Student satisfaction • Student loyalty	Taiwan
7	(Chen, 2017)	3 items	• Brand association • Student trust • Student commitment	Taiwan
8	(Chandra *et al*., 2018)	6 items	• Services provided • Value paid	Malaysia
9	(Gunawan & Wahyuni, 2018)	30 items21 items	• Marketing Mix • Islamic	Saudi Arabia
10	(Pedro *et al.*, 2018)	7 items	• Customer satisfaction measured through: ○ Perceptions of quality service	Portugal

Source: own elaboration.

In this context, customer or student satisfaction is a very reliable variable to predict future behavior with respect to the loyalty or engagement toward the institutions, and therefore we propose it as the best antecedent for the pride of belonging and the repurchase behavior.

3.3.4. Pride of Belonging

The introduction of pride of belonging or sense of belonging as a variable of the model for this research is due to the fact that we believe that it may explain some behaviors related to the repurchase intention

With the emergence of the social media, customer relation management strategies have changed, and firms have been forced to considerer new ways of interacting with their consumers and customers. Although the sense of belonging and other behaviors related to the pride of the human being have been described to a large extent by some disciplines (psychology, sociology, politics), this concept has been treated very little for business and, even less, for marketing.

Developing the sense of membership in this research, we try to demonstrate that through the pride of belonging to styles, fashions and brands, companies can encourage repurchase in their customers. This is in keeping with our objective: modeling the repurchase behavior through the pride of belonging in the Higher Education Institutions.

The review literature and state of art show some ideas which we will apply to define the sense of belonging variable and to model it: Among them, we can highlight word of mouth, belonging to ssociations, following the social media of the Institutions, collaborating with the no-money causes, recommend to-recruit fellows, etc.

Thus, we propose the construct of sense of belonging based on the following components, which will be able to be measured in the survey, and also, have been used and studied in different researches.

Table 3.6. Components of the sense of belonging variable for alumni of HE Institutions and references related to the components

Component of Sense of Belonging	Authors (Date)
- Word of mouth (W.O.M)	(Bean & Bradley, 1986) (Athiyaman, 1997) (McAlexander & Koenig, 2001) (Alves & Raposo, 2007) (Hsu *et al.*, 2015)
- Following social media networks (SNSs)	(Constantinides & Stagno, 2011) (Constantinides & Stagno, 2012) (Leng, 2012) (Rekhter, 2012)

	(Palmer, 2013) (Kuzma & Wright, 2013) (Sandlin & Peña, 2014) (Rutter *et al*., 2016) (Brech *et al*., 2017)
- Participation in events and social events	(Betz *et al*., 1970) (Astin, 1984) (Bean & Bradley, 1986) (Mael & Asforth, 1992) (Wolf-Wendel *et al*., 2009) (Strayhorn, 2018)
- Membership to alumni association	(Mael & Asforth, 1992) (Bhattarcharya *et al*., 1995) (Gruen *et al*., 2000) (Stuart, 2009) (Newman & Petrosko, 2011) (Strayhorn, 2018)
- Donation for Institutional development	(Mael & Asforth, 1992) (Gaier, 2005) (Cabrera *et al*., 2005) (Weerts & Ronca, 2008) (Volkwein, 2010) (Hsu *et al*., 2015)
- Recommend recruiting fellows	(McAlexander & Koenig, 2001) (Weerts & Ronca, 2008) (Volkwein, 2010) (Hsu *et al*., 2015)

Source: own elaboration

Hsu *et al*. (2015) concluded their paper pointing out that satisfied alumni can help their educational institutions financially, supply jobs to subsequent graduates and provide word-of-mouth. The following is a description and references of such components, starting with the word-of-mouth as a behavior of the relationship between students, graduates and possible candidates to apply to a university or college.

- Word-of-mouth (WOM):

  It is assumed that students in colleges and universities are similar to employees in work organizations in that both share the criterion of membership, and frequently interact with other members of the organizations (Bean & Bradley, 1986)

  Alves and Raposo (2007) declared that high levels of satisfaction in the students may engage in favorable word-of-mouth communication, recommend programs, or return as graduate students, and we think that the first two of the cited behaviors, respond to the requirements that pride or sense of belonging of an alumnus should have.

In addition, these authors argued that the consequences of satisfaction in HE are related to both loyalty and to the student´s involvement in positive word of mouth actions: student´s loyalty was the main consequence of satisfaction, given that it was noticeable that student satisfaction partly influenced loyalty.

If students are satisfied with their educational experience, they will demonstrate loyalty to that institution and if students are satisfied with their educational experience then they will involve themselves in positive word of mouth actions (Athiyaman, 1997) and on other hand, it is partially rejected that the student´s involvement in word of mouth actions is only influenced by satisfaction in an indirect manner (Alves & Raposo, 2007) and this WOM is used to transmit.

- Following social media network (SNSs):

Online marketing, particularly social media marketing, has received increased attention in marketing for HE. Most universities have a presence on at least one, or even several social media platforms. Especially in Western countries, Facebook and Twitter are very prominent social media platforms used by universities. Yet little research has examined the characteristics of social media for marketing for HE (Brech *et al*., 2017).

Most universities throughout the world use social media and many have a main Facebook page to address various stakeholders (e.g., potential students, current students, former students, or the public). Besides a main Facebook brand page, many universities have specific additional brand pages (Brech *et al*., 2017).

An increasing number of institutions utilize social media network sites (Leng, 2012; Rekhter, 2012; Sandlin & Peña, 2014), including student-written blogs, on their admission websites in an effort to enhance authenticity in their recruitment marketing materials.

Prospective college students perceived student-written blogs to be authentic when student bloggers disclosed personal details and feelings about campus life, even when the topic of the blog was contrived to focus on admission and college-related activities. Recognizing a blog as authentic occurred through the process of internalizing the experience described in the blog post and identifying with the blogger (Sandlin & Peña, 2014).

Sandlin and Peña (2014) pointed out that, during the college search process, the connection and the identification with college students can be instrumental in forming prospective students' expectations and feelings of belonging.

Studies such as the characterization of the use of Twitter by Australian Universities (Palmer, 2013) address using social media communication channels for a variety of purposes, including marketing, student recruitment, student support, alumni communication, developing a network visualization method to make visible the interactions between a university and its stakeholders in the Twitter environment.

Although the potential and popularity of the microblogging platform Twitter is important to inquire into its use in learning and enhancing it (Lackovic *et al.*, 2017; Kimmons *et al*., 2017; Ricoy & Feliz, 2016; Sarwar *et al*., 2019; Tur & Marn, 2015) nevertheless our research is only focused on the use as a marketing and communication tool with alumni.

If social media interaction prior to student recruitment fosters an early pride of belonging to the university (Rutter, *et al*., 2016), the sense of belonging must be on when students finish their studies and became alumni and the interaction with social media continues.

Table 3.7. Variables for the social media interaction measurement in HEIs

Variable	**Description and Measure**
Social media use	• Twitter Tweets – the number of tweets from the HEI twitter account. • Twitter Interaction – the number of direct interactions with other Twitter users.

	• Twitter Website Links – the number of website links posted to Twitter. • Facebook Talking About – compiles from a variety of Facebook interactions that took place over the 7 days. These interactions include, liking an HEI; posting to a HEI Page; liking, commenting on or sharing an HEI's post; responding to a question; RSVPing to an event, mentioning an HEI's page in a post; and photo tagging an HEI's page.
Social media validation	• Twitter Followers – the number of users that are following the HEI's twitter account (with the HEI tweets shown in the user's feed). • Facebook Likes – the number of users who like the HEI's Facebook page.
Performance	• Student Recruitment Performance – UCAS provides data on the number of applicants to an HEI and the number of accepted places. Thus, UCAS Demand per Place is an accepted measure of student recruitment performance.

UCAS: The Universities and Colleges Admissions Service

Source: Rutter *et al*. (2016).

- Participants in Events and Social Life:

Social life appears as a dimension to measure the college student satisfaction (Betz, *et al*., 1970). Social life is defined as the number of close friends a student has, and the sense of control and confidence a student has in his or her social life. For most of students, social life is an important and satisfying activity in college (Betz *et al*., 1970) and thus students who view their social lives positively are expected to be more satisfied with their college experience (Bean & Bradley, 1986). Betz *et al.* (1970) included as social life the opportunities to meet socially relevant goals, such as dating, meeting compatible or interesting people, making friends, participating in campus events and informal social activities.

The role that the sense of belonging plays in educational contexts and life setting is critical. Involvement experiences reveal how student´s sense of belonging can be inspired or diminished, such as running for student government office or pledging to join sorority (Strayhorn, 2018) and overall, it must be noted that sense of belonging is present when students participate in social events, and they take part in social life of their universities.

Student involvement refers to both academic and social (e.g., extracurricular) activities: the investment of physical and psychological energy inside different objects or activities, which happens along a continuum (Strayhorn, 2018).

Activities such as "*working on campus, living on campus, engaging with peers, being a member of clubs, and socializing with faculty members are types of involvement measured under the Involvement Theory*" (Wolf-Wendel *et al*., 2009).

Related to sense of belonging, engagement is conceptually distinct in at least two ways according to Strayhorn (2012):

1. engagement refers to the amount of time and effort students devote to their academic responsibilities, such as studies, and other activities, such as sports and clubs "*that lead to the experience and outcomes that constitute student success"* (Wolf-Wendel *et al*., 2009).
2. engagement relates to how institutions invest resources and structure learning opportunities to "*encourage students to participate in and benefit from such activities"* (Wolf-Wendel, *et al*., 2009).

Involvement in college social life is positively associated with students´ sense of belonging in college according to found positive correlations between students´ involvement in the activity's campus (e.g., working on committee/organization) and their perceived sense of support and belongings on campus (Astin, 1984; Strayhorn, 2018).

All this development is based on the participation and commitment of the students during the stay in the institution and as an undergraduate. However, we will try to apply this idea to alumni and how they could also get involved and participate in some university activities for them, as a sign of belonging.

- Membership to Alumni Associations

There are multiple forms of memberships and membership organizations. These relationships are characterized by a formalized agreement that include regular dues payments and an annual membership renewal (Gruen *et al*., 2000).

Identification is defined as the “perceived oneness with belongingness to an organization*”* of which the person is a member. Alumni as future customers, in their role as members, identify with organizations (Bhattarcharya *et al*., 1995).

These last authors pointed out that organizations can resort to more direct strategies to ensure identification on the part of consumers: for example, nonprofit entities, such as museums, seek to build identification by drawing consumers “inside” by making them members. The phenomenon of identification also happens in the case of employees of an organization as in the alumni of education institution according to some organizational researchers as (Dutton & Dukerich, 1991; Dutton *et al*., 1994; Mael & Asforth, 1992; O'Reilly & Chatman, 1986).

Mael and Asforth (1992) affirmed that, when a person identifies with an organization, he or she perceives a sense of connectedness to an organization and defines him or herself in terms of the organization.

The existence of both formal and informal alumni organizations at American educational institutions dates to the beginning of the 19th Century (Brubacher, 2017). For the alumnus, continued affiliation with the alma mater often provides intellectual stimulation, prestige, identity stability, and a vehicle for altruistic or tax-motivated donations (Pickett, 1986).

For their part, alumni provide various types of support: financial gifts, recruitment, career advice or job placement for graduates, participation in alumni events, and volunteer support for funds solicitation and organizational events (Mael & Asforth, 1992).

Mael and Asforth (1992) together with the other authors cited, explained that membership carries various belonging behaviors included in our variable, such as: financial support, recruitment, career advice or job placement for graduates, which are described below.

- Donation for Institutional development

In recent decades, institutions of HE increasingly view their alumni as valuable sources of both information and financial support. Since the 1980s, more and more campuses have used alumni surveys to assess the impact of the collegiate experience on student cognitive and noncognitive development (Cabrera *et al*., 2005).

It has been said that alumni are the financial backbone of educational organizations (Bakal, 1979) and that ‘few constituents are more important to an institution than its alumni’ (Ransdell, 1985).

However, positive experiences with institutions are not enough to prompt alumni financial support, being the most important indicators: age, family, income, career and educational history, current job duties and responsibilities, board memberships with both for-profit and nonprofit organizations honors, achievements, publications, creative works, leisure activities and hobbies, spouse’s career and educational history, board membership, activities, achievements and awards, and ages, and schooling of children and grandchildren (Cabrera *et al*., 2005).

In line with this argument, Weerts and Ronca (2007) also suggested that alumni donors are predicted by capacity variables related to gender, residence, and overall civic engagement. Alumni donors are often enlisted to serve important roles as volunteers and political advocates.

In recent years, HE institutions increasingly treat their alumni as sources of valuable information and financial support (Volkwein, 2010). Hsu *et al* (2015) referred to alumni satisfaction as a factor related to the financial support. Satisfied alumni can financially help educational institutions (Gaier, 2005).

Our research does not seek to define a donor profile, but rather the influence of what financial support means for the belonginess of alumni, with respect to the likelihood of returning to the same college or university.

- Recommend recruiting fellows

Alumni can offer good perspectives for academic asset programs and are often used in student recruitment mentoring (Volkwein, 2010). A signal of belonging is to believe that the best professionals that a recruiter can enlist as employees for a company, have studied in the recruiter's same university or college.

McAlexander and Koenig (2001) noted that satisfied alumni provide positive word-of-mouth effects, and supply jobs to subsequent graduates.

Alumni volunteers also serve in other important ways, such as mentors, recruiters, and booster club leaders that raise the profile of the institution in their areas (Weerts & Ronca, 2008).

We expect that if the recruiter had a good experience during the stay in her or his university and he/she will consider that the acquired level of knowledge is high, this professional will select a graduate of his or her institution. This criterion would be related to the sense of belonging that we want to research in this work.

The importance of alumni is great in this role, alumni can provide more objective insights and alumni can better evaluate the curricular relevance to job requirements (Hsu *et al*., 2015).

The literature shows that the sense of belonging might be used in two circumstances. On the one hand, the Strayhorn (2012) Sense of Belonging Theory references the academic success of a student (Cisneros *et al*., 2019) and, on the other hand, sense of belonging is extended after the university stay if alumni satisfaction is high (Hsu *et al*., 2015). To address this issue, in this study we suggest the decomposing of the sense of belonging into six parts. We suggest that these parts would be representing behaviors and attitudes of alumni that can be applied to the HE marketing.

In sum, we would hope that the sense of belonging will become an important issue in a sector such as HE, where the links between students themselves, and the students and their institutions can grow and be maintained over time. And so, after leaving the university, students can continue to maintain a relationship with the institution through cooperation offering internships to students, offering jobs to new graduates, or cooperating on research projects (Dlâcic *et al*., 2014), beyond the WOM as a cause of the loyalty (Alves & Raposo, 2007; Hsu *et al*., 2015).

3.3.5. Repurchase Intention

Repurchase intention is the dependent variable of this study and thus the focus of this research. In marketing the repurchase means the first step to maintain incomes, and thus achieve one of the main goals that any company requires.

Dlâcic *et al*, (2014) pointed out that student repurchase intention contains attitudinal and behavioral dimensions and referred to the time both during and after the student´s period of study in institutions (Henning-Thurau *et al*., 2001), which is a competitive advantage for the institutions (Rojas-Méndez *et al*., 2009) because costs to attract students will be less than if these students were new affiliations.

The concept of customer loyalty is operationalized through repurchase intention, and thus, it is defined as students´ favorable attitude and behavior towards the faculty, implying that they will recommend the faculty to others and that they intend to continue their educations at the same faculty in the future (Dlâcic *et al*., 2014).

Our research posits that pride or sense of belonging influences the repurchase intention considering that after the stay at the university, this sense is maintained as an attitudinal dimension: tending to word-to-mouth, tending to follow social networking, tending to participate in social events of the university, tending to support financially, tending to recruit graduates of the same institutions or trending to be fellow donors.

Customer loyalty is discernible in many forms of customer behavior. Jones and Sasser (1995) grouped ways of measuring loyalty into three main categories with respect to repurchase intention behavior, that in HE context will be:

1. Repurchase intention, or when it is possible to ask customers about their future intentions during a long repurchase cycle.
2. Primary Behavior, or when the relationship can be measured in five categories of repurchasing behavioral: recency, frequency, amount, retention and longevity.
3. Secondary Behavior, or when it is relating to customer referrals, endorsements, and spreading the word are extremely important forms of consumer behavior for the institution.

For our model, re-purchase intention or intention to return to the University is the category that is adapted to the definition of the variable. As mentioned above, and at any time, once students have finished their studies and they become alumni, it is possible to ask them about their future intentions to go back to the institution where they studied.

The fact that intent to repurchase can be measured at any moment is especially valuable for services with a long repurchase cycle. The repurchase intention actually is a very strong indicator of future behavior. Although this measure will generally overstate the probability of repurchase, the degree of exaggeration is usually fairly accurate(Jones & Sasser, 1995).

Also, the repurchase intention variable is an individual´s judgement about an intention, considering his or her current situation and likely circumstances (Hellier *et al*., 2003).

Thus, the opportunity of knowing the possible number of alumni who expect to return to their university to follow their training, gives them an important competitive advantage (Rojas-Méndez *et al*., 2009).

We think that any firm, or in our case, a HE institution that needs to estimate a percentage of future income in a time period, will be able to plan better and dedicate more resources to obtain new customers (students). This is the reason why repurchase is essential for the sustainability and profitability of the firms.

In the case of HE Institutions, in addition to financial viability through repurchase, we believe the institutions can gain prestige and reputation. When the alumni return to their colleges or universities as professionals, they will do it thinking about improving skills, in achieving new competences and achieving their professional goals. They will return, only, if they believe that this choice is the best for them.

We will propose a variable to measure the repurchase intention that also includes different circumstances related to the value proposal of institutions. In this context, it is pointed out that the courses offered, for example, should be decisive to take a decision. Likewise, the characteristics related to the design, the methodology, the price, etc. will be taken into account in order to measure the repurchase intention variable as components of it.

The offer that a HE institution makes to its alumni, and also to any student profile, should be understood as a global service that includes an academic proposal and support that allow students to enjoy an optimum learning experience.

3.4. Hypotheses

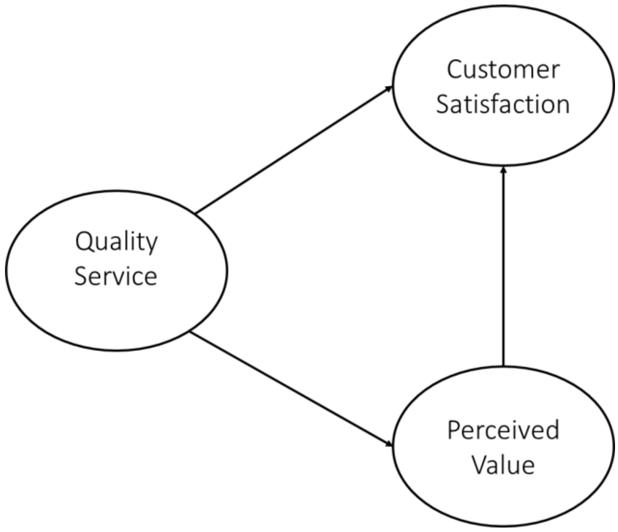
From the variables described above, we propose the hypotheses that are explained below. In our model, we have included five variables, four of which are classic variables, very related to service marketing and very present in the literature over time: perceived quality, perceived value, customer or student satisfaction, and repurchase intention. The fifth variable is the sense or pride of belonging, and we expect it to be a contribution as an antecedent of the repurchase intention.

Firstly, in this chapter, we justify and document the hypothesis through the academic research focused on the relationships among the perceived quality, perceived value and customer satisfaction with the repurchase variable, and among them and the pride of belonging. Furthermore, in this chapter, we will present the arguments for not including the relationships among quality, value, and satisfaction as hypotheses.

Many studies have suggested the relationships among some variables of the research, such as we mentioned in previous chapters. Perceived service quality significantly influences customer-perceived value and (Petrick & Backman (2002), Sweeny and Soutar (2001), and Zeithaml (1988) affirmed that this relationship is positive.

Similar conclusions were confirmed in other contexts: for banking services in Taiwan (Hsu *et al.*, 2006), for mobile services (Turel & Serenko, 2006) or for tourist destination in China (Wang, et al., 2009). These researchers confirmed that perceived service quality is positively and significantly related to customer-perceived value and even, the perceived quality is, generally, the best predictor of customer-perceived value (Cronin Jr *et al.,* 2000).

Figure 3.9. Model for classic variables in services marketing



Source: own elaboration.

In the HE context Dlâcic *et al.* (2014) indicated that perceived service quality is a significant predictor of perceived value, and Helgesen and Nesset (2007) affirmed that the perception of quality associated with an object is either reinforced when the student experiences high quality performance, and thus, performance quality is expected to influence satisfaction.

Perceived quality upon customer satisfaction is a relationship largely studied in the academic studies, but especially, during the last years of the last century (Anderson & Sullivan, 1993; Caruana & Pitt, 1997; Mittal *et al*., 1998; Taylor & Baker, 1994).

Cronin *et al*. 2000 synthesized on the basis of efforts to conceptualize the effects of quality (SQ), customer satisfaction (SAT), and perceived value (V) on customers' behavioral intentions (BI). Numerous studies, as shown in Table 3.8, have specified relationships among quality, value, satisfaction and such consequences as customer loyalty, positive word of mouth, price premium, and repurchase intention; furthermore, others have been included in this table based on Cronin Jr *et al*. (2000). Also, this table includes a column which has been added to show whether the study was focused on HE, resulting in that our revision mainly added studies which used these variables for the HE context.

We are particularly interested in mentioning the numerous studies that have dealt with quality, satisfaction, and value in order to discard the hypotheses that relate quality, value and satisfaction. These variables have been tested in multiple occasions and we argue that this research should focus only on the relationship of those three variables with the sense of belonging and repurchase intention.

Table 3.8. Review of the literature relating variables as value, quality, satisfaction, and behavior (constructs and results)

ON	Author (date)	Relevant Constructs	Link(s) to Outcomes	About HE	Empirically Tested
1	(Parasuraman *et al*., 1988)	SQ, BI	SQ	No	Yes
2	(Zeithaml, 1988)	SQ, PV	PV	No	No
3	(Parasuraman *et al*., 1991)	SQ, BI	SQ	No	Yes
4	(Bolton & Drew, 1991)	SQ, SAT, PV, BI	PV	No	Yes
5	(Cronin Jr. & Taylor, 1992)	SQ, SAT, BI	SAT	No	Yes
6	(Boulding *et al*., 1993)	SQ, BI	SQ	No	Yes
7	(Anderson & Sullivan , 1993)	SQ, SAT, BI	SQ, SAT	No	Yes
8	(Gotlieb *et al*., 1994)	SQ, SAT, BI	SAT, BI	No	Yes
9	(Anderson & Fornell, 1994)	SQ, SAT	SAT	No	Yes
10	(Taylor & Baker, 1994)	SQ, SAT, BI	BI	No	Yes
11	(Zeithaml *et al*., 1996)	SQ, BI	BI	No	Yes
12	(Wakefield & Barnes, 1996)	SQ, PV, BI	PV	No	Yes
13	(Hartline & Jones , 1996)	SQ, PV, BI	PV	No	Yes
14	(Fornell *et al*., 1996	SQ, SAT, PV, BI	SAT	No	Yes
15	(Hallowell, 1996)	SAT, BI	SAT	No	Yes
16	(Webb & Jagun, 1997)	SAT, PV, BI	BI	Yes	Yes
17	(Patterson & Spreng, 1997)	SAT, PV, BI	SAT	No	Yes
18	(Bolton, 1998)	SAT, BI	SAT	No	Yes
19	(Andreassen & Lindestad, 1998)	SQ, SV, SAT, BI	SAT	No	Yes
20	(Chenet, et al., 1999)	SQ, SV, SAT, BI	SAT	No	No
21	(Ennew & Blinks, 1999)	SQ, SV, SAT, BI	SAT, SV	No	Yes
22	(LeBlanc & Nguyen , 1999)	SQ, PV, SAT	PV. SAT	Yes	Yes

ON	Author (date)	Relevant Constructs	Link(s) to Outcomes	About HE	Empirically Tested
23	(Oliver, 1999)	SAT, BI	SAT	No	No
24	(Garbarino & Johnson, 1999)	SAT, BI	SAT	No	Yes
25	(Bolton & Lemon, 1999)	SAT, BI	SAT	No	Yes
26	(Tan & Kek, 2004)	SQ, SAT	SAT	Yes	Yes
27	(Marzo *et al*., 2005)	SQ, SAT, BI	SAT, BI	Yes	Yes
28	(Helgesen & Nesset, 2007)	SQ, SAT, BI	SAT, BI	Yes	Yes
29	(Ledden *et al*., 2007)	PV, SAT	SAT	Yes	Yes
30	(Barnes, 2007)	SQ, SAT	SAT	Yes	Yes
31	(Douglas, *et al*., 2008)	SQ, SAT	SAT	Yes	Yes
32	(Stodinik & Rogers, 2008)	SQ, SAT	SAT	Yes	Yes
33	(Rojas-Méndez *et al.*, 2009)	SQ, SAT, BI	BI	Yes	Yes
34	(Wang, et al., 2009)	SQ, PV, SAT, BI	SAT, BI	No	Yes
35	(Nadiri *et al.*, 2009)	SQ, SAT	SAT	Yes	Yes
36	(Brown & Mazzoral, 2009)	PV, SAT, BI	BI	Yes	Yes
37	(Gruber *et al*., 2010)	SQ, SAT	SAT	Yes	Yes
38	(De Jager & Gbadamosi, 2010)	SQ, SAT	SAT	Yes	Yes
39	(Alves, 2011)	SQ, V, SAT, BI	SAT, BI	Yes	Yes
40	(Duque, 2014)	SAT, BI	BI	Yes	Yes
41	(Dlâcic *et al*., 2014)	SQ, PV, BI	PV, BI	Yes	Yes
42	(Hsu *et al*., 2015)	PQ, PV, SAT, BI	SAT, BI	Yes	Yes
43	(Nicklen *et al*., 2016)	SQ, PV, SAT	PV	Yes	Yes
44	(Doña-Toledo *et al.*, 2017)	SQ, PV, SAT	SAT	Yes	Yes
45	(Gunawan & Wahyuni, 2018)	SQ, SAT, BI	SAT, BI	Yes	Yes
46	(Pedro *et al*., 2018)	SQ, SAT	SAT	Yes	Yes
47	(Chandra *et al*., 2018)	SQ, SAT, BI	SAT, BI	Yes	Yes
48	(Hwang & Choi, 2019)	SQ, SAT, BI	SAT, BI	Yes	Yes
49	(Pham *et al.*, 2019)	PV, SAT	BI	Yes	Yes
50	(Butt, 2020)	SQ, PV	SAT	Yes	Yes
51	(Beckett *et al.*, 2020)	SQ, PV	PV	Yes	Yes

Source: own elaboration based on Cronin Jr, *et al*. (2000).

According to our research, the first study on HE was conducted in 1997 with some of the cited variables, and later, numerous researches have emerged to link quality, value, behavioral intentions and customer satisfaction until the present.

Duque (2014) pointed out that in HE, many classifications and factors have been used, and typologies vary depending on the conception of education quality, the expected achievements as results of an education quality and the procedures of analysis (De Jager & Gbadamosi, 2010).

Stodnick and Rogers (2008) found that the most important dimensions of quality that influence satisfaction with the course are reliability on the instructor´s way of lecturing, assurance about the instructor´s competence and knowledge, and the empathy of the instructor.

Moreover, lecturers' expertise, lecturers' interest in the subject, quality and accessibility of IT facilities, and prospects of the degree furthering students' career are related to the overall perception of education quality (Mai, 2005).

Sojkin *et al*. (2012) established that the most important factor determining satisfaction from studying a business major is "social conditions", that includes aspects, such as university coffee places, good sports installations, subsidized hosting and parking spaces.

The overall learning experience in HE is enhanced by support services provided; thus, better facilities, systems and processes that support learning will increase student satisfaction (Yeo & Li, 2014).

In services marketing, a general classification of perceived service quality consists of functional and technical dimension (Gronroos, 1984), which would correspond *to educational quality* and *administrative quality* in the HE context (Duque, 2014), expecting that educational quality and administrative quality influence student satisfaction.

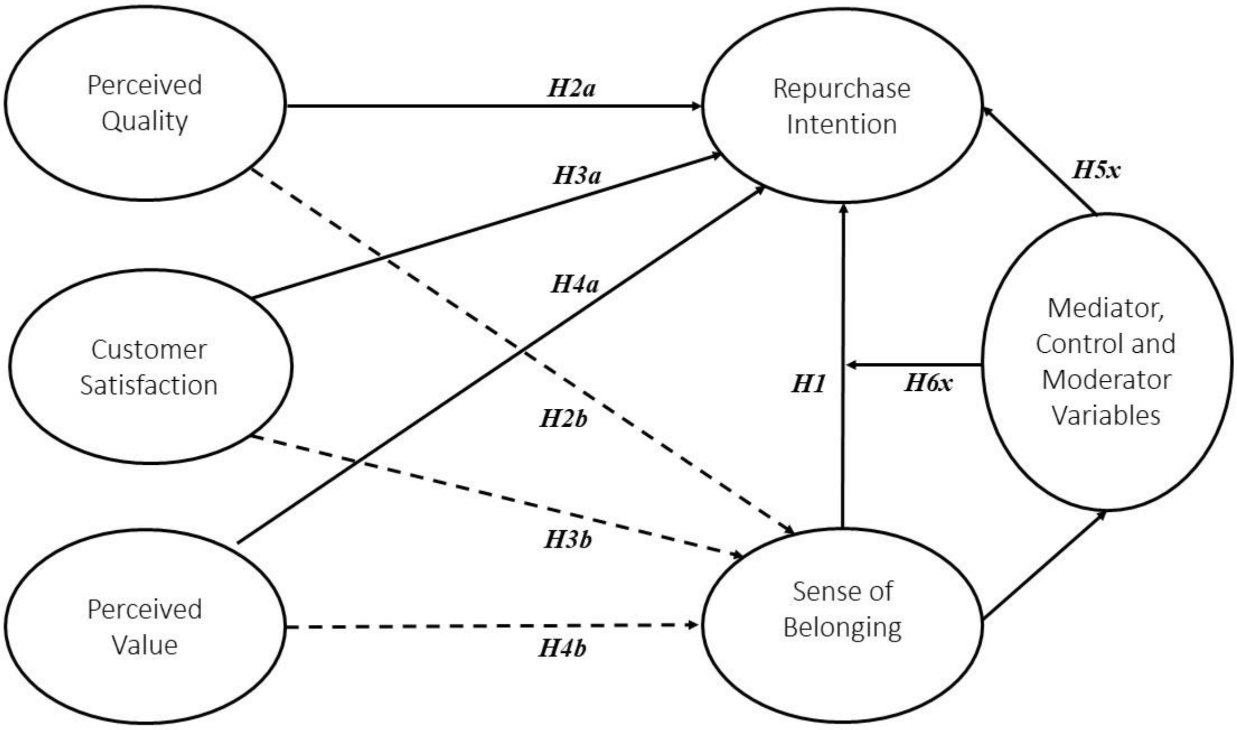
A more recent study about quality management in the higher education context showed how the literature has approached quality management in higher education, how the main quality management principles are being addressed and, more importantly, integrated in all processes and organizational levels of universities (Manatos *et al*., 2017).

Despite the high number of conceptual articles which appear in the literature, there is an obvious trend towards a more empirically based debate, especially after the early 2000s (Manatos *et al*., 2017) and it will likely continue in the near future.

Nevertheless, the hypotheses which relate quality to value or satisfaction are not included in our hypotheses list because, we believe that these relationships are being studied continuously and our research requires us to focus on the relations between these main variables with the new variables for this context such as the pride of belonging and the repurchase.

This research proposes the following hypotheses in order to delve deeply into the students' behavior as customers in their intentions to return to study at the universities or colleges where they were graduated from.

Figure 3.10. Global model and hypotheses of research



Source: own elaboration.

A detailed view of our model shows that, on the one hand, hypotheses ***H1, H2a, H3a*** and ***H4a*** link the classic variables and the pride of belonging with the dependent variable: repurchase intention, which is the main argument for this research. On the other hand, we propose other hypotheses to link the classic variables of the services marketing (quality, satisfaction and value) with the pride of belonging considering the lack of results for them until now.

The relationship between pride of belonging and repurchase intention is the main contribution of this thesis and it prompts the research question for this thesis: *Does the pride of belonging influence repurchase intention in the Higher Education context?*

Thus, it is the main hypothesis of this study and the beginning for this research, considering that there is a relationship between the sense of pride of belonging and an institution with the intention to return to study and so, demonstrating a repurchase intention:

H1: Pride of belonging influences positively repurchase intention

Nevertheless, the interest of this thesis is also the modeling of the repurchase intention through other variables such as quality, value, or satisfaction. Dlâcic *et al.* (2014) proposed as hypotheses of their study that *"Perceived HE service quality has a direct, positive, and significant effect on student repurchase intention"* and *"Student-perceived value has a direct, positive, and significant effect on student repurchase intention".*

In the literature, perceived quality has been recognized as the antecedent of the repurchase. Thus, high service quality can lead to more positive customer behavior intentions (Dlâcic *et al*., 2014). Cronin *et al.* (2000) argued that service quality has a direct effect on customer loyalty. Kuo *et al.* (2009) pointed out that the service quality of mobile value-added services is positively related to continuous use, referral, and repurchase. Similar conclusions were made by Lee *et al*. (2005) in the tourism context; Lai *et al*. (2009) in the telecommunications services in China and heritage tourism services in Taiwan (Chen & Chen, 2010).

Until the study of Dlâcic *et al*. (2014) it was considered that there was a lack of studies on the relationship between the perceived quality of a service and the intention to repurchase in the HE context. Our research hopes to test the hypothesis of the mentioned study in other countries:

H2a: Perceived quality influences positively repurchase intention

Customer satisfaction is widely recognized as a key determinant in influencing consumers´ future purchase intentions (Anderson & Sullivan, 1993; Cronin Jr. & Taylor, 1992; Fornell, 1992; Fornell *et al*., 1996; Taylor & Baker, 1994).

Hsu *et al*. (2015) used CSI model to provide a common set of measures to interpret customer satisfaction, being the customers the alumni and, also the same authors point out as hypothesis a positive relationship between customer satisfaction level and loyalty, including return as graduate students (Alves & Raposo, 2007; Bean & Bradley, 1986).

H3a: Student satisfaction influences positively repurchase intention

Both Roostika and Mutlhay (2010) and Sanchez-Fernandez *et al*. (2010) revealed that perceived value influences repurchase intention in HE context and their studies were conducted at universities in Yogyakarta (Indonesia) and Spain. Dlâcic *et al.* (2014) proposed as follow the hypothesis that "*Student-perceived value has a direct, positive, and significant effect on student repurchase intention"* and our study attempts to test a similar hypothesis including other samples.

H4a: Perceived value influences repurchase intention positively

The detailed view of our model shows us that pride of belonging could be understood as the mediator variable between the classic variables and the repurchase intention. This mediator role comprises the following hypotheses:

H2b: Perceived quality influences positively sense of belonging

H3b: Customer satisfaction influences positively pride of belonging

H4b: Perceived value influences positively pride of belonging

These hypotheses: *H2b*, *H3b* and *H4b* together with *H1*, are the core of our research, broadening knowledge and theories signaled in the past regarding student satisfaction, the perceived value or quality perceived in Higher Education.

Alves and Raposo (2007) pointed out that the education service is one of high ambiguity where quality is difficult to evaluate: if the expectations have a significant influence on the formation of satisfaction; if the influence of expectations is direct and simultaneously indirect through quality perceived or, if the influence of quality in satisfaction is greater, specifically from functional quality.

The variable value was studied by Hartman and Schmidt (1995) and Webb and Jagun (1997), with these researchers proving that student satisfactionwas influenced by value perceived. On the other hand, Leblanc, and Nguyen (1999) noted that value perceived by the students can involve dimensions related to quality, image, emotional values, and even social values.

In HE, the value perceived influence is still limited in research. According to Alves and Raposo (2007) if satisfaction in HE is the global result obtained with educational experience in all its ways, then:

- Student satisfaction in HE is influenced by its perception of value, and.
- The value perceived is influenced by the quality perceived and student´s expectations.

Initially, the consequences of satisfaction in HE do not linearly correspond to the consequences of satisfaction in other services. Whilst in the greater part of services, complaint behavior, word of mouth actions, loyalty, repetitive purchasing behavior and profit are shown as a consequence of satisfaction, some of these consequences do not make sense in HE (Alves & Raposo, 2007).

Although, on the other hand, in terms of higher education, the main consequences of satisfaction found by some authors are loyalty and complaints (Webb & Jagun, 1997), and word of mouth actions (Athiyaman, 1997).

Thus, Alves and Raposo (2017) planned to analyze the most important consequences resulting from satisfying the student in higher education, by establishing the following hypotheses that are linked to the *H3a* and *H3b* hypotheses, and form the preamble of our study.

- If the student is satisfied with his/her educational experience, then he /she will demonstrate loyalty towards the institution.
- If the student is satisfied with his/her educational experience, then he/she will engage in positive word of mouth.

To conclude this chapter, we propose that the model considered for this study also includes five hypotheses related to moderators and control variables: professional level, location of the institution, methodology of study (online, presential or blended), financial aid and personal circumstances. While we try to analyze the relationship between the pride of belonging and repurchase intention directly, which we assume to be positive and significant, we also expect to find the influence of personal and sociodemographic factors in this influence.

CHAPTER 4

4. RESEARCH DESIGN AND METHODOLOGY

4.1. Introduction

This chapter details the methodology and the design of the research used for the quantitative analysis. The model and the hypotheses proposed for this research must be addressed in a real-life scenario. Means of verification play a key role in grounding an initiative such as this.

Thus, and to support the hypotheses proposed in this research, we have set out the following quantitative analysis, which has four steps:

1. Questionnaire design.
2. Survey and data collection.
3. Methodology and model of analysis.
4. Results.

Quantitative analysis is based on deductive thinking, that is, part of the accepted general data to deduce various assumptions through logical reasoning - previously established hypotheses apply it to specific cases and check its validity, based on statistical analysis. The purpose of this methodology is to find out numerical figures through the analysis, normally statistical, of the variables of interest in a representative sample, whose estimation of the values will represent the whole of the population studied (Recuero, 2014).

Quantitative research enables the study of behaviors, motivations, attitudes, characteristics in general, observable phenomena and carries with it a structured research process. The interpretation of the data must be objective, the results are descriptive and will allow the researcher to test the hypotheses raised, according to their statistical characterization.

For this conclusive stage of the investigation, the quantitative research begins with the elaboration of the questionnaire, which allows for the collection of the fundamental information of the constructs that are part of the model. This phase of the research has also included data collection through three surveys at three higher education institutions, using electronic questionnaires sent by e-mail to study the target population of the research.

The method chosen to analyze the data and modeling has been the technique of Partial Least Squares (PLS). The main objective of this technique is the prediction of latent variables, based on the modification of ordinary least squares, and analysis of analysis in variance and principal component analysis.

Finally, we proceed to the analysis of the results to test the hypotheses raised and propose models to be applied in the management of HE institutions.

4.2. Questionnaire Design

Over the years, academic researchers have used questionnaires for quantitative surveys of students. For example, a quantitative survey of a sample of 953 alumni from one American university was drawn from a population of 4,481 from three-year groups. This study aimed to examine the concept of identity salience in the context of no-profit higher education (Arnett *et al*., 2003). Also, a qualitative and quantitative survey of a random sample of 62 international students was undertaken to explore international students' perceptions about British education and British performance in the world market for international education (Binsardi, & Elwulongo, 2003). Finally, a third example is a quantitative survey, using self-completion questionnaire survey, using self-completion questionnaires, of a convenience sample of 395 business school students, aimed to identify the main effects of institutional image and institutional reputational on customer loyalty (Nguyen & LeBlanc, 2001).

Our questionnaire used for this research has been designed according to many other preview studies related to these topics. Moreover, the opinions of experts and of managers of the academic world have been taken into consideration to elaborate it. Chancellors and academic managers of the institutions that have participated in this research have given their comments regarding the issues raised in this questionnaire. After the draft was concluded, they gave their opinions regarding its scope in order to improve and delimit the sense of some questions and their possible responses.

The questionnaire consists of three parts. The first one is divided in four blocks, one block for each of the independent latent variables that are integrated into the model: quality service perception (20 questions), perceived value (6 questions), satisfaction (8 questions) and sense of belonging (6 questions). To answer these questions, a Likert scale from 1 to 7 is used, considering that 1 represents total disagreement or that the probability that it occurs is 0% and 7 represents a total agreement or that the probability that it happen is 100%.

The reasons for using this type of scale are as follows:

1. It is especially appropriate to measure individual behaviors and perceptions.
2. Scale amplitude up to position 7 will allow a better interpretation of the response, distinguishing between close but not equal opinions. This 7-point Likert scale improves the captured information and reduces the measurement error of respondents.
3. The 7-point Likert scale includes a neutral central point.
4. The 7-point Likert scale is homogenous for all concepts to facilitate the respondents ‘answer and avoid the measurement error that minimize reliability of information.
5. These scales are more suitable to be used in causal models that require the use of metric variables.

The second part of the questionnaire includes the four questions that give shape to the latent dependent variable of this research: repurchase intention, such as it has been defined in the theorical framework.

The first and second section measured the respondent´s perceptions of each construct according to the research model. All the measurement scales adopted are nominal. All items were assessed using seven-point Likert scales from 1=”strongly disagree” to 7=”strongly agree”.

The last part of this questionnaire is focused on obtaining information about the moderator and mediator variables in the relation between the pride of belonging and the repurchase, and the social and demographic variables of the sample. This section tries to understand through each respondent´s personal data and the background and acquired grade of each respondent to locate their answers in their contexts, since the survey has been carried out in three Higher Education Institutions.

The purpose of this section is to understand, with the personal data of the respondent, their background and qualification acquired to locate their responses in a context, since the survey has been conducted in three Higher Education Institutions.

The questionnaire was submitted online. An internet survey (CAWI, computer-assisted web interview) consists of developing it on a web platform and then sending an email with the questionnaire to the chosen sample. The internet survey improves objectivity in the responses, reduces the time for data collection and analysis, expands coverage, implies a reduction in time and costs (Loureiro Dios, 2015).

4.2.1. Perceived Service Quality

Over the last 20 years, authors have used the SERVQUAL scale to measure service quality in a wide selection of industries with varying success. Normally perceived service quality is measured with a modified SERVQUAL scale (Parasuraman *et al.*, 1988) and most of the studies conducted on service quality in the last 25 years are based on the SERVQUAL model (Yildiz, 2014). SERVQUAL is a multiple-item scale for measuring perceived quality service, designed to be applicable across a broad spectrum of services.

An examination of the content of the final items making up each of SERVQUAL´s five dimensions suggested the following labels and concise definitions for the dimensions:

Tangibles:	Physical facilities, equipment, and appearance of personnel.
Reliability:	Ability to perform to promised service dependably and accurately.
Responsiveness:	Willingness to help customer and provide prompt service.

Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Empathy: Caring, individualized attention the firm provides its customers.

Modifications have been applied to the items since the analysis to these five dimensions of SERVQUAL scale to approximate to the HEI variables and perceived service quality is measured with a modified SERVQUAL scale. Dlâcic *et al*. 2014 proposed a modified scale using 24 items to measure the perceived service quality and, also, we decided to use a modified questionnaire for our research that would allow us to measure the dichotomy and interrelation between customer perception and expectation in response to current contexts (Yeo & Li, 2014):

- Up-to-date equipment.
- Visually appealing physical facilities.
- Appearance of physical facilities.
- Sympathetic and reassuring faculty management.
- Dependable faculty.
- Receiving prompt service from teaching staff.
- Receiving prompt service from non-teaching staff.
- Willingness to help students (non-teaching staff).
- Willingness to help students (teaching staff).
- Trustful teaching staff.
- Trustful non-teaching staff.
- Polite teaching staff.
- Polite non-teaching staff.
- Adequate job support for teaching staff.
- Adequate job support for non-teaching staff.
- Faculty provides personal attention.
- Teaching staff provides personal attention.
- Non-teaching staff provides personal attention.
- Teaching staff knows students’ needs.
- Non-teaching staff knows students' needs.

This part of the questionnaire has been designed to measure mainly the performance of the facilities, faculty and non-teaching staff, expecting to obtain results that allow us to measure the proper functioning of different parts of a HE institution, which will have been determinants in the relationship with students during their stay at the universities and colleges.

4.2.2. Perceived Value Questionnaire

Likewise, for years authors have applied questionnaires to assess the perception of value that students have about their institutions. This variable is focused on capturing the different components that influence customers: emotional, social, quality, price and performance and value for money. Scales as PERVAL has emerged to measure the construct.

Our questions suggest that perceived value can be regarded as a "*consumer´s overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given*" (Zeithaml, 1988, p. 14). This assessment is a comparison of a product's or service´s "get" and "give". The commonest interpretation of this trade-off has been to consider the relation between price and quality (Cravens *et al*., 1988; Monroe, 1990; Sweeny & Soutar, 2001).

Although other authors have also suggested that viewing value as a trade-off between only quality and price is too simplistic (Bolton & Drew, 1991). So, understanding is necessary to view the value about providing "*superior value to the buyer in terms of product quality, special features, or after-sale service*" (Porter, 1990). And it is the scope of the questionnaire that we propose in the research which is beyond the price and the trade-off of the paid money.

From this point of view and the model that collects this idea: "get" value and "give" value (Ledden *et al*., 2007), we plan a questionnaire that is mainly linked to functional value (FV). The questions suggested, allow us to know the students´ opinions on the benefits obtained during the stay in the institutions.

A first component of perceived value would be related to the functional value for the student, when the stay in a university supposes professional improvements for him. We understand these benefits as the possible advancements that alumni can achieve after their chosen course of study will gain them new employments or career advancements (LeBlanc & Nguyen, 1999; Martensen *et al*., 2000; Stafford, 1994):

- My relationship to school is greatly beneficial to me.
- It is more valuable for me to study at school than at other schools.
- I consider it very advantageous to be a student at school.

On the other hand, we try to evaluate the "give" components of the perceived value, but not only related to the monetary effort. There are other important efforts that must be considered: personal efforts, self-sacrifices, etc., which require giving up both family life and leisure, for example. Therefore, our questions address both the sacrifices made in monetary terms (course fees, accommodation costs, textbooks, etc.) and non-pecuniary efforts taken during the stay at a HE institution away (time, energy, self-sacrifices, etc. (Brown & Mazzoral, 2009; Ledden *et al*., 2007; Webb & Jagun, 1997):

- I consider that the fee (cost of registration) corresponds to the value of the course taken in this Institution.
- I consider that the dedication, the effort, and the time dedicated are in agreement with what the course has contributed in knowledge acquired.

The last question of this part of the questionnaire attempts to collect information about the general perception of the perceived value that the student has of the HE institution, after her or his stay: “my association with XYZ has been of value to me”, how to interpret one-dimensional measured through a question like (Webb & Jagun, 1997):

- Overall received from the Institution has a very high value for me.

This part of the questionnaire has been designed to measure the overall perception of value that alumni have, considering the accomplishments reached and, also the efforts made. To the extent that alumni consider that they have earned their professional goals (better salary, better labor position in the organization or professional advances) and that the necessary efforts have been rewarded (family time, leisure, etc.) we can obtain a complete measurement of perceived value.

4.2.3. Customer Satisfaction Questionnaire

Also, for years authors have used questionnaires to measure student satisfaction and in recent years new studies have continued to emerge with measurements on this variable (Dlâcic *et al*., 2014; Duque, 2014; Hsu, *et al*., 2015; Saunders and Kolek, 2017; Yildiz, 2014), These investigations have served to validate different models that link customer satisfaction with loyalty or perceived value.

One of the main arguments raised in this thesis is that the result of satisfaction is always a comparison between what is expected and what is perceived. Following Gruber *et al.* (2010), we include in the satisfaction questionnaire diverse issues that have been collected before:

- Institution-level satisfaction with the total student experience.
- Faculty-level satisfaction with the total student experience.
- Programme-level satisfaction with learning and teaching.
- Teacher appraisal by students.

Based on these premises, we propose eight questions for our survey. Firstly, we aim to know the program-level satisfaction. Understanding the content of a program and its design accounts for great part of student satisfaction since it was determinant at the time of election and definitively establishes the difference between the expectation level and the result when the course finishes. Course content and organization are included in surveys and the alumni community is the one that has the opportunity to judge the outcome of educational programmes through these surveys (Hsu *et al*., 2015; Gruber *et al*., 2010; Tan & Kek, 2004):

- The Program and its curricular design have covered all my expectations.

Faculty performance is considered as a key element, teaching and accompaniment are fundamental to improve students. Inasmuch as a student learns and perceives good faculty teaching, his or her satisfaction level increases. A good teacher is a guarantee for the student satisfaction (Aldridge & Rowley, 1998; Hsu *et al*., 2015; Tan & Kek, 2004;):

- Teaching of Faculty has covered all my expectations.
- Accompaniment of Faculty has met all my expectations.

Faculty and non-faculty staff are equally decisive in satisfying students during their stay. Non-faculty staff help solve many day-to-day problems and issues for resident or nonresident students and some authors include this component of the satisfaction in their research (Aldridge & Rowley, 1998; Gruber *et al*., 2010; Hsu *et al*., 2015; Tan & Kek, 2004;):

- Accompaniment of non-faculty staff has met all my expectations.

And thus, solutions to the issues and problems that had been given to students during their stay, are a clear argument for their satisfaction: troubles, difficulties, worries or any matters that had been experienced by them (Aldridge & Rowley, 1998; Brown & Mazzoral, 2009; Hsu *et al*., 2015; Tan & Kek, 2004):

- All the questions that have emerged during my stay at the Institution have been resolved.

Other questions that should be included in a satisfaction questionnaire are related to tools and facilities. To the extent that good equipment is available for students in institutions, the results will be better, performance will be higher, and satisfaction will increase (Aldridge & Rowley, 1998; Brown & Mazzoral, 2009; Tan & Kek, 2004):

- Technological tools put at my disposal have covered my expectations.
- The facilities and all the resources related to non-teaching have covered all my expectations (answer only if you have done face-to-face studies totally or partially).

As a conclusion of this part, one of the most popular satisfaction measuring instruments in HE is the student satisfaction inventory marketed by Noel-Levitz, a consulting firm specializing in HE. The student satisfaction inventory is an instrument that measures students' satisfaction in accordance with their experiences during their stay. As a result, the student satisfaction inventory provides the basis for developing the questionnaire for constructs of course design, staff teaching, and campus environment (Hsu *et al*., 2015). Our questionnaire is not the student satisfaction inventory of Noel-Levitz consulting firm, but we are trying to design a questionnaire that provides a wide insight of the variable.

Finally, a last question is proposed in the questionnaire, summarizing the variable objective and considering the aforementioned in Hsu *et al. (*2015):

- All my expectations have been reached.

4.2.4. Pride of Belonging Questionnaire

Based on the above-mentioned references about the pride of belonging applied to marketing, we propose a section of the questionnaire to study this variable. We consider that the pride of belonging linked to a HE institution should be measured from six insights as explained in another chapter of this work; these six aspects can deal clearly with former student behaviors. Below we cite these actions including the questions for the questionnaire.

WOM is referenced in the literature as a component linked to both satisfaction and loyalty of student (Alves & Raposo, 2007; Athiyaman, 1997). We argue that the positive reference about the HE institution is a first good measurer for the sense of belonging and thus, we raise this first question:

- References that I give of the Institution are always positive.

In addition, we point out that if involvement in the institutions' social life is associated positively with students' sense of belonging during the stay (Astin, 1984; Strayhorn, 2018), this sense of belonging can remain in alumni. Obviously, the events and activities will be different from those that the student would participate in, but if there is an opportunity to share the social life of the previous institution, it would be another acceptable measurer for this pride of belonging variable:

- I want to participate in the events and activities that the Institution organizes.

Certainly, one of the most significant components for the belongingness variable will be membership and belonging to the association of former students. The assessment questionnaire about the pride of belonging includes a question to know the tendency to identify himself with this kind of organization (Bhattarcharya *et al.,* 1995; Gruen *et al.,* 2000; Mael & Asforth, 1992; Newman & Petrosko, 2011; Strayhorn, 2018; Stuart, 2009).

- I am (or would be) a member of alumni associations that the Institution promotes.

After the emergence of social media, the landscape of marketing has changed enormously. HE institutions are using these online communication tools and social media to communicate their news and to attract the attention of the new candidates. We suggest that the follow-up carried out by alumni of the social media networks such as Facebook, Twitter, and

Instagram of their institutions (Brech *et al*., 2017; Palmer, 2013), is a good metric to know the pride of belonging. To the extent that former students follow these social media network platforms, we suppose that the pride of belonging will be higher.

- I follow the Institution with interest in social networks to the Institution.

In this context, we argue that donating to a HE institution is a great sign of belongingness. Several authors signal out that the financial support and the donations to the HE institutions are factors related to the satisfaction of former students (Gaier, 2005; Hsu *et al*., 2015; Volkwein, 2010). Therefore, we posit that if a donation is made by an alumnus, her or his sense of belonging is probably greater than if he or she did not donate.

- I made (or would make) a donation for the development of the Institutional (if requested).

Finally, we understand that one of clearest signals of belonging is when a former student of a HE institution recruits a candidate of the same institution. When a candidate is elected by a fellow, we argue that the sense of belonging is present in such election: trust, reliability, quality performance, etc. are arguments that the recruiter use. Nevertheless, Hsu *et al*. (2015) reflect that there is an objective insight and that alumni are who can better evaluate the curricular relevance.

- I recommend the hiring by my company of those who have studied at the Institution.

With these six questions, we are trying to build a variable that is capable of measuring the sense of belonging linked to the marketing. Just as the perceived quality service, perceived value or satisfaction can positively influence the repurchase intention, therefore, we consider that the sense or, pride of belonging also influences this behavior. Obviously, it is not the only variable that influences it; nevertheless, we want to know the *what* and what is its reliability with respect to the repurchase behavior.

Modeling the intention to repurchase through the sense of belonging is the main scope of this research, as shown by the thesis title, and so we trust that this part is one of the most important in this work.

4.2.5. Repurchase Intention Questionnaire

The repurchase intention variable is our dependent variable in the proposed model. As we have pointed out above, the literature on HE marketing is incoherent and lacks theoretical models that reflect upon the context of HE the nature of their services (Hemsley-Brown & Oplatka, 2006), and, therefore, the importance of intention of repurchase has not been treated in depth either.

In this thesis, we posit that repurchase intentions should be understood with an attitudinal and behavioral dimension: probably, when a former student is satisfied as a result of her or his stay, this person will consider the return to the institution, if circumstances are present and favorable for him or her.

Dlâcic, *et al.*, 2014 formulated two questions: "*I will probably use services of the school again" and "I intend to repurchase services from school again in the future*". These questions would focus on knowing the dimension of future behavior, that could be used to calculate the probably of repurchasing. In accordance with this, we propose two novel questions that allow us to know more about this behavior, limitng the time in which the former student returns to his or her HE institutions.

- I will probably return to study at this Institution in a period of less than two years.
- I will probably return to study at this Institution. I will return in a period between two to five years.
- I will probably return to study at this Institution in a period between five to ten years.
- I will probably go back to study at this Institution at some point.

Summarizing at this stage, the part of the questionnaire on the intention to repurchase is posed to determine the probability of returning to the same HE institution where the person had studied. The questionnaire includes four questions: three of them designed to know possible periods of returning: almost immediately or in less than two years, between two and four years, and between five and ten years; and a final question about the possible behavior without a limited period of time.

4.2.6. Mediator Variables

To complete the description of this questionnaire, we cite the mediator and moderator variables that we believe must be included. In general, a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion. Mediating variables act as external events that acquire an internal meaning for the model (Baron & Kenny, 1986).

Accordingly, we propose to include in the questionnaire an aspect that may influence the result of the dependent variable: repurchase intention. We believe that there are matters related to the offer or with personal conditions that influence the repurchase intention, such as the type of methodology, possible gains or profit, aids to study, current courses, etc. Thus, the questions that are raised, try to access the information that could most change the student's decision.

- Studying a new program in this institution will depend on the possibility of gaining new professional skills or advance in my professional level.
- Studying a new program will depend on the proximity or accessibility to the Institution.
- Studying a new program will depend on the possibility of online studying.
- Studying a new program will depend on the possibility of studying in a classroom setting.
- I will return to study at this institution if the program offered me is of a very novel content.
- I will return to study at this institution if the program offered me is given in a language different from the one given in the first program.
- I will return to study at this institution if some kind of scholarship or financial aid is offered.
- My personal situation (time, costs, and availability) conditions my decision.

We also consider that our model and research should include moderator variables. These are aspects that influence the result, such as social and demographic items related to the student.

4.2.7. Moderator Variables: Social Demographic Variables

Moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur (Baron & Kenny, 1986). In general terms, a moderator is a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects that direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable. Specifically, with a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables (Baron & Kenny, 1986).

- Sex.
- Country of origin.
- Year of birth.
- Age Interval.
- Level of Study in this Institution.
- Year of completion of the studies.
- Duration in years of the studies performed in the institution.
- Modality in which the studies were performed.
- Type of company in which you currently work.
- Position that you currently occupy in your company.
- Civil status.
- Number of children.

So far, we have described the questionnaire used to collect the data that we need. The number of questions is 64 divided into 7 different sections. In the appendices of this work, we include the questionnaire in English and its translation into Spanish.

The questionnaire has been submitted in Spanish since the target populations for the survey frames were mainly Spanish speakers, even for the alumni of one American institution in Florida, USA, as will be described below.

The questionnaire translated into Spanish has been verified by a Spanish translator expert in the English language to ensure that the meaning of the questions was the same as the English version.

4.3. Survey and Data Collection

The research methodology proposed is a survey divided into three parts, administered to three different higher education institutions, but with the same profiles and a single questionnaire in Spanish for all of them. The information has been compiled in a structured manner: all alumni have answered the same questions in Spanish and in the same order, so as not to disturb the meaning of the results. The data and information have been obtained in groups and in a structured way, which has allowed us to analyze the results and test the hypotheses formulated in this work.

The surveys have been conducted via email with the designed questionnaires sent from the servers of each of the institutions that have participated in this study. This method allows for the sending of emails in batches to the registered addresses. Recipients have only had to type their answers through the Google Forms electronic tool, which automatically stores the answers.

This type of survey has been especially suitable for this project in which the institutions have lists of email addresses of their alumni whom we wanted to address in each of the institutions. To carry out the surveys, we have had the collaboration of the departments of graduate and alumni relations, who have coordinated the sending of the emails.

Using this CAWI (Computer Assisted Web Interviewing) survey methodology, we have been able to propose three studies in the following institutions, from Spain, Colombia, and the United States.

- EIG from Spain, a business school founded in 1992 with different executive, postgrad and grade programs, and a community with more than 3.000 former students. EIG is in Granada (Andalucía).
- CEIPA Business School from Colombia is a university foundation that was founded in 1979. More than 20,000 people have graduated from CEIPA in the last more than 40 years but only 5,000 alumni are now in its community (https//ceipa.edu.co). CEIPA Business School is in Medellin (Antioquia) and Barranquilla (Atlántico)
- Westfield Business School from United States is a HE institution that was established in 2012 with a license from the CIE (Commission of

Independent Education, in Florida) to operate executive programs: MBA, executive MBA and executive Financial Master (www.westfield.education). Its alumni community has more the 2,000 graduate members. Westfield Business School is in Doral, Dade County close Miami (Fl).

These institutions have been selected for this study because they have similar characteristics. Initially we set out in this research to look for the key elements related to executive training. We pondered the short-term needs of the executive professionals, and therefore, we had to focus on the business schools as HE institutions.

The three higher education institutions are also private and, therefore, after defining their strategic planning, they need to grow their institutions. As we have referenced above, we are in a global environment for the HE. Moreover, HE education faces a new scenario, in a post-COVID-19 era, when many institutions begin to emerge with online course offers.

EIG, Westfield and CEIPA are similar in that the three now have a wide offer of online programs, even though EIG and CEIPA combine the online offer with face-to-face programs. The three institutions are well referenced by their former students. Before beginning the research, we spoke with the Chancellors, Deans and academic directors of the institutions.

4.4. Methodology of Analysis: PLS-SEM

The expansion of structural equation models (PLS-SEM) has been widely disseminated for years in areas such as marketing (Hair *et al*., 2012a; Henseler *et al*., 2015; Hult *et al*., 2018) and other subjects such as information technology, tourism, health science, operations management or human resources and currently, new tools continue to be developed and modifications are established in the reporting standards for articles that use PLS as an analysis tool (Marin-Garcia & Alfalla-Luque, 2019).

Firstly, we would like to make a point about the structural equation model (SEM) which is a second-generation multivariate data analysis technique that gives a higher level of confidence to research due to its statistical efficiency through robust and powerful software. Its development has brought about a revolution in the field of empirical research, since it allows simultaneously examining a series of dependency relationships between independent and dependent variables (Martínez Avila & Fierro Moreno, 2018).

Martinez-Ávila & Fierro-Moreno (2018) pointed out that this statistical technique for series of estimates of simultaneous equations using multiple regressions is characterized by two basic components: 1) the structural model and 2) the measurement model. The structural model is the guide model that shows the dependency relationships between independent variables (exogenous) and dependent variables (endogenous). The measurement model shows the relationships between the constructs (latent variables) and the indicators (observable variables); In this model, the researcher can evaluate the contribution of each item (reactive) to the measurement scale, that is, specify which indicators define each construct. In addition, it evaluates the reliability of constructs and indicators.

In SEM there are two approaches: the first is based on the analysis of covariance structures (CB) and the second is the partial least squares (PLS) approach based on analysis of variance.

The second approach, referring to the PLS method, is based on the analysis of variance, which implies a more flexible modeling methodology since it does not require rigorous parametric assumptions, mainly in the distribution of the data. In this sense, Wold (1980) affirmed that the modeling of structural equations with partial least squares (PLS-SEM) does not require the conditions demanded by the traditional modeling of structural covariance equations (CB-SEM, for the statistical distributions (normality of the sample size data in reference to the observed variables); that is, they use non-parametric tests. PLS models are used under predictive and non-confirmatory situations (Hair *et al*., 2017).

PLS-SEM emerged as a technique to analyze the complex relationships between latent variables that allow the observed data to be explained and predictive analysis as a relevant element in scientific research (Martínez Avila & Fierro Moreno, 2018).

To select the use of the PLS-SEM technique, Hair, *et al.* (2017) started from the premise of the research objective. If the key objective is the prediction of constructs, it is recommended to use this technique. On the other hand, if the objective is to test or confirm a theory, the most recommended is to use the CB-SEM. The PLS-SEM has less restrictive requirements in the measurement of sample size scales and in the distribution of data. It is an approach that has gained wide acceptance today, mainly in market research and, in general, in the social sciences.

It should be noted that the PLS technique can be used for both explanatory (confirmatory) and predictive (exploratory) research (Hair *et al*., 2017; Henseler *et al*., 2016a).

According to Shmueli & Koppius (2011), an explanatory model is a model built for the purpose of testing causal hypotheses that specify how and why a certain empirical phenomenon occurs. A predictive model refers to the construction and evaluation of a model that aims to predict new or future observations or scenarios. The predictive power of a model refers to its ability to generate accurate predictions of new observations, either in cross-sectional or longitudinal studies (Martínez Avila & Fierro Moreno, 2018).

One of the most common reasons for using PLS-SEM is the sample size, prediction uses, non-normal data, which is typical of most social science studies with complex models and advanced analysis (Hair *et al*., 2017).

Hair *et al*. (2017) noted that, when deciding whether to use PLS-SEM or CB-SEM, researchers should recognize that PLS-SEM achieves greater statistical power at all sample sizes, but particularly smaller samples sizes, compared to CB-SEM. Greater statistical power means that when using PLS-SEM a specific relationship is more likely to be statistically significant when it is present in the population.

The higher statistical power makes PLS-SEM particularly suitable, therefore, for exploratory research where theory is less developed as in our case whose goal is to advance a possible relationship between two variables that have not been stated so far.

Table 4.1. Guidelines for selecting PLS-SEM and CB-SEM

	Recommended method		
Types of analysis	**PLS-SEM**	**CB-SEM**	**Both**
Objective = prediction	X		
Objective = exploratory research or theory development	X		
Objective = explanation only		X	
Objective = explanation and prediction	X		
Measurement philosophy = total variance (composite-based)	X		

	Recommended method		
Types of analysis	**PLS-SEM**	**CB-SEM**	**Both**
Measurement philosophy = total variance only (factor-based)		X	
Reflective measurement model specification			X
Formative measurement model specification	X		
Metric data			X
Non-metric data = ordinal and nominal	X		
Smaller samples sizes – N = < 100	X		
Larger samples sizes – N = > 100			X
Binary moderators			X
Continuous moderators	X		
Normally distributed data			X
Non-normally distributed data	X		
Secondary (archival) data	X		
Higher order constructs = two 1st constructs	X		
Higher order constructs = three of more 1st order constructs			X
Latent variable scores needed for subsequent analysis	X		

Source: Hair *et al*. (2017)

4.4.1. Formative Measures and Reflective Measures

One of the main issues in developing the model is to determine the convenience between reflective or constructive measures to build the latent variables.

Formative measures are latent constructs made up of measurement indicators, in which these are the cause or antecedent of the construct (Diamantopoulos & Winkhofer, 2001; Valdivieso, 2013). In the formative model, each indicator represents a dimension of the meaning of the latent variable; removing an indicator means that the variable loses some of its meaning, hence the importance of indicators causing the construct.

Regarding the reflective model, it is considered as a measurement model where the indicators of the latent variable are competitive with each other and represent manifestations of the latent variable. The causal relationship goes from the latent variable to the indicators and a change in that will be reflected in all its indicators. The difference between the two measurement approaches is in the causal priority between the latent variable and its indicators (Bollen, 1989; Diamantopoulos, 1999).

4.4.2. PLS-SEM Features

PLS-SEM is a multivariate analysis technique whose purpose is to test structural models. Although it has been developed for several decades, it is considered an emerging technique. This methodology has as its main objective the causal-predictive analysis in which the analyzed problems are complex, and the theoretical knowledge may be scarce (Urbach & Ahlemann, 2010).

As shown above, it is Hair *et al.* (2017) who argued that PLS-SEM has several advantages compared to other SEM techniques. Being a more flexible technique, it has the following characteristics:

1. This technique can use small sample sizes, although if it is larger, that increases the precision, and it is not necessary to assume a normal distribution of the data (since the PLS-SEM is a non-parametric method, the recommended mean scale is ordinal measured on Likert 1 scale).
2. The number of items of each construct measured can be only one or can be made up of more than one and reflective and formative measurement methods can be incorporated into the relationships between constructs and their indicators.
3. PLS-SEM aims to maximize the amount of variance explained (maximizes the coefficient of determination [R^2]).
4. In the evaluation of the global model (estimation of the measurement model), goodness of fit criteria is not established, but reflective and formative measures are evaluated separately.
5. The structural evaluation of the model analyzes the R^2, the predictive relevance (Q^2), the size and significance of the standardized regression coefficients or path coefficients and the sizes of the effects (f^2 and q^2).
6. The basic PLS algorithm follows a two-step approach, the first one refers to the iterative estimation of the latent variable scores, and the

second step refers to the final estimation of the weights, loads and path coefficients by means of the estimation of ordinary least squares (multiple and simple) and in the principal component analysis (Henseler *et al*., 2015).

In general, PLS-SEM is a non-parametric statistical method. Although it does not require that the data present a normal distribution, it is required to verify that the data are not excessively non-normal since in general, this type of data is problematic in assessing the significance of the parameters. (Marin-Garcia & Alfalla-Luque, 2019; Martínez Avila & Fierro Moreno, 2018).

One of the characteristics of the PLS-SEM is precisely that it could be used with small sample sizes; however, the minimum sample size depends on the number of relationships (among the latent variables) that are specified in the model (Marcoulides & Saunders, 2006; Wong, 2013). From this perspective, Table 2 shows the suggested sample size for this type of study.

Thus, PLS-SEM methodology is known for its ability to handle small sample sizes, which does not mean that the objective is to meet the minimum sample size requirement (Wong, 2013). A sample size of 100 to 200 is recommended to potentiate the results of the model, since at least 100 observations can be reached to reach acceptable levels of statistical power, given a certain quality in the measurement model (Hoyle, 1995; Reinartz *et al*., 2009).

In our case, the used sample contains more than 300 observations from the compilation of the surveys carried out in the three institutions that have collaborated with this research.

Table. 4.2. Suggested sample size for PLS-SEM methodology

Minimum number of observations in the sample	**Number of relationships in the structural model**
52	2
59	3
65	4
70	5
75	6

Minimum number of observations in the sample	Number of relationships in the structural model
80	7
84	8
88	9
91	10

Source: Wong (2013).

4.4.3. Systematic process for using PLS-SEM

Hair *et al.* (2017) established a logical methodology that consists of nine stages to make use of the PLS-SEM:

1. Specification of the structural model.
2. Measurement model specification.
3. Data collection and examination.
4. Model estimation.
5. Formative measurement evaluation.
6. Reflective measurement evaluation.
7. Evaluation of the structural model.
8. Advanced analysis.
9. Interpretation of results.

Throughout this work we have detailed the process of defining the elements that the investigation requires. The choice of variables and the formulation of hypotheses have allowed us to define a relational or structural model and we have described the characteristics of our samples and their conditions for this study.

In the following chapters, we will carry out the model estimation for PLS analysis and the evaluations that PLS methodology demands.

Based on the above, the model that relates independent variables to the dependent variable has been defined, which has shown the logic of the relationship of the hypotheses that were tested. This model is the one that has served as the basis of the diagram that the *SmartPLS statistical software* requires to proceed to the calculations that the investigation requires.

Any model used for *SmartPLS* requires two previous analyses: 1) a structural analysis of the model that describes the relationships between latent variables (measurement model evaluation), and 2) a measurement analysis of the model, which shows the relationships between latent variables and their measurements (indicators) (structural model evaluation).

Regarding the systematic evaluation of the results of the PLS-SEM, Table 4.3 shows the statistical tests used both for the evaluation of the reflective and formative measurement models and in the global evaluation of the structural model. Each of them should be considered to have its own validity restrictions (Hair *et al*., 2017; Martínez Avila & Fierro Moreno, 2018).

Both the model and the graph for SmartPLS have been built following the logic that suggests that the independent (predictor) variables are on the left and the dependent variable is on the right.

Once the structural model is developed, two aspects are mainly observed: the sequence of the constructs and the relationship between them, which represent the hypotheses and their relationships according to the theory that is being tested. In addition to observing the latent and observable variables, it is also important to mention two aspects that can be embedded in the model in the constructs: mediation and moderation (Martínez Avila & Fierro Moreno, 2018).

Therefore, considering the indications that the authors point out for the analysis with SmartPLS, the results for this entire study will be presented starting with the evaluation of the calculation model for a reflective measurement model (outer model) and then the structural model (inner model) will be evaluated.

Table 4.3**.** PLS-SEM Evaluation (statistical tests)

Measurement model evaluation	
Reflective measurement model	**Formative measurement model**
1. Internal consistency reliability (Cronbach´s alpha).	1. Convergent validity
2. Convergent validity (examining the outer loadings of the indicators to determine the average variance extracted (AVE) from each construct).	2. Collinearity between indicators

3. Discriminant validity (Fornell-Larcker criterion)	3. Significance and relevance of weights
Structural model evaluation	
1. Coefficient of determination (R^2)	
2. Predictive relevance (Q^2)	
3. Standardized path coefficients	

Source: Hair *et al*. (2017)

Therefore, the procedure evaluates the components of the designed model and the resulting model (Barclay *et al*., 1995; Mochales González, 2013; Recuero Virto, 2014), and also for analysis related to HE marketing (Ismanova, 2019).

The *outer model* specifies the measurement model that represents the relations among the observed indicators and the latent constructs. Its purpose is to measure validity, confirming whether the model really measures what we are looking for, and reliability, evaluating whether this measurement is done in a stable and consistent manner (Hair *et al*., 2017).

The *inner model* concretizes the structural model among latent exogenous and endogenous variables. Therefore, the weight and magnitude of the relations among variables have been calculated such as Recuero (2014) pointed out.

Subsequently, a bootstrap analysis has been undertaken to find out the Student’s t-value in pursuance of knowing the meaningfulness of the relations among constructs which build the model. These three stages: measurement model, structural model, and bootstrap analysis have been developed in a sequential way in four occasions for the suggested model, and a posterior calculation over moderator and mediator effects that some variables have for this model.

These sequences allow us to test the hypotheses that have been proposed for this work and the conclusions to summarize all the phases that have been developed and have been presented.

CHAPTER 5

5. RESULTS

5.1. Introduction

As mentioned in the conclusion of the previous chapter, a study with four scenarios is carried out based on the data collected from the surveys conducted for this investigation. Three colleges participated in this research by organizing a survey of their former students: *Escuela Internacional de Gerencia* (EIG) from Spain, *Westfield Business School* (Westfield) from the United States of America and *Fundación Universitaria CEIPA* (CEIPA) from Colombia.

The consolidation of all available data allows us to obtain a sample of 359 participants. This number of cases is enough to study models with more than 10 relations between latent variables according to the Partial Least Square (PLS) method (Wong, 2013) (See Table 4.2). Initially the proposed model established seven relations among their variables and hypotheses (See Figure 3.11).

The validation procedure that we follow for this study begins with a calculation of all available data for only one calculation whose data panel is the combination of the data from the three institutions noted above. This calculation is carried out for a global model including perceived quality and value, student satisfaction, pride of belongin or sense of belonging and repurchase intention variables and their reflective indicators.

We follow the abovementioned description with the first part focusing on the measurement model evaluation and the second part targeting a structural model evaluation, which evaluate through Student-t tests the hypotheses included in this research through a bootstrap. Bootstrapping is a resampling procedure, since it treats the sample as the population, and from it extracts with replacement many samples of size n (Chin, 1998). Bootstrap offers the *t*-Student values, where those indicators greater than 1.96 are significant. Thus, using bootstrap t-Student's, ‘t’ values determine which relationships (hypotheses) are statistically significant.

Once those results are obtained for the mentioned general model, the data will be segmented for each college. The comparison among the three results of each HE institution, allow us to determine if the hypotheses can be generalized or depend on the colleges.

To test our hypotheses under three scenarios and in comparison with the general model, and since the Spanish College sample has only 79 records, we will work with a model with five relations among the latent variables, focusing mainly on the relations among the repurchase intention variable and the sense of belonging variable with other independent variables.

For this first part of our study, we focus on *H1, H2a, H3a, H4a and H4b* as main hypotheses because it allows us to confirm the most important lines that this research tries to prove in the HE context to improve business performance.

Once this part of the study is finished, we will plan a general model with some possible moderating and mediating variables that allow us to understand the influence of these variables on the relationship between pride of belonginess and the repurchase intention variables as professional level alumni, location of the institution, study methodology, financial aids or personal circumstances as moderating variables of this general model.

According to this calculation procedure, we expect to obtain a good basis for establishing future guidelines to study the relationship between the repurchase intention and the pride of belonging of a former student to an institution of HE, and for modeling the future repurchase behaviors through variables such as quality, value or satisfaction in the context of HE, which we develop in the discussion and later, in the conclusions of this research.

5.2. Global Results

We undertake an ambitious challenge to comply with a model that allows us to test the hypotheses proposed. PLS-SEM analysis technique is a tool that requires previous verification of a list of conditions to assess the validity of the model. Therefore, we start from a model that includes all the variables and indicators collected from the three surveys and, later we refine this model until we propose a model which meets all the requirements indicated in the literature.

FIRST PHASE

We start the calculation of the model proposed for this research with one that includes all variables and all their reflective indicators such as we observe in the following figure.

First of all, the research model is tested using PLS, which has several strengths that make it appropriate for this study. In PLS, item reliability is assessed by examining the loading and all loading exceeded the recommended threshold of 0.7 (Carmines & Zeller, 1979).

The following table shows the loading factors, and those factors that are lesser that 0.7, should be deleted in the model (see Table 5.1). The table includes 20 indicators of quality perceived, 8 indicators of student satisfaction, 6 indicators of perceived value, 6 indicators of sense or pride of belonging and 4 factors for the repurchase intention modeling. All of them (44 indicators) are shown in a continuous sequence.

Figure 5.1. Global Model for SmartPLS Software

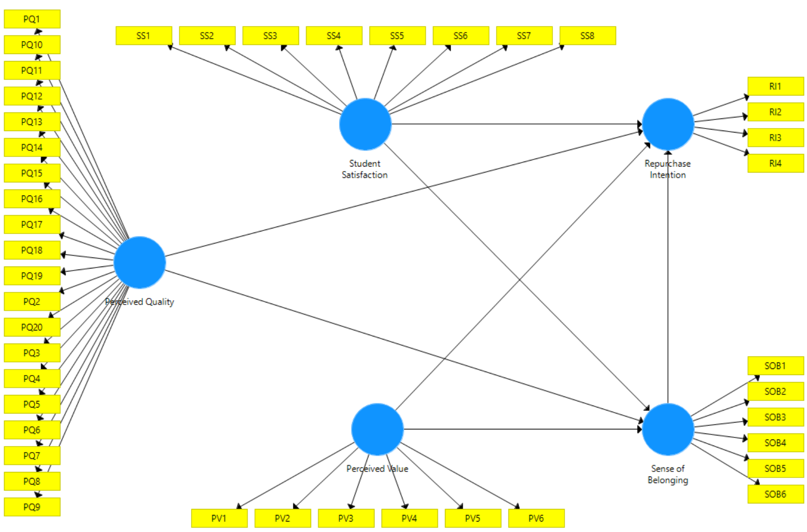


Table 5.1. External loading factors for reflective indicators for a first global model

PERCEIIVED QUALITY		STUDENT SATISFACTION		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION	
PQ1	0.735	SS1	0.882	PV1	0.892	SOB1	0.844	RI1	0.810
PQ10	0.798	SS2	0.891	PV2	0.869	SOB2	0.817	RI2	0.900
PQ11	0.801	SS3	0.902	PV3	0.905	SOB3	0.743	RI3	0.817
PQ12	0.788	SS4	0.857	PV4	0.835	SOB4	0.781	RI4	0.852
PQ13	0.852	SS5	0.851	PV5	0.874	SOB5	0.680		
PQ14	0.864	SS6	0.835	PV6	0.927	SOB6	0.860		
PQ15	0.829	SS7	0.810						
PQ16	0.779	SS8	0.932						
PQ17	0.849								
PQ18	0.795								
PQ19	0.723								
PQ2	0.444								
PQ20	0.842								
PQ3	0.771								
PQ4	0.762								
PQ5	0.818								
PQ6	0.758								
PQ7	0.755								
PQ8	0.834								
PQ9	0.832								

According to these results, two indicators should be removed to ensure the reliability of the model. Posteriorly and having deleted these external loading factors, we must build a model without these two indicators so that all loading indicators exceed the recommended threshold of 0.7.

The following steps to evaluate the measurement model are the reliability and the convergent internal analysis. To assess the convergent validity of the construct, we need to report the internal consistency and discriminant validity (Fornell & Larcker, 1981).

Analysis of the internal consistency of the scales allows to specify the degree of rigor with which a set of indicators measures the same latent variable. There are various procedures to measure the precision of a measurement as we have mentioned; Alpha of Cronbach (AC) coefficient being the most frequently used (Aldás & Uriel, 2017). AC is defined as the part of the variance of all indicators for a latent variable. It means that if AC has a higher value, the variance of a latent value and the variance of all of indicators will explain with greater probability the same effects, and so, its reliability will be higher for the measurement.

Reliability of a scale only indicates that the different items that compose it are highly correlated to each other, and are measuring the same latent variable. But just because a scale is reliable does not mean that the variable is what you must measure. A measurement cannot be valid if it is not reliable, but its reliability is not a sufficient condition (Aldás & Uriel, 2017).

In accordance with the foregoing, the composite reliability is defined as the part of total variance that is due to common factors and to loading factors' variances for a latent variable. Thus, the internal consistency of a model proposed with the PLS calculation tool is evaluated through two indicators: Cronbach's Alpha coefficient and the composite reliability of the construct and the interpretation of both indices is similar: Cronbach's Alpha coefficients for all constructs with reflective indicators must be above 0.7 (Marin-Garcia & Alfalla-Luque, 2019) and the composite reliability of the constructs must be above 0.6 (Henseler *et al*., 2015) to consider acceptable to these constructs and their measurements

On the other hand, convergent validity assesses whether the different items that measure a construct really measure the same. Average Variance Extracted (AVE) provides the amount of variance that a construct obtains from its indicators in relation to the amount of variance due to error (Marin-Garcia & Alfalla-Luque, 2019).

The following table provides the information about internal consistency and convergent validity that asseses the measurement model through the values of Alpha of Cronbach, composite reliability, and AVE for this first global model. Posteriorly, another table shows the other results once the two indicators lesser than 0.7 have been erased. Showing these results also, we want to assess the impact that two indicators have on the results of the final adjusted model (See tables 5.2 to 5.5).

Table 5.2. Internal consistency and convergent validity for a first global model

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Quality	0.967	0.970	0.618
Perceived Value	0.944	0.956	0.782
Student Satisfaction	0.954	0.962	0.758

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Sense of Belonging	0.879	0.908	0.628
Repurchase Intention	0.868	0.909	0.715

As we can see, AC and AVE values for the latent variables are greater than 0.7 as previously stated to confirm the validity of the measurement model, and the composite reliability of these variables is also greater than 0.6 according to the criteria which have been proposed.

Finally, to assess discriminant validity, we follow Fornell and Larcker (1981) who suggested the use of AVE, which should be greater than the variances shared among the constructs. Discriminant validity is an assessment of the extent to which a construct of interest differs from other constructs. The comparison can be made in a correlation matrix, including the correlations among different constructs in the off-diagonal elements of the matrix, and the square roots of the AVE for each of the constructs along the diagonal. For adequate discriminant validity, the diagonal elements should be greater than the off-diagonal elements in the corresponding rows and columns (See table 5.3).

According to the results of Fornell-Laker criteria, the correlation among the indicators of perceived value or student satisfaction are not discriminant for the calculation of perceived quality value through their reflective indicators. In other words, the variables may be correlated, but not so much that the discrimination capacity of their own indicators to measure them is questioned (Aldás & Uriel, 2017).

However, the hypotheses proposed for this research do not include the relationships among the perceived quality and value, or among student satisfaction and perceived quality, thus we consider that the lack of discriminant validity among these variables does not affect the results that we are looking for.

Table 5.3. Fornell-Larcker for a first global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging	Student Satisfaction
Perceived Quality	**0.786**				
Perceived Value	0.794	**0.884**			
Repurchase Intention	0.446	0.525	**0.845**		
Sense of Belonging	0.706	0.797	0.633	**0.790**	
Student Satisfaction	0.859	0.873	0.513	0.767	**0.871**

SECOND PHASE

To obtain a better model, we proceeded to eliminate two indicators that turned out to be less than 0.7 such as we have described above. PQ2 and SOB5 were eliminated in this global model, without entailing a significant loss of information. PQ2 is an item related to "*visually appealing physical facilities*" of the HE institutions and SOB5 is an item to determine if *"the student makes (or would make) a donation for the development of the Institution (if requested)"*.

Precisely, these items would not have been of major significance, since a large number of responses have been from students whose study methodology has been online and their opinion on the physical appearances of their institution would be based on tangential aspects. Regarding donations, none of the three institutions has a program concerning this matter, so all the answers have been given conditionally.

Thus, the following table shows the loading factors for the "*adjusted global model"* based on the "*first global model"* planned for this research and those factors that were lesser that 0.7, have been deleted in the model. The following table includes the 19 indicators of quality perceived, the 8 indicators of student satisfaction, the 6 indicators of perceived value, the 5 pride of belonging indicators, and the 4 factors for the repurchase intention modeling, all of them (42 indicators) are shown in a continuous sequence (see table 5.4).

Table 5.4. External loading factors for reflective indicators for an adjusted global model

PERCEIIVED QUALITY		STUDENT SATISFACTION		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION	
PQ1	**0.733**	**SS1**	**0.882**	**PV1**	**0.892**	**SOB1**	**0.862**	**RI1**	**0.807**
PQ10	**0.798**	**SS2**	**0.891**	**PV2**	**0.869**	**SOB2**	**0.828**	**RI2**	**0.899**
PQ11	**0.802**	**SS3**	**0.901**	**PV3**	**0.905**	**SOB3**	**0.758**	**RI3**	**0.815**
PQ12	**0.789**	**SS4**	**0.857**	**PV4**	**0.835**	**SOB4**	**0.778**	**RI4**	**0.856**

PERCEIIVED QUALITY		STUDENT SATISFACTION		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION
PQ13	0.851	SS5	0.851	PV5	0.874	SOB5	------	
PQ14	0.865	SS6	0.835	PV6	0.927	SOB6	0.863	
PQ15	0.830	SS7	0.810					
PQ16	0.781	SS8	0.932					
PQ17	0.850							
PQ18	0.794							
PQ19	0.722							
PQ2	-----							
PQ20	0.841							
PQ3	0.771							
PQ4	0.763							
PQ5	0.822							
PQ6	0.755							
PQ7	0.757							
PQ8	0.837							
PQ9	0.834							

Once that external loading factors have been tested and their results do not exceed the recommended threshold of 0.7 (Carmines & Zeller, 1979), we proceed to note the results obtained about the reliability and internal consistency of the measurement model. Similarly, noted above, we show the results Alpha´s Cronbach, composite reliability, and AVE (see table 5.5).

Significantly, we do not find differences in the values calculated with a first global model and an adjusted global model (without the indicator PQ 2 and SOB5), but it is true that some AVE values have changed slightly. AVE of perceived quality changes from 0.618 to 0.641 and, AVE of sense of belonging changes from 0.628 to 0.671, and so, the AVE´s values of these constructs have increased, meaning that now the variance of the indicators influences more on the variance both of sense of belonging and perceive quality.

Table 5.5. Internal consistency and convergent validity for an adjusted global model

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Quality	0.969	0.971	0.641
Perceived Value	0.944	0.956	0.782

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Student Satisfaction	0.954	0.962	0.758
Sense of Belonging	0.878	0.910	0.671
Repurchase Intention	0.868	0.909	0.714

All of this means that the model continues to be positive as a measurement tool for the modified proposed model, since all the values are greater than the references given in the literature as adequate values (Henseler *et al*., 2015; Marin-Garcia & Alfalla-Luque, 2019).

Continuing the subject of the measurement model evaluation, we proceed to show the values referred to Fornell-Larcker criterion for the validity discriminant evaluation.

Table 5.6. Fornell-Larcker for an adjusted global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging	Student Satisfaction
Perceived Quality	**0.801**				
Perceived Value	0.791	**0.884**			
Repurchase Intention	0.445	0.527	**0.845**		
Sense of Belonging	0.717	0.796	0.622	**0.819**	
Student Satisfaction	0.858	0.873	0.515	0.773	**0.871**

Also, according to this result of the Fornell-Larcker criterion, we consider appropriate to use the HTMT matrix to evaluate the discriminant validity (Henseler *et al*., 2015). This matrix includes two types of correlations; on the one hand, the correlations of the indicators of the same latent variable called *monotrait-heteromethod* (MT) correlations and, on the other hand, the correlations among the indicators of one variable with the indicators of another variable called *heterotrait-heteromethod correlations* (HT).

It seems logical that if the mean of the correlations between two different latent variable indicators is greater than those of the indicators of the corresponding construct, then we will have a discriminant validity problem (HT/MT>1) (Aldás & Uriel, 2017). The proposed criterion is that the HT/MT ratio is less than 0.9 for each pair of latent variables, otherwise we could face a problem of discriminant validity (Gold *et al*., 2001) (see table 5.6).

Table 5.7. *Heterotrait-Monotrait Ratio* (HTMT) criterion for an adjusted global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging	Student Satisfaction
Perceived Quality					
Perceived Value	0.823				
Repurchase Intention	0.465	0.560			
Sense of Belonging	0.755	0.854	0.693		
Student Satisfaction	0.891	0.916	0.541	0.817	

As we can see, a problem of discriminant validity continues to exist between two latent variables of the model, although they are two independent variables whose relationship is not part of the hypotheses of this investigation.

This issue leads us to propose the following steps: on the one hand we would like to carry out the validation of the structural model and, later we will determine the level of significance of the hypotheses proposed for this modified global model through the bootstrapping technique. Finally, for this second method we will carry out the calculation of the step coefficients that represent the weight of the standardized regressions among the variables of this global model.

For SmartPLS investigations, once confidence in the measurement model is established, main effects must also be tested, which are related to the R^2 statistic and the Q^2 statistic. The test of the structural equation model includes an estimation of the path coefficients and R^2 values. The path coefficients indicate the strength of the relationships among the dependent and independent variables, and R^2 values represent the amount of variance explained. Thus, R^2 value is a measure of the predictive power of a model for the dependent latent variables. R^2 values that stand at 0.67 are substantial, at 0.33 they are moderate and 0.19 are weak (Chin, 1998).

The following table shows the R^2 values for the two dependent variables that the model contains: repurchase intention and sense of belonging. In the case of sense of belonging, R^2 represents an almost substantial level, and in the case of repurchase intention, R^2 represents a moderate level of the predictive power of model for these two latent variables, such as table 5.7 shows.

Table 5.8. R^2 criterion for structural model evaluation for an adjusted global model

	R^2
Repurchase Intention	0.394
Sense of Belonging	0.663

To measure the predictability (predictive relevance) of the dependent constructs, the Stone-Geisser redundancy index can also be used (Geisser, 1975; Stone, 1974). The values of this index must be positive to guarantee the reproducibility of the original values of the model with which we are working. According to the calculations for this model, the Stone-Geisser Q^2 index can be seen in table 5.8.

Table 5.9. Q^2 index for predictive relevance of dependent variables for an adjusted global model

	Q^2
Repurchase Intention	0.261
Sense of Belonging	0.423

On the other hand, the path coefficients represent the standardized regression weights. These data require measures of how well the proposed model fits the observed data. The following table (see table 5.8) shows the standardized coefficients paths for this first adjusted global calculation containing three independent variables, one dependent variable and another variable which is dependent, but is also participating as an independent variable with respect to the repurchase intention dependent variable. Through these variables, we can observe the positive or negative influence between variables that configure the model and are used to formulate the main hypotheses for this research. To calculate these coefficient paths, we use *bootstrapping*.

The next tables show the results of the bootstrapping procedure of the seven relationships established for this first modified model, and in consequence, the result of the hypotheses that have been proposed as a base of this research about repurchase intention and pride of belonging in the HE context (see table 5.9 and table 5.10).

Table 5.10. Standardized *path* coefficients in an adjusted global model

	Repurchase Intention	**Sense of Belonging**
Perceived Quality	-0.114	0.128

Student Satisfaction	0.131	0.239
Perceived Value	0.062	0.486
Sense of Belonging	0.553	

As a last step of this procedure, we propose at first to review the hypotheses according to results obtained (See Table 5.11). Apparently, the relationships among the variables described in the model that have generated the hypotheses for this work in almost all cases would be accepted, but not with a level of significance that would mean that a hypothesis is accepted.

Table 5.11. Bootstrapping *t*-Student values and *p*-values for an adjusted global model

	***t*-Student value**	***p*-value**
Perceived Quality -> Repurchase Intention	1,527	0.127
Perceived Quality -> Sense of Belonging	1,643	0.101
Perceived Value -> Repurchase Intention	0.618	0.537
Perceived Value -> Sense of Belonging	5,154	**0.000**
Sense of Belonging -> Repurchase Intention	8,642	**0.000**
Student Satisfaction -> Repurchase Intention	1,172	0.242
Student Satisfaction -> Sense of Belonging	2,141	**0.033**

Table 5.12. Result of hypotheses ascertainment for an adjusted global model

	Ascertainment
H1: Pride of belonging influences positively repurchase intention.	Not Rejected (****)
H2a: Perceived quality influences positively repurchase intention.	Rejected
H2b: Perceived quality influences positively pride of belonging.	Not Rejected – not significant
H3a: Student satisfaction influences positively repurchase intention.	Not Rejected – not significant
H3b: Student satisfaction influences positively pride of belonging.	Not Rejected (*)
H4a: Perceived value influences positively repurchase intention.	Not Rejected – not significant
H4b: Perceived value influences positively pride of belonging.	Not Rejected (****)

(****) hypothesis is not rejected ($p<0.0001$).
(*) hypothesis is not rejected ($p< 0.1$).

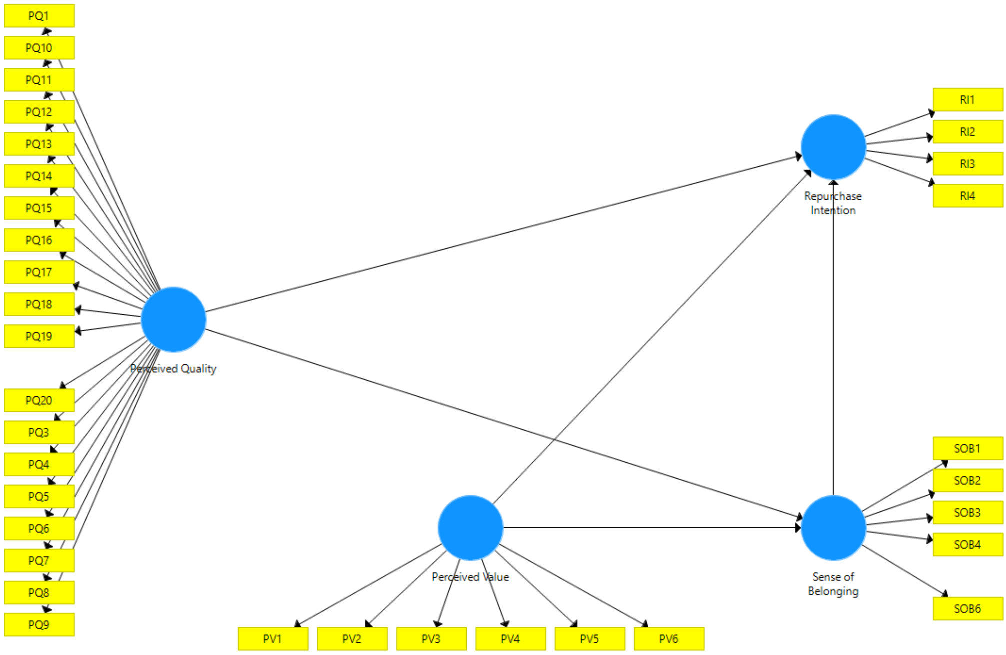
According to these results and the analysis undertaken, it is deemed appropriate to continue with a debugging of this global model with five latent variables. Such as it has been displayed, discriminant validity is not ideal such as Fornell-Larcker criterion proposes, although we believe that it is not substantial in the result of the first and main hypothesis of this research: the positive influence of sense of belonging on repurchase intention.

To adjust the model to the PLS requirements, we proceed to eliminate one of the model´s independent latent variables, which means that we will not be able to test the hypotheses H3a and H3b. Nevertheless, it allows us to raise a perfect model that assesses the validity of the results in relation to the main proposals of this research: the relationship between the sense of belonging and the repurchase intention in the HE context.

THIRD PHASE

For this third step of the process, we try to find a definitive model that allows us to test the main hypotheses. We delete from the model the student satisfaction variable since its correlation coefficients with perceived quality and perceived value variables do not warrant discriminant validity according to the Fornell-Larcker criterion. The model, which is suggested for this phase, is the following shown ahead (see figure 5.2): a final global model.

Figure 5.2. Final global model with modifications according to PLS requirements



As in the last cases, we proceed to check the external loading factor of reflective indicators and the conditions that assess the measurement model through reliability, convergent validity, and thealready mentioned discriminant validity. The following tables show these results that meet the recommended requirements.

We initiated with the table that contains the external loading factors; all of which are greater than 0.7.

Table 5.13. External loading factors for reflective indicators for a final global model modified without the Student Satisfaction latent variable

PERCEIIVED QUALITY		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION	
PQ1	**0.733**	**PV1**	**0.892**	**SOB1**	**0.861**	**RI1**	**0.806**
PQ10	**0.798**	**PV2**	**0.869**	**SOB2**	**0.828**	**RI2**	**0.899**
PQ11	**0.802**	**PV3**	**0.905**	**SOB3**	**0.759**	**RI3**	**0.815**
PQ12	**0.789**	**PV4**	**0.835**	**SOB4**	**0.779**	**RI4**	**0.856**
PQ13	**0.851**	**PV5**	**0.874**	**SOB5**	**------**		
PQ14	**0.865**	**PV6**	**0.927**	**SOB6**	**0.862**		
PQ15	**0.830**						
PQ16	**0.781**						
PQ17	**0.850**						
PQ18	**0.794**						
PQ19	**0.722**						
PQ2	**-----**						
PQ20	**0.841**						
PQ3	**0.771**						
PQ4	**0.763**						
PQ5	**0.822**						
PQ6	**0.755**						
PQ7	**0.757**						
PQ8	**0.837**						
PQ9	**0.834**						

The following control that we carry out with this third model is the internal consistency and convergent validity checks. For this new model, the Alpha of Cronbach, composite reliability and AVE are corrected and comply with criteria that authors note (Aldás & Uriel, 2017; Fornell & Larcker, 1981; Hair *et al*., 2017) (See table 5.13).

Table 5.14. Internal consistency and convergent validity for a final global model

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Quality	0.969	0.971	0.641
Perceived Value	0.944	0.956	0.782
Sense of Belonging	0.878	0.910	0.671
Repurchase Intention	0.868	0.909	0.714

As expected, the results of table 5.13 are the same as the results of table 5.5, since the elimination of a latent variable in a model should not influence the measurement through indicators of each one of the latent variables that remain in the model.

The following table also shows the results that confirm the discriminant validity requirement tested using the Fornell-Larcker criterion. As in the internal consistency and convergent validity checks, these values are again the same as the last global model generated (See tables 5.14 and 5.6).

Table 5.15. Fornell-Larcker matrix for a final global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	**0.801**			
Perceived Value	0.791	**0.884**		
Repurchase Intention	0.445	0.527	**0.845**	
Sense of Belonging	0.717	0.795	0.622	**0.819**

The following table shows the second criterion used to confirm the discriminant validity and whose results have also been positive, observing that they have not changed with respect to the last calculation of the HTMT ratio for this model without the student satisfaction variable.

Table 5.16. *Heterotrait-Monotrait Ratio* (HTMT) criterion for a final global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality				
Perceived Value	0.823			
Repurchase Intention	0.465	0.560		
Sense of Belonging	0.755	0.854	0.693	

After the evaluation of the measurement model, the next stage is to verify the evaluation of the structural model as previously carried out. The test of the structural equation model includes an estimation of the path coefficients, R^2 and Q^2 values, also, as we have done with the second model of work in this research. We begin by showing the R^2 values in the following table. These values according to what we can observe are slightly lower than the values calculated previously (values calculated in previous model, R^2=0.394 for repurchase intention and R^2=0.663 for sense of belonging, see table 5.7). Nevertheless, these values do not mean that the statistical value has lost its meaning for the latent variable, neither qualitative nor quantitative.

Table 5.17. R^2 criterion for structural model evaluation for a final global model

	R^2
Repurchase Intention	0.391
Sense of Belonging	0.652

On the other hand, we must also test the predictive relevance or the redundancy index for the structural model and that it has been calculated through the Stone-Geisser index. Table 5.17 shows the values obtained, also slightly lower than those calculated for the last model (Q^2 = 0.261 for repurchase intention and Q^2 = 0.423 for sense of belonging). Nevertheless, these values still meet widely the criterion indicated in the literature that points out that Q^2 must always be greater than zero (Stone, 1974¸ Geisser, 1975).

Table 5.18. Q^2 index for predictive relevance of dependent variables in a final global model

	Q^2
Repurchase Intention	0.260
Sense of Belonging	0.419

Once we come to this point, we show the results of both the standardized path coefficients and t-Student test value that are used to test the hypotheses proposed. Finally, the last step of this process is to run the correlations between the variables as a last contribution to help understand this model.

The following table shows the results of the bootstrapping procedure of the five relationships established in this second model modified without student satisfaction values (see Table 5.18). A second table demonstrates the validity and significance ofthe relationship between the sense of belonging, repurchase intention and also, a positive and significant relationship between perceived value and sense of belonging.

Table 5.19. Standardized path coefficients in a global model modified without student satisfaction variable

	Repurchase Intention	**Sense of Belonging**
Perceived Quality	-0.058	0.234
Perceived Value	0.122	0.609
Sense of Belonging	0.568	

Table 5.20. Bootstrapping *t*-Student values and *p*-values for a global model modified without student satisfaction variable

	***t*-Student value**	***p*-value**
Perceived Quality -> Repurchase Intention	0.854	0.393
Perceived Quality -> Sense of Belonging	3.308	**0.001**
Perceived Value -> Repurchase Intention	1.488	0.137
Perceived Value -> Sense of Belonging	8.954	**0.000**
Sense of Belonging -> Repurchase Intention	8.948	**0.000**

These results obtained with the bootstrapping procedure allow us to validate the hypotheses. Prior to this, we point out that the new model proposed without student satisfaction variable has improved some relationships in the model. This final global model modified without student satisfaction let us validate as significant, the relationship among perceived value and sense of belonging that the last model did not consider as significant. The final global model proposed provides results which improve the significance levels. See tables 5.19 and 5.10 in the relationships between perceived value and sense of belonging, and between thesenseof belonging, and repurchase intention as the main hypothesis of this research.

To conclude this first part of the results, the following table gives us the correlation values among the four variables considered in this model without student satisfaction. It has greatly improvedthe significance between sense of belonging and repurchase intention (see table 5.20).

Table 5.21. Correlation coefficients among variables for a final global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	**1.000**	0.791	0.445	0.717
Perceived Value	0.791	**1.000**	0.527	0.795
Repurchase Intention	0.445	0.527	**1.000**	0.622
Sense of Belonging	0.717	0.795	0.622	**1.000**

Through these values we realize that the greatest correlation is between quality and value, but this relationship between perceived quality and value is not included within the scope of this research neither as its hypothesis. On the other hand, these results point out a high correlation between perceived value and sense of belonging, between sense of belonging and repurchase intention as the main goal of this work.

Finally, we show the analysis carried out from the results obtained that have been shown in the different previous tables to validate the hypotheses that supported this research work. For us it is extremely important to confirm the non-rejection of the first hypothesis.

Table 5.22. Result of hypotheses ascertainment for a global model modified

	Ascertainment
H1: Pride of belonging influences positively repurchase intention.	Not Rejected (****)
H2a: Perceived quality influences positively repurchase intention.	Not Rejected – not significant
H2b: Perceived quality influences positively pride of belonging.	Not Rejected (**)
H3a: Customer satisfaction influences positively repurchase intention.	Ø
H3b: Customer satisfaction influences positively pride of belonging.	Ø
H4a: Perceived value influences positively repurchase intention.	Not Rejected – not significant

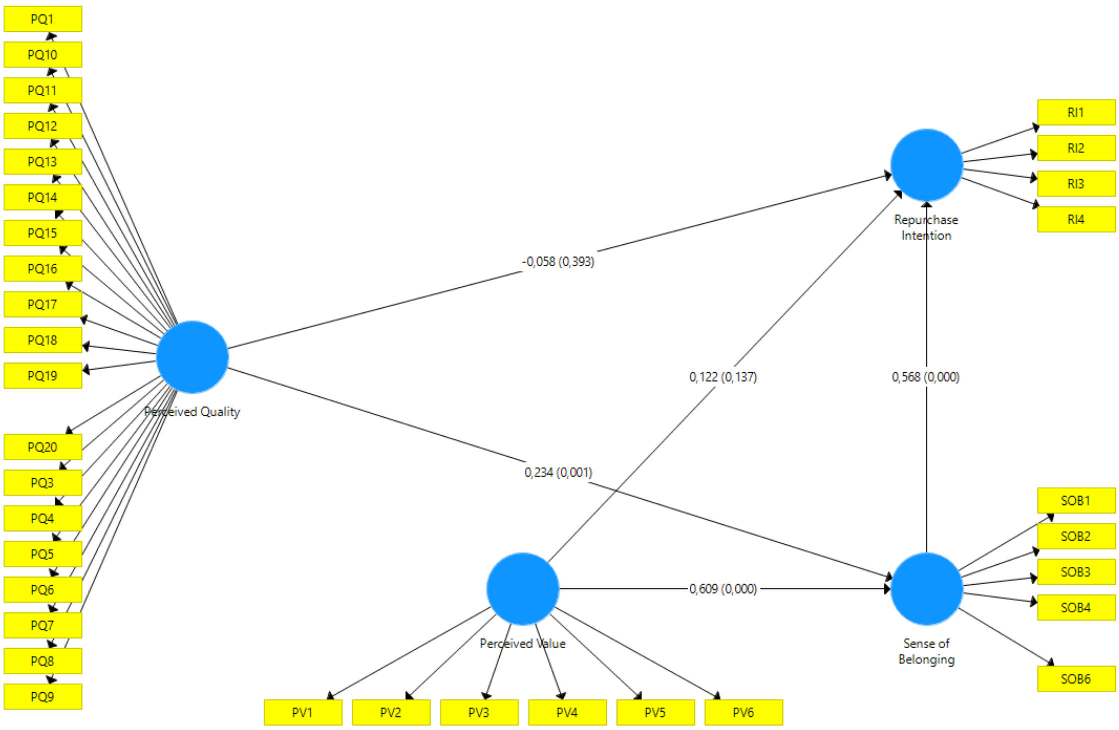
H4b: Perceived value influences positively pride of belonging.	Not Rejected (***)

(****) hypothesis is not rejected (p<0.0001).
(***) hypothesis is not rejected (p<0.001).
Ø hypothesis is not considered in the model

As a consequence of this first part of the procedure, we could affirm that, mainly, the hypotheses proposed for this research, initially, are not rejected. Nevertheless, these early signs must be confirmed with the next calculations based on data from three colleges that participated through alumni in this research.

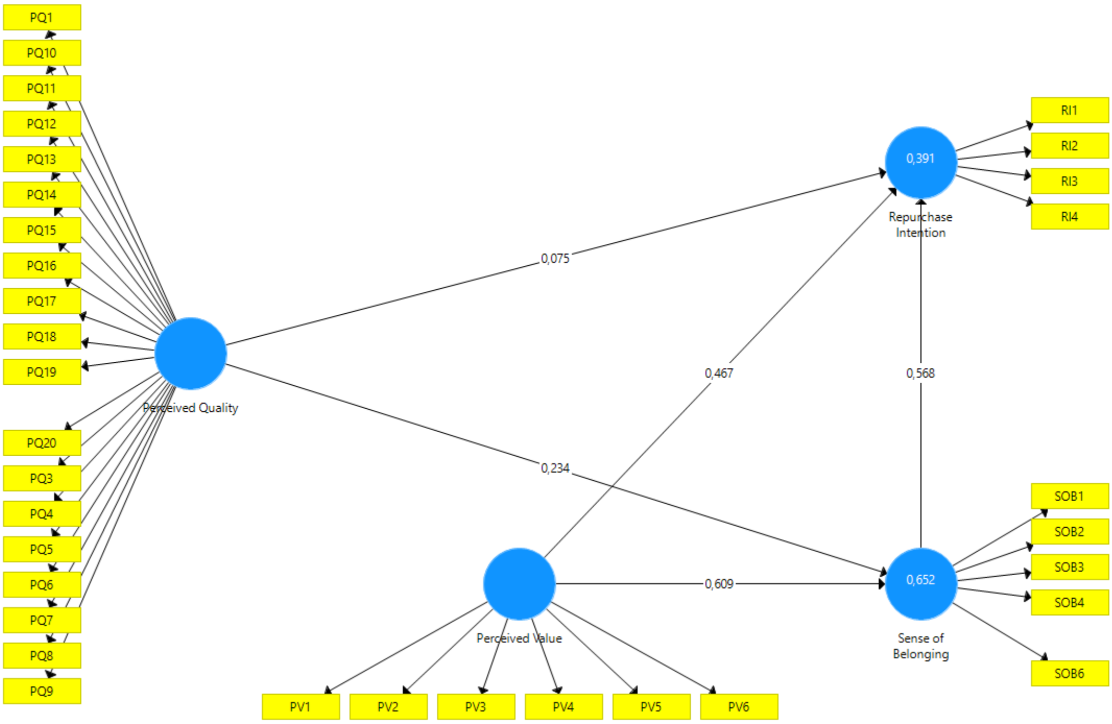
To finish this part of calculation and its results, the following figures contains the standardized path coefficients among the modeling variables and their *p*-values (see figure 5.3) and, the other figure includes the total effects among the variables of the model and the R^2 value (see figure 5.4). As it was mentioned above, R^2 represents the amount or percentage of variance for the variable that is explained with the available sample which we are working in the research.

Figure 5.3. Standardized path coefficients and *p*-values for a final global model



And the following figure is the resume about the different total effects that the variables included in the model has over the dependent variables.

Figure 5.4. Total effects over dependent variables and their R^2 for a final global model



5.3. *Specific Results*

The next part of the chapter is dedicated to specific results once the results for a global model have been obtained together with all the data collected through the survey of this research. From now on, we are faced with the challenge of finding the optimum model for smaller samples other than the one used in the first part of this chapter.

The working line selected to give continuity to this work is based on this last model that includes five of the six variables initially proposed in the theoretical framework. As explained at the time, three of the five variables appear many times related to repurchase intention in the academic literature, whereas the sense of belonging as the main contribution of this research is the other variable also linked to the repurchase intention which is considered in the study to explain such behavior. Due to the requirements that PLS imposes on the models, we had to adjust the initial model to comply with such statistical rules. For this reason, we initiate the new calculations with the last model that only includes the three independent variables already considered plus the repurchase intention as a dependent variable. In line with the results obtained, we will determine what new changes should be made in the model in order to adapt it to the statistical requirements of the PLS calculation procedure.

We begin the next part of this research with the study and the results of the Spanish school, whose survey is the one with the least data of the three surveys conducted with former students. Subsequently, we continue the calculation with the data from the American institution, and we conclude with the study for the Colombian university, whose survey is the one with the most data of the three.

5.3.1. Results of a Spanish Higher Education Institution

In order to obtain the results to verify a link between the sense of belonging and repurchase intention in the Spanish institution that collaborated in this work, we follow the same method applied until now. This process follows which includes the evaluation of both the measurement model and the structural model together with the statistical parameters which indicate its suitability. Thus, in order not to extend the chapter excessively, only the inconsistencies found are mentioned. Therefore, not all results of these intermediate stages are noted until we reach the consistent final model.

Starting this process from the last model described above, in which student satisfaction was eliminated by the discriminant validity criterion according to the Fornell-Larcker matrix, this model requires new modifications of the data from the Spanish Institution to obtain a positive evaluation for both the measurement model and the structural model. The small size of the sample of the Spanish institution probably restricts even more the model for this scenario, but we will continue focusing on the main hypothesis of the research: the relation between sense of belonging and repurchase intention.

A first analysis of external loading factors shows three indicators below the recommended threshold of 0.7: PQ4 (*"Sympathetic and reassuring faculty management"*), SOB2 (*"I want to participate in the events and activities that institutions organized")* and SOB4

("I follow with interest in social networks to the Institution"). We remove these indicators with the goal of obtaining a new model that have all external loading factors greater than recommended value of 0.7 (Carmines & Zeller, 1979).

Moreover, we obtained some disturbance in the discriminant validity evaluation where not all correlation coefficients among the variables of the model are lower than the AVE indicator value of each one of them in the matrix diagonal such as the Fornell-Larker criterion requires.

To solve these problems, we proceeded to eliminate the reflective indicators mentioned above and evaluate the options to achieve a new model for the data of this Spanish institution that allows us to conclude something about the relationship between sense of belonging and repurchase intention and other variables.

Nevertheless, we continue having problems that point-out the requirement of a more adjusted model, probably due to the reduced number of data that sample has.

For this reason, it is necessary to consider eliminating one more independent variable from the model, also remove the SOB5 *("I am (or would) a member of alumni associates that the Institution promotes")* indicator for the latent variable sense of belonging and simplify the interpretation of the purchase intention variable in order to eliminate all the non-conformities that the validity discriminant requirements generate in the model.

Table 5.23. External loading factors for reflective indicators for a new model modified with a Spanish Institution data

PERCEIVED VALUE		**SENSE OF BELONGING**		**REPURCHASE INTENTION**	
PV1	**0.897**	**SOB1**	**0.916**	**RI4**	**1,000**
PV2	**0.857**	**SOB6**	**0.935**		
PV3	**0.919**				
PV4	**0.891**				
PV5	**0.875**				
PV6	**0.942**				

As we can see, the model remains extremely reduced. However, we consider that it will be interesting to continue with the analysis in order to reach some possible conclusions, which are surely linked to the size of the sample; only 79 responses, but enough according to Wong (2013).

As in the case of the global result, the following table shows the internal consistency and convergent validity that have been calculated for this scenario.

Table 5.24. Internal consistency and convergent validity for a new model modified with a Spanish Institution data

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Value	0.951	0.961	0.805
Repurchase of Intention	1.000	1.000	1.000
Sense of Belonging	0.833	0.923	0.857

In this case, the results show some differences in the final global model that is proposed in the last notes about the final global model (see table 5.13). AC, composite reliability, and AVE of repurchase intention are 1.0 in this case because the repurchase intention variable has only one indicator (RI4 "*I will probably return to study at this Institution at some point*"). On the other hand, since perceived value and sense of belonging have a smaller number of indicators, also AC, composite reliability and AVE have changed in this new model: Both AC values have changed in different senses: AC of perceived value is a bit higher and AC of sense of belonging is a bit lower. Nevertheless, the composite reliability and the AVE´s of the two variables, sense of belonging and repurchase intention have increased.

The next stage is the discriminant validity valuation for the model studied for the Spanish institution such as we note in table 5.24, being valid the results obtained.

Table 5.25. Fornell-Larcker matrix criterion for a new model modified with a Spanish Institution data

	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Value	**0.897**		
Repurchase Intention	0.645	**1.000**	
Sense of Belonging	0.864	0.665	**0.926**

After checking the measurement model evaluation, we pass to the structural model analysis according to R^2, Q^2, and standardized path coefficients. The next two tables show the figures to valuate positively the structure of this model for the Spanish Institution data.

Table 5.26. R^2 and Q^2 criteria for structural model evaluation for a new model modified with a Spanish Institution data

	R^2	Q^2
Repurchase Intention	0.462	0.437
Sense of Belonging	0.746	0.632

As can be seen, the R^2 and Q^2 values obtained are higher with respect to to the values of the final global model (see tables 5.16 and 5.17), surely because, in this model the constructs have been considerably simplified and therefore, their variances explain the behavior in a more comprehensive way than in the main model in which we had some more indicators for each of the latent variables.

Table 5.27. Standardized path coefficients for a new model modified with a Spanish Institution data

	Repurchase Intention	Sense of Belonging
Perceived Value	0.279	0.864
Sense of Belonging	0.424	

Finally, we can see in the next table that the *t*-Student and *p* values which allow us to reject or not to reject the hypotheses proposed for this work under the conditions for the Spanish survey.

Table 5.28. Bootstrapping *t*-Student values and *p*-values for a new model modified with a Spanish Institution data

	t-Student value	*p*-value
Perceived Value -> Repurchase Intention	1.807	0.071
Perceived Value -> Sense of Belonging	30.341	**0.000**
Sense of Belonging -> Repurchase Intention	2.762	**0.006**

These values confirm that relationships are positive although with a low significance in the case of the influence the perceived value exerts over the repurchase intention and a greater significance in the relation between the sense of belonging and the repurchase intention. Also, through these results, the relationship perceived value and sense of belonging is strongly confirmed. This issue is also considered significantly important as part of this research, since this variable appears as a marketing variable more now than ever before, given that it has been addressed very few times as such until now.

The following tables and figures resume the results for the Spanish Institution: firstly, table 5.28 contains the correlation coefficients among the three variables that are described in this particular model and the scorecard with hypotheses results (see table 5.29).

Table 5.29. Correlations coefficients among variables for a new model modified with a Spanish Institution data

	Perceived Value	**Repurchase Intention**	**Sense of Belonging**
Perceived Value	**1.000**	0.645	0.864
Repurchase Intention	0.645	**1.000**	0.665
Sense of Belonging	0.864	0.665	**1.000**

Table 5.30. Result of hypotheses ascertainment for a Spanish Institution data

	Ascertainment
H1: Pride of belonging influences positively repurchase intention.	Not Rejected (***)
H2a: Perceived quality influences positively repurchase intention.	Ø
H2b: Perceived quality influences positively pride of belonging.	Ø
H3a: Customer satisfaction influences positively repurchase intention.	Ø
H3b: Customer satisfaction influences positively pride of belonging.	Ø
H4a: Perceived value influences positively repurchase intention.	Not Rejected – not significant
H4b: Perceived value influences positively pride of belonging.	Not Rejected (****)

(****) hypothesis is not rejected ($p<0.0001$).
(***) hypothesis is not rejected ($p<0.001$).
Ø hypothesis is not considered in the model

Lastly, we include the two resulting figures: the first displays the standardized path coefficients and their *p*-values according to the *t*-Student test and the second figure displays the total effects over dependent variables and R^2 of these latent variables.

Both figures: the standardized path coefficients and the *p*-value figures together with the total effects of the R^2 value summarize the results obtained for the Spanish institution, whose meaning and circumstances we will analyze in the next chapter of this work.

Figure 5.5. Standardized path coefficients and *p*-values for the Spanish model

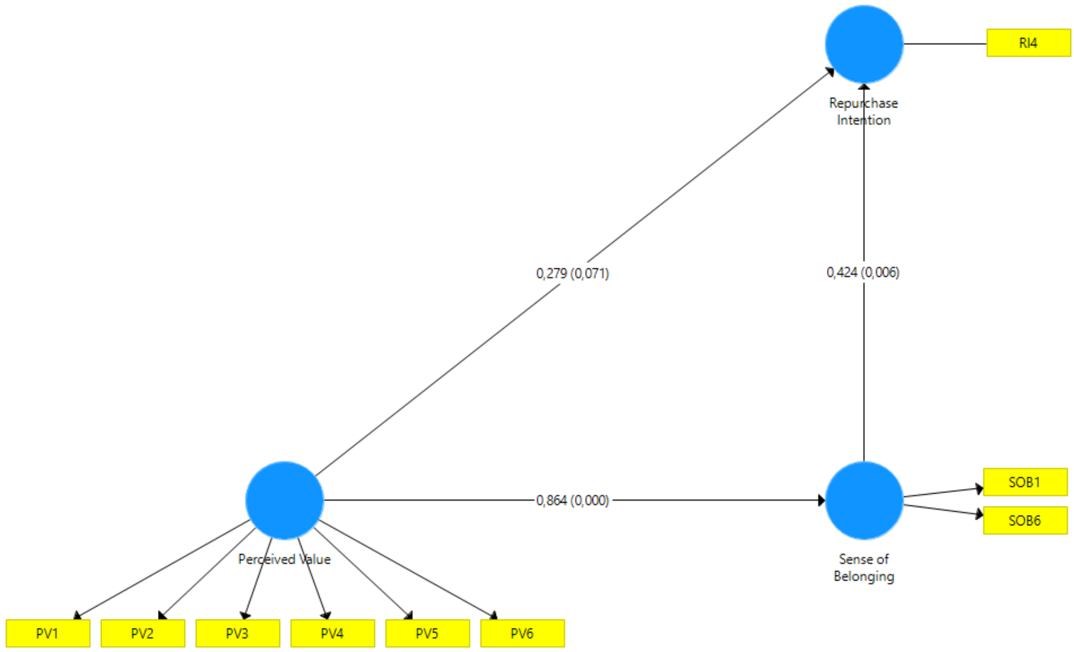
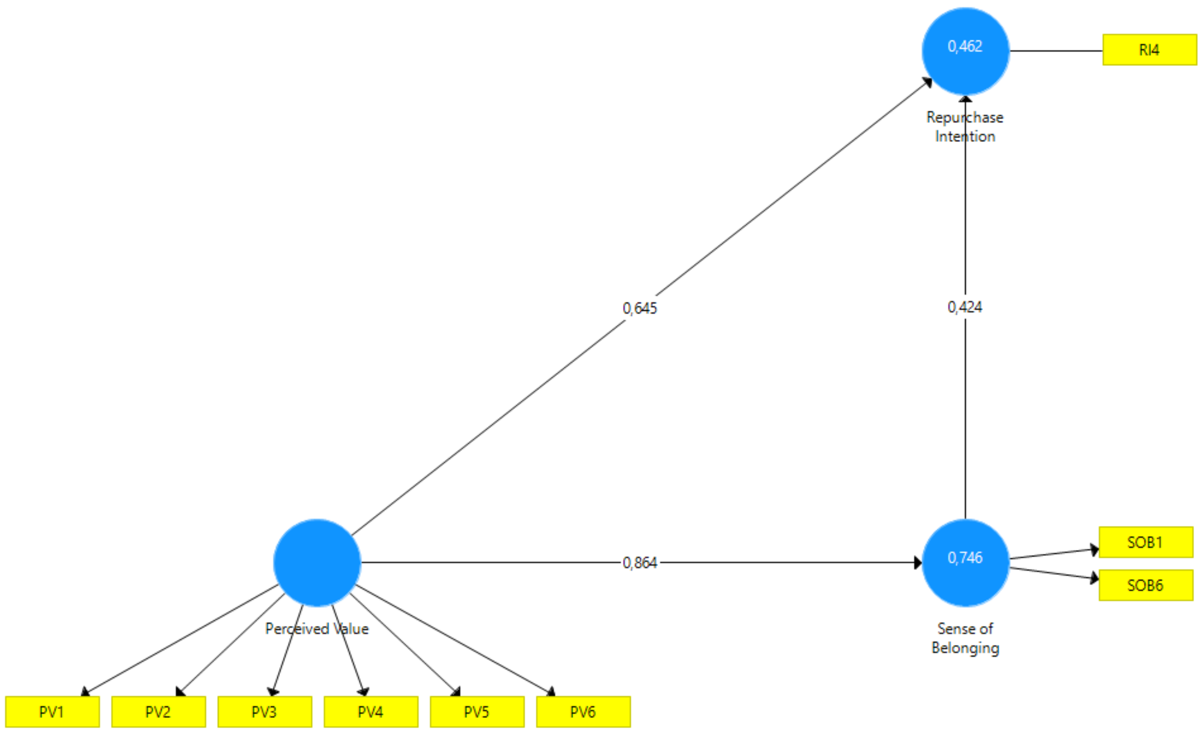


Figure 5.6. Total effects over dependent variables and their R^2 for the Spanish model



5.3.2. Results of a US Higher Education Institution

We follow the same path that has been done so far with the Spanish Institution, in order to obtain the results that verify a link between the sense of belonging and the repurchase intention in the American institution that collaborated in this study. This process involves evaluating both the measurement model and the structural model, with the statistical parameters which indicate its suitability. As noted above, in order not to extend this chapter excessively, only the inconsistencies found are mentioned. Therefore, not all results of these intermediate stages are noted until we reach the consistent final model.Starting this process from the model proposed as a global model, described at first in this section, where student satisfaction was eliminated by the discriminant validity criterion according to the Fornell-Larcker matrix, this model also requires new modifications of the data from the American Institution to obtain a positive evaluation for both the measurement model and the structural model.

This new analysis of external loading factors shows two indicators below that do not reach the recommended threshold of 0.7: PQ1 (*"Up-to-date equipment"*) and PQ19 (*"Teaching staff knows students 'needs")*. As we did in the last case with the Spanish institution, we proceed to remove these two indicators with the aim of obtaining a new model that has all the external loading factors higher than the recommended value of 0.7 (see table 5.30), as well as the external indicator (PQ2) of perceived quality variable that was already deleted in the final global model for all data of the survey. As can be seen, and seems logical, this new model is quite similar to the final global model that was adjusted after removing the PQ2 and SOB5 indicators. Since the survey sample of the American Institution has 117 registers, according to Wong (2013) up to ten relationships could be included in a model.

Table 5.31. External loading factors for reflective indicators for the model modified with a US Institution data

PERCEIIVED QUALITY		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION	
PQ1	-----	**PV1**	**0.915**	**SOB1**	**0.903**	**RI1**	**0.823**
PQ10	**0.790**	**PV2**	**0.889**	**SOB2**	**0.917**	**RI2**	**0.906**
PQ11	**0.862**	**PV3**	**0.927**	**SOB3**	**0.845**	**RI3**	**0.823**
PQ12	**0.864**	**PV4**	**0.876**	**SOB4**	**0.827**	**RI4**	**0.888**
PQ13	**0.912**	**PV5**	**0.913**	**SOB5**	------		

PQ14	**0.907**	**PV6**	**0.935**	**SOB6**	**0.915**	
PQ15	**0.839**					
PQ16	**0.788**					
PQ17	**0.870**					
PQ18	**0.759**					
PQ19	**-----**					
PQ2	**-----**					
PQ20	**0.857**					
PQ3	**0.813**					
PQ4	**0.853**					
PQ5	**0.891**					
PQ6	**0.845**					
PQ7	**0.737**					
PQ8	**0.887**					
PQ9	**0.920**					

The following control that we carry out for this new model is the internal consistency and convergent validity check. For this model and with American institution data, the Alpha of Cronbach, composite reliability, and AVE are correct and comply with criteria.

Table 5.32. Internal consistency and convergent validity for the model modified with a US Institution data

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Quality	0.975	0.978	0.720
Perceived Value	0.958	0.966	0.827
Sense of Belonging	0.884	0.920	0.741
Repurchase Intention	0.929	0.946	0.779

The next stage will be the discriminant validity evaluation with the Fornell-Larcker matrix. The following table shows the results that confirm the discriminant validity requirement tested using this Fornell-Larcker criterion.

Table 5.33. Fornell-Larcker for the model modified with a US Institution data

	Perceived Quality	**Perceived Value**	**Repurchase Intention**	**Sense of Belonging**
Perceived Quality	**0.848**			
Perceived Value	0.820	**0.910**		
Repurchase Intention	0.486	0.623	**0.861**	
Sense of Belonging	0.774	0.858	0.694	**0.889**

Since we have found that the correlation coefficient between perceived value and sense of belonging is greater than one number of the AVE diagonal of the Fornell-Larcker matrix, we estimate that it is also necessary to turn to the HTMT ratioin order to evaluate this disturbance. Such criterion points-out that the measurement model is correct if all value included in *Heterotrait-Monotrait Ratio* (HTMT) matrix are lower than 0.9 (Aldás & Uriel, 2017; Gold *et al*., 2001).

The following table shows these results which comply with the HTMT criterion and so we can conclude that this model for the American institution data conforms to the requirements for an ideal discriminant validity.

Table 5.34. *Heterotrait-Monotrait Ratio* (HTMT) criterion for the model modified with a US Institution data

	Perceived Quality	**Perceived Value**	**Repurchase Intention**	**Sense of Belonging**
Perceived Quality				
Perceived Value	0.843			
Repurchase Intention	0.508	0.666		
Sense of Belonging	0.798	0.899	0.752	

As in the last case for the Spanish institution study, once the measurement model evaluation has been checked, we pass to the structural model analysis according to R^2, Q^2, and standardized path coefficients whose values are used to check the structural model. The next two tables show the figures to evaluate positively the structure of this model for the US Institution data.

Table 5.35. R^2 and Q^2 criteria for structural model evaluation for the model modified with US Institution data

	R^2	Q^2
Repurchase Intention	0.499	0.355
Sense of Belonging	0.751	0.562

The results obtained for Q^2 and R^2 values in the model of the US Institution are qualitatively in line with the previous results. Nevertheless, an analysis of the changes will always be desirable, but we will leave it for later when we start the analysis and conclusions of the results.

The standardized path coefficients obtained from this study allow us to check the hypotheses proposed and according to these results we conclude that the relationship between independent variablesand dependent variables is always positive with the exception of the relation between perceived quality, and repurchase intention just as in the global model which had already emerged.

Table 5.36. Standardized path coefficients for the model modified with a US Institution data

	Repurchase Intention	Sense of Belonging
Perceived Quality	-0.217	0.215
Perceived Value	0.233	0.682
Sense of Belonging	0.662	

To conclude the study of the American institution data, we should check the next table with the *t*-Student and *p* values which allow us reject or not the hypotheses proposed for this work under the conditions for the American survey and *bootstrapping* conditions.

Table 5.37. Bootstrapping *t*-Student values and *p*-values for the model modified with a US Institution data

	***t*-Student value**	***p*-value**
Perceived Quality -> Repurchase Intention	1.898	0.058
Perceived Quality -> Sense of Belonging	2.869	**0.004**
Perceived Value -> Repurchase Intention	1.810	0.071
Perceived Value -> Sense of Belonging	9.413	**0.000**

Sense of Belonging -> Repurchase Intention	5.644	**0.000**

These values confirm that relationships are positive and strongly significant in the case of the relationship between sense of belonging and repurchase intention as we have already noted before with the previous studied cases (global case and Spanish case). In addtion, as we noted, the link between perceived value and sense of belonging is strongly confirmed as well as the relation between perceived quality and sense of belonging. According to these results, however the negative effect that perceived quality has over repurchase intention is not significant with a *p*-value greater than 0.01. The following table collects the results for the hypotheses in the case of an American college.

Table 5.38. Result of hypotheses ascertainment for a US Institution data

	Ascertainment
H1: Pride of belonging influences positively repurchase intention.	Not Rejected (****)
H2a: Perceived quality influences positively repurchase intention.	Rejected
H2b: Perceived quality influences positively pride of belonging.	Not Rejected (**)
H3a: Customer satisfaction influences positively repurchase intention.	Ø
H3b: Customer satisfaction influences positively pride of belonging.	Ø
H4a: Perceived value influences positively repurchase intention.	Not Rejected– not significant
H4b: Perceived value influences positively pride of belonging.	Not Rejected (****)

(****) hypothesis is not rejected ($p<0.0001$).
(**) hypothesis is not rejected ($p<0.01$).
Ø hypothesis is not considered in the model.

To conclude the results of the US Institution, the following table will give us the correlation values of the four variables considered in this model without student satisfaction that we also considered for this section of the research.

Table 5.39. Correlations coefficients among variables for the model modified with a US Institution data

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	**1.000**	0.791	0.445	0.717
Perceived Value	0.791	**1.000**	0.527	0.795
Repurchase Intention	0.445	0.527	**1.000**	0.622
Sense of Belonging	0.717	0.795	0.622	**1.000**

As in the Spanish case, we conclude with two resulting figures: the first one shows the standardized path coefficients and their p-values according to the *t*-Student test values, as far as we can see.

Figure 5.7. Standardized path coefficients and *p*-values for the US model

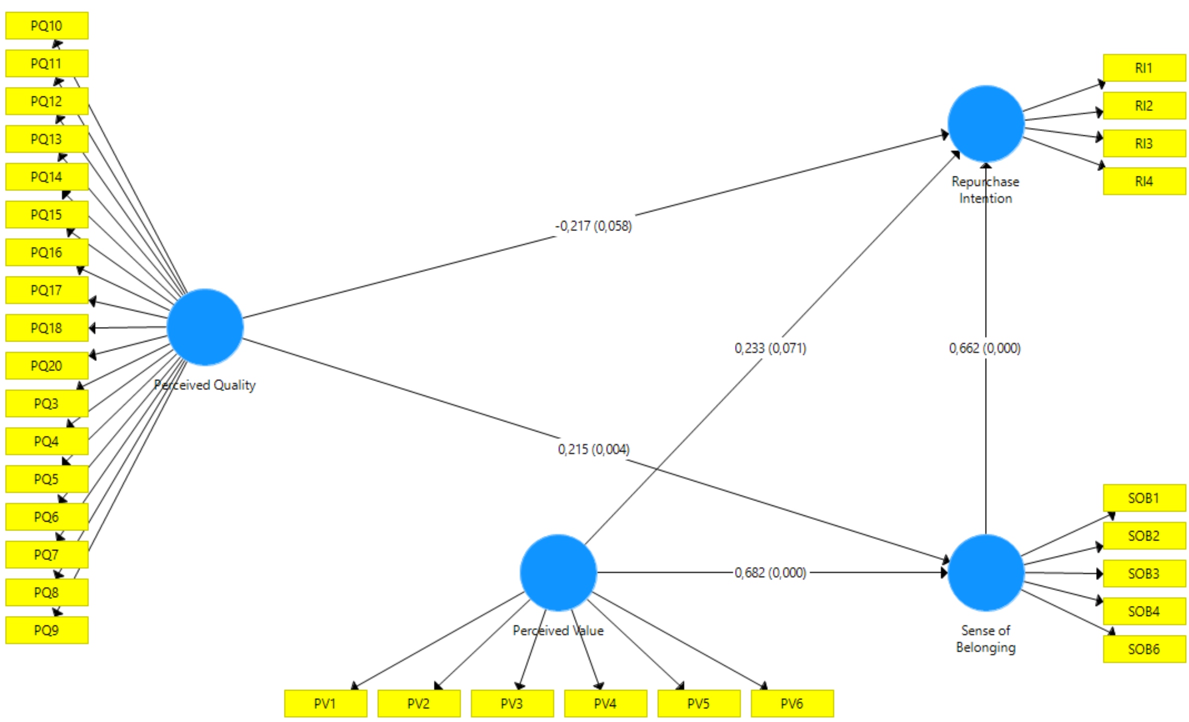
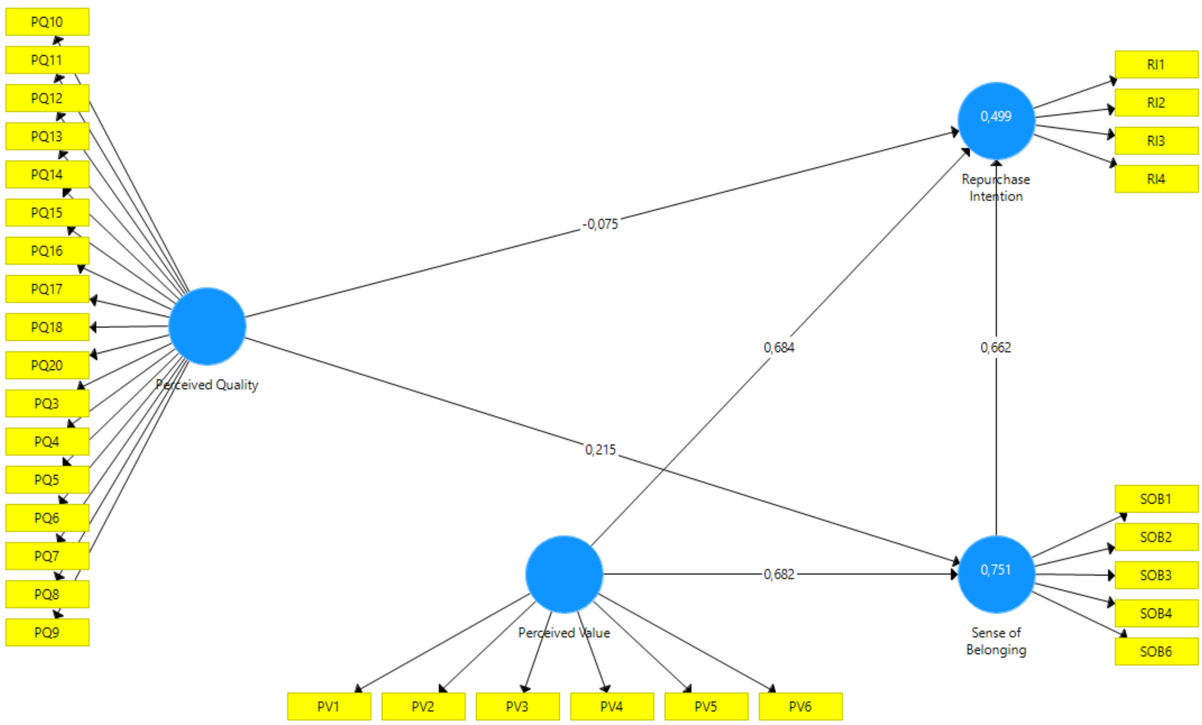


Figure 5.8. Total effects over dependent variables and their R^2 for the US model



5.3.3. Results of a Colombian Higher Education Institution

We shall follow the same path as with the Spanish and US Institutions. This process includes the evaluation of both the measurement model and the structural model, with the statistical parameters which indicate its suitability. As noted above, in order not to extend the chapter excessively, only the inconsistencies met are mentioned. Therefore not all results of these intermediate stages are noted until we reach the consistent final model.

In this new analysis of external loading factors, we obtain results that show that an indicator is below the recommended threshold of 0.7: PQ19 (*"Teaching staff knows students 'needs")*. Moreover, as we did in the last two cases, both for the Spanish and the US institutions, we proceed to remove only this indicator in the final global model for the three institutions in order to obtain a new model that has all the external loading factors greater than the recommended value of 0.7 (see table 5.39), in addition to the external indicator (PQ2) of the perceived quality variable and the external indicator (SOB5) of sense of belonging that already were deleted in the final global model. Therefore, this new model is also quite similar to the final global model that was adjusted after removing the PQ2 and SOB5 indicators. The survey sample of the Colombian Institution has 162 registers.

Table 5.40: External loading factors for reflective indicators for the model modified with a Colombian Institution data.

PERCEIIVED QUALITY		PERCEIVED VALUE		SENSE OF BELONGING		REPURCHASE INTENTION	
PQ1	**0.780**	**PV1**	**0.872**	**SOB1**	**0.866**	**RI1**	**0.821**
PQ10	**0.787**	**PV2**	**0.865**	**SOB2**	**0.844**	**RI2**	**0.886**
PQ11	**0.780**	**PV3**	**0.890**	**SOB3**	**0.756**	**RI3**	**0.792**
PQ12	**0.759**	**PV4**	**0.768**	**SOB4**	**0.793**	**RI4**	**0.867**
PQ13	**0.807**	**PV5**	**0.842**	**SOB5**	------		
PQ14	**0.818**	**PV6**	**0.908**	**SOB6**	**0.835**		
PQ15	**0.763**						
PQ16	**0.719**						
PQ17	**0.789**						
PQ18	**0.746**						
PQ19	-----						
PQ2	-----						
PQ20	**0.810**						
PQ3	**0.728**						
PQ4	**0.739**						
PQ5	**0.757**						
PQ6	**0.711**						
PQ7	**0.705**						
PQ8	**0.790**						
PQ9	**0.759**						

As in the last cases, we carry out the following control for this model which is the internal consistency and convergent validity check. For this model, the Colombian institution data are correct and comply with the criteria of the Alpha of Cronbach, composite reliability, and AVE (see table 5.40).

The next stage will be the discriminant validity evaluation with the Fornell-Larcker matrix. The following table shows the results that confirm the discriminant validity requirement which was tested using the Fornell-Larcker criterion (see table 5.41).

Oncewe check the conditions for the measurement model evaluation and the requirements have been fulfilled, we proceed, as in the cases described above, to also evaluate the structural model.

Table 5.41. Internal consistency and convergent validity for the model modified with a Colombian institution data

Latent Variables	Alpha of Cronbach (AC)	Composite Reliability (CR)	Average of Variance Extracted (AVE)
Perceived Quality	0.958	0.962	0.585
Perceived Value	0.928	0.944	0.738
Sense of Belonging	0.878	0.911	0.672
Repurchase Intention	0.866	0.907	0.709

In the next table, we show the value for the Fornell-Larcker matrix that determinates the discriminant validity of the model.

Table 5.42. Fornell-Larcker for the model modified with a Colombian Institution data

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	**0.765**			
Perceived Value	0.745	**0.859**		
Repurchase Intention	0.649	0.735	**0.820**	
Sense of Belonging	0.388	0.421	0.558	**0.842**

The following table contains the values for the HTMT criterion, and also demonstrates that the discriminant validity condition is conformed by the sample from the Colombian institution.

Table 5.43. *Heterotrait-Monotrait Ratio* (HTMT) criterion for the model modified with a Colombian Institution data

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality				
Perceived Value	0.783			
Repurchase Intention	0.679	0.794		
Sense of Belonging	0.404	0.441	0.617	

Subsequently, we pass to the structural model analysis according to R^2, Q^2, and standardized path coefficients whose values are used to check the structural model, as we have done above for other cases.

The next two tables show the figures to positively evaluate the structure of this model for the Colombian institution data.

Table 5.44. R^2 and Q^2 criteria for structural model evaluation for the model modified with a Colombian Institution data

	R^2	Q^2
Repurchase Intention	0.563	0.202
Sense of Belonging	0.312	0.357

We proceed with the Colombian institution in very much the same manner as we did with the other parts of the research. The standardized path coefficients obtained for this study allow us to check the hypotheses proposed and according to these results we conclude that the relationship between independent variables and dependent variables is always positive with the exception of the relation between perceived quality and repurchase intention just as it had already emerged in the global model.

Table 5.45. Standardized path coefficients for the model modified with Colombian Institution data

	Repurchase Intention	**Sense of Belonging**
Perceived Quality	0.045	0.229
Perceived Value	-0.001	0.564
Sense of Belonging	0.529	

To conclude the study of the Colombian institution data, we show the next table with the *t*-Student and *p* values to confirm or reject the hypotheses also proposed for this institution.

Table 5.46: Bootstrapping *t*-Student values and *p*-values for the model modified with a Colombian Institution data

	t-Student value	*p*-value
Perceived Quality -> Repurchase Intention	2,104	**0.036**
Perceived Quality -> Sense of Belonging	0.470	0.638
Perceived Value -> Repurchase Intention	0.010	0.992
Perceived Value -> Sense of Belonging	4,983	**0.000**
Sense of Belonging -> Repurchase Intention	5,414	**0.000**

These results definitely confirm that the relationships are positive and strongly significant in the case of the relationship between sense of belonging and repurchase intention as we have already noted before with all the previous cases (Global case, Spanish case and US case). Moreover, in this case we observe that the link between perceived value and sense of belonging is strongly confirmed as well as the relation between perceived quality and repurchase intention. According to these results, however the negative effect that the perceived value has over the repurchase intention is not significant with a *p*-value greater than 0.1. The following table collects the results for the hypotheses in the case of the Colombian college.

Table 5.47. Result of hypotheses ascertainment for a Colombian Institution data.

	Ascertainment
H1: Pride of belonging influences positively repurchase intention.	Not Rejected (****)
H2a: Perceived quality influences positively repurchase intention.	Not Rejected (*)
H2b: Perceived quality influences positively pride of belonging.	Not Rejected – not significant
H3a: Customer satisfaction influences positively repurchase intention.	Ø
H3b: Customer satisfaction influences positively pride of belonging.	Ø
H4a: Perceived value influences positively repurchase intention.	Rejected
H4b: Perceived value influences positively pride of belonging.	Not Rejected (****)

(****) hypothesis is not rejected (p<0.0001).
(*) hypothesis is not rejected (p<0.1).
Ø hypothesis is not considered in the model

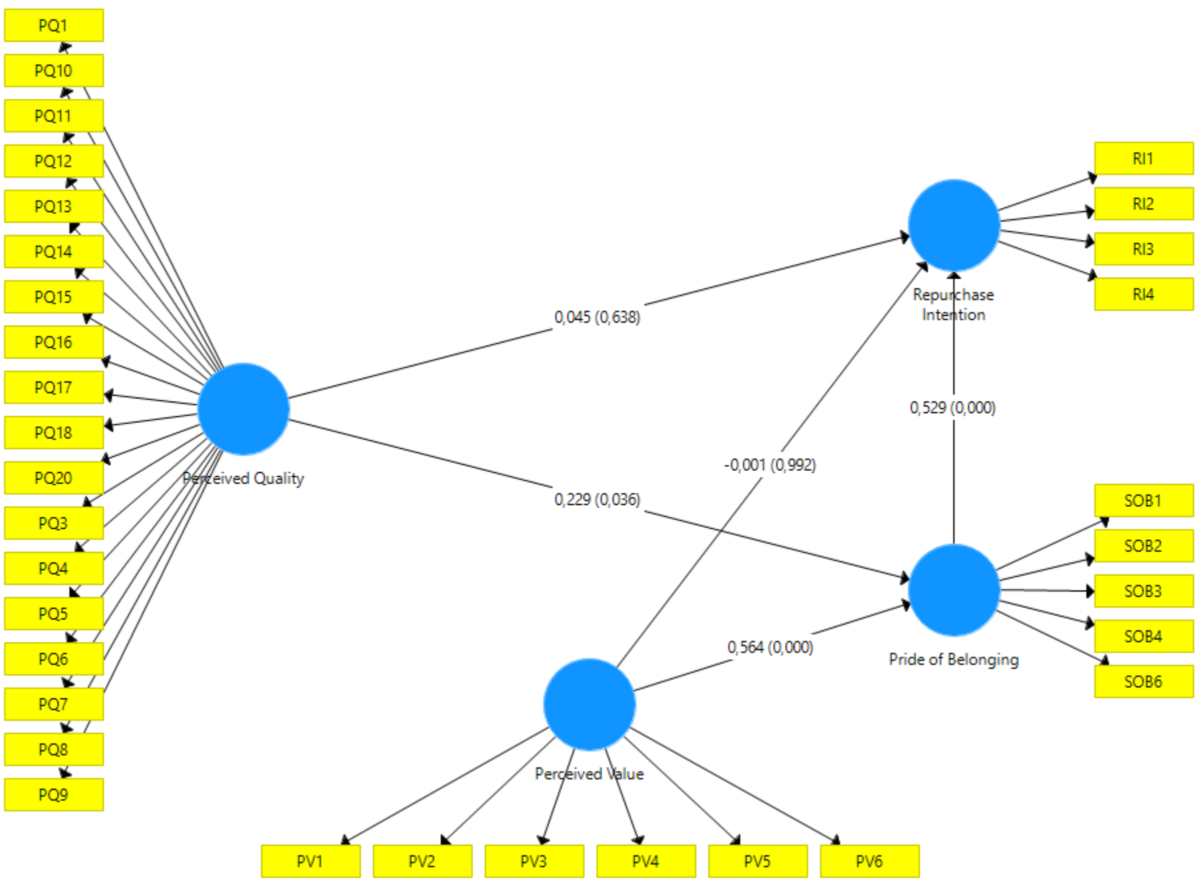
To conclude the results of the Colombian Institution, the following table also gives us the correlationvalues of the four variables considered in this model.

Table 5.48: Correlation coefficients between variables for the model modified with a Colombian Institution data

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	**1.000**	0.820	0.486	0.774
Perceived Value	0.820	**1.000**	0.623	0.858
Repurchase Intention	0.486	0.623	**1.000**	0.694
Sense of Belonging	0.774	0.858	0.694	**1.000**

As in the previous cases we conclude with two graphic results: the first of them displays the standardized path coefficients and their p-values according to the *t*-Student test values, as far as we can see.

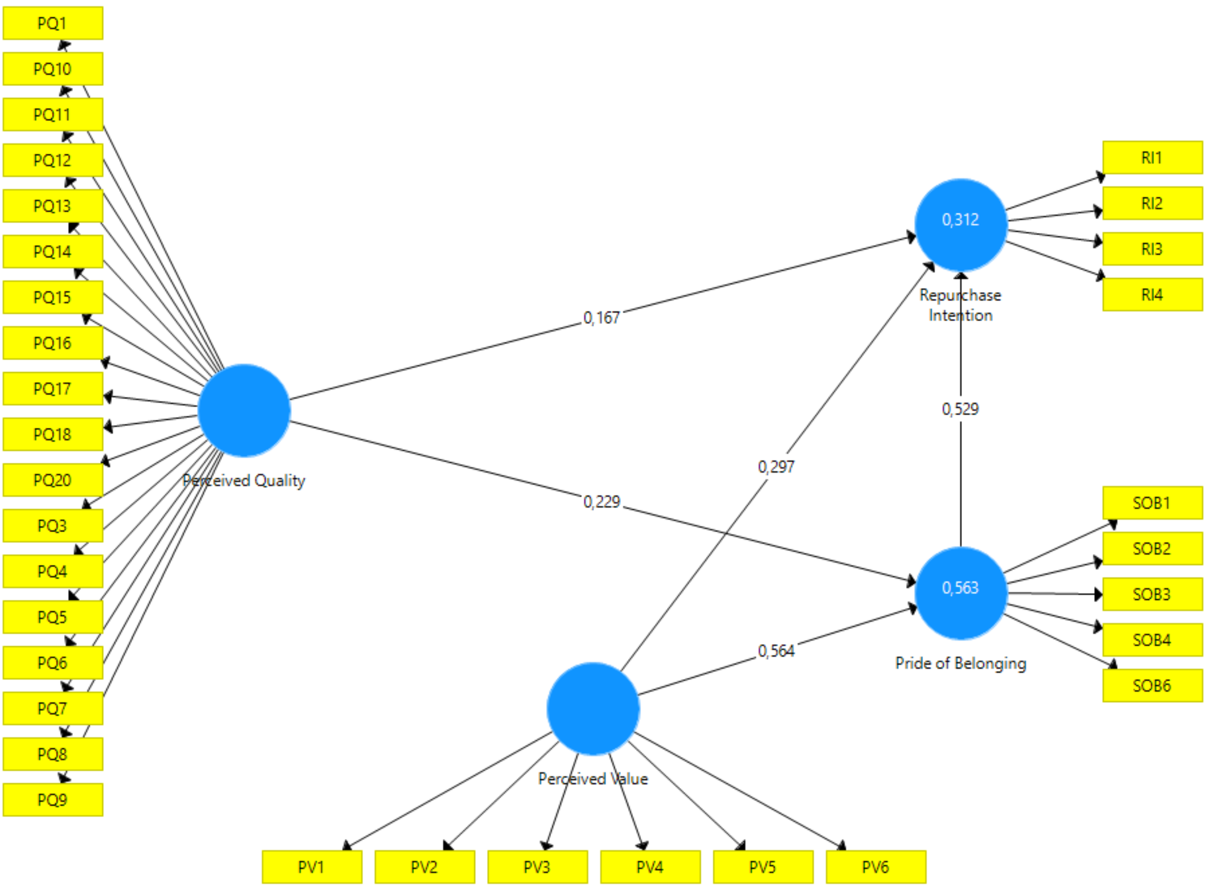
Figure 5.9. Standardized path coefficients and *p*-values for the Colombian model



And the second graph shows the total effect that the independent variables have over the dependent variables. All of these results have also been displayed in the tables above included in this text.

In all cases we cannot reject that pride or sense of belonging has a positive influence over the repurchase, and moreover, this influence is strongly positive with *p*-value < 0.0001, which allows us to sustain that the main hypothesis of this research, and the sources for it, are not rejected.

Figure 5.10. Total effects over dependent variables and their R^2 for the American model



5.3.4. *Results through the mediator variables*

The results obtained for the four studies undertaken show the certain relation between the sense of belonging and the repurchase intention; firstly, because all the standardized path coefficients are greater than 0.2 as threshold to consider that the link exists (Chin, 1998).

A first summary of these results compels us not to reject the main hypothesis of the research: ***Pride of belonging influences positively repurchase intention.***

The following table shows the path coefficient, *t*-Student statistical value and the *p*-value of these first four calculations which allow us to start a new analysis with the mediator variables proposed through the questionnaire.

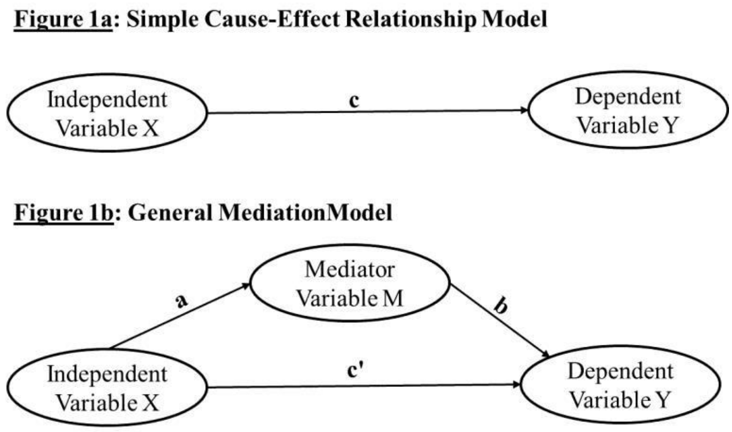
Table 5.49: Summary of standardized path coefficients between sense of belonging and repurchase intention, *t*-Student values, and p-values for the global case and the Spanish, US and Colombian cases.

	Path Coefficients	***t*-Student values**	***p*-values**
Global Case	0.568	8.948	0.000
Spanish Case	0.424	2.762	0.000
American Case	0.662	5.644	0.000
Colombian Case	0.529	5.474	0.000

The questionnaire used for the survey of this work contains eight questions covering certain criteria which could influence the repurchase intention. These factors pointed out various considerations to the survey respondents that could improve the probability of their returning to their HE institutions. The impact of these factors could be considered determinants for the former students' decision, if they were thinking about returning to study at, the HE institutions where they had previously studied.

The core characteristic of a mediating effect (i.e., indirect effect or mediation) is that it involves a third variable that plays an intermediate role in the relationship among the independent and dependent variables. It means that the effect of the independent variable X on the dependent variable Y is mediated by a third variable M, called the mediating variable or mediator (Carrión *et al*., 2017) (see Figure 5.9).

Figure 5.11. Simple cause-effect relationship and general mediation



Source: Carrión *et al*. (2017).

Carrión *et al*. (2017) noted that the mediation of an M variable among X and Y can be of three types: a full mediation, a complementary partial mediation, or a competitive partial mediation. Also, these authors indicate the ratio VAF (variance accounted for) allow us to know what percentage of the variance of dependent variable is explained by the mediator. VAF is defined as $VAF = \frac{ab}{c' + ab}$.

In accordance with the foregoing, we proceed to perform the calculations with the PLS-SEM technique with the help of the SmartPLS software for the different mediating variables that were included in the questionnaire. The mediator variables that are integrated in the model to confirm the theory are the following as seen below.

The first mediator variable that we propose is about "*professional improvement*" that the return to the same college can provide. The question included was "*Studying of a new program in this institution will depend on the possibility of gaining new professional skills or advance in my professional level*".

A second mediator variable is referred to "*proximity factor*" to go back to the same university or HE institution where the student was studying before. The question included was "*Studying a new program will depend on the proximity or accessibility to the Institution".*

The third and fourth variables represent the methodology value to undertake a new program: *"online methodology"* or "*presential methodology"* whose questions associated to these concepts were: *"Studying a new program will depend on the possibility of online* *studying"* and "*Studying a new program will depend on the possibility of studying in a classroom setting"*.

We also propose a mediator variable associated with "*novel contents"* and whose question was *"I will return to study in this Institution if the Program offered to me is of a very novel content"*.

The sixth mediator variable associated with this research is "*different language*" if the contents proposed by the HE institutions to return are provided in another language different from the one used in previous courses. The question included was *"I will return to study at this institution if you offer me a program in a different language from the one offered in the first program"*.

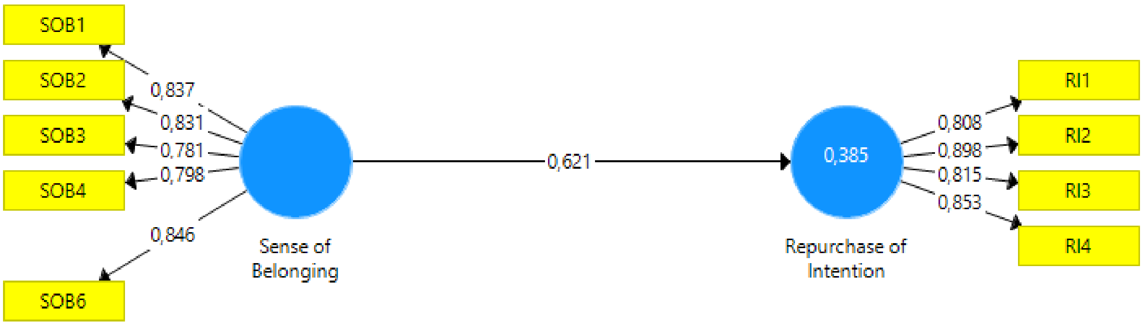
A seventh mediator variable included in this study is referred to "*financial aid*" that a former student could receive if he returns to the Institution and the question was *"I will return to study at this Institution is you offer me some kind of scholarship or financial aid"*.

And the last mediator variable considered is related to "*personal conditions*" that would encourage former student to return to the HE institution. The question that has been included in the questionnaire "*My personal situation (time, costs and availability) conditions my decision*".

In order to solve the influence or mediation problem in the relationship between sense of belonging and repurchase intention, we make a calculation only with these variables as a reference value for the next checks. For this reason, we plan a simple model only with the sense of belonging and the repurchase variables together with their respective indicators, such as these latent variables are in the final global model (see figures 5.3 and 5.4).

The model analyzed in the following figure (see figure 5.12), shows the external loading factor indicators for each latent variable together with the standardized path coefficient and the R^2 statistics. When a model has only two variables, path coefficient, direct effect and even correlation are evidently the same.

Figure 5.12. Standardized path coefficients, external loading factor indicators and R^2 for the simplest model between sense of belonging and repurchase intention



The bootstrapping technique undertaken allow us to also obtain the following values: t-Student is 18.152 and p-value is 0.0000 for this relationship between sense of belonging and repurchase intention whose direct effect and correlation is 0.621 as we have seen before. The results obtained will also be the references for the following calculations that will include the mediator variables between sense of belonging and repurchase intention, which we carry out below.

The calculation sequence which we must follow for this procedure is to plan the configuration of the model used to calculate the influence or indirect effect that the mediator variables have on the link between sense of belonging and repurchase intention. A generic model shows the configuration initially proposed to solve the influence for each mediator variable. Both sense of belonging latent variable and repurchase intention latent variable contain all their external loading factors but they will be deleted if their values will be below the threshold of 0.7. The following figure shows this generic model:

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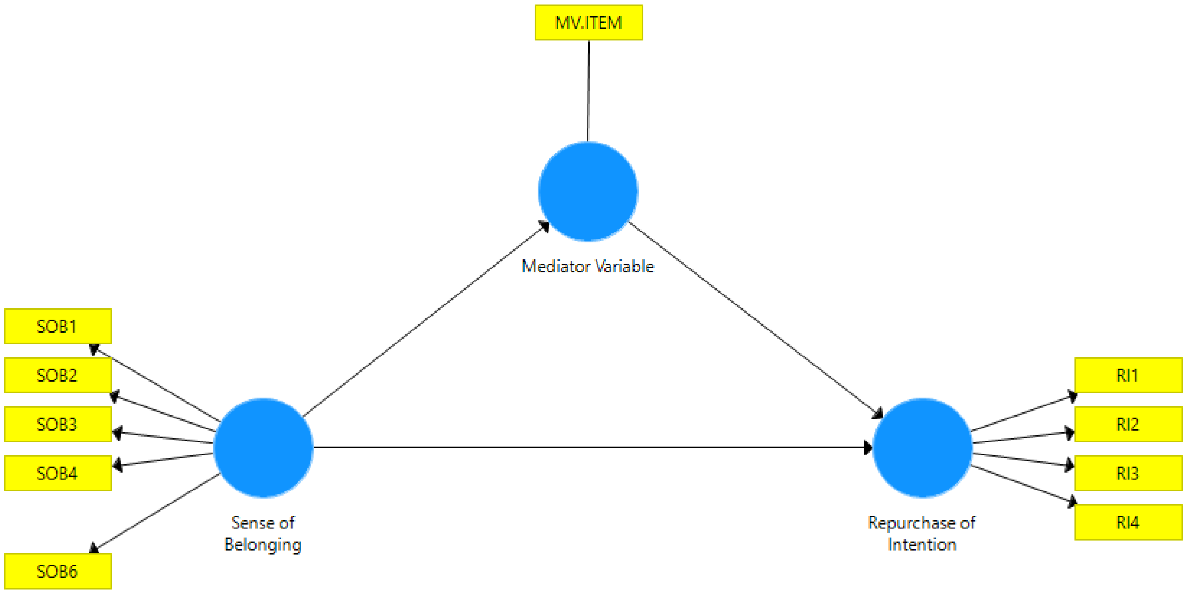
Figure 5.13. Generic model with a mediator variable between sense of belonging and repurchase intention relationship



The following figures, from 5.14 to 5.21, show the results of the effect that each mediator variable has on the relationship between sense of belonging and repurchase intention. Figure 5.12 is the generic model upon which the calculations were made

Figure 5.14. Professional improvement mediator variable

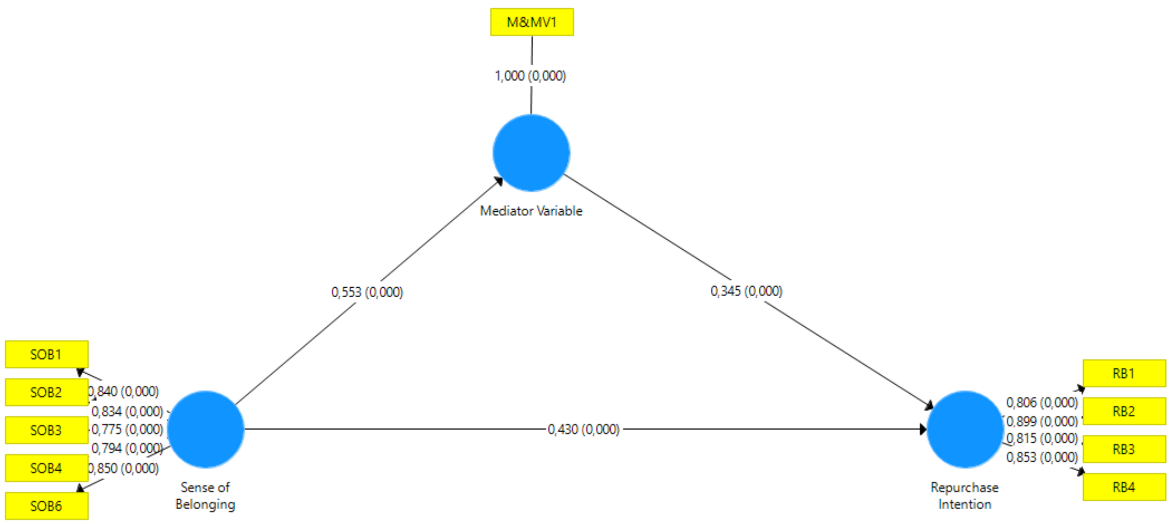


Figure 5.15. Proximity mediator variable

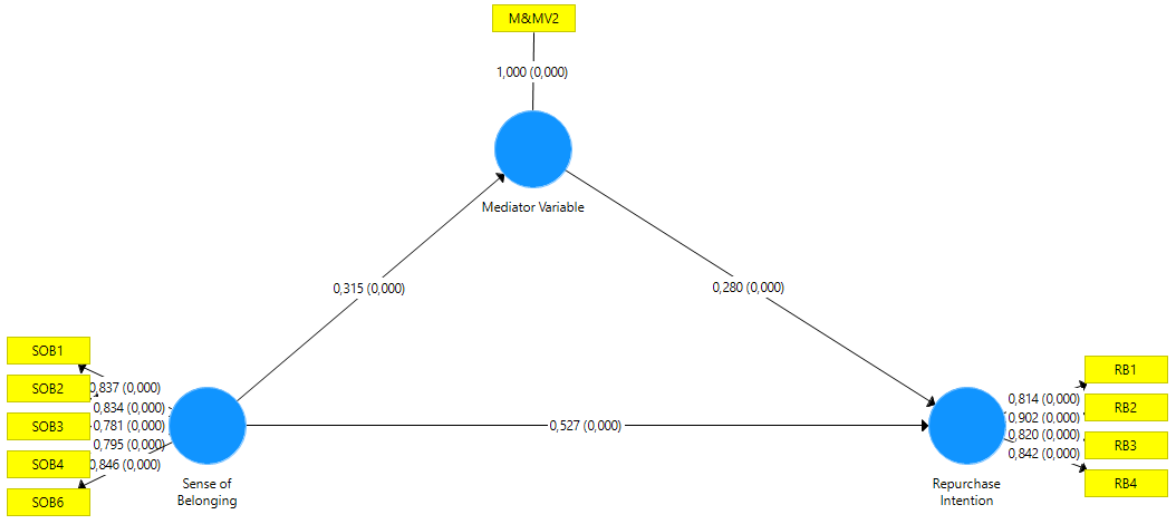


Figure 5.16. Online methodology mediator variable

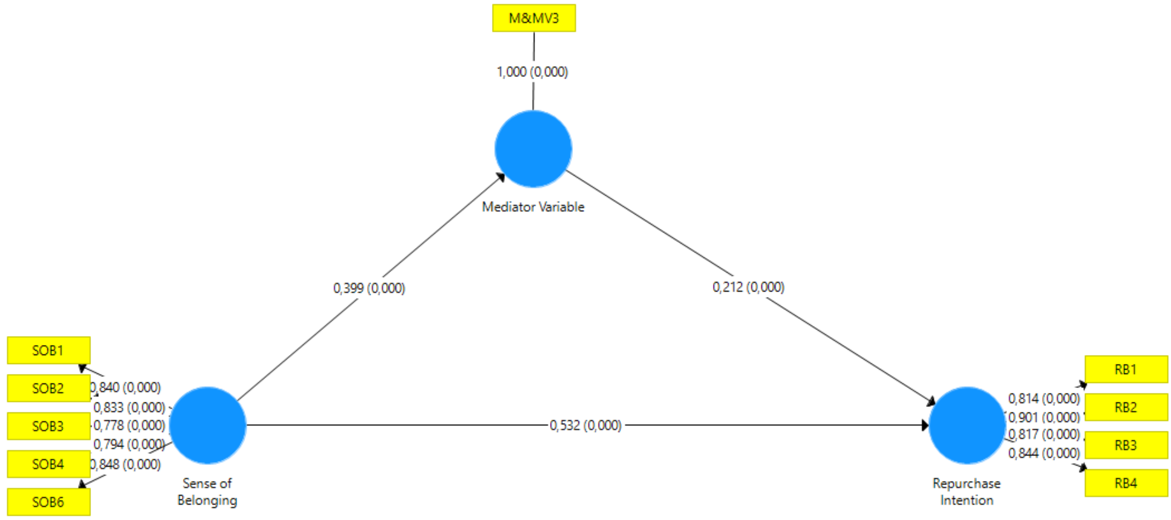


Figure 5.17. Presential methodology mediator variable

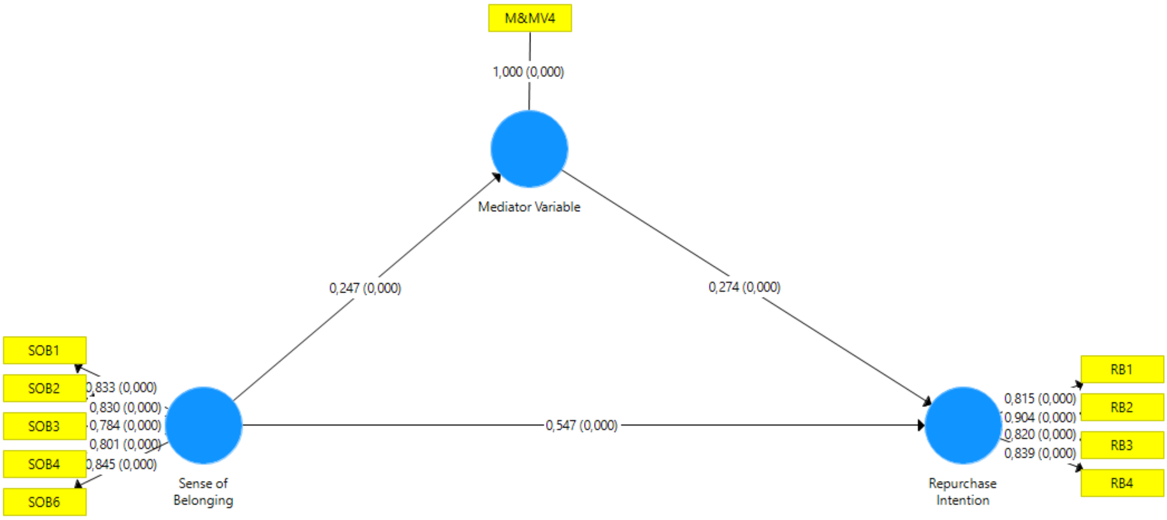


Figure 5.18. Novel contents mediator variable

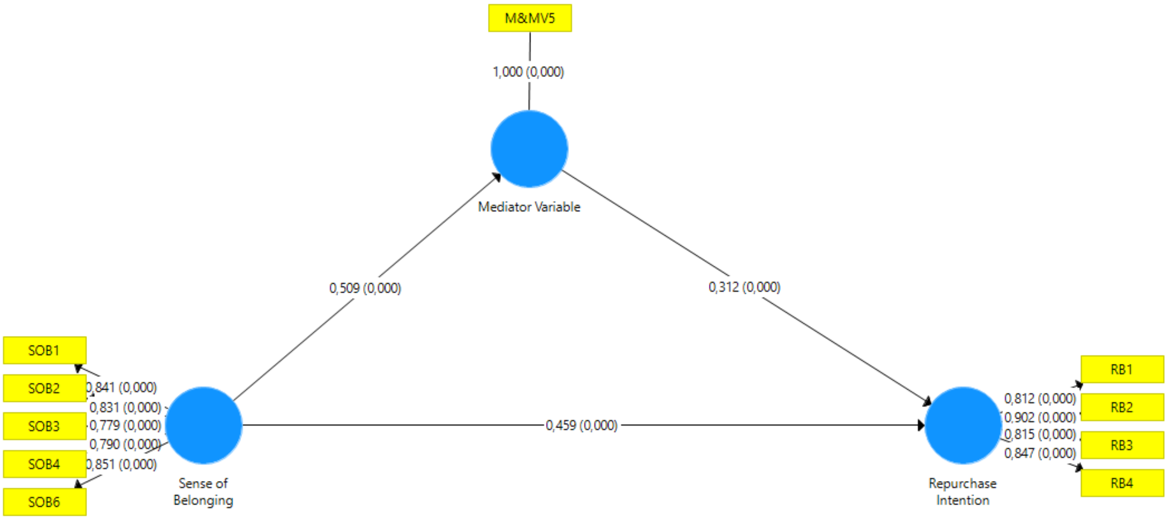


Figure 5.19. Different language mediator variable

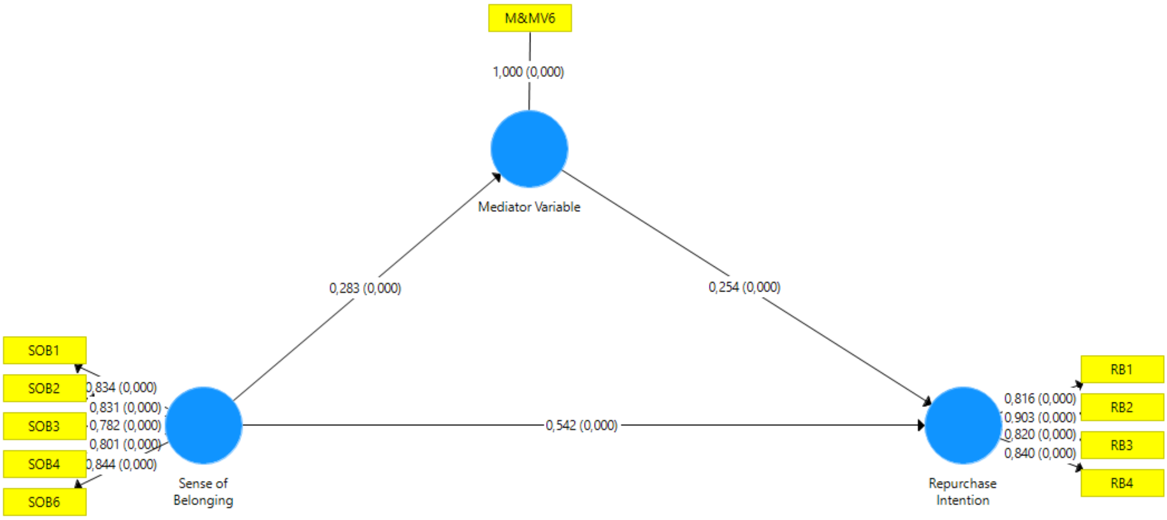


Figure 5.20. Financial aid mediator variable

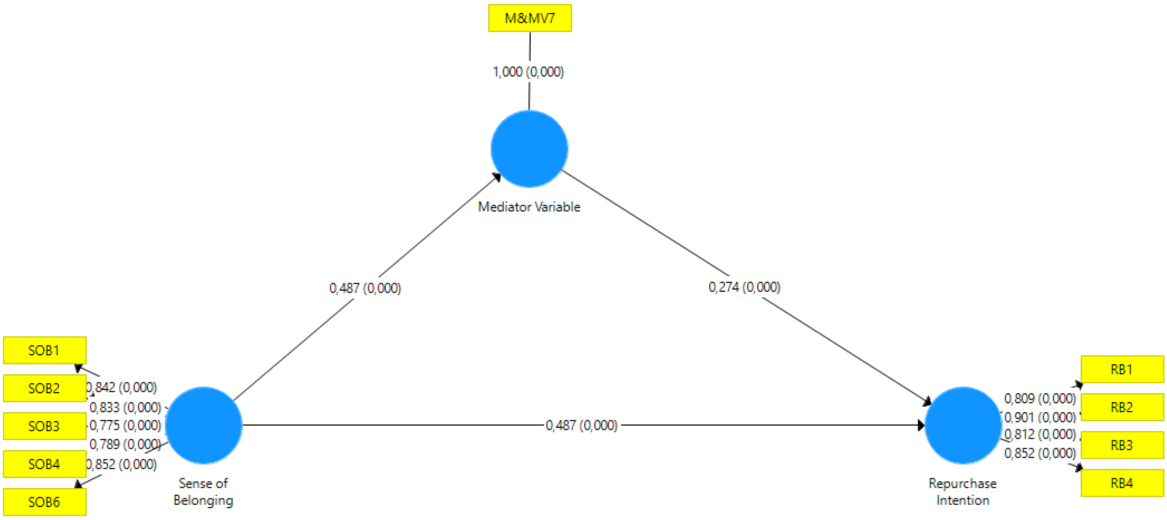
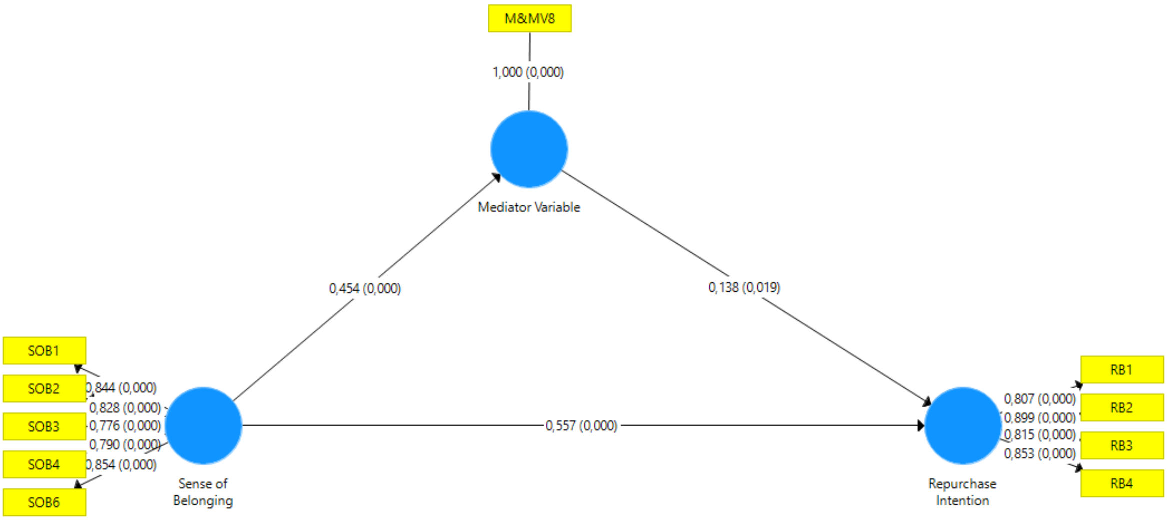


Figure 5.21. Personal conditions mediator variable



The following table shows the results obtained through the PLS-SEM for the models noted above with a reference to each of the mediator variables.

Table 5.50. *Path* coefficients, *t*-Student values and p-values for the model including the mediator variables between sense of belonging and repurchase intention

Mediator Variable	***Path* (c')**	***t*-Student Value**	***p*-Value**	***Path* (a)**	***t*-Student Value**	***p*-Value**	***Path* (b)**	***t*-Student Value**	***p*-Value**
Professional improvements	0.430	8.757	**0.000**	0.553	9.917	**0.000**	0.345	6.338	**0.000**
Proximity	0.527	12.586	**0.000**	0.315	5.339	**0.000**	0.280	5.887	**0.000**
Online methodology	0.532	13.112	**0.000**	0.399	8.601	**0.000**	0.212	4.452	**0.000**
Presential methodology	0.547	14.893	**0.000**	0.247	4.739	**0.000**	0.274	6.451	**0.000**
Novel contents	0.459	9.054	**0.000**	0.509	9.569	**0.000**	0.312	5.479	**0.000**
Different language	0.542	13.603	**0.000**	0.283	5.444	**0.000**	0.254	5.507	**0.000**
Financial aids	0.487	9.385	**0.000**	0.487	7.923	**0.000**	0.274	4.951	**0.000**
Personal conditions	0.557	11.910	**0.000**	0.454	7.024	**0.000**	0.138	2.351	**0.019**

The next stage in this procedure is to show the different effects that these mediators have on the relationship between sense of belonging and repurchase intention. In order to do so, in Figure 5.11 and Figure 5.9 we show the direct effects and the indirect effects that the calculations provide, taking into account that $a_x b$ represents the indirect effect through the mediator variable and c' is the direct effect among the main latent variables for the model of Figure 5.11.

The results allow us to establish the type of mediation that each mediator variable has over the model and the VAF value, and according to the indirect effect values of mediator variables also, we determine which mediator variable influences the repurchase intention result more.

Table 5.50 shows the a, b, and c values obtained and additional calculations to know the indirect and total effects over the repurchase intention.

Table 5.51. *Path* coefficients among variables for the model including the mediator variable, indirect and total effect, and VAF

Mediator Variable	**A**	**b**	**c'**	**Indirect Effect (axb)**	**Total Effect (c'+axb)**	**VAF (%)**	**Type of Mediation(*)**
Professional improvements	0.553	0.345	0.430	0.191	0.621	31%	CYPM
Proximity	0.315	0.280	0.527	0.088	0.615	14%	CYPM
Online methodology	0.399	0.212	0.532	0.085	0.617	14%	CYPM
Presential methodology	0.247	0.274	0.547	0.068	0.615	11%	CYPM
Novel contents	0.509	0.312	0.459	0.159	0.618	26%	CYPM
Different language	0.283	0.254	0.542	0.072	0.614	12%	CYPM
Financial aids	0.487	0.274	0.487	0.133	0.620	22%	CYPM
Personal conditions	0.454	0.138	0.557	0.063	0.620	10%	CYPM

(*) Type of Mediation: FM, full mediation; CYPM, complementary partial mediation; CEPM, competitive partial mediation.

From these results, conclusions can then be made relative to the hypotheses raised for the research. According to the results, the following hypotheses are not rejected:

H5a*: The insight of a professional improvement through a new course in a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5b: *The proximity factor to a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5c: *The online methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5d: *The presential methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5e*: The access to novel contents through a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5f: *The possibility of conducting a program in a different language from the first one at a HE institution for a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5g: *The possibility of a former student to access to financial aid in order to return to a HE institution is a partial positive mediation factor between sense of belonging and repurchase intention.*

H5h: *The personal conditions of a former student are a partial positive mediation between sense of belonging and repurchase intention*.

Two other hypotheses which were also raised were not rejected either. The hypotheses *H5i, H5j and H5k* are referred to as the variables that most influenced the other mediator variables. Initially we posited that “professional improvements”, “novel contents” and “financial aids” were the mediating variables that have the most indirect influence on the relationship between sense of belonging and repurchase intention.

Based on the results, we consider that a mediating variable has a high indirect effect if its indirect effect value is one of the four first of the eight mediating effect values. The following table shows these values of the indirect effect for the considered mediator variables.

According to results the “*professional improvements*” has the greater indirect effect with regard to the relationship between the sense of belonging and the repurchase intention followed by “*novel contents”, “financial aids*”, and the “*proximity factor*” but the last one is very far from the other three values whose indirect effects are greater than 0.130.Table 5.51: Ordered indirect effects.

Table 5.52. Ordered indirect effect values

Mediator Variable	Indirect Effect (axb)
Professional improvements	0.191
Novel contents	0.159
Financial aids	0.133
Proximity	0.088
Online methodology	0.085
Different language	0.072
Presential methodology	0.068
Personal conditions	0.063

Hence, and considering these results the following hypotheses are positive and significant (see table 5.49).

***H5i**: The insight of a professional improvement is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention.*

***H5j**: The novel content is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention.*

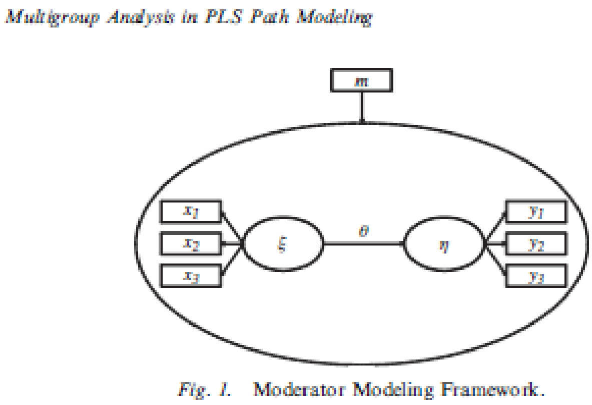
***H5k**: The access to the financial aid is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention.*

5.3.5. Results through the moderator variables

Conceptually, the comparison of group-specific effects entails the consideration of a categorical moderator variable which “affects the direction and/or strength of the relation between an independent or predict variable and a dependent or criterion variable” (Baron & Kenny, 1986; Sarstedt *et al*., 2011). That means that group effects are nothing more than a variable´s moderating effect whereby the categorical moderator variable expresses each observation´s group membership (Henseler, *et al*., 2009). As a consequence, multigroup analysis is generally regarded as a special case when of the modeling continuous moderating effects (Henseler & Chin, 2010; Henseler & Fassot, 2010; Sarstedt *et al*., 2012).

The following figure illustrates the categorical moderator concept graphically, where *m* represents a categorical moderating variable, which potentially exerts an influence on the model relations. More precisely, this means that a population is hypothesized as different across two or more subpopulations which are expressed by different modalities in m (Sarstedt, et al., 2011).

Figure 5.22. Moderator modeling framework. Multigroup analysis in PLS modeling



Source: Sarstedt *et al*. (2011)

Following this idea, we propose for this research the analysis of six categorial moderator variables which will be able to categorize the profile plus the influencer in the relationship between the sense the belonging and the repurchase intention. In the next table (see table 5.52) we include all categorical criterion used to establish the subgroups which serve for this new calculation.

These categories are related to the sociodemographic variables that were included as items in the questionnaire. We recall that these items can be both qualitative and quantitative moderating variables, and that direct and / or strengthen the relationship between an independent variable and a dependent variable.

The items which have been used to evaluate the moderating force of these are: sex, country of origin grouped in geographical areas, year of birth, also grouped by age intervals, modality in which the studies in the institution were performed, type of company in which the former student is working in and the position that the former student currently occupies. The items included in the questionnaire as moderating variables of the research are the gender of former students; born country of birth of the former students grouped in geographical areas;

year of birth of the former students grouped by intervals; methodology of study in which the former students studied their courses in the last experience at the HE institutions where they could return again; type of companies in which the former students are working in and the position occupied by them in these enterprises.

Table 5.53. Categorical moderating variables and subgroups of calculation

Categorical moderating variables	**Subgroups of calculation.**
Sex (2 subgroups)	Male and female
Country of origin grouped by areas (3 subgroups)	European, North, and Central American, and South American
Year of birth grouped by age intervals (3 subgroups).	Less than 31, between 31 and 40, and more than 40.
Modality of study (3 subgroups)	Blended, online and presential.
Size and type of company working in (5 subgroups).	Public company, multinational company, national company (more than 200 employees), medium-sized company (50-200 employees) and small and micro enterprise (less 50 employees).
Current position in the company (3 subgroups).	First level, second level, and third level or lower.

The procedure followed in this part of the research is the same as in the epigraphs described above. The former goal should continue being the measurement model evaluation and, the latter the structural model evaluation. Therefore, with SmartPLS we undertake the same routines for each of the subgroups associated with a categorical moderating variable.

- To check the external loading factors to assess whether those values are greater than 0.7.
- To check the Fornell-Larcker matrix, composite reliability, and AVE value.
- To check the Fornell-Larcker matrix.
- To do the bootstrapping to obtain *t*-Student value and *p*-value significance of the standardized path coefficients.

To homologate the results of different subgroups for a categorical mediator variable, their models evidently must be the same, should have the same indicators, and thus the indicators or external loading factors for each one of the latent variables will be eliminated as had been done to any of them. We must also note the number of participants that are included for each one of the samples of the categorical mediating variables.

Taking as a reference figure 5.22 displayed above, for the gender moderating variable, the results obtained are shown in the next table.

Table 5.54. Results for gender as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
Male	196	0.611	13.608	0.000	0.373
Female	163	**0.649**	13.441	0.000	0.421

According to the measurement model evaluation (external loading factor greater than 0.7) the SOB5 indicator was deleted in this first model to calculate the values for these two subgroups of the mediating value according to gender.

The following two figures display the results in which we observe how the sense of belonging of former female students influence the repurchase intention more than the sense of belonging of the male students does.

Figure 5.23. Results of the male subgroup for gender data as a moderating variable

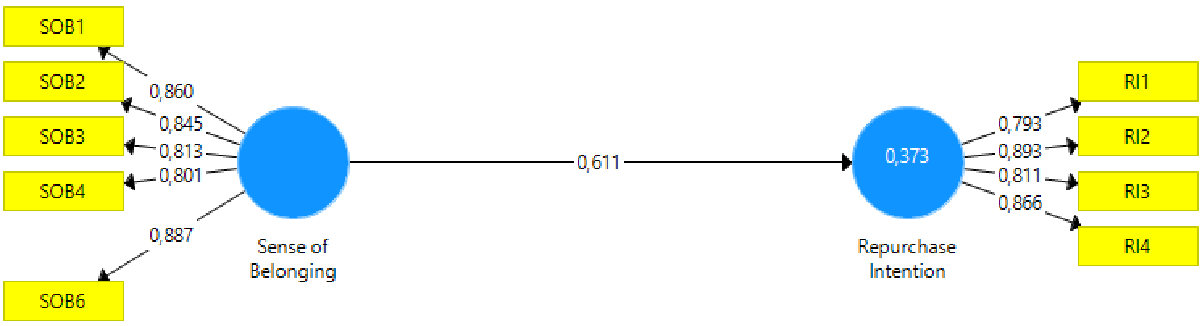
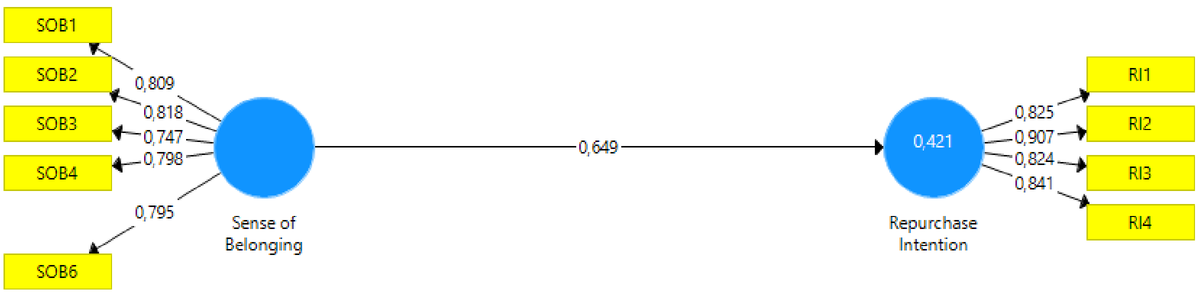


Figure 5.24. Results of the female subgroup for gender data as a moderating variable



These values also allow us not to reject the hypothesis H6a, "*Women´s sense of belonging has more influence on the repurchase intention than that of the males*".

The following data that we observe refer to the country of origin, or home country of the responders who answered the questionnaire and who have been grouped in three geographical areas: North and Central America, Europe, and South America. The results of this "area of birth or country" moderating value are.

Table 5.55. Results for area of birth as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
North and Central America	20	**0.747**	7.708	0.000	0.559
South America	284	0.605	15.288	0.000	0.366
Europe	55	0.634	9.082	0.000	0.402

The following figures 5.25, 5.26 and 5.27 display these results below:

Figure 5.25. Results of the North and Central America subgroup for area of birth data as a moderating variable

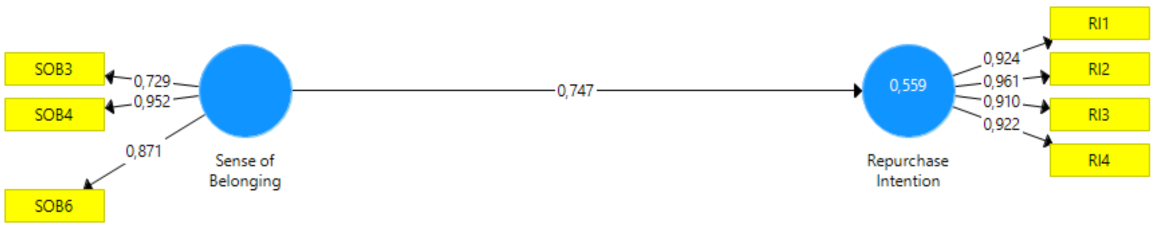


Figure 5.26 Results of the South America subgroup for area of birth data as a moderating variable

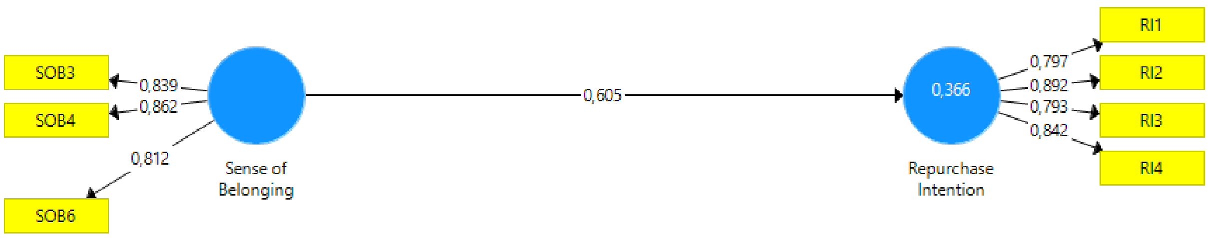
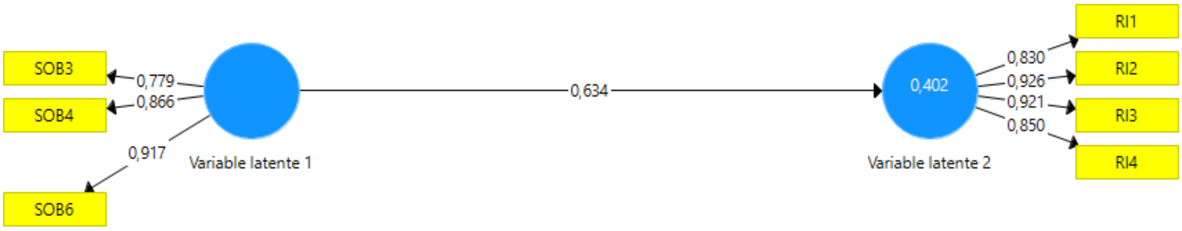


Figure 5.27. Results of the Europe subgroup for area of birth data as a moderating variable



These results allow us not to reject hypothesis H6b, "*Former students from North and Central America have a sense of belonging which exerts more influence on the repurchase intention than the former students from the other two areas of birth*".

The next part of the study is dedicated to exposing the moderating effect that year of birth grouped in age intervals has on the influence between the sense of belonging and the repurchase intention. The intervals selected to study the moderator effect are three: a first group defined by less than 31 years; a second interval by an age between 31 and 40 years, and a third group older than 40 years.

After a first calculation with SmartPLS, the results of the age less than 31 point out that SOB3 and SOB5 external indicators must be deleted in the model. Subsequently, the same indicators have to be eliminated in the models for the age group between 31 and 40, as well as the age group older than 40 years. Posteriorly, a second modification was required in the model, since SOB4 has also been removed.

The results are shown in the following tables and figures 5.28, 5.29 and 5.30 display these results below).

Table 5.56. Results for age grouped as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
Age less than 31	56	0.567	7,977	0.000	0.321
Age between 31 and 40	142	0.600	12,159	0.000	0.360
Age older than 40	153	**0.611**	12,188	0.000	0.373

Figure 5.28. Age less than 31subgroups for year of birth data as a moderating variable

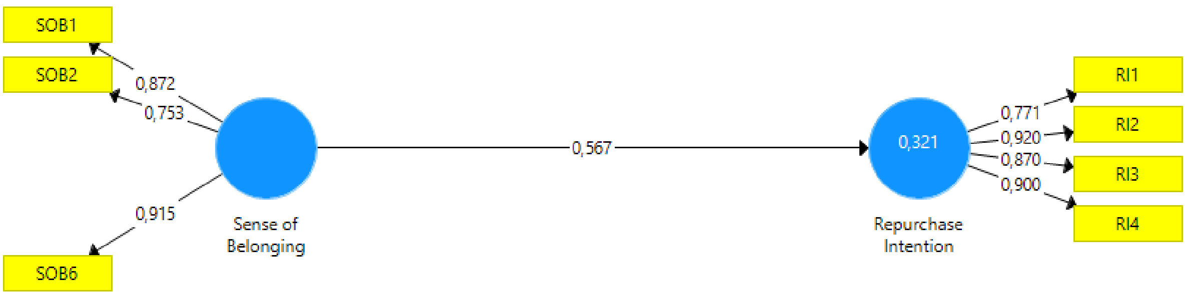


Figure 5.29 Age between 31 and 40 subgroups for year of birth data as a moderating variable

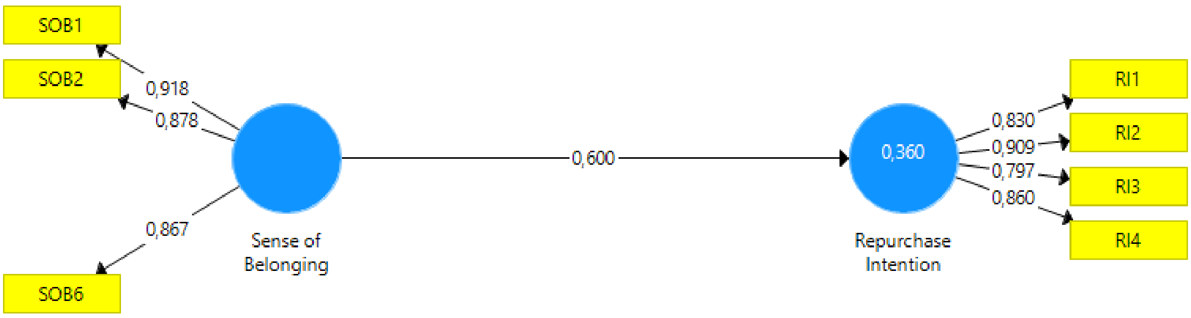
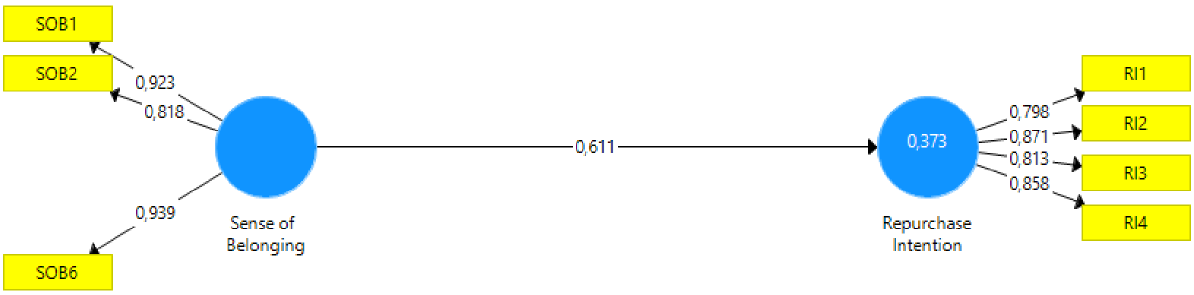


Figure 5.30. Age older than 40 subgroups for year of birth data as a moderating variable



According to these results for age moderating variable, we do not reject the H6c hypothesis whose statement is *"The sense of belonging of the youngest former students exerts the least influence on the repurchase intention in comparison with the other two age groups"*.

Along these lines, we follow the analysis of the next moderating variable based on the study methodology experienced at the HE institution. The alumni communities had to respond with regard to the last course taken, and we wanted to test if the influence of the last methodology type used can influence or not the relation between the sense of belonging and the repurchase intention. The subgroups which have been formed to evaluate this moderating effect are: blended methodology, presential methodology and online methodology.

As in the cases noted above, firstly we assess the external loading factors in the common model to eliminate the three subgroups whose indicators do not reach the threshold of 0.7. According to the first results, the SOB5 indicator of the Sense of Belonging latent variable must be erased. Posteriorly, we test that the model is right and meets all the requirements already described.

Table 5.57. Results for methodology as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
Blended	64	0.706	12.285	0.000	0.498
Presential	153	0.622	12.533	0.000	0.387
Online	142	**0.589**	12.803	0.000	0.346

The following figures 5.31, 5.32 and 5.33 display these results below:

Figure 5.31. Blended methodology subgroup for study methodology as a moderating variable

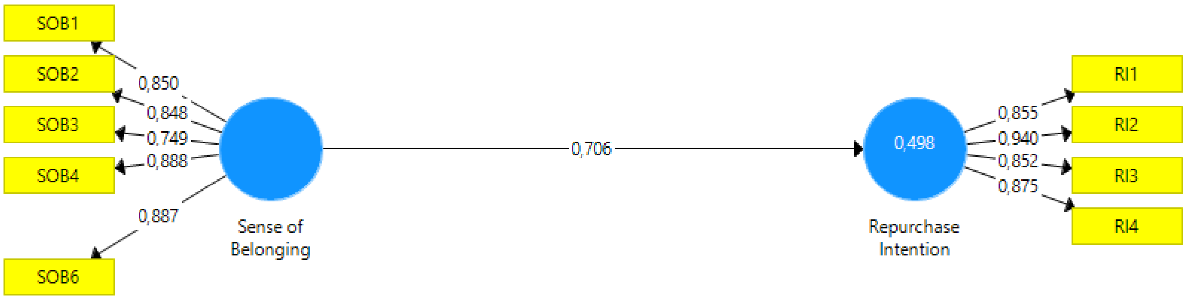


Figure 5.32. Presential methodology subgroup for study methodology as a moderating variable

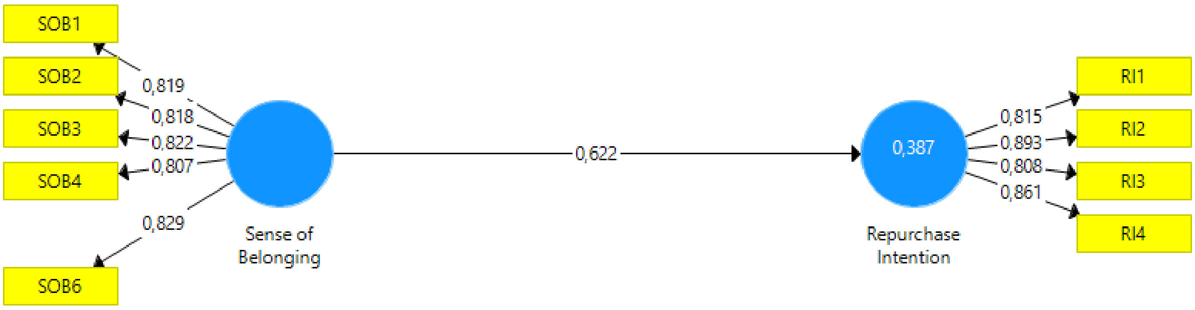
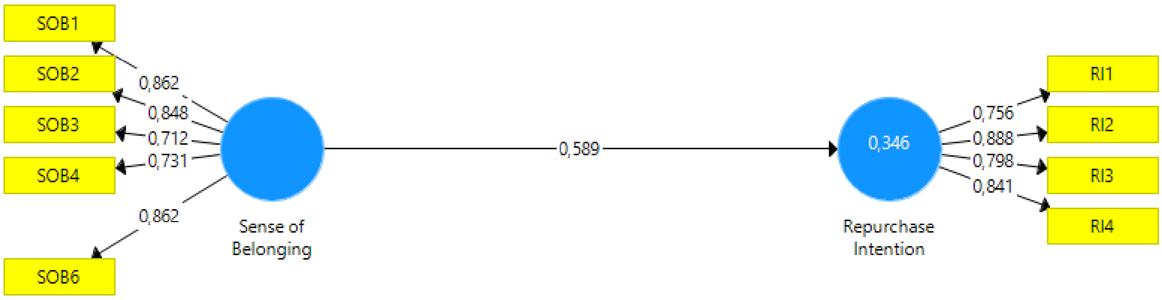


Figure 5.33. Online methodology subgroup for study methodology as a moderating variable



According to these results, we cannot reject the H6d hypothesis, since both consistency and significance are adequate for the statement *"The sense of belonging of the former students who followed a blended methodology course exerts more influence on the repurchase intention in comparison with the former students of the other two methodologies"*.

Continuing with these descriptions, we point out the results obtained for the categorical moderating moderator variable linked to company type which former students are working in at the momentof responding to the survey proposed and we test to see if the influence of the company type where the former students currently work influences or not the relation between the sense of belonging and the repurchase intention. The subgroups which have been formed to evaluate this moderator effects are five: public organizations or companies, multinational companies and firms, national companies with more than 200 employees, national medium sized companies with less than 200 employees but more than 50, and small and micro businesses and entrepreneurships.

As in the cases shown above, we evaluate the external loading factors to eliminate in the common model the five subgroups whose indicators do not reach the threshold of 0.7. Regarding the results obtained, we deem it necessary to eliminate the following indicators in the model: SOB2, SOB3, SOB4, and SOB5 for the sense of belonging latent variable and the RI3 for the repurchase indicator construct. Undertaken this modification, we check that the five models comply with both the measurement and structural model evaluation requirements, which allow us to carry out the calculation for the PLS technique and obtain the following results for these five scenarios.

Table 5.58. Results for type of company as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
Public	29	**0.660**	8.584	0.000	0.435
Multinational	119	0.580	8,632	0.000	0.337
National (more than 200 employees)	98	0.531	6.355	0.000	0.282
Medium (between 50-200 employees)	36	0.565	5.181	0.000	0.330
Small and Micro	59	0.635	10.082	0.000	0.403

The following figures 5.34, 5.35, 5.36, 5,37 and 5.38 display these results below:

Figure 5.34. Public organizations' or companies' subgroup for type of company where former student is working, as a moderating variable

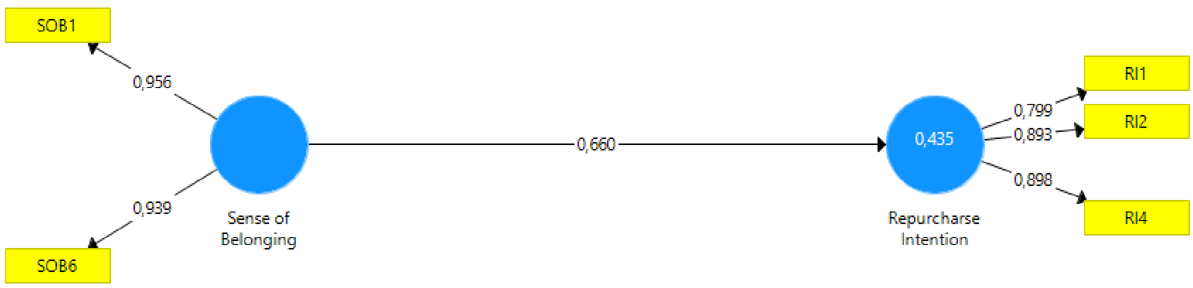


Figure 5.35. Multinational companies' subgroup for type of company where former student is working, as a moderating variable

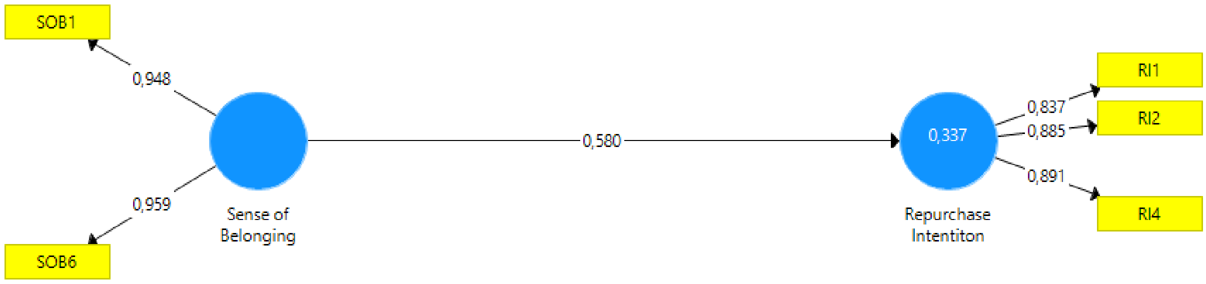


Figure 5.36. National companies´ subgroup for type of company where former student is working, as a moderating variable

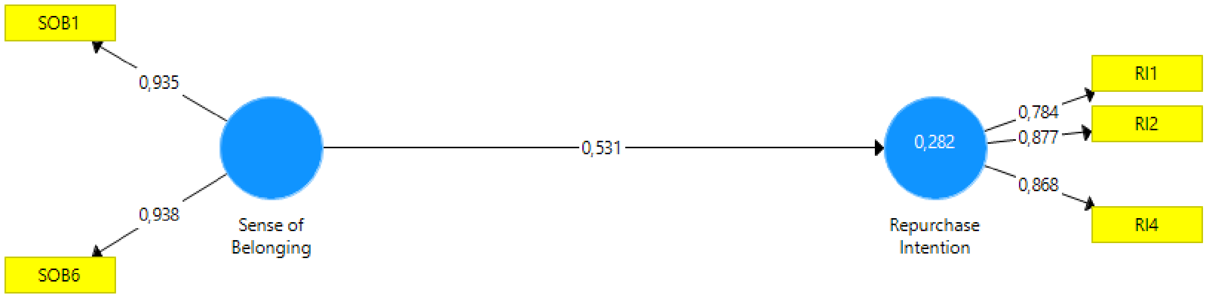


Figure 5.37. Medium-sized companies´ subgroup for type of company where former student is working, as a moderating variable.

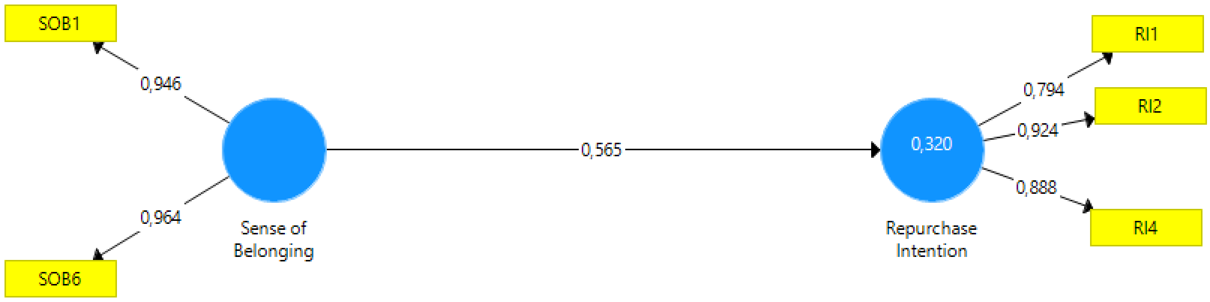
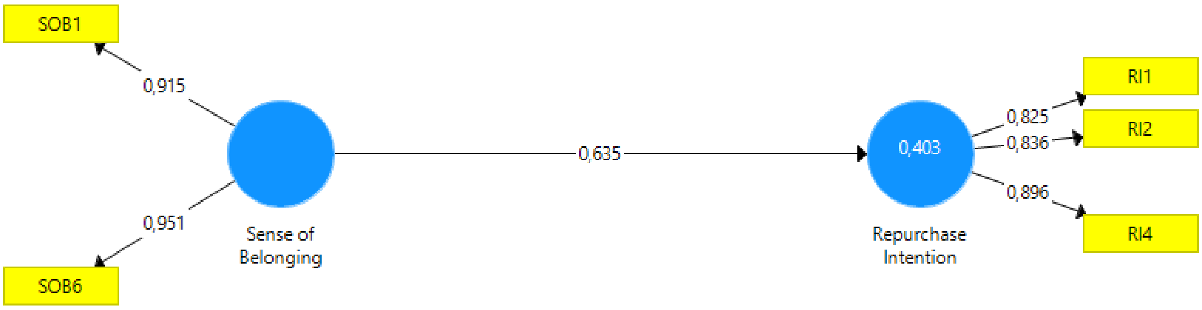


Figure 5.38. Small and micro companies´ subgroup for type of company where former student is working, as a moderating variable



The results allow us not to reject the two hypotheses formulated with regard to this moderating variable: H6e: "*The sense of belonging of the former students who are working in public companies and organizations is more influential for the repurchase intention than the sense of belonging of the former students who are working in, at least, three other types of companies*" and H6f: "*The sense of belonging of the former students who are working in small and micro businesses and entrepreneurships is more influential for the repurchase intention than the former students´ sense of belonging who are working in, at least, three other types of companies*". These hypotheses are sustained and significant according to the results obtained for the type of company where the former student is working, as a moderator variable

Finally, we undertake a last calculation about moderating variables: the position occupied by the former student at the moment of responding to the survey. The subgroups proposed for this analysis are three: We supposed that the respondents were able to determine their organizational position, understanding that the first level is the top of the company or general management, the second level is a position related to executive decisions and on reporting to the general management and the third level is lower than this second level, more oriented to operative performances.

The evaluation of the external loading factors indicates that the SOB3 and SOB5 must be deleted in the model. Once this modification has been undertaken, we check that the three models meet with all the requirements for PLS technique and obtain the following results for the three following scenarios.

Table 5.59. Results for position in the company as a categorical moderating variable and their subgroups

Subgroups	Number of Registers	Path Coeff. / Correlation	*t*-Student	*p*-value	R^2
First level	41	**0.616**	8.438	0.000	0.379
Second level	170	0.605	13.387	0.000	0.366
Third level	116	0.598	9-516	0.000	0.358

The following figures 5.29, 5.30, and 5.31 display these results and allow us not to reject hypothesis H6g referred to as the influence of the sense of belonging in the former students according to the position in their companies.

Figure 5.39. First level subgroup for position in a company where former student is working, as a moderating variable

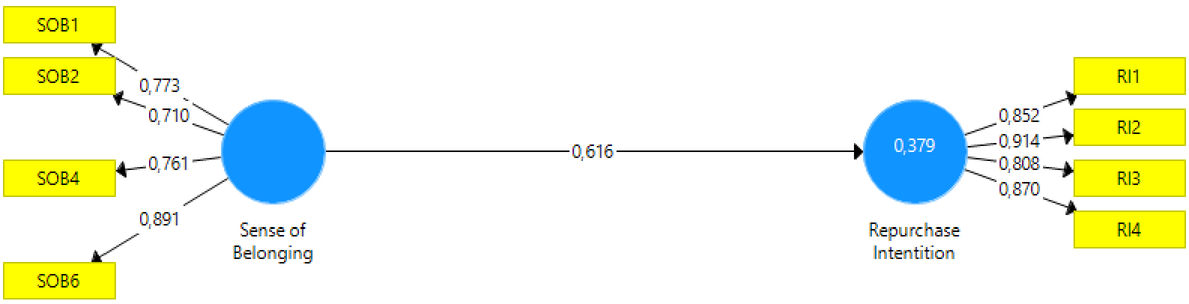


Figure 5.40. Second level subgroup for position in a company where former student is working, as moderating variable

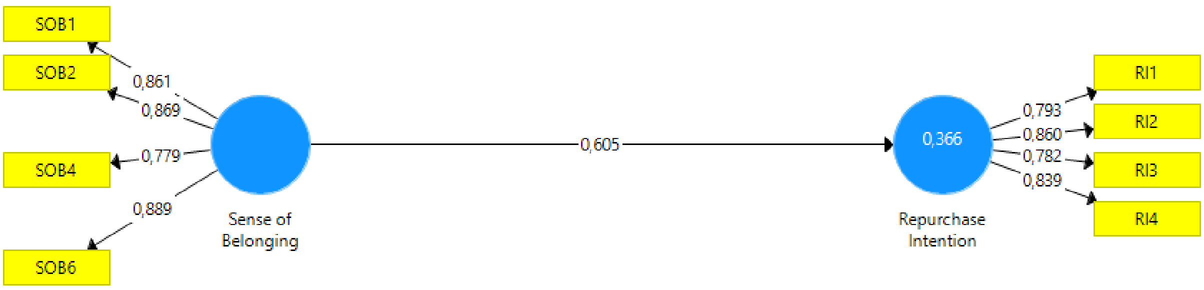
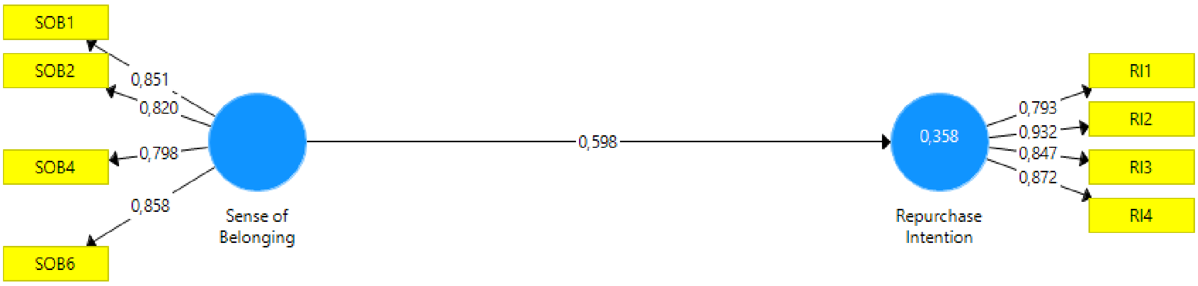


Figure 5.41. Third or lower-level subgroup for position in a company where former student is working, as a moderating variable



And finally, these results allow us to confirm the hypotheses formulated with regard to this moderating variable: H6g: "*The sense of belonging of the former students who are performing first levels of responsibility in the companies and organizations where they are working is more influential for the repurchase intention than the former students´ sense of belonging who are performing inferior levels in their companies*""

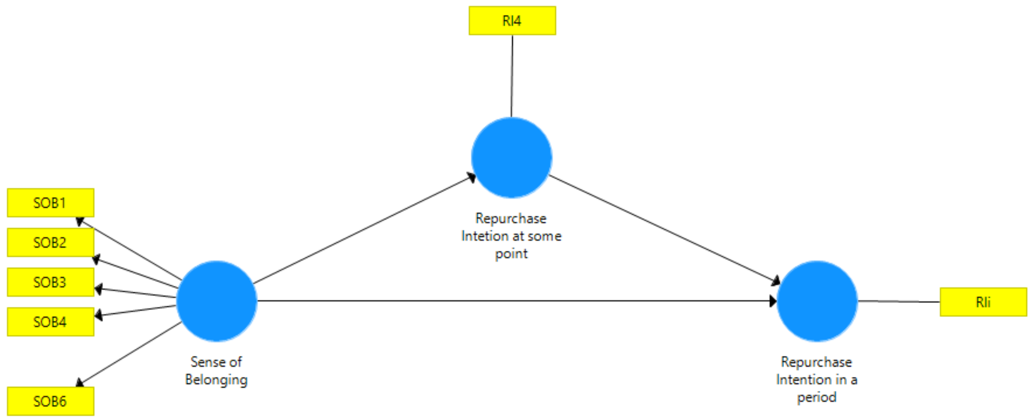
5.3.6. Results to estimate the repurchase intention time

A last calculation is proposed to estimate the repurchase intention time. In order to undertake this objective, we propose to use indicators (RI1, RI2, RI3, RI4) of the repurchase intention variable and build a model where the time factor is "isolated" and, thus we can consider that the results obtained are according to this factor.

We recall that the repurchase intention as a latent variable has four external indicators which are used to set the cited variable: three of them (RI1, RI2, RI3) are referred to intervals of time, while that the last one (RI4) is an indicator of the repurchase intent at some point. Our idea to research the time effect with respect to modeling the repurchase intention through the sense of belonging and its effect on the estimated repurchase intention time, will be to consider, on the one hand, a variable that we will call "repurchase intention at some point" and, on the other hand, another variable named "Repurchase intention in a period". Thus, "repurchase intention at some point" will have a indicator that will be RI4 "*I will probably go back to study at this Institution at some point"* according to the questionnaire, and "repurchase intention in a period" will be determined through the other three indicators for each one of three different intervals of time which have been asked in the study.

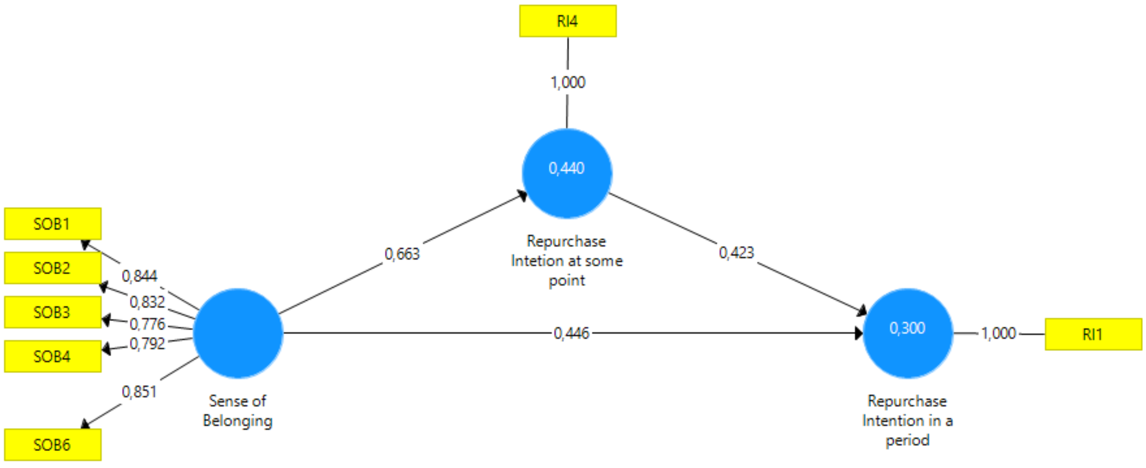
In the next figure, we show this model, where RIi is the generic variable for each calculation: RI1 *("I will probably return to study at this Institution in a period of the less than two years"),* or RI2 *("I will probably return to study at this Institution in a period between two to five years"),* or RI3 *("I will probably go back to study at this Institution in a period between five to ten years").*

Figure 5.42. Generic model to estimate the time effect in the repurchase intention through the sense of belonging



The first calculation is with RI1 that responds to a period of less than two years.

Figure 5.43. Results to estimate the time effect for a period of less than two years in the repurchase intention through the sense of belonging



The results of graph 5.43 contain the path values among the variables, the external loading factors, and R^2 for each one of the dependent variables. The R^2 for repurchase intention at some point is 0.4 and its value will be the same for the three calculations that we will solve.

This value represents that this model has some more than a moderate predictive power without reaching the substantial level according to the description that Chin (1998) does for R^2 value. Moreover, this model to predict a period of repurchase of less than two years has a predictive power which is almost moderate.

The following table shows more significant data to interpret these results and the model that has been performed. We suppose that this model will allow us to draw some conclusions about the model built in order to estimate the intervals of time for the repurchase intention period.

Table 5.60. Results to estimate the time effect for a period of less than two years in the repurchase intention through the sense of belonging

	Path Coefficient	***t*-Student**	***p*-value**
Sense of belonging → Repurchase intention in a period	0.166	3.279	0.001
Sense of belonging → Repurchase intention at some point	0.663	19.301	0.000
Repurchase intention at some point → Repurchase intention in a period	0.423	7.221	0.000

For this first case studied, we can conclude that the sense of belonging and the repurchase intention at some point is a strongly significant relationship, even greater than the relation between repurchase intention at some point (RI4) and repurchase intention in a period of less than two years. By contrast, the significance of the relationship between the sense of belonging and the repurchase intention in a period, is the lowest of the three relations.

The following two calculations continue along the same lines. The RI1 indicator is substituted first by RI2 and later by RI3. The RI2 indicator, for an interval of from two to five years, and the RI3 indicator for an interval of from five to ten years. The results obtainedwill also be the path values, the external loading factor and R^2, but really important in this phase is the result for the relationship between the sense of belonging and the repurchase intention in a period and the R^2 value of the repurchase intention in a period according to its intervals.

The two following figures 5.44 and 5.45 show these results, with R^2=0.427 for RI2 (interval between two and five years) and R^2=0.351 for RI3 (interval between five and ten years, therefore it means that the model performs better when the time estimation is between two and five years or is an intermediate period of time.

Figure 5.44 Results to estimate the time effect for a period of between two to five years in the repurchase intention through the sense of belonging

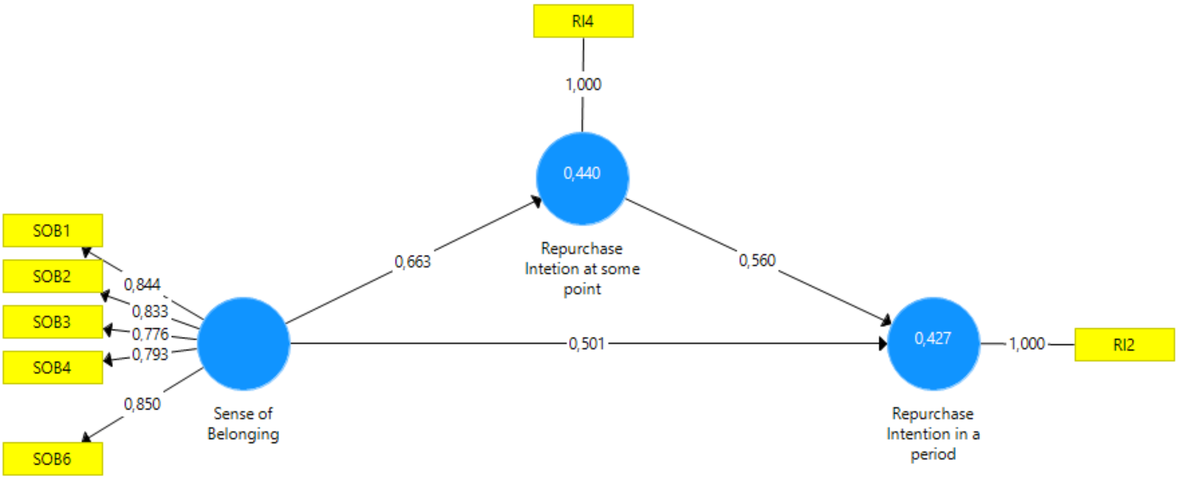
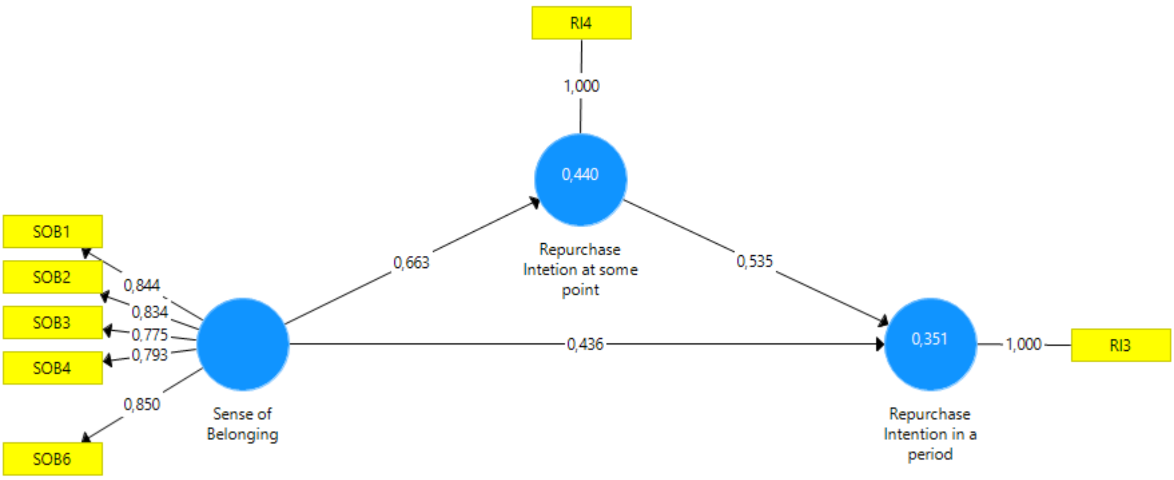


Figure 5.45: Results to estimate the time effect for a period of more than five years in the repurchase intention through the sense of belonging.



And the following tables allow us to know the significant values of the aforementioned relationships for each of the cases. In both cases, the relationship between the sense of belonging and the repurchase intention for an interval of from five to ten years is not significant, but on the other hand, the relationship between the repurchase intention at some point and the repurchase intention in a period is especially significant, as shown in the following tables.

Table 5.61. Results to estimate the time effect for a period of between two to five years in the repurchase intention through the sense of belonging

	Path Coefficient	*t*-Student	*p*-value
Sense of belonging → Repurchase intention in a period	0.130	2.715	0.007
Sense of belonging → Repurchase intention at some point	0.663	9.668	0.000
Repurchase intention at some point → Repurchase intention in a period	0.560	18.583	0.000

Table 5.62: Results to estimate the time effect for a period of more than five years in the repurchase intention through the sense of belonging.

	Path Coefficient	*t*-Student	*p*-value
Sense of belonging → Repurchase intention in a period	0.082	10.044	0.000
Sense of belonging → Repurchase intention at some point	0.663	1.665	0.099
Repurchase intention at some point → Repurchase intention in a period	0.535	18.758	0.000

CHAPTER 6

6. ANALYSIS

In this chapter, based on the analysis of the results obtained in the last chapter we review, discuss, and relate these results to the existing literature that mentions similar results or that has tested similar hypotheses. However, before this comparative analysis that could reconsider some ideas of our elected theoretical framework, we summarize all the results and hypotheses raised in the relationships of the different scenarios in order to obtain a clearer view of the subject of this research.

In addition to the discussion and review of the results in light of former research, new academic implications, and future research that may emerge, we want to propose some applicable guidelines for the management of HE institutions in order to improve profitability and, above all, image and perceptions of their former students. It is very important for us to offer a new setting for alumni relations with their institutions in order to achieve a framework that allows the alumni to continue their training: professionals, executives and managers with better training in the future to ensure a more prosperous world.

At the beginning of this research we proposed a main scope: modeling of the repurchase intention in the HE context using, pride of belonging. To understand this condition, we have used other variables linked to loyalty behaviors that the literature has mentioned over the years and on many occasions: perceived service quality, perceived value, or satisfaction, and it has also given us the opportunity to research the relationships among the aforementioned variables with the repurchase intention and the sense of belonging.

Thus, this main goal has also provided some other specific objectives that we now report to analyze in conjunction with the main one:

- Measure perceived quality in the HE context and especially for the online methodology, since most of the answers proceed from this educational environment.
- Measure perceived value as a trade-off that the student undertakes or pays.
- Relate perceived value with sense or pride of belonginess.
- Relate student satisfaction with loyalty behaviors.
- Build the sense of belonging variable for the HE context through indicators such as membership, alumni associations, WOM effects, recruiting of professionals from the same HE institutions.
- Determine the mediator variables which most influence the repurchase intention through the sense of belonging.
- Determine the moderator variables which most influence the repurchase intention.
- Determine the influence of the sense of belonging on the repurchase time estimation.

In the following lines and epigraphs of this chapter, we develop these arguments using the results obtained with the PLS technique that allowed us to obtain the effects and significances between variables. Using SmartPLS software[1], one of the main software packets for structural equation models based on partial least square (PLS-SEM), we have built a model that enabled us to establish relations between variables and study the effects that some have on other through reflective indicators. The level of these effects and the value of the coefficients that evaluate the proposed measurement models and structural models is now what we evaluate.

In order to introduce this discussion, we show once again the hypotheses proposed for this research that will be addressed according to the scope of the research and its goals.

The following tables contain all the hypotheses that have been formulated as starting points for the research and we indicate the scenarios that have served to reject or not reject these formulations. In summary, there are twenty-four hypotheses that have been studied

[1] Ringle, C.M., Wende, S. and Becker, J.M. 2015 "SmartPLS 3." Boenningstedt: SmartPLS GmbH, http://www.smartpls.com

Table 6.1 Hypotheses of the research: global and specific settings

Indicator	Hypotheses	Data
H1	*Sense of belonging influences positively repurchase intention*	Global and studies for the Spanish, American, and Colombian Institutions
H2a	*Perceived quality influences positively repurchase intention.*	
H2b	*Perceived quality influences positively sense of belonging.*	
H3a	*Student satisfaction influences positively repurchase intention.*	
H3b	*Student satisfaction influences positively pride of belonging.*	
H4a	*Perceived value influences positively repurchase intention.*	
H4b	*Perceived value influences positively sense of belonging.*	

This second table contains the hypotheses formulated to measure the moderator effect between sense of belonging and repurchase intention, once perceived quality, student satisfaction or perceived value were eliminated from the global model initially proposed.

Table 6.2 Hypotheses of the research to measure mediator effects

Indicator	Hypotheses	Data
H5a	*The insight of professional improvement through a new course in a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*	Global
H5b	*The proximity factor to a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	
H5c	*The online methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	
H5d	*The face-to-face methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	
H5e	*The access to novel contents through a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*	
Hef	*The possibility to carry out a program in a different language from the first one at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	
H5g	*The possibility to access to financial aid to return to a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	

Indicator	Hypotheses	Data
H5h	*The personal conditions of a former student are a partial positive mediation between sense of belonging and repurchase intention*	
H5i	*The insight of professional improvement is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention.*	
H5j	*The novel content is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention*	
H5k	*The access to the financial aid is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention*	

And finally, a third table containing the hypotheses formulated to evaluate the effects that moderator variables have on sense of belonging and repurchase intention according to some social, demographic, and labor characteristics which former students have. To evaluate these models with these variables, data from three institutions were used together.

Table 6.3 Hypotheses of the research to measure moderator effects

Indicator	Hypotheses	Data
H6a	*Womens' sense of belonging exerts more influence on the repurchase intention than that of males*	Global
H6b	*Former students from North and Central American have a sense of belonging which exerts more influence on the repurchase intention than the former students born in the other two areas*	
H6c	*The sense of belonging of the youngest former students exerts the least influence on the repurchase intention in comparison with the other two age groups*	
H6e	*The sense of belonging of the former students who followed a course which used a blended methodology exerts more influence on the repurchase intention in comparison with the former students who studied with the other two methodologies*	
H6f	*The sense of belonging of the former students who are working at small, micro businesses, and entrepreneurships exerts more influence on the repurchase intention than the sense of belonging of the former students who are working in, at least three other types of companies*	
H6g	*The sense of belonging of the former students who have first level responsibilities at the companies and organizations where they work exerts more influence on the repurchase intention than the former students´ sense of belonging who are holding inferior positions in their companies.*	

6.1. Discussion and academic implications

Once the main objective and scope of the investigation have been established, we are now in a position to start an in-depth analysis, comparing the results with respect to the data of each institution (scenarios) and the meaning of the results obtained in the context of the academic research already carried out. We start with a summary of the results on the hypotheses studied for the global scenario of the three institutions studied jointly and subsequently for each of them.

Table 6.4 Summary of the results on the hypotheses

	Statements	***Global Data***	***Spanish Institution***	***American Institution***	***Colombian Institution***
H1	*Sense of belonging influences positively repurchase intention.*	Not Rejected (****)	Not Rejected (***)	Not Rejected (****)	Not Rejected (****)
H2a	*Perceived quality influences positively repurchase intention.*	Not Rejected – not significant	∅	Rejected	Not Rejected (**)
H2b	*Perceived quality influences positively sense of belonging.*	Not Rejected (***)	∅	Not Rejected (***)	Not Rejected – not significant
H3a	*Student satisfaction influences positively repurchase intention.*	∅	∅	∅	∅
H3b	*Student satisfaction influences positively pride of belonging.*	∅	∅	∅	∅
H4a	*Perceived value influences positively repurchase intention.*	Not Rejected – not significant	Not Reject – not significant	Not Reject – not significant	Rejected
H4b	*Perceived value influences positively sense of belonging.*	Not Rejected (***)	Not Rejected (****)	Not Rejected (****)	Not Rejected (****)

(****) hypothesis is not rejected ($p<0.0001$).
(***) hypothesis is not rejected ($p<0.001$).
(**) hypothesis is not rejected ($p<0.01$).
∅ hypothesis is not considered in the model

6.1.1. Main objective

Initially, we can affirm that there is a positive effect between the sense or pride of belonging and the repurchase intention. We must remember that the research question formulated as a starting point for this thesis was "***Does the sense pride of belonging influence the repurchase in High Education context?***"

Previous investigations have treated the repurchase intention in the HE context from different insights as we explain above (see 3.3.5 epigraph) (Dlâcic *et al*., 2014; Henning-Thurau *et al*., 2001; Rojas-Méndez *et al.*, 2009).

The most recent studies have continued addressing the repurchase intention issue: "*The conceptualization of repurchase intention has evolved over the years, and it is regarded as one of the consumer behavior outcome variables resulting from high value and satisfaction and resulting in loyalty"* (Binnawas *et al*., 2020). Behavioral loyalty has continued to be considered as consistent and repetitive purchasing behavior, while attitudinal loyalty reflects an emotional attachment (Bowen & Chen, 2001). Other insights continue to point to cognitive loyalty as a higher order dimension that involves the customer´s conscious decision-making process in the evaluation of alternatives brands when a repurchase takes effect (Caruana, 2002).

Therefore, we continue to perceive that the literature maintains a conceptual framework for behavioral intentions based on attitudinal, emotional, and cognitive aspects but without clearly defining that each one of them are true indicators. The proposal of this research, objectively, is to materialize these different aspects of loyalty. We believe that one of these aspects is the pride of belonging, since what customers feel towards a brand, a service or a company will be a useful tool for managing the loyalty of these customers.

As hypothesis *H1* was not rejected in all the cases proposed and with a statistical significance of 0.0001, it seems possible to say that there is a link between the sense of belonging and the repurchase intention. The following tables show the correlations found in this study.

Table 6.5 Summary of correlations coefficients between sense of belonging and repurchase intention.

	Global Data	*Spanish Institutions*	*American Institution*	*Colombian Institution*
Sense of belonging → repurchase intention	0.622	0.665	0.622	0.694

Subsequently, we analyze the sense of belonging effect on repurchase intention associated with other circumstances (mediating, and moderating effects) that will help us to understand this relationship in greater depth. For now, we leave it here pointing to a proposed model that has enabled us to obtain results for the verification of the goals that we had proposed. To check the relationship between the sense of belonging and the repurchase intention, we use a model that contains independent variables: perceived quality and value. With the two dependent variables, the repurchase intention, and the sense of belonging in the core of the research, we have been able to support the main arguments for all the scenarios provided by this thesis. Nevertheless, as we will see below, this has not been the case for all the arguments initially thought for the research.

6.1.2. Specific objective: relationship between perceived quality and loyalty.

As we mentioned above, one of the specific objectives of this work is to measure perceived quality in the HE context and especially in an online education context since most of the answers proceed from this environment (for example, Westfield Business School is a HE institution whose programs are only online and CEIPA in Colombia and EIG in Spain offer both as online as face-to-face programs). Hypotheses *H2a* and *H2b* are focused on the relationships between quality services, sense of belonging, and repurchase intention, respectively. Thus, these hypotheses are extraordinarily linked to the loyalty concept, as it is in the academic literature that we were able to check (see table 3.3, page 93-94).

However, it is not until Dlâcic *et al*. (2014) that a lack of studies on the relationship between perceived quality and repurchase intention in the HE context has been discovered. This circumstance has greatly influenced the conceptual genesis of this work.

Over the time, especially during the last few years and in different countries, different studies have shown that service quality has a significant effect on student loyalty (Fares *et al*., 2013; Gunawan & Wahyuni, 2018; Usman *et al*., 2016). However, there are also studies which have rejected that perceived quality has a positive effect on loyalty (Chandra *et al*., 2018; Ganić *et al*., 2018); or another where the result indicates service quality is not a significant construct to predict the behavioral intention of students (Hwang & Choi, 2019).

The results obtained in our research are in accordance with this frame of reference. In the first place, we consider that formally, the latent variable of perceived quality integrated into our research model, built through twenty indicators, is in line with other formulations which were applied in similar forms to other models. We have previously indicated that there are studies on perceived quality that contain from a maximum number of indicators (67) (Sultan & Wong, 2010a) to a minimum number of indicators for the perceived quality construct (18) (Angell *et al*., 2008; Stodinik & Rogers, 2008; Rojas-Méndez *et al*., 2009) and it is even possible to refer to the presence of sub-dimensions to measure the perceived quality (Teeroovengadum, et al., 2016). Thus, it is concluded on this subject that, although the number of external indicators of perceived quality could seem excessive for our study, other similar investigations were carried out with similar models for this variable.

Second, and related to the hypotheses; *H2a* has been evaluated with four different conclusions, precisely, each one of them according to each one of the scenarios or data of institutions. On the other hand, *H2b*, when it has been possible to evaluate, the result has been that the hypothesis should not be rejected for these scenarios, but only for the case of the Colombian institution, where the hypothesis is not significant. Nevertheless, it is significant for the global model and the particular case of the American institution ($p<0.001$).

For this reason and in accordance with *H2's* hypotheses related to perceived quality, the sense of belonging, and the repurchase intention, we consider that our results faithfully follow other results provided by the Academy, thus we did not find any discrepancies with what has been formulated by other authors, and we believe that a door has been opened to continue investigating the service and frame perceived quality by alumni.

6.1.3. *Specific objective: link between perceived value and loyalty*

The second specific objective proposed in this work is to study the perceived value as a trade-off between the fee or effort of the student and what the student perceives throughout the stay at the institution. Through the proposed model, we can also establish the relationship between perceived value and repurchase value, and between perceived value and the sense of belonging.

Likewise, we must remember that, initially the main global model designed for the study included the relationship between student satisfaction and loyalty variables studied in the research: sense of belonging and repurchase intention, as we have described previously, in chapter 3. Hsu *et al*. (2015) developed a model in which satisfaction and loyalty were reflective indicators of the perceived value variable. Other indicators used were: attitude, skill, knowledge, or professional capability, where perceived value appears as a dependent latent variable and perceived quality was the independent latent variable. Our objective for this workis to also clarify some of these ideas since satisfaction and loyalty are measured jointly in the same variable in the model of Hsu *et al.* (2015). In our opinion it is confusing to interpret a future behavior of the alumni through a single variable that represents two really different concepts.

The hypotheses *H3a* and *H3b,* and *H4a* and *H4b* summarize the scope of a part of this investigation. They are based on the need to obtain information on the attitudinal and cognitive dimensions that had been incorporated into the investigation of loyalty throughout the years (Bowen & Chen, 2001; Caruana, 2002; Hallowell, 1996; Olsen, 2002) and the result is a behavioral loyalty related to a repetitious purchase behavior and an attitudinal loyalty reflected on an emotional and psychological attachment (Bowen & Chen, 2001) and for this last issue, attitudinal loyalty would be related to pride of belonging, which is a more emotional aspect.

However, in any case, student satisfaction has been studied for years as a dependent variable (Brown & Mazzoral, 2009; Chandra *et al*., 2018; Chen, 2017; DeShields Jr. *et al*., 2005; Gruber *et al*., 2010; Gunawan & Wahyuni, 2018; Hsu *et al*., 2015; Hsu *et al*., 2006; Pedro *et al*., 2018; Tan & Kek, 2004). Therefore, and in accordance with what we have presented in this work, and in others, student satisfaction has been considered as a suitable independent variable for generating loyalty. Initially, our model had the purpose of considering the satisfaction variable as a variable closely linked to behavioral loyalty (*H3a*) and, also to attitudinal loyalty (*H3b*). However, this objective has not been reached since the requirements of the calculation technique obliged us to delete the student satisfaction variable in order to achieve a consistent model as was explained in the previous chapter.

Eliminating the student satisfaction variable from the model, certainly meant a loss of the information we wanted to analyze about the alumni who answered our survey. However, as previously stated in this research, practitioners and academics continue to focus on finding a robust theoretical model to measure student satisfaction. In our opinion, and as we have contributed throughout this study, some other investigations have failed to precisely delimit this variable, using questions about the quality or value of the service in measuring satisfaction.

Although we have built a questionnaire that focused on avoiding possible ambiguity, we can suppose that the responders could still be including these confusions in their responses, hence they would also be inducing results that would not be usefulfor measuring the level of their expectations.

In summary, we wanted to achieve a modeling of the repurchase intention through variables such as student satisfaction for this work. However, it was not possible, and it will remain as an objective for future research.

In this text, we have previously described how student satisfaction and perceived value are useful variables to achieve loyalty behavior. Nevertheless, no mention has been made of any research that included any or all of these variables together, directly influencing behavioral intentions when the effects of quality, value and satisfaction were considered simultaneously (Cronin Jr *et al.*, 2000). As far as we know, other models that have been used as references for this research, have not included simultaneously the three variables mentioned to predict the performance of sense of belonging and repurchase intention (Dlâcic *et al*., 2014; Hsu *et al*., 2015) just as we propose.

However, we have found some interesting results in the relationships between the perceived value and repurchase intention variables, and the sense of belonging variable, that have allowed us not to reject hypotheses *H4a* and *H4b*, but with different levels of significance. The relationship between perceived value and repurchase intention is not rejected for the global case that includes the data of the three institutions and for the particular cases of the Spanish and the US Institutions, although without significance, but the hypothesis *H4a*, however, is rejected for the Colombian case.

Furthemore, the results obtained from the four cases (global, Spanish, US and Colombian) have provided data that allow us to affirm a strong relationship between perceived value and the sense of belonging. It means that, when alumni feel that their effort (monetary or no monetary) is compensated, the sense of belonging increases. Therefore, *H4b* is not rejected and it is possible to propose a way to increase the repurchase intention, as we also stated with the *H1* hypothesis through the sense of belonging. This result is extremely important in order to understand what a student of HE looks for. This aspect will be discussed in more detail later.

As aforementioned, both Roostika and Mutlhay (2010) and Sanchez-Fernandez *et al*. (2010) explained how perceived value influences repurchase intention in the HE context and their studies at the universities in Yogyakarta (Indonesia) and Spain confirmed this. Therefore, our results confirm that perceived value is a variable that influences positively on the two meanings of loyalty: both behavioral and attitudinal (repurchase and sense of belonging).

There are not many studies which have addressed the perceived value and its link to loyalty in line with our findings for this work. We believe that the value variable is the key for an HE student on the path to achieving new professional and personal objectives. Therefore, a new window of opportunity is opened to study many aspects related to value, mainly functional value (Brown & Mazzoral, 2009; LeBlanc & Nguyen, 1999; Ledden *et al*., 2007). Value is associated with effort, monetary sacrifice, and non-monetary sacrifice, and inasmuch as a person invests "*some*" to achieve an objective. It will be measured in terms of effort; when the effort to achieve something is great, and if it is achieving it, the value of it will increase, and when these efforts are not so great, surely the value will go down.

The questionnaire proposed for this research was based on functional value dimensions described in the literature (LeBlanc & Nguyen, 1999; Ledden *et al*., 2007; Stafford, 1994); related to performance or utility of service that an HE institution can provide, jointed to monetary sacrifice related to the efforts made in monetary terms, as for example: course fees (cost of registration) or non-monetary sacrifice such as time linked to loss of opportunity to participate in family and social events (Cronin *et al*., 1997; Ledden *et al*., 2007).

6.1.4. Specific objective: link between student satisfaction and loyalty.

Satisfaction is one of the variables most used in the modeling to know behaviors related to loyalty, both so as an independent variable as a mediating variable, for example, between quality and repurchase (Caruana, 2002; Olsen, 2002). Initially, our model can support the necessary calculations to study the relationships between student satisfaction as mediating variable between quality and repurchase, or also between the value and sense of belonging variables (see figure 3.8). However, we had not to consider this option, since it was eliminated from the student satisfaction variable as a mediating variable and finally considering the student satisfaction variable as an independent variable in addition to the proposed model. This aim allowed to us to propose the *H3a* and *H3b* hypotheses.

Alves and Raposo (2007) pointed out that student loyalty was the main consequence of satisfaction, given that it was noticeable that student satisfaction had a direct influence of more than 50% of their loyalty. These results are in accordance with other studies found by Webb & Jagun (1997) and Eskildsen, *et al.* (1999). More recent studies have confirmed the positive influence of satisfaction on loyalty (Ganić *et al*., 2018; Chandra *et al*., 2018).

These prior results have been extremely valuable when compared with results obtained with our proposed model. However, Fornell-Larcker criterion to verify the discriminant validity points out that the variables may be correlated, and it may not be convenient for the validity of the model and variable measurements (Aldás & Uriel, 2017). Since in our first step, we obtained extremely high correlations between perceived quality and satisfaction and on the other hand, between perceived value and student satisfaction, we proceeded to eliminate student satisfaction from the model. It means that we will have no way of verifying any relationship or hypothesis related to student satisfaction and the other variables included in the model.

This missing part of our model, of course, makes us consider the need to continue working along this line until achieving the results that allow us to obtain results about the relationships between student satisfaction and other concepts, since student satisfaction always appears as a key to understand the behavior of students and alumni in this HE context, such is how we will declare in the epigraph about future researches.

6.1.5. Specific objective: build a variable linked to the sense of belonging that allows for the establishing of marketing insights.

Certainly, the greatest challenge of this research is the creation of a possible model of the sense of belonging as a useful variable for the marketing science. The review of the literature and the state of the art have shown that the sense of belonging is a construct associated mainly to sociology and psychology, and scarcely to marketing, that would allow us to draw conclusions with a market orientation.

In order to build this variable, as we have explained previously in the fourth chapter, the questionnaire has included the terms that we consider more linked to the sense of belonging and that can best describe their meaning. Issues such as WOM, for example, have been included in the literature about marketing of HE institutions (Alves & Raposo, 2007; Athiyaman, 1997; Bean & Bradley, 1986; Hsu *et al*., 2015; McAlexander & Koenig, 2001), and could be considered as a marketing indicator related to loyalty behaviors. In addition, today we can point out that the following to social networks is an indicator related to marketing insights, and that the academic literature has been mentioning for a very short time (Brech *et al*., 2017; Constantinides & Stagno, 2011; Constantinides & Stagno, 2012; Kuzma & Wright, 2013; Leng, 2012; Palmer, 2013; Rekhter, 2012; Rutter *et al*., 2016; Sandlin & Peña, 2014). Therefore, we decided to include SOB1 and SOB2 as external factors of the sense of belonging latent variable.

Moreover, to complete the measurement and building of the pride or sense of belonging that we are studying, we have considered four other indicators that have not been incorporated until now as indicators for a marketing variable: the participation in activities or events that institutions organize (Astin, 1984; Bean & Bradley, 1986; Betz *et al*., 1970; Mael & Asforth, 1992; Strayhorn, 2018; Wolf-Wendel *et al*., 2009); and the membership to alumni association (Bhattarcharya *et al*., 1995; Gruen *et al*., 2000; Mael & Asforth, 1992; Newman & Petrosko, 2011; Strayhorn, 2018; Stuart, 2009); or donation for the development institutional (Cabrera *et al*., 2005; Gaier, 2005; Hsu *et al*., 2015; Mael & Asforth, 1992; Volkwein, 2010; Weerts & Ronca, 2008); and recommendation to recruit fellows inside a work environment (Hsu *et al*., 2015; McAlexander & Koenig, 2001; Volkwein, 2010; Weerts & Ronca, 2008). These four issues were measured through four indicators SOB3, SOB4, SOB5 and SOB6.

The controls required by PLS-SEM, required that some indicators had to be removed from the built models to obtain reliable results. The following table shows the different indicators, or external factors of sense of belonging latent variable, finally included and eliminated from the calculation model, according to items reliability, which must be evaluated by examining the load since all of them must exceed the recommended threshold of 0.7 (Carmines & Zeller, 1979). Therefore, when the external load factors of sense of belonging variable were lesser than 0.7, the proposed models were again deleting such items.

Table 6.6.Summary of the indicators or external factors of the sense of belonging variable. Part I.

	SOB1	SOB2	SOB3	SOB4	SOB5	SOB6
Global Case	0.861	0.828	0.759	0.779	X	**0.862**
Spanish Case	0.916	X	X	X	X	**0.935**
US Case	0.903	**0.917**	0.845	0.827	X	0.915
Colombian Case	**0.866**	0.844	0.756	0.793	X	0.835

This first table shows that in all cases except in the Spanish one, the sense of belonging has been built with five of the six indicators initially proposed. For the Spanish case it was necessary to eliminate three additional indicators, because these three did not reach the threshold of 0.7. We must remember that the Spanish case had the smallest sample of the research and we are able to affirm that the size of the sample surely influences this requirement of the model.

These results also show that the SOB6 factor appears to be the most influential or with the major weight on the variable in the global case, as in the Spanish case as well as in the other two cases, this factor is the highest or close to the highest factor in each one of the cases. SOB6 represents the recommendation to the company to hire those who have studied at the institution. The second factor that appears in these results is SOB1, with a value remarkably similar to SOB6, on the positive references given by a graduate of the Institution. Regarding this indicator, we believe that it is closely related to the sense of belonging linked to marketing and its mission, so we can affirm that it is an important component of this construct.

In a following approach to the relationship between the sense of belonging and the repurchase intention of our research, we have raised the influence of number of mediating variables on such relations. The following table shows all external load factors for each calculation undertaken for the eight proposed mediating variables.

Table 6.7. Summary of the indicators or external factors of the sense of belonging variable. Part II.

Mediator Variable	SOB1	SOB2	SOB3	SOB4	SOB5	SOB6
Professional improvements	0.840	0.834	0.775	0.794	X	**0.850**
Proximity	0.837	0.834	0.781	0.795	X	**0.846**
Online methodology	0.840	0.833	0.778	0.794	X	**0.848**
Face-to-face methodology	0.833	0.830	0.784	0.801	X	**0.845**
Novel contents	0.841	0.831	0.779	0.790	X	**0.851**
Different language	0.834	0.831	0.782	0.801	X	**0.844**
Financial aids	0.842	0.833	0.775	0.789	X	**0.852**
Personal conditions	0.844	0.828	0.776	0.790	X	**0.854**

Evidently, these results are highly similar to the global case, since the samples for each calculation were almost the same, we only made small modifications due to some null register in each category of the mediating variable when the answer was blank. Due to the results obtained, the data enable us to suppose that the positive references given to other persons, the recruiting of fellows of the same institutions by companies and, even the following of the news about the institutions through the social media, could be considered as very good insights to measure the sense of belonging. Nevertheless, we believe that much work must still be undertaken regarding this issue.

Continuing with the analysis of the results obtained that allow us to establish which items or factors better define the sense of belonging variable, we provide more information based on the results of models that contained moderating variables. In summary, we made twenty calculations that have provided the following results shown in table 6.8.

The following table shows the values of external load factors for each of the subgroups that integrate a moderating variable included in this research. We point out that the calculations were for the following cases: gender (male/female), area of birth (North and Central America/South America/Europe), year of birth (less than 31/between 31 and 40/ older than 40), methodology of study (blended/fac-to-face/online), type of company where alumni work currently (public/multinational/national/medium/small), and finally, position in the company where the former student works currently (first level/second level/third level). Unlike the results of the mediating variables, we obtained different configurations of the sense of belonging variable that can be observed below. Summarily, we have obtained results for six categories of the moderating variables, and nineteen subgroups that providethe following results.

Table 6.8. Summary of the indicators or external factors of the sense of belonging variable. Part III.

Moderator Variable Subgroups for each categorical variable	**SOB1**	**SOB2**	**SOB3**	**SOB4**	**SOB5**	**SOB6**
Gender (male)	0.860	0.845	0.813	0.801	X	**0.887**
Gender (female)	0.809	**0.818**	0.747	0.798	X	0.795
Area of birth (North and Central America)	X	X	0.729	**0.952**	X	0.871
Area of birth (South America)	X	X	0.839	**0.862**	X	0.812
Area of birth (Europe)	X	X	0.779	0.866	X	**0.917**
Year of birth (less than 31)	0.872	0.753	X	X	X	**0.915**
Year of birth (between 31-40)	**0.918**	0.878	X	X	X	**0.867**
Year of birth (more than 40)	0.923	0.818	X	X	X	**0.939**
Methodology (blended)	0.850	0.848	0.749	**0.888**	X	0.887
Methodology (presential)	0.819	0.818	**0.822**	0.807	X	**0.829**
Methodology (online)	**0.862**	0.848	0.712	0.731	X	**0.862**
Company (public)	**0.956**	X	X	X	X	0.939
Company (multinational)	0.948	X	X	X	X	**0.959**
Company (national)	0.935	X	X	X	X	**0.938**
Company (medium size)	0.946	X	X	X	X	**0.964**
Company (small and micro size)	0.915	X	X	X	X	**0.951**
Position (first level)	0.773	0.710	X	0.761	X	**0.891**
Position (second level)	0.861	0.869	X	0.779	X	**0.889**
Position (third level or lower)	0.851	0.820	X	0.798	X	**0.858**

According to these results, we can affirm that the indicators such as the recruiting of fellows or postgraduates of the same institutions would be a determining factor to configure the sense of belonging of the alumni. Likewise, the SOB1 indicator linked to the references given by an alumnus would be the second most important factor to measure this sense of belonging.

Regarding the SOB5 factor, we must declare that the elimination of this factor has little importance, since none of the institutions included in this study has a system to collect funds. In any case, all the data that have been collected related to this indicator have been under an "assumption" and not as a certainty of the Institutions

Regarding other indicators, we believe that some cases have not provided sufficient data to correctly evaluate the structural model, since we were forced to eliminate indicators from the external model.

6.1.6. *Specific objective: measure the influence of moderator and mediator variables on the relationship between the sense of belonging and the repurchase intention*

In accordance with what we have just described in the previous paragraph, a large number of cases for this investigation are based on the mediating and moderating variables that have also served to state certain hypotheses. These results are shown below.

Table 6.9 Hypotheses not rejected of the research according to moderator effects

Indicator	Hypotheses	Results
H5a	*The insight of professional improvement through a new course in a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*	Not Rejected (***)
H5b	*The proximity factor to a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	Not Rejected (***)
H5c	*The online methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	Not Rejected (***)
H5d	*The presential methodology to carry out a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	Not Rejected (***)
H5e	*The access to novel contents through a program at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention.*	Not Rejected (***)
Hf	*The possibility to carry out a program in different languages from the first one at a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	Not Rejected (***)
H5g	*The possibility to access to financial aid to return to a HE institution of a former student is a partial positive mediation factor between sense of belonging and repurchase intention*	Not Rejected (***)
H5h	*The personal conditions of a former student are a partial positive mediation between sense of belonging and repurchase intention*	Not Rejected (***)
H5i	*The insight of professional improvement is one mediating variable that has a highest indirect influence for the relationship between sense of belonging and repurchase intention.*	Not Rejected (***)
H5j	*The novel content is one mediating variable that has the highest indirect influence on the relationship between sense of belonging and repurchase intention*	Not Rejected (***)
H5k	*The access to the financial aid is one mediating variable that has the highest indirect influence for the relationship between sense of belonging and repurchase intention*	Not Rejected (***)

Due to the absence of previous studies related to these variables in the HE context, we will only explain the meaning that these results have, especially, thinking in future research about the same question: sense of belonging and repurchase intention, and how some circumstances can influence this relation.

Table 6.10 Hypotheses not rejected of the research according to moderator effects

Indicator	Hypotheses	Results
H6a	*Women´s sense of belonging is more influential for the repurchase intention than that of males*	Not Rejected (***)
H6b	*Former students from North and Central American have a sense of belonging which is more influential for the repurchase intention than the former students form the other two born areas*	Not Rejected (***)
H6c	*The sense of belonging of the youngest former students is the least influential for the repurchase intention in comparison with the other two age groups*	Not Rejected (***)
H6e	*The sense of belonging of the former students who followed a course with the blended methodology is more influential for the repurchase intention in comparison with the former students of the other two methodologies*	Not Rejected (***)
H6f	*The sense of belonging of the former students who are working at small, micro businesses, and entrepreneurships is more influential for the repurchase intention than the former students´ sense of belonging who are working inthe other three types of companies*	Not Rejected (***)
H6g	*The sense of belonging of the former students who are performing first levels of responsibility in their companies and organizations is more influential for the repurchase intention than the former students´ sense of belonging who are performing inferior levels in their companies.*	Not Rejected (***)

6.1.7. *Specific objective: link between the sense of belonging in repurchase time estimation.*

The results of this research are focused on achieving a better understanding of the behavior of alumni in relation to their HE institutions where they studied throughout their lives. Obviously, this behavior is related to the time periods in which these decisions were made. In order to estimate it, we built a repurchase intention dependent variable in function of when these decisions were made.

We recall the four items used or indicators to compose the repurchase intention variable. A first indicator is the probability of returning within two years; the second indicator is an indicator for an interval between two and five years, and a third indicator is an indicator to measure the probability of returning back to the institution within ten years or more. Finally, the fourth indicator is used to measure the probability of returning to the institutions at some point. It means that this indicator would integrate the other previously explained indicators, and thus, this item could be considered as a moderating effect on the final result; the most likely moment in when alumni could return to its HE institution.

The obtained results (see tables 5.60, 5.61 and 5.62) have enabled us to obtain the significance of the relationships between the sense of belonging and the period of time when the repurchase has been estimated to occur.

However, these results do not allow us to confirm that the significance between the sense of belonging and the repurchase intention in a determinate interval of time is high in accordance with the intervals of time which were defined in the questionnaire. On the other hand, we have checked that the relationship between the sense of belonging and the repurchase intention at some point is high, with a path coefficient of 0.663. The correlations between repurchase intention at some point and repurchase intention in a time period are greater than 0.4 and strongly significant. Therefore, these results allow us to point out that the sense of belongingcannot directly estimate a certain time period for the repurchase to occur, but we believe that it will be possible to know the probability of the repurchase easier through the relationship between the sense of belonging and the repurchase intention at some point later on by interpreting it according to the correlations and significance.

In the following table, we summarize the R^2 values to evaluate the performance of the sense of belonging to predict repurchase behaviors and their time periods.

Table 6.11. Results concerning the model to estimate the repurchase intention by time periods.

Repurchase Intention in a time period	R^2	Sense of Belonging (Total Effect)	Repurchase intention at some point (Total Effect)	Sense of Belonging (Correlation)	Repurchase intention at some point (Correlation)
External factor, RI1	0.330	0.446	0.426	0.446	0.533
External factor, RI2	0.427	0.501	0.560	0.501	0.646
External factor, RI3	0.351	0.436	0.535	0.436	0.589

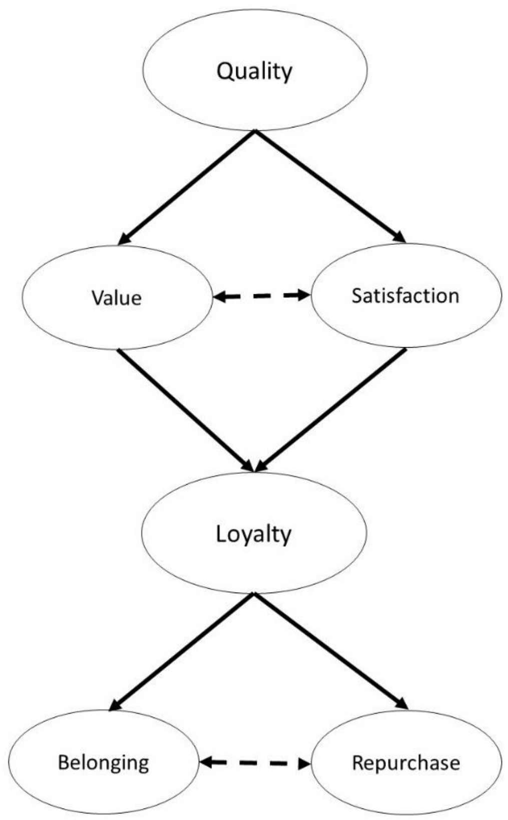
According to these results, we can affirm that our model allows us to predict more effectively when the time periods of repurchase are intermediate, when the estimated time period is very short (less than two years), or is very long (greater than five years).

6.2. Implications for the management of HE institutions

Once the results are analyzed, we proceed to posit how to apply them to the management of HE institutions. In this epigraph we expose not only the consequences of the results, but an interpretation of all the models in order to link the academic perspective with the managerial performance.

We start with a first figure that allows us to translate the initial model of this research to a managerial code.

Figure 6.1. Managerial interpretation of the model for the academic research



Through this figure, we describe the meaning of the different variables used for this research and its meaning at a managerial level. We believe that it is a matter of utmost importance to transfer these results and their conclusions to a management level for HE institutions to clearly define their meaning in order to facilitate their decision-making and their process improvement. For these reasons, we want to point out exactly what perceived quality, perceived value, student satisfaction, and the dependent variables proposed for this research, mean to us. Thus, it will be possible to avoid any possible misinterpretation, as frequently happens in the management world with some concepts that are used in a sort of indifferent way.

One of the most frequent challenges that arises for exectutives in the business world is precisely defining the concepts that appear in their performance. Thus, it is common to hear how executives from all over the world talk about the importance of quality for customers, or the importance of achieving satisfaction for customer happiness, or establishing value as the main objective for an organization. However, these statements, as is often pointed out, are not always accurate in the contexts in which they are made, while the meaning and the framework of these words that are referenced need to be clarified. With this in mind, throughout the work undertaken for this research we found enough references and other works that helped us to understand the dimensions of these concepts and the paths towards which they should be oriented.

We argue that quality is a variable that must relate to the performance of processes and systems. The management of the companies must try the perfect the performance of these systems because the customers judge if the system works or not and, in accordance with our research, it is still not related with the sense of belonging and repurchase intention of customers. Likewise, throughout this study, we argue that value is related to a trade-off between what is given and what is obtained. Consequently, any customer will perceive the value of a service in function the effort that he or she has to make to enjoy the benefits of a service. Perceived value will be higher inasmuch as a customer receives more for the effort made, and therefore, the perceived value should be understood as an exchange or trade-off. Finally, the third independent variable that we proposed to use is the satisfaction variable, closely related to customer expectations or the level of services that customers hope to receive. Obviously, when expectations are less than what is received, customer satisfaction is positive, and it will be negative when it is just the opposite (expectations are higher than the received benefits).

Throughout this dissertation, we have presented these arguments (see table 3.2 page 102). We highlight that it is important to understand these variables very clearly because, inasmuch as the managers assume the exact meaning of each variable, decisions taken and managed will probably be more appropriate and reliable for business.

In second part of these recommendations for management, we want to focus on the meaning of our dependent variables. Although the sense of belonging has been used as an independent variable to model the repurchase intention, this research has focused much on learning what this variable means for marketing and we have also fully exploited this study to model it in function of perceived quality and perceived value. Thus, the results obtained allow us to propose some conclusions about the sense of belonging and how this variable can to be anticipated as a consequence of perceived value, which is extremely relevant in our opinion.

Sense of belonging is a variable that was built from different concepts such as membership, follower on social networks, event participations and others. As shown in table 3.6 (page 116), these external indicators have been used as antecedents to formulate it as a measurable marketing variable. Thus, being measured through these indicators, the sense of belonging can also be used to predict other customer behaviors, one of the most important arguments of this thesis. Therefore, we conclude that it would be possible to predict the repurchase through the sense of belonging.

Assuming the scheme shown above to be true, it will allow education managers to make some decisions focused on increasing the repurchase of alumni as part of a business objective. Obviously, we believe that the management of quality, value, and satisfaction through their components will influence the sense of belonging and repurchase results.

On the other hand, it is important to highlight the numeric results: path coefficients, total effects, and correlations between variables serve to draw a more understandable framework for a manager. Using the following tables, a manager can interpret the relationships better and it will allow him to establish scenarios and make decisions focused on the corporate objectives. A clear difference between the managerial and academic understanding lies in the priority between the significance of the model and the quantitative importance of the numeric results.

The following tables show the results that managers of HE education, surely, need to know in order to make decisions and predict results based on the significance of the model. Table 6.12 shows how the higher path coefficient in the model proposed is between perceived value and sense of belonging (0.609), and also the relation between sense of belonging and repurchase intention has a high path coefficient (0.568). Such as we noted in table 5.11, these relations are supported by non-rejected hypotheses.

Table 6.12. Path coefficients for a global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	-	-	-0.058	0.238
Perceived Value	-	-	0.122	0.609
Repurchase Intention	-	-	-	-
Sense of Belonging	-	-	0.568	-

Obviously, the total effects and the path coefficients are the same when there are no mediator variables between them, such as happens in the following relationships: perceived quality-sense of belonging, perceived value-sense of belonging, and sense of belonging-repurchase intention. In the same way as in the relationships where there were some mediator variables: quality-repurchase, with sense of belonging as a moderator variable and value-repurchase. Results allow us to register a weak total effect in the relationship between quality-repurchase and a medium total effect between value and repurchase.

Table 6.13. Total effects for a global model.

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	-	-	0.075	0.238
Perceived Value	-	-	0.467	0.609
Repurchase Intention	-	-	-	-
Sense of Belonging	-	-	0.568	-

Consequently, we suppose that the sense of belonging has a strong influence on the effect between quality and repurchase intention, and its moderating effect makes the total effect of perceived quality on repurchase, finally, positive (0.075), changing the sign that the between two variables (quality and repurchase) initially had. The same applies when the relationship between perceived value and repurchase intention has a moderating effect through the sense of belonging: initially the path coefficient is 0.122 and, finally the total effect is 0.467. Thus, we may conclude that the sense of belonging has a great importance on the total effect that variables, such as quality or value have on repurchase intention.

Table 6.14. Correlation coefficients for a global model

	Perceived Quality	Perceived Value	Repurchase Intention	Sense of Belonging
Perceived Quality	1.0	0.790	0.445	0.717
Perceived Value	0.790	1.0	0.527	0.795
Repurchase Intention	0.445	0.527	1.0	0.622
Sense of Belonging	0.717	0.795	0.622	1.00

Finally, table 6.14 shows us the correlation coefficients between variables included in the global model of this research. The conclusion are twofold (1) the highest correlation is between the perceived value and the sense of belonging (0.795), and (2) repurchase intention is more strongly correlated with the sense of belonging (0.622) than with the other variables of the model. Therefore, we find conclusive the following outline that can provide managers with a valuable insight for their management: value creation for students (or customers, said in a generalized way) may generate sense of belonging to institutions and companies, and therefore this feeling will become an important precedent for repurchase behaviors, so decisive in management of organizations.

In order to delve deeper into this sequence and to continue providing more data and exploratory ways to HE managers, we show some relationships between indicators extracted from the survey below. We provide a descriptive view that also allows us to analyze the relationships between these variables and the possibility that the managers have to make decisions about their marketing and business strategies.

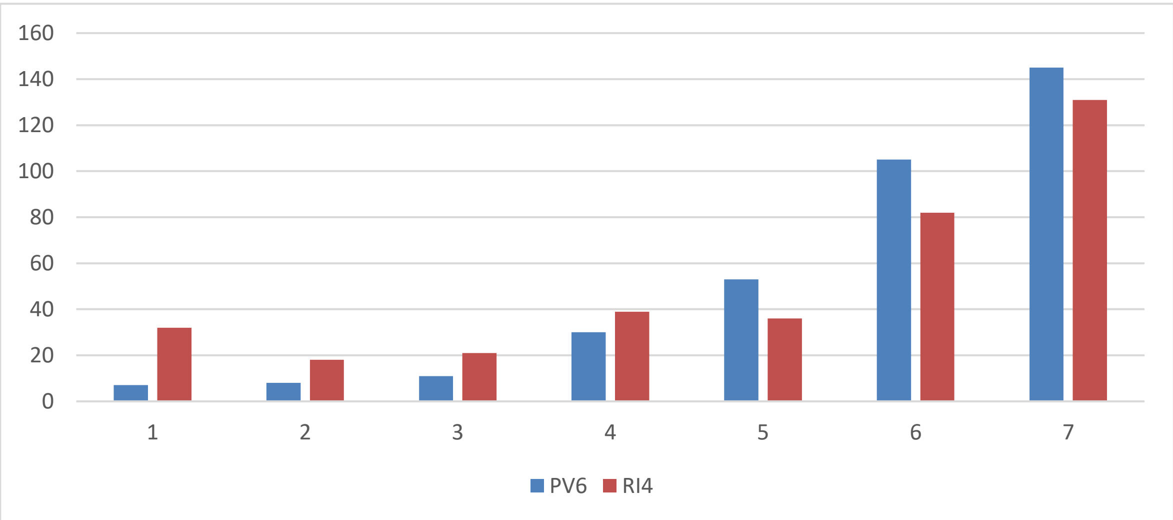
In the following tables and figures we can observe some of the effects between pairs of external indicators of the variables that we consider more significant for decision making. It will be important for managers and managerial decisions to have information on the most important indicators. We will providethem with results and with the help of descriptive statistical analysis, some data that will be used as guides for managers of HE institutions. To the extent that these executives can make decisions and can act on the most determining issues of this business, it is likely that the repurchase of their alumni will increase.

In order to simplify the understanding of the objective we seek with this study, we have selected some external factors that can be considered as the most representative of their latent variables. Certainly, it is not aligned with the academic sense that this research has, since our objective is to propose a valid model to predict the repurchase intention behavior through the sense of belonging. Nevertheless, we understand that executives need another kind of data and references that are not so predictive but more descriptive. With this in mind, we present some graphics below which allow us to examine the correlations between some indicators of the variables, identifying some challenges for executives that must be solved from the understanding of these results.

We accept that for management, the binary models based on the 2x2 matrix are completely understandable. We also assume that our respondents have answered according to this same criterion: (positive-positive, positive-negative, negative-positive and negative-negative) for the questions raised.

Therefore, we take indicators such as PV6 (*Overall received from the Institution personally has a very high value for me)*, RI4 (*I will probably go back to study at this Institution at some point)* or SOB1 *(References that I give of the Institution are always positive)*, even SS8 (*All my expectations have been reached)*, to finally combine them and provide the following frequency graphs.

Figure 6.2. Frequency graph of PV6 and RI4 external indicators



This graphic, whose values are shown in the following table, shows that a great number of cases assume the likelihood of returning to the institution and the probability that what is received from the institution has a very high value for the former student (65% of the cases). These results lead us to think that there is a good perspective for the institutions of the students who answered the questionnaire. But on the other hand, 11 percent responded that the probability of returning to the institution would be low, and also, they perceived low value for the institution. Clearly, this last result is not good news, because it declares that there is a certain number of alumni that neither have the intention of returning, nor feel that they received the value that they consider appropriate.

However, at the managerial level there are two interesting cases. These cases are when, alumni without having received value from their institution, would return to that institution at some point, or even vice versa (4%), and the other case is when the probability of returning is very low (19%), even though the alumni received a high value, or even vice versa.

Table 6.15. Results of PV6 and RI4 representing a 2x2 matrix

% frequencies associated to ranges		**External factor RI4**	
		From 1 to 4	**From 5 to 7**
External factor PV6	**From 1 to 4**	11%	4%
	From 5 to 7	19%	65%

These results should help decision-making that focuses on improving the performance of a HE institution in relation to the repurchase intention of their alumni. We believe that the main challenge and opportunity is to ensure that former students who received a high value, and are not interested in returning to the institution, finally return. Likewise, it will be motivating to understand why some undeclared alumni who did not receive a high value from their colleges and universities, would nevertheless return to their institutions.

We believe that this analysis allows practitioners to make decisions and to design new strategies. In addition, a data summary is shown below, using the following scheme to understand the state of the art in each case. The following table shows the framework that summarizes the data obtained from a pair of external related indicators which advocate a possible decision to enhance the performance under perceived value and repurchase intention criteria, for example. Working within this framework, managers will work to set improvement goals more easily.

Table 6.16. Summary representing insights regarding the results obtained from external indicators of perceived value and repurchase intention.

	NO POSITIVE RESPONSES TO REPURCHASE INTENTION	POSITIVE RESPONSES TO REPURCHASE INTENTION
NO POSITIVE RESPONSES RELATED TO PERCEIVED VALUE	**FAILURE (11%)**	**CHANCE (4%)**
POSITIVE RESPONSES RELATED TO PERCEIVED VALUE	**CHALLENGE (19%)**	**SUCCESSFUL (65%)**

Mainly, it means that there are many alumni who responded successfully to what was proposed and intended; on the other hand, there is also a considerable number that represent a failure as an institution. Therefore, other decisions must be executed outside the framework of this work such as decisions related to the organizational problems, the operations of services and the business strategy of the institution. Nevertheless, there are two other results that can help the managers responsible for marketing and services of the institutions to better understand the needs and expectations of their students. We point out that these challenges would be the real opportunities to improve the results of alumni loyalty to a higher education institution.

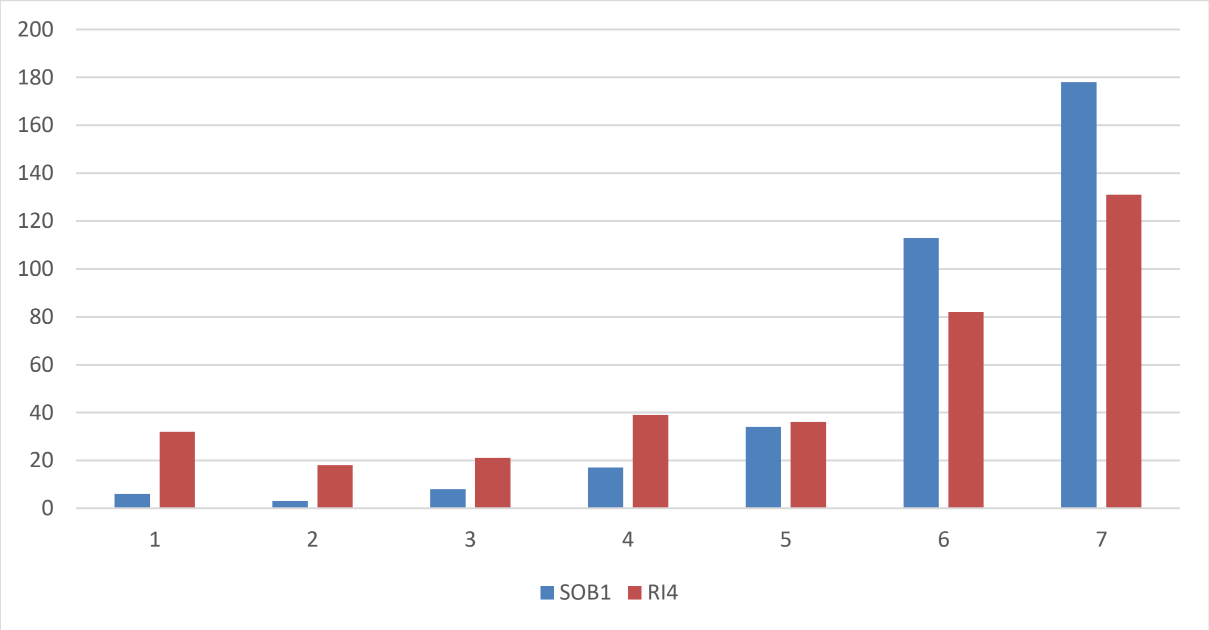
And keeping along this line, we argue that this scheme could also be applied to other pairs of external indicators used to model latent variables of our model as are the SOB1 and SOB6 indicators, highly representative of the sense of belonging variable in comparison to the RI4 indicator, meaning of repurchase intention in some point.

The following two graphs and tables represent the results and data obtained through the survey carried out in the three institutions of results for SOB1 *(References that I give of the Institution are always positive)* and SOB6 *(I recommend, or would recommend, the hiring by my company to those who have studied at the Institution)* in comparison with RI4, external indicator for repurchase intention at some point.

The results obtained are summarized below. Firstly, from the values that are shown on it for SOB1 and RI4 we can observe that a great number of cases show the likelihood of returning to the institution and the probability of giving good reviews about the institution (68%). On the other hand, 8% of the sample responded that the probability of returning to the institution would be low, and that the probability of giving good references is also low, which clearly indicates unsuccessful management considering that 8% is a low value for this indicator.

However, as in the case noted above, there are two interesting cases: where the alumni without providing good references about the institution, would return to institution at some point (2%), or even another case in which former students giving good references show a low percentage regarding the probability of returning (23%), which is really a challenge to arrange.

Figure 6.3. Frequency graph for SOB1 and RI4 external indicators



The following table shows the results grouped in a low level of good references given and a high level of good references, with respect to the probability of returning to the same institution at some point, and table 6.18 shows the category of these issues with data provided.

Table 6.17. Results of SOB1 and RI4 representing a 2x2 matrix

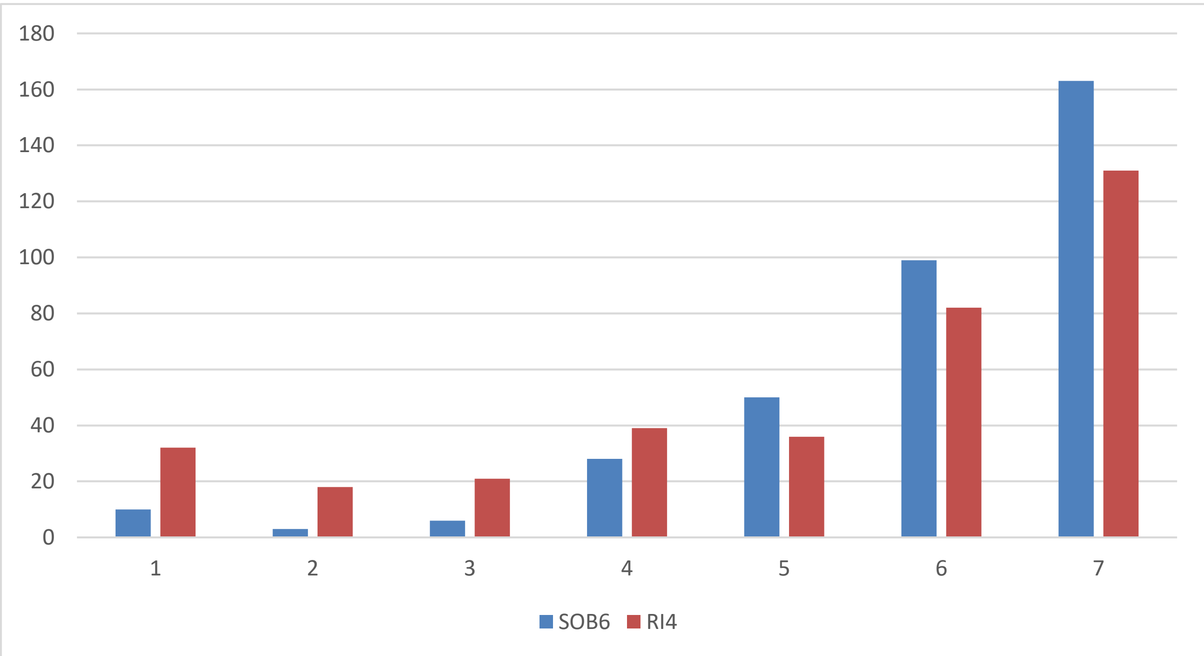
% frequencies associated to ranges		**External factor RI4**	
		From 1 to 4	**From 5 to 7**
External factor SOB1	**From 1 to 4**	8%	2%
	From 5 to 7	23%	68%

Table 6.18. Summary representing insights regarding the results obtained from the external indicators for references given as external indicator and repurchase intention.

	NO POSITIVE RESPONSES TO REPURCHASE INTENTION	POSITIVE RESPONSES TO REPURCHASE INTENTION
NO POSITIVE RESPONSES RELATED TO REFERENCES GIVEN	**FAILURE (8%)**	**CHANCE (2%)**
POSITIVE RESPONSES RELATED TO REFERENCES GIVEN	**CHALLENGE (23%)**	**SUCCESSFUL (68%)**

As with the external factor SOB1, we use SOB6 as an external indicator as well to establish its influence on the repurchase intention so that these results have a meaning at the managerial level. In the following figure, we show the frequencies where we can observe a certain correlation level between these two indicators, which are closely linked to the meanings of their latent variables. SOB6 is the external indicator that measures the recommendation level of hiring by the company where the former student is working who has studied at the same institution.

Figure 6.4. Frequency graph for SOB6 and RI4 external indicators



The following table shows the frequencies grouped in two levels of answers: a low level and a high level for each one of two indicators, that also serve to establish the possible managerial decisions.

Table 6.19. Results of SOB6 and RI4 representing a 2x2 matrix

% frequencies associated to ranges		**External factor RI4**	
		From 1 to 4	**From 5 to 7**
External factor SOB6	**From 1 to 4**	3%	10%
	From 5 to 7	28%	59%

We find an important challenge in the following case where the alumni respond that they recommend the hiring of students from the same institution, even though the probability of returning to their institution is low (28%). Obviously, we consider that this case represents a good opportunity to offer something that becomes attractive for the alumni of the institutions to return to their HE institutions.

Table 6.20. Summary representing insights regarding the results obtained from external indicators for hiring recommendation and repurchase intention.

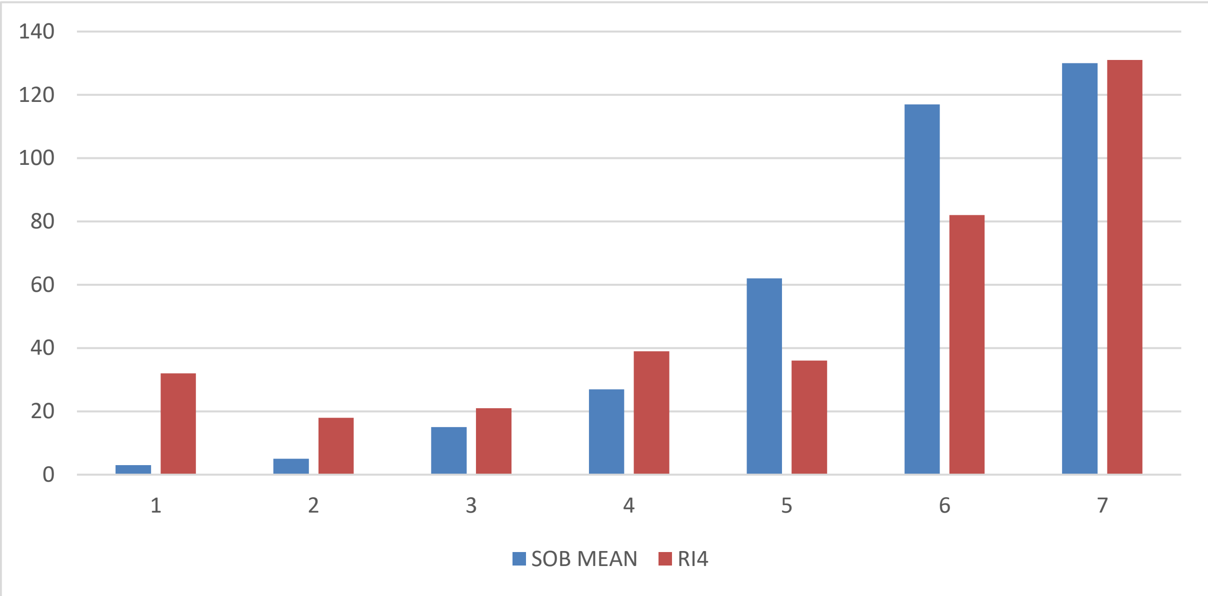
	NO POSITIVE RESPONSES TO REPURCHASE INTENTION	**POSITIVE RESPONSES TO REPURCHASE INTENTION**
NO POSITIVE RESPONSES RELATED TO HIRING RECOMMENATION	**FAILURE (3%)**	**CHANCE (10%)**
POSITIVE RESPONSES RELATED TO HIRING RECOMMENDATION	**CHALLENGE (28%)**	**SUCCESSFUL (59%)**

Likewise, we consider another measurement for the sense of belonging variable as the mean of all their indicators that could explain some insights about the meaning of the variables proposed in the research.

Table 6.21. Results of SOB MEAN (mean of all external indicators of sense of belonging variable) and repurchase intention representing a 2x2 matrix

% frequencies associated to ranges		**External factor RI4**	
		From 1 to 4	**From 5 to 7**
External factor SOB MEAN	**From 1 to 4**	11%	3%
	From 5 to 7	20%	66%

Figure 6.5. Frequency graph for SOB MEAN and RI4 external indicators



According to these results, we also find an important challenge for managers who should understand the positive answers related to a high sense of belonging even though these alumni are not advocating a return to the same college or university in the short term. This level represents 20% of the sample. HE institutions will surely be extremely interested in knowing how they can ensure that their alumni, who have a high sense of belonging to their institutions, are not interested in returning to their institutions at some point.

Table 6.22. Summary representing insights regarding the results obtained from the external indicators of mean of all external indicators of the sense of belonging and the repurchase intention.

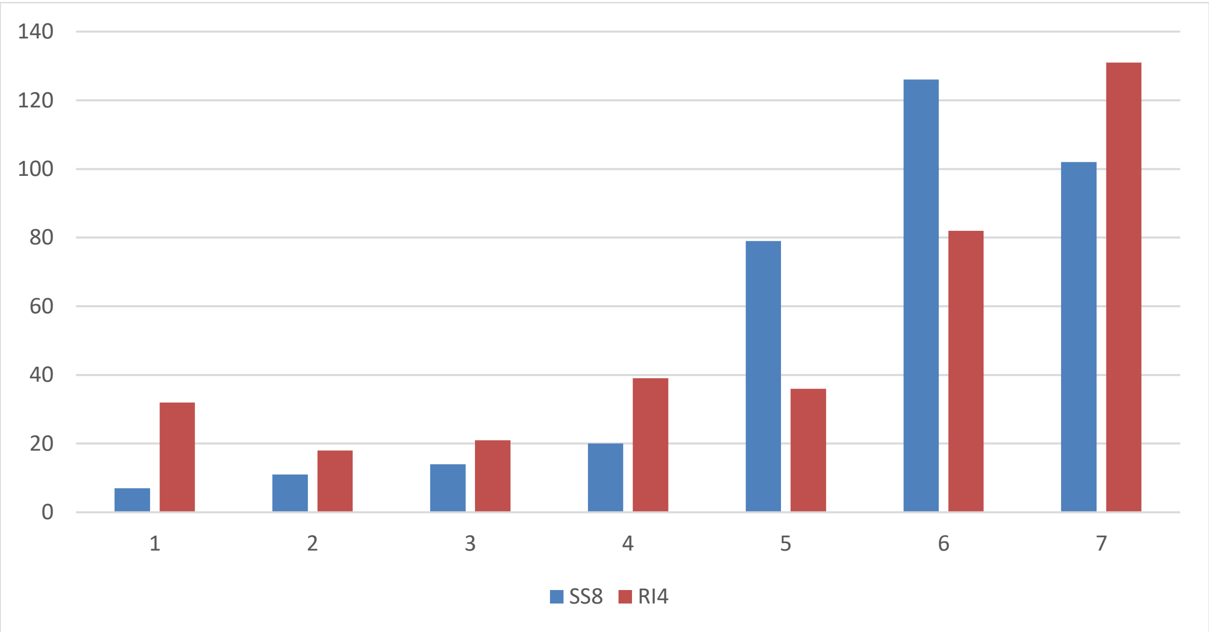
	NO POSITIVE RESPONSESTO REPURCHASE INTENTION	**POSITIVE RESPONSES TO REPURCHASE INTENTION**
NO POSITIVE RESPONSES RELATED TO MEAN OF SENSE OF BELONGING	**FAILURE (11%)**	**CHANCE (3%)**
POSITIVE RESPONSES RELATED TOMEAN OF SENSE OF BELONGING	**CHALLENGE (20%)**	**SUCCESSFUL (66%)**

At this point of the discussion, we can confirm that the sense of belonging and the repurchase intention at some point have a high correlation and that in most of the cases (66%)

when there is a considerable level of belonging, repurchase intention finally occurs with a high probability.

Lastly, we include a similar interpretation for an external indicator of the student satisfaction considered in the general model of this study according to the questionnaire used. Keeping on this line described above, we take the external indicator SS8 *(All my expectations have been reached)* of the student satisfaction latent variable to relate it to the external indicator RI4 of the repurchase intention variable, and for this, we propose the same interpretation procedure as for those mentioned above. We include a graph of frequencies where we observe that, for a high number of the alumni whose expectations were achieved during their stays at the institutions, the probability of returning to their institutions is also high,. This group of 65% of the sample, is accompanied by a challenge to recover 20% of the alumni who, considering their expectations were achieved, do not consider returning to their institutions one more time.

Figure 6.6. Frequency graph for SS8 and RI4 external indicators



The following tables show results which we consider valuable to indicate the ways of improving the marketing of the HE institutions.

Table 6.23. Results of SS8 and RI4 representing a 2x2 matrix

% frequencies associated to ranges		External factor RI4	
		From 1 to 4	From 5 to 7
External factor SS8	From 1 to 4	11%	4%
	From 5 to 7	20%	65%

Table 6.24. Summary representing insights regarding the results obtained from the external indicators for student satisfaction and repurchase intention.

	NO POSITIVE RESPONSES TO REPURCHASE INTENTION	POSITIVE RESPONSES TO REPURCHASE INTENTION
NO POSITIVE RESPONSES RELATED TO ALL EXPECTATIONS REACHED	FAILURE (11%)	CHANCE (4%)
POSITIVE RESPONSES RELATED TO ALL EXPECTATIONS REACHED	CHALLENGE (20%)	SUCCESSFUL (65%)

6.3. Future researches

After the analysis of the results and its interpretation for a managerial context, we address the proposal of future avenues of research. Considering that the results obtained have allowed us not to reject the main hypotheses of this study, we propose three lines of research for the future, which link the work and results described above. The three lines are: a) Continue with other studies for the modeling of the repurchase intention through the sense of belonging and others variables, both for the HE context and for other contexts; b) Model the sense of belonging variable to be an applicable variable for marketing; and c) Delve into the perceived value variable as one linked to the sense of belonging and the repurchase intention, first and foremost, because we are in a new scenario for HE context, as will be described below.

a) Modeling of repurchase through sense of belonging and other variables:

The sample used in this research collects 359 registers of three institutions which offered their alumni database for the preparation of the survey. These institutions are also young, founded a few years ago, and thus, it was foreseeable that the size of the sample would not be large. Nevertheless, and as we described consequently above, the size of the sample fulfills all PLS-

SEM method requirements, although it has not been possible to maintain the initial model, since some criteria such as the Fornell-Larcker forced us to eliminate some variables. This action is not causally related to the number of registers, but we suppose that a greater sample would perhaps allow usto confirm a model that initially had five variables and nine possible relationships among them. Therefore, it would be very desirable to continue this line of research, applying this method in other HE institutions. A greater sample would probably give rise to additional studies regarding the influence of student satisfaction on the repurchase intention, and as it has already been referred to in this study, has not been possible to test. We would consider it of great importance if this research and these results stimulate further research in the HE context with similar arguments to what have been already used.

b) Modeling of the sense of belonging variable as applicable to marketing.

One of the small contributions of this research is the modeling of the sense of belonging as a marketing variable, and that from the beginning was one of the main arguments to start this study: modeling the sense of belonging variable from a marketing perspective. As we described throughout the study and especially in the theoretical framework chapter, the pride, or sense of belonging variable is a construct linked to psychology, sociology and other social sciences but scarcely related to marketing.

Precisely from a marketing perspective we continue arguing the importance of branding, loyalty, or the relationship with the client. However, it would be equally interesting to add the concept of sense of belonging to this discussion as a marketing issue as well. In order to incorporate this sense of belonging concept to marketing, we consider it necessary to continue modeling the variable with more indicators, and to study its meaning and applicability in other sectors. Throughout this research, we have referred to other brands where the customer develops a sense or pride of belonging, and we cited brands such as Harley-Davidson or Ferrari. Therefore, does this sense or, pride arise in other sectors, in other brands, in other services in addition to

HE? This is a question we ask ourselves, hoping that it can also be one more argument for future study.

c) Delving into the perceived value variable related to sense of belonging and repurchase intention.

Finally, we posit a last future line of research focused mainly on “customers” in the HE institution context. There is a debate about whether or not to consider students as customers, but beyond this question, the results of this research have demonstrated the importance of perceived value, as well as the significant influence of this variable on other variables such as the sense of belonging and the intention to repurchase. Following this line, we also propose to delve into the perceived value variable as a key for customer decision making and how to create value for the student.

This research has been carried out during 2020, a significant year in which incredibly important challenges have been imposed on colleges, universities, and business schools; challenges which have been addressed by the HE sector at great risk. Along this line, we argue that it will be extremely important to define future arguements that allow a student to perceive value in the HE institution. Future research must join managers and educators to achieve valuable proposals that students would also recognize as valuable.

COVID-19 has certainly marked the beginning of a new era in Education. The conditions and needs experienced during this time, have presented a challenge that institutions have had to face with different results. We are absolutely sure that we must continue researching the variables of value, quality, and satisfaction that represent what students are looking for in the HE Instituions, whose indicators allow us to measure these variables. These indicators will continue to change in the coming years and we are going to be involved in this endeavor.

d) Deepen other aspects related to the alumni communities as potential markets and the evolution of the sense of belonging of the students until they become graduates.

CHAPTER 7

7. CONCLUSIONS

It is with great satisfaction and happiness that we reach this point and initiate the conclusions of this research. We will continue positing the more important ideas that we may extract from the results and analysis of this study. This epigraph is divided into four points and a corollary as a final contribution regarding the Higher Education context and the challenges that universities, colleges, and business school all over the world will have to face in the post-COVID-19 era.

First of all, we will initiate with the analysis of some of the main ideas that we can assume after reviewing the academic literature about the sense of belonging and the repurchase intention, considering that these two variables contain most of the contributions of this study. The literature guided us toward the need to identify many uses of the concept, since the sense of belonging is a variable linked to different perspectives: psychological, sociological, physical or even spiritual (Walker & Avant, 2005); in addition, belonging is a concept that has not been discussed or researched widely. Scant literature has addressed the concept, and much of it is narrative rather than empirical (Hagerty *et al*., 1992). Initially, belonginess implies recognition and acceptance of a member by another member in a group (Anant, 1966).

Posteriorly, for an educational context, ideas of belonging emerged aligning with the corporate branding approach (Curtis *et al*., 2009). In addition, to building a connection with users, the brand must also foster a sense of belonging through interaction and engagement, where engagement can take the form of content which tailors to prospective students (Lasorsa *et al*., 2012; Rutter *et al*., 2016).

The review of Strayhorn´s (2012) about the Theory of Sense of Belonging has allowed us to know that engagement, social support, and academics are all components of the students´ feelings of belonging in the education framework insight. Sense of belonging is defined as a basic human need, a feeling that influences behavior (Strayhorn, 2018) and, applied to the university setting, sense of belonging is the perception of their own affiliation and identification with the greater university community (Hausmann *et al.,* 2009).

These ideas concerning the sense of belonging in the education context have allowed us to approach the issue first from the alumni perspective and later from a marketing perspective. To define the alumni´s pride of belonging, we followed some ideas about the professional associations´ sense of belonging that has three components of commitment: affective, continuance and normative (Gruen *et al*., 2000). For example, financial support appears as an argument to the membership for both professional associations and alumni membership (Gruen *et al*., 2000; Volkwein, 2010). From this starting point, we described a variable focused on marketing arguments that allowed us to establish a construct capable of predicting certain behaviors of alumni with respect to their repurchase intentions.

Thus, we finished constructing a sense of belonging variable with six components: word of mouth (WOM), followed by social media networks (SNSs), participation in events and social events, memberships to alumni associations, donations for institutional development, and recommendations to recruit fellows. This variable was introduced in the model to support the main hypothesis raised for this study: ***Sense of belonging influences positively repurchase intention,*** which was not rejected in any of the cases.

Linked to sense of belonging, we focused on the modeling and significance of repurchase intention in this research. During the theoretical framework description, we were able to address the importance of repurchase for HE institutions, but with an initial lack of theoretical models that reflected upon the context of HE and the nature of their services in universities competitive global marketplace (Melewar & Akel, 2005; Hemsley-Brown & Oplatka, 2006; Waeraas & Soldbakk, 2009). However, HE institutions now recognize the need to market themselves in a climate of competition. They are incorporating marketing practices and concepts from other sectors into the HE sector.

In order to contextualize repurchase intention, we have underpinned two insights: an attitudinal one, and other behavioral dimensions with reference to time, both during and after the student´s period of study (Dlâcic *et al*., 2014; Henning-Thurau *et al*., 2001). Students' loyalty to the HE institutions where they studied is demonstrated by positive WOM, by offering jobs to new graduates and by returning to update knowledge later (Dlâcic *et al*., 2014). Therefore, these aspects were part of the ideas that allowed us to connect our main variables for this research; on the one hand, finding the predictors for the repurchase intention, and on the other hand, making such predictors starting points to compose a variable linked to the sense of belonging of alumni.

Moreover, during the writing of the theoretical framework the repurchase intention has been analyzed from two perspectives, since the literature offers many references about the issue. Literature indicates that initial research emphasized only the behavioral dimension of loyalty, being the repurchase the final effect of service loyalty (Caruana, 2002).

Furthermore, the repurchase behavior appears reflected on the engagement definition, including in the customer lifetime value (CLV). The term *engagement* is behavioral in nature and goes beyond, resulting from motivational drivers (Kumar *et al*., 2010; Van Doorn *et al*., 2010), but it would be incomplete without the inclusion of repurchase.

In summary, and considering the different insights on both variables, repurchase and belonging, we decided to argue that both variables are part of service loyalty for our case of study, in accordance with the proposed model.

Secondly, we want to point out the obtained results of R^2 value before showing the hypotheses that are fulfilled in this research. Certainly, it will be significant to refer to the hypotheses of our research that were not rejected, since the confirmation of the proposed model is first and foremost the most transcendent. Through the model that includes the sense of belonging variable, it was possible to predict the behavior of the repurchase intention and we argue that it is the most important objective of any other item that can be tested in this research. R^2 value represents the amount of variance that can be explained. Thus, the R^2 value is a measure of the predictive power of a model for a dependent variable: R^2 values that stand at 0.67 are substantial, at 0.33 they are moderate and 0.19 are weak (Chin, 1998).

To sum up, we obtained the following R^2 values at the cited calculations, which allow us to interpret the strength of this model to predict the behaviors based on these variables of the model. The results for the global model, after the changes and modifications made to adjust it, are that the R^2 obtained are the following: R^2 of the sense of belonging variable is 0.652 and R^2 of repurchase intention is 0.391, almost substantial and moderate respectively (Chin, 1998).

A clear interpretation of these results is that this model would serve very well to predict sense of belonging through perceived quality and perceived value, for example, and although this evidence was not considered within the objectives for this thesis, we believe that it is extremely relevant in the main line of our conclusions. The same happens for the Spanish case with R^2 values of 0.746 for the sense of belonging variable and 0.462 for repurchase intention; for the US case with R^2 values of 0.751 for the sense of belonging variable and 0.499 for repurchase intention, and for the Colombian case with R^2 values of 0.563 for the sense of belonging variable, and 0.312 for repurchase intention.

Therefore, in accordance with these results we can affirm that our model allows us to predict sense of belonging substantially. This model could also moderately predict repurchase intention through perceived quality and perceived value, as we described above, the student satisfaction variable was withdrawn from the model due to PLS-SEM requirements.

Thirdly, we also find it interesting to describe the obtained results for the non-rejection of the hypotheses of this research. According to the empirical analysis, we obtained results that allowed us not to reject the main idea of the present research: sense of belonging influences positively on repurchase intention and it had similar results for the four proposed scenarios: global case, Spanish case, US case, and Colombian case for each one of the institutions, respectively.

With reference to the above we carried out a survey in three HE institutions that have collaborated with us for this study. The total number of received questionnaires was 359, which were enough to perform the calculations with PLS-SEM according to Wong (2013). This methodology is especially recommendable for exploratory research, with a reflective measurement model specification and small samples sizes as were used in this study.

This study can be considered as an advance towards the possible development and the direct relationship between two variables: sense of belonging and repurchase intention, being the latter significantly important in marketing. It would mean that sense of belonging would have a capability as a predictor for repurchase intention, and therefore as a marketing variable that can be used, measured, and interpreted.

In addition, the obtained results allow us to conclude that in three medium-sized HE institutions sense of belonging would be a good predictor for repurchase intention. We believe that this issue is important for the management of HE institutions, such as it has been presented in this thesis. Therefore, we continue considering that the main driver of this research was to study the possible impact that sense of belonging could have on a loyalty behavior as important as the repurchase intention.

Likewise, the calculations with mediating and moderating variables have been included for this valuation and through them, we were also hable to test the link between sense of belonging and repurchase intention. Eleven hypotheses were formulated according to the mediating variables selected: professional improvements, proximity, online methodology, face-to-face methodology, novel contents, different language, financial aid, and personal conditions. The PLS-SEM calculations braced the main objective for this thesis, affirming that the positive relationship between both variables is significant in all cases studied.

In addition, the moderating effect of the modeling allowed us to test the influence of these moderating variables on the influence of sense of belonging on repurchase intention. Six categorical moderating variables were added to this study, resulting in nineteen subgroups which were carried out with the PLS-SEM calculations. The obtained results for all the cases allowed us to affirm that sense of belonging and repurchase intention are two positively and significantly linked constructs. These calculations made under conditions such as sex, country of origin, year of birth, modality of study, size and type of company working in, and the position currently held in the company, confirmed this positive influence and advanced the hypothesis that, indeed, the sense of belonging can be considered as a marketing variable that can be used as a future predictor of the repurchase behaviors. In all cases except for the subgroup case of the national companies with more than 200 employees, the obtained R^2 values were higher than 0.320, that, in short, implies such relationship can be considered as moderate according to Chin (1998).

As the last point of this thesis, we will dedicate the following few lines to express some ideas related to the results obtained and the future that we believe HE will have to face in the post-COVID-19 era. We have configured a model that once more seeks to understand the relations between variables related to customers (students) behaviors. We think that these results can also guide HE institutions to face the challenges surfacing at this time. Our work, as research, is focused on marketing knowledge, seeking a new significance for the pride of belonging that a customer has towards a firm, or a brand, or a service, pride which can influence the repurchase behavior. Moreover, any research undertaken in a context, undoubtedly, will provide information, data, results, and new ideas that from a managerial standpoint will serve to enhance executives' performance.

The emergence of the COVID-19 pandemic has meant that most of the world's HE institutions have had to modify procedures, processes, and structures to continue their activities. Along these lines, the three universities that have collaborated with us in this study have had to alter some of their proposals, even though they are HE institutions highly focused on online methodology. As a result of this situation, studies and papers are emerging with reference to this situation, and organizations such as UNESCO have already noted the impact that this pandemic has had on Education: "The closures implemented as a measure to contain the Covid-19 pandemic, have led to an accelerated deployment of distance education solutions to ensure pedagogical continuity. The obstacles are multiple, ranging from low connectivity and lack online content aligned with national curricula to teachers unprepared for this 'new normal'" (UNESCO, 2020).

Nevertheless, this challenge is also seen as an opportunity: what is an obvious problem, is also an opportunity to advance to a new HE scenario. The COVID-19 outbreak has further implications. For example, it challenged quality assurance implementation in open learning in HE to the next level of complexity, as has happened in Asian universities. To respond to the COVID-19 crisis, HE institutions need to take necessary actions to ensure their learning services remain well implemented following quality guidelines. Zuhairi *et al.* (2020) pointed out that strategic plans and policy objectives have to be redrawn to accommodate such disruptions: an action plan requires to carefully address the changing needs of students and stakeholders.

HE institutions have to rethink their post-pandemic pedagogy (Murphy, 2020). The COVID-19 pandemic has challenged the HE system across the world to change to online teaching and learning mode almost overnight, enforcing many reluctant institutions and educators to change their traditional pedagogical approach to an online teaching and learning environment (Dhawan, 2020). A further study regarding the COVID-19 pandemic indicates that universities worldwide are moving faster towards online learning, and there seems to be stronger needs for the use and integration of technology-enhanced learning into the learning systems along with the other needs for resources, staff readiness and student accessibility to technology (Ali, 2020).

The post-COVID-19 times will require HE institutions to transform themselves, their technology-based teaching and learning with courses that may be offered in fully online, hybrid or argument immersive residential modes, for the benefit of learners (Govindarajan & Srivastava, 2020). The world is moving online mode rapidly, and is calling for HE in digital age to move online, too, and the post-COVID-19 experience may expedite this online digital transformation of HE even faster (Zuhairi *et al*., 2020).

This scenario reaffirms, we think, the importance and validity of our study, considering that the samples taken originate from three HE institutions where online learning is at the center of their value proposals. But beyond this issue, we posit some considerations about the model used and the significance of the results for the new age, that the post-COVID-19 era will provide us in the HE context.

Certainly, we cannot refer to the significance of student satisfaction, since this variable was deleted from the model, and no results have been obtained from it. However, the other four variables and their results can provide some signals that we want to point out below.

Based on the seven hypotheses proposed, we observe that perceived quality is not a conclusive variable with regard to the loyalty variables: sense of belonging and repurchase intention. In summary, if a variable such as quality is not conclusive for loyalty, but in terms of quality assurance, the irruption of COVID-19 poses specific challenges. As new policies, systems and procedures need to be adapted to meet the COVID-19 teaching and learning environment (Zuhairi *et al*., 2020), quality is a necessary but not sufficient key to achieve objectives in the HE context; *"*the COVID19 pandemic has compelled Open and Distance Learning system to be able to ensure sustainability though continuous adaptations and innovation*"* (World Bank, 2020).

In accordance with the theoretical framework and the results obtained, affirming that technology and innovation will be the main drivers of perceived quality is quite close to the future HE will have to face. Table 3.2 included in our work shows the significance that we believe independent variables have in the context of this work, where quality is very closely related to the performance of the systems, processes, and also the procedures of the institution and those who deal with them.

Following this line, we believe that this performance (quality) will be more related to innovation and technology, which will allow students to access to easier learning every time. Furthermore, the perceived quality valuation will be more focused on these drivers (technology and innovation) than on the more human aspects, as the performance of teaching-staff, non-teaching-staff, or the facilities. Therefore, it means that a lot of resources will have to be dedicated to developing tools and applications in order to enhance the perceived quality, forgetting about physical aspects and concentrating more on reliability and truth.

Moreover, we believe that perceived value will be the most important variable linked to loyalty according to the results and their high levels of relevance and significance obtained through the PLS-SEM calculations of this study, mainly for sense of belonging. For all cases planned, perceived value influences positively and significantly on sense of belonging, which, in turn, influences positively and significantly on repurchase intention. This perspective allows us to propose that perceived value is the generator of the loyal behaviors of alumni. Without the value and without the possibility that a student feels that the trade-off of value with the institution was a good investment for him/her, it will be difficult for the student to feel a sense of belonging, and therefore impossible to develop a repurchase intention posteriorly.

In view of the results of the study, we believe that HE institutions will have to focus on the creation of value for their students in the future. Similarly, when we talk about creating value for shareholders through publicly traded stock, or for customers through products and services, HE institutions must create value for their students through their programs, performance and results linked to their life. The value will be what a student earns for himself or herself and allows him/her to achieve his/her goals according to the effort made throughout his/her life. Therefore, knowing the expectations of the students will be a priority to ensure the value that an institution can provide for its students.

We are probably living one of the most special moments of this generation. The COVID-19 pandemic will have been the most transcendental and important event in our lives. Surely, for the next few years both education and HE will be forced to make preventive decisions to apply new modes for learning and teaching. However, it must not be an obstacle to continue with the mission of education, which impacts on and improves people's lives considering that any circumstance will be useful for this change or that evolution: for education, science, politics or economy.

And so we would like to end with a quote related to a fact that probably changed many ideas and introduced a new perspective for science from then until now. Certainly, any crisis is a difficult time for anyone, but it is a great opportunity for everyone and whatever the circumstance: Knowledge and Learning will never stop.

"*In 1665, Cambridge University closed due to the black plague epidemic that struck England. Isaac Newton had to return to Woolsthorpe Manor, his home. One day, sitting in the garden, he saw an apple fall and this inspired him to formulate his theory of universal gravitation (…). The moral of this story is that, inasmuch as the doors of HE institutions have to be closed, academic activities continue where there are souls committed to science and training, sometimes with surprising results. Incidentally, the University of Cambridge has now closed its doors in 2020, for the second time in its history."* (UNESCO, 2020).

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RESUMEN EN ESPAÑOL

RESUMEN

Esta investigación busca a través de una prueba empírica confirmar la relación existente entre el sentido de pertenencia a una empresa o institución y la probabilidad de recompra. Para ello, consideramos el contexto de la Educación Superior, buscando, además, evaluar qué otras variables influyen en la intención de recompra, es decir, el regreso a la misma universidad o escuela de negocios donde había estudiado anteriormente un exalumno. Nuestro estudio se ha realizado con más de 350 encuestados, todos ellos obtenidas de los egresados de tres pequeñas y medianas instituciones educativas de España, Estados Unidos y Colombia. El cuestionario incluyó preguntas sobre la calidad percibida, el valor percibido y la satisfacción del estudiante, además de preguntas referidas al sentido de pertenencia y a la intención de recompra. Además, se ha incluido en el estudio una secuencia de variables moderadoras y mediadoras como variables demográficas y sociales. Para modelar estas relaciones, aplicamos el método de los mínimos cuadrados parciales (PLS) utilizando el software SmartPLS. El modelo aplicado ha considerado indicadores reflexivos para cada variable. Los resultados obtenidos permiten afirmar que el orgullo o sentido de pertenencia que sienten los egresados podría ser un buen predictor de la intención de recompra (retorno a Institución de Educación Superior) y, por tanto, este resultado permitiría proponer esta variable como una herramienta de predicción de la recompra en particular y de análisis de la lealtad del cliente dentro del Marketing de Servicios en general. Uno de los objetivos de esta investigación para directivos y gerentes de las instituciones de Educación Superior es que puedan ser capaces de centrarse en el desarrollo de estrategias que aumenten el sentido de pertenencia de los egresados

INTRODUCCIÓN

A través de esta investigación hemos buscado la posible relación que pudiera haber entre la intención de recompra y el sentido u orgullo que pertenencia que cualquier cliente vinculado pudiera sentir hacia una empresa. La primera de estas variables, la intención de compra, recompra o recurrencia, es uno de los aspectos comportamentales que desde el concepto de la lealtad se estudian frecuentemente. No ocurre lo mismo con el concepto de pertenencia, sentido de esta u orgullo de pertenencia, que hasta ahora no ha sido incorporado como una variable formal de análisis del Marketing.

Algunos indicadores o componentes de esta variable sí han estado presente en algunas investigaciones relacionadas con la lealtad, pero hasta este momento, no se ha planteado una investigación que conformando una variable con indicadores relacionados con comportamientos, filiaciones y actitudes integren un variable que sin embargo pueda medir un nivel cognitivo y hasta sentimental de un cliente: ¿qué nivel de pertenencia puede llegar a sentir un cliente hacia una empresa? ¿cuáles serían sus indicadores? ¿qué papel jugaran las nuevas tecnologías, las redes sociales o el entorno en el cual vivimos? Por lo tanto, ¿hay posibilidad de llegar a medir el sentido de pertenencia de los clientes y a través de ello predecir su comportamiento de compra futuro? Este trabajo, con toda modestia, tratará de aportar conocimiento a través de la investigación empírica que permita ir respondiendo a estas preguntas y a la vez se pueda ir creando la expectativa que el sentido de pertenencia se puede incorporar al Marketing como variable y objetivo de gestión.

Para dar forma a este objetivo, se ha planteado esta investigación en el contexto de la Educación Superior ya que está inmersa en un proceso de transformación muy importante, con el fin de ofrecer cada día una mejor formación y mayores oportunidades de aprendizaje. Desde principios de los años 90 la Educación Superior y, sobre todo, la formación enfocada a la formación de directivos y ejecutivos del mundo de la Empresa ha experimentado una profunda transformación motivado también por los cambios en el entorno y las necesidades demandadas. Cuestiones como la competencia global, el desarrollo tecnológico, las fusiones y adquisiciones, la importancia de la reducción de costes, o las alianzas estratégicas entre empresas (Conger & Benjamin, 1999; Conger & Xin, 2000) motivaron un impulso de la formación ejecutiva; y todo ello enfocado hacia un fortalecimiento de las competencias directivas que se podían conseguir a través de programas como los Master in Business

Administration (MBA) los cuales empezaron a ser muy reconocidos para la dirección de negocios (Baruch & Peiperl, 2000).

Posteriormente han surgido otras nuevas cuestiones como la globalización, la diversidad, las alianzas, el crecimiento del comercio digital y la digitalización y el gran reto de la sostenibilidad ambiental. A estas cuestiones hay que añadir los efectos que también causó la crisis económica y financiera que comenzó con la caída de Lehman Brothers en 2007, y todo lo que ha supuesto la pandemia del COVID-19. Por tanto, el mundo actual demanda una nueva generación de directivos y ejecutivos que puedan afrontar los retos del futuro con una nueva visión que pueda impactar positivamente en una triple cuenta de resultados (económica, social y ambiental). Este cambio de paradigma y el desarrollo continuo del entorno digital significa que los seres humanos (ejecutivos o no) tendremos que reciclarnos de manera continua, adquiriendo nuevos conocimientos y habilidades que nos permitan afrontar los problemas que la sociedad actual plantea. Es por ello, que consideramos que la Educación Superior en general, y la ejecutiva en particular, son hoy en día un mercado dinámico y existe esta demanda de formación.

También hemos tenido en cuenta para elegir a la Educación Superior como contexto para este trabajo que la Educación es una actividad que permite la aplicación Marketing de Servicios en toda su amplitud para su correcta gestión, siendo la Educación en sí es una necesidad tan básica como lo es la Salud, por ejemplo. Por tanto, el sector de la Educación Superior permite enfocarnos a cuestiones tan vinculadas al Marketing de Servicios que abordamos en esta investigación como la lealtad del cliente y sus consecuencias, y otras que derivarán de este enfoque como es el debate del estudiante como cliente o no, cuestión que también ha sido abordada en este trabajo.

Con relación a esta cuestión, Guibault (2016) mencionó que es admisible la consideración del estudiante como cliente en la medida que las instituciones de Educación Superior han adoptado también prácticas de marketing. En este sentido, nosotros vamos a considerar que los estudiantes deben ser considerados como clientes desde el punto de vista de la atracción hacia la Institución que ésta debe realizar. Por tanto, la mercantilización en el sector de la Educación Superior debe utilizarse como una herramienta de gestión, como una herramienta útil para maximizar los esfuerzos enfocados en la captación de los mejores estudiantes para cada institución y universidad, sin considerar posteriormente la relación entre alumno y docente que debe ser independiente de las prácticas comerciales que la institución pueda hacer, aunque sí debe estar sujeta a algunos criterios del ya mencionado Marketing de Servicios.

Esto quiere decir que, para lograr el éxito, las universidades y las instituciones de Educación Superior deben encontrar caminos para promover comportamientos de lealtad entre sus egresados entre los cuales deben estar el sentido de pertenencia, y más aún entre su comunidad de egresados. Esto significa que las instituciones deben diseñar planes de marketing que incluyan a sus egresados entre sus objetivos de marketing y para ello realizar acciones como las que a continuación se citan. En primer lugar, se trata de conocer sus opiniones sobre sus experiencias durante sus estancias. En segundo lugar, ofrecer nuevos programas de acuerdo con sus necesidades. Y finalmente, llevar a cabo planes enfocados para que el retorno de estos egresados a sus instituciones se produzca a través de posibles acciones dentro de las decisiones gerenciales que las instituciones pudieran llevar a cabo.

Esto quiere decir que, nuestro trabajo de investigación tiene en las comunidades de antiguos alumnos su objeto de estudio dentro del marketing. De esta manera, los resultados y las conclusiones que se obtengan podrían ser aplicadas en la gestión y la acción directiva de las instituciones de Educación Superior poniendo en práctica las acciones y estrategias derivadas de estos hallazgos a través de las decisiones directivas en estas instituciones.

Por lo tanto, la cuestión final que se aborda en esta tesis doctoral es cómo conseguir la recompra de las comunidades *alumni* de universidades y escuelas de negocio como resultado de las acciones que dentro de las áreas del Marketing y la Dirección de Empresa se puedan llevar a cabo para conseguirla, como un objetivo fundamental para la sostenibilidad económica de una organización.

La cuestión de la recompra en la literatura se ha vinculado a muy diferentes conceptos relacionados con los comportamientos del consumidor: la preferencia de marca, la reducción de costes esperada, la lealtad del cliente, su satisfacción, el valor percibido, la calidad y la intención de recompra (Hellier *et al.*, 2003). Y estas cuestiones han provisto un gran número de argumentos, teorías e ideas para el Marketing. Hellier *et al.* (2003) definieron la intención de la recompra como "el juicio del individuo sobre volver a comprar un servicio designado de la misma empresa, teniendo en cuenta su situación actual y circunstancias probables".

Y sobre esta cuestión, un gran número de investigaciones se han llevado a cabo durante años relacionando la intención de recompra con las intenciones en los comportamientos y en la lealtad de los clientes (Cronin Jr *et al*., 2000) hacia productos y servicios en sectores tales como el turismo, la sanidad o el ocio (Chen & Tsai, 2007; Hutchinson, *et al*., 2009; Ryu, et al., 2008; Tarn, 1999; Tian-Cole, *et al*., 2002; Wu, *et al*., 2018).

Estos problemas ya estudiados siguen estando presentes entre los intereses de la comunidad académica. Y ello es lo que nos ha motivado para plantear una nueva perspectiva basada en el sentido de pertenencia como una variable con capacidad de predicción de la recompra, en este caso en el contexto de la Educación Superior.

El concepto del sentido de pertenencia aparece en la literatura asociado a la Psicología, a la Sociología e incluso a la Política, pero sin referencias claras asociadas al Marketing o a la Dirección de Empresa. El hecho de que el sentido u orgullo de pertenencia no haya sido tratado hasta ahora desde el punto de vista del Marketing podría inducir a pensar en el escaso interés o significado que tiene. Sin embargo, pensamos que desde hace poco tiempo el sentido de pertenencia se manifiesta a través de indicadores muy vinculados al Marketing y otras áreas también muy relacionadas a él, tal y como se ha definido a lo largo de este trabajo. Para ello hemos tomado como modelo el de las organizaciones profesionales (Gruen *et al*., 2000), por ejemplo. Tambien para señalar la importancia del sentido de pertencia se han tomado como referencia la importancia que hay entre cliente y marca, el cliente y la empresa, el uso del producto y las relaciones que pueda haber con otros clientes (McAlexander *et al*., 2002).

Por lo tanto, en este trabajo abordamos el desafío de utilizar el sentido de pertenencia como un predictor del comportamiento de recompra. Esto significa que estimamos que los clientes desarrollarán actitudes y comportamientos ligados a la lealtad, que en este caso vincularemos al sentido u orgullo de pertenencia, y cuyo resultado final es la intención de recomprar en el tiempo, en un contexto especial como es el de la Enseñanza Superior.

MARCO TEÓRICO Y VARIABLES

Este marco teórico parte de la necesidad de conectar las dos realidades a las que ya nos hemos referido en la introducción de este trabajo. Por un lado, que se plantee el tema de la recompra y las diferentes cuestiones que se relacionan con el contexto elegido: desde la revisión de la Educación Superior como mercado y su desarrollo, y la revisión de las variables que llevan la recompra. Y, por otro lado, la prospección de la literatura sobre el tema del sentido u orgullo de pertenencia. Por lo tanto, serán la recompra y el sentido de pertenencia los dos argumentos principales que están presentes en la mayor parte del marco teórico de esta tesis ya que son las dos principales variables de esta investigación y que deberían servir para responder a la pregunta de investigación: ¿cómo influye el orgullo de pertenencia en la intención de recompra en el contexto de la educación superior?

El primer paso dado en nuestro marco teórico ha sido la revisión de lo que significa el comportamiento de la recompra en el contexto de la Educación Superior. A este respecto las universidades se encuentran en un mercado global competitivo (Melewar & Akel, 2005) lo que los lleva a utilizar teorías del marketing que permiten a estas instituciones un perfil competitivo, ganando posiciones en los mercados internacionales (Waeraas & Soldbakk, 2009). Numerosos tópicos asociados al marketing y a la gestión vienen estando muy presentes en la dirección de las instituciones de Educación Superior como son: el atractivo del mercado (Baimbridge, 1997), la ventaja competitiva (Mazzoral y Soutar, 1999); el mapeo de mercados (Gumport, 1997); las necesidades de los estudiantes (Lin, 1997); el capitalismo sobre activos tangibles (Coates, 1998); publicidad (Berger y Wallingford, 1997; Jugenheimer, 1995); la gestión de la imagen (Koku, 1997; Symes, 1998), la tangibilidad (Yost Jr. y Tucker, 1995); según los productos (Chan e Imrie, 1995; Hesketh y Knight, 1999), etc.

Por tanto, muchos temas de marketing se han abordado a lo largo del tiempo relacionándolos con la gestión de las Instituciones de Educación Superior. Sin embargo, en este contexto los estudios que relacionan la lealtad y la intención de recompra no se han tratado hasta más recientemente (Dlâcic *et al*., 2014; Hsu *et al*., 2015).

En un siguiente paso, y con el objetivo de contextualizar esta investigación hemos revisado la evolución del sector de la Educación Superior vista como una actividad, la cual en los últimos 20 años ha sufrido una gran transformación. Los cambios tecnológicos han impulsado la globalización de la Educación Superior, y también participando de los efectos del Tratado General de Comercio y Servicio de 1995. Estas circunstancias aceleraron la transformación de la Educación Superior en un *commodity,* cuyo efecto es atraer estudiantes internacionales e inversores privados a escala global (Maringe & Gibbs, 2009) hacia las instituciones. Por tanto, este nuevo escenario en el que está la Educación Superior termina estando muy asociado al desarrollo de las nuevas tecnologías y a la economía del conocimiento (Nowotny *et al*., 2013).

Adoptado en 1995 por la Organización Mundial del Comercio (OMC), el Acuerdo General sobre el Comercio de Servicios (GATS) identificó claramente a la Educación como un servicio que debe ser liberalizado y regulado por las reglas comerciales. Si bien los partidarios de esta decision vieron el GATS como una oportunidad, otros lo vieron más como una amenaza. Para éstos últimos, la noción de la Educación Superior como un bien comercializable es un desafío a los valores tradicionales de la Educación Superior, especialmente como consecuencia de la idea de ésta como un bien público y una responsabilidad pública. En general, Kauppinen (2014) afirmó la necesidad de ser cuidadosos en las conceptualizaciones. En el campo de la Educación Superior, la situación económica del conocimiento no se puede abordar a través de la dicotomía simplista de bien público versus bien privado.

En resumen, la expresión "conocimiento como *commodity*" puede significar varias cosas y no puede asimilarse a una concepción global. Este tema claramente necesita más investigación tanto a nivel teórico como empírico. Igualmente, asumimos que la perspectiva de la mercantilización de los servicios de Educación Superior es un debate abierto por autores académicos e investigadores, aunque este panorama se mantiene principalmente en trabajos sobre política y gestión de la educación y, por tanto, no en términos de marketing, quedando fuera del objetivo para esta investigación.

Al igual que existe un debate que enfrenta a quienes consideran a la Educación Superior como un sector económico más con quienes los consideran con un bien público, existe el debate entre quienes consideran que el estudiante puede ser considerado como un cliente, y quienes no consideran que esto es posible, y este debate también ha quedado reflejado en la literatura.

Desde nuestro punto de vista, es necesario considerar al estudiante también como cliente y así también queda reflejado en la literatura donde este papel de consumidor va en ascenso, especialmente a medida que los sistemas de la Educación Superior se vuelven más diversos, complejos, inclusivos y expansivos institucionalmente. En este entorno, los estudiantes y sus patrocinadores (padres, gobiernos, etc.) exigen formas institucionales más receptivas y flexibles, lo que, según algunos sociólogos, refleja el advenimiento de una sociedad cada vez más reflexiva (Wellen, 2005), y por otro lado, conseguir que la Educación Superior sea "correcta" exige que no asumamos que el "cliente siempre tiene la razón". Cada vez más estudiantes se ven a sí mismos como compradores activos de servicios académicos y piden estándares de garantía de calidad más estrictos y credenciales "valoradas", tal y como reseña un informe de Government of Ontario, publicado en 2004 (Ontario Postsecondary Review Secretary & Rae, 2004).

Dentro de esta nueva visión de la Educación Superior y la nueva tendencia de aplicar conceptos y estrategias de marketing en la gestión de la actividad fundamental, centrada en el alumno, se han realizado trabajos que también han propuesto modelos que se adaptan a las particularidades que tiene la Educación Superior (Ivy, 2008). Ivy (2008) propuso un marketing para la educación basado en el modelo de las 7P, con tres variables más que el modelo de las 4 P, que se utiliza para los productos de consumo desde la década de 1960, el cual no podría ser suficiente para abordar el marketing de los programas MBA, por ejemplo. Estas 7P serían: *premiums, programme, prospectus, promotion, price, people,* and *prominence.*

Por lo tanto, la posibilidad de que el estudiante pueda ser considerado como un cliente nos lleva a relacionarlo con las variables que conforman nuestro modelo de investigación: la percepción de la calidad, el valor percibido, la satisfacción del cliente, y las dos variables con más significado para este trabajo, y ya mencionadas: el sentido de pertenencia y la intención de recompra.

El concepto de calidad ha estado relacionado casi por completo con la fabricación o con el diseño de los productos, asumiéndose que calidad es la ausencia de defectos y el cumplimiento de las especificaciones previas para su realización. Sin embargo, este punto de vista asociado al mundo operativo y de la producción casi en su totalidad, también ha ido relacionándose con el mundo comercial y el concepto de calidad se ha ido vinculando sobre todo a las expectativas, las percepciones y las satisfacciones que el cliente llegar a tener tanto con un producto como con un servicio. Por esta razón la calidad ha pasado a tener un importancia muy grande para el mundo del marketing de servicios.

La calidad percibida que forma parte de este trabajo es una variable basada también en las numerosas investigaciones que se han realizado a lo largo del tiempo y que tienen su origen en el modelo SERVQUAL (Parasuraman *et al.*, 1988) el cual fue el punto de partida para la medición de la calidad en empresas de servicios.

Según Sultan y Wong (2012), la investigación de la calidad del servicio se ha extendido al dominio de la Educacion Superior y actualmente la literatura describe el desempeño funcional de los servicios educativos siguiendo las medidas SERVQUAL o SERVPERF, escala que solo mide la percepción de la calidad (Cronin Jr. & Taylor, 1992).

Nuestro trabajo de investigación incluye una revisión de parte de esta literatura, citando de los diferentes trabajos los aspectos de la calidad que se miden, el número de ítems o indicadores que forman parte de la variable y el país en el cual se ha realizado dicho trabajo. Tal y como se detallará más adelante, para esta investigación se han utilizado 20 indicadores relacionados con el desempeño y la percepción de los recursos que las instituciones que participaron esta encuesta tienen.

La segunda variable que se ha considerado vinculada a las comunidades de los antiguos alumnos de las instituciones de Educación Superior es la de la satisfacción del estudiante. De hecho, cómo medir la satisfacción de los estudiantes es un factor crítico de preocupación para las instituciones de Educación Superior. Un estudiante satisfecho es más probable que recomiende programas de estudio a otros estudiantes y contribuya con fondos para apoyar a sus instituciones (Dlâcic *et al*., 2014; Yildiz, 2014).

Nuestro trabajo ha señalado la significativa ausencia de trabajos relacionados con la satisfacción del estudiantes, aunque se menciona la validez también de determinados índices o escalas como el CSI (American Customer Satisfaction Index), o el SCSB (Swedish Customer Satisfaction Barometer) para medir dicha satisfacción en las instituciones de Educación Superior. La realidad es que se han realizado trabajos limitados para comprender la satisfacción de los estudiantes en el contexto educativo (Hsu *et al.*, 2015).

La satisfacción del cliente y la calidad del servicio pueden parecer muy cercanas y causar confusión entre ambos y, de hecho, la literatura muestra diferentes puntos de vista acerca de esta cuestión. Dabholkar *et al*. (2000) y Cronin *et al*. (2000) afirmaron que la calidad percibida es un antecedente de la satisfacción, y por el contrario otros autores consideraron la satisfacción del cliente como un antecedente de la calidad del servicio.

Al igual que para la variable calidad percibida, se ha incluido en nuestro trabajo una revisión de parte de la literatura relacionada con la satisfacción del estudiante en el ámbito de la Educación Superior.

La tercera variable considerada en el modelo como independiente es el valor percibido, la cual está vinculada con la evaluación general del cliente de un servicio o producto. El concepto de valor percibido se basa en la Teoría de la Equidad (Can & Erdil, 2018; Christodoulides & De Chernatorny, 2009; Keller, 1993; Lassar *et al*., 1995). Por otro lado, el factor del valor percibido es la evaluación general por parte del consumidor del valor de un producto, que se basa en sus percepciones (Zeithaml, 1988), aunque para nosotros y con el fin de acotar mucho más este concepto hemos optado por un concepto que interprete la diferencia entre los beneficios recibidos y sus costes, sean monetarios o no (financieros y psicológicos) (Dlâcic *et al*., 2014).

Por otro lado, las perspectivas del valor percibido de los clientes pueden ser analizada a través del valor funcional, emocional social y la lealtad a la marca (Hoolbrok & Corfman, 1985; Yeh *et al*., 2016). De acuerdo con la literatura, el valor percibido ha sido medido como una variable unidimensional por parte de algunos autores (por ejemplo, el dinero), para una evaluación general del valor (Sweeney *et al*., 1997), o como una variable multidimensional (Sweeney y Soutar, 2001). Esto ha hecho que, durante varios años, la definición más común de valor en marketing haya sido la relación o compensación entre calidad y precio (Anderson y Fornell, 1991; Cravens *et al*., 1988, DeSouza, 1989, Dodds, 1991; Dodds y Monroe, 1985; Grewal *et al*., 1998; Lichtenstein *et al*. 1990; Monroe, 1990).

A nuestro entender, y lo que serviría para dar una mayor claridad al concepto sería considerar el valor como el *"trade-off"* o intercambio entre lo dado y lo obtenido (Dlâcic *et al*., 2014).

También se ha incluido en este trabajo una revisión de parte de los trabajos realizados con el concepto de valor en el contexto de la Educación Superior (ver tabla 3.4) incluyendo tanto trabajos que han considerado el valor para ser medido de manera multidimensional como de forma unidimensional, así como el número de indicadores que se han usado en cada una de las ocasiones.

Habiéndose realizado la exposición sobre estas tres variables independientes que servirán para comparar sus capacidades de predicción de la intención de la recompra, con la capacidad de predicción del sentido de pertenencia, mencionaremos a continuación las principales ideas en las que nos hemos apoyado para desarrollar todo este trabajo y que pretende ser el principal aporte de este trabajo: el vínculo que pudiera haber entre el sentido de pertenencia y la intención de recompra como variable predictora y resultado respectivamente.

El sentido u orgullo de pertenencia como se ha definido en el presente trabajo, y de acuerdo a lo que más adelante se explica en el modelo, se podría considerar como una variable mediadora entre las variables que ya han sido definidas (calidad percibida, satisfacción del estudiante y valor percibido) y la intención de recompra, puesto que también se ha utilizado el modelo propuesto para estudiar las posibles relaciones que hay entre estas y el sentido de pertenencia como lógicamente se puede pensar que ocurra.

Para explicar el significado del orgullo de pertenencia en el contexto del marketing nos hemos apoyado, como se ha mencionado anteriormente, en ciertas realidades ya conocidas como son las membresías de clientes en ciertas marcas y en las estrategias de fidelización que se pueden llevar a cabo, pero pensamos que este concepto puede ser ampliado. Para empezar a aplicar este concepto, debemos partir de alguna definición previa como es la de "comunidad", bajo la cual se identifican los diferentes miembros de una vecindad, una profesión u ocupación, un club de aficionados o los devotos o fans de una marca (McAlexander *et al.*, 2002). Por lo tanto, y asumiendo que el sentido de pertenencia puede vincularse a una comunidad vinculada a un entorno comercial, cabe preguntarse por los efectos que este sentido de pertenencia puede llegar a tener en los comportamientos de los clientes y en la influencia que puede tener en los comportamientos relacionados con la recompra.

Anant (1966) señaló que la pertenencia, desde el punto de vista psicológioco, es un sentimiento o percepción afectiva, o evaluativa interna. También este sentido de pertenencia podría describirse mejor, como la experiencia de una persona al ser valorada o considerada importante para un referente externo y que supone experimentar un ajuste entre el "*yo*" y ese referente. Además, sociológicamente, la pertenencia connota pertenencia a grupos o sistemas, es decir, la pertenencia puede ser observada y descrita a través de referentes conductuales como la pertenencia a grupos y redes sociales.

Esto es lo que ha dado lugar a la definición de los seis indicadores que vamos a considerar para medir la el orgullo o sentido de pertenencia y que claramente estarán muy vinculados a las nuevas tecnologías y al desarrollo de las redes sociales. Estos componentes del sentido de pertenencia son: el "boca a boca" o WOM (*Word of Mouth*), el seguimiento de las redes sociales, la participación en eventos sociales, la participación o membresia a las asociaciones de antiguos alumnos, la realización de donaciones para el desarrollo institucional y la recomendación para puestos laborales de compañeros de la mismo institución, tal y como puede verse en la tesis.

Hsu *et al. (*2015) concluyeron en su artículo que los exalumnos satisfechos pueden ayudar financieramente a sus instituciones educativas, proporcionar puestos de trabajo a los graduados posteriores y usar el boca a oreja, lo que nos sirve como punto de arranque para suponer que estos indicadores podrán conformar la variable del sentido de pertenencia con la intención de que tenga todo el sentido dentro del marketing.

Nuestro trabajo de investigación ha incluido una revisión de gran parte de los artículos que han tratado estos conceptos en el entorno de la Educación Superior hasta poder concluir que son parte del sentido de pertenencia.

Con la intención de recompra concluimos el marco teórico y la revisión de las variables que integran el modelo que dan soporte a la investigación. La intención de recompra es la variable dependiente de este estudio. En marketing la recompra supone el primer paso para mantener los ingresos y, así, lograr uno de los principales objetivos que requiere cualquier empresa.

Dlâcic *et al*. (2014) señalaron que la intención de recompra del estudiante contiene dimensiones actitudinales y conductuales y se refiere al tiempo tanto durante como después del período de estudio del estudiante en instituciones (Henning-Thurau et al., 2001). Y ello representa una ventaja competitiva para las instituciones (Rojas-Méndez et al., 2009) porque los costes de atraer estudiantes serán menores que si estos estudiantes son nuevas filiaciones.

En el marco teórico se han incluido las dos visiones que sobre la recompra que la literatura académica ha desarrollado: por un lado, la visión de la recompra desde el punto de vista de la lealtad (Caruana, 2002) y, por otro lado, desde el punto de vista del "*engagement"* o compromiso (Kumar *et al.,* 2010). Para operacionalizar esta variable en esta investigación se optó por la perspectiva de la lealtad.

Esta perspectiva significa que los clientes primero se vuelven leales en el sentido cognitivo, luego en un sentido afectivo y aún más tarde en una forma conativa, de acción o conductual (Olsen, 2002). Este marco conceptual, basado en la teoría expectativa-valor (Eagly & Chaiken, 1993), permite incluir varios factores que pueden mediar o moderar la relación actitud-comportamiento. Dick & Basu (1994) afirmaron que el aspecto cognitivo, los antecedentes afectivos y conativos de la actitud relativa, contribuyen a la lealtad, junto con las consecuencias motivacionales, perceptivas y conductuales.

Dlâcic *et al*. (2014) manejaron el concepto de lealtad a través de la intención de recompra, abarcando tanto la dimensión conductual como actitudinal, concluyendo, por ejemplo, que será posible una actitud y comportamiento favorable de los estudiantes hacia el profesorado, lo que implica que los estudiantes recomendarán el profesorado a los demás y que estarán tratando de volver a la misma facultad para continuar su educación.

Asimismo, Kenny y Khanfar (2009) propusieron estudiar la dimensión de intención de recompra dentro de la Educación Superior a través de la relación entre la satisfacción del cliente y la calidad del servicio. Sin embargo, si bien las relaciones entre lealtad, calidad del servicio y satisfacción son bien conocidas y se han estudiado en diferentes sectores, existe un vacío en la literatura que examina esta relación dentro de Educación Superior (Kenney y Khanfar, 2009) lo que justifica en parte el gap que este trabajo quiere cubrir.

La atracción de matrículas de estudiantes es un problema continuo para las instituciones de educación superior. Si bien los investigadores han estudiado este tema desde varias perspectivas, pocos lo han visto como un desafío de marketing (Kenney y Khanfar, 2009).

MODELO DE INVESTIGACIÓN E HIPÓTESIS

Esta investigación exploratoria busca dar respuesta a la siguiente pregunta de investigación: **"¿El sentido de pertenencia afecta al comportamiento de la recompra y a la intención de un egresado para regresar a la misma institución para continuar sus estudios?"** Para dar respuesta a esta cuestión y rechazar o no la hipótesis que hemos formulado, construimos un modelo que vincula estas variables entre ellas y que, además, se puedan evaluar otras variables como la calidad, la satisfacción y el valor en relación al sentido de pertenencia e intención de recompra.

Proponemos un modelo que representa el objeto de la investigación y que responde a la pregunta de investigación que hemos formulado. Las principales relaciones que se discuten en este estudio están vinculadas con la calidad del servicio, la satisfacción, el valor percibido y el orgullo o sentido de pertenencia.

Esta investigación busca encontrar la relación entre el valor percibido, la satisfacción del cliente y la calidad del servicio con la intención de recompra y, por otro lado, entre el sentido de pertenencia y la recompra, y las relaciones positivas entre ellos. Esperamos comprobar que este sentido u orgullo de pertenencia influye positivamente en la recompra.

Dado que las variables de este modelo no se pueden observar directamente, es necesario crearlas como variables latentes. Para la creación de estas variables latentes, se genera una batería de ítems o indicadores a través de los cuales se representarán las diferentes variables latentes (Bollen, 2014).

Por lo tanto, el modelo que proponemos para esta investigación debe ser la base a partir de la cual se obtiene la información con la que podamos analizar los resultados de acuerdo con las opiniones de los egresados y tomar decisiones para lograr dos objetivos: 1. la mejora de las variables relacionadas con las percepciones de los estudiantes (calidad, valor y satisfacción), y 2. la mejora de los objetivos de la Institución (orgullo o sentido de pertenencia y recompra).

En la medida en que seamos capaces de implementar un modelo válido para estos objetivos, habremos logrado el último objetivo de esta investigación: diseñar estrategias a través del orgullo de pertenencia de los estudiantes para que los egresados regresen a sus Instituciones de Educación Superior para seguir estudiando en el futuro.

Para desarrollar nuestro modelo, hemos partido de modelos ya estudiados tales como el de Dlâcic´s *et al*. (2014) y el de Duque (2014). Hsu *et al.* (2015) también desarrollaron un modelo en el cual se relaciona la calidad percibida con el valor percibido y ésta con la satisfacción y la lealtad, utilizando siete indicadores.

A partir del modelo de Caruana (2002) en el cual se propone el estudio de la relación entre la calidad y la lealtad, se entiende que la satisfacción es una variable mediadora entre ambas. Este modelo de Caruana (2002) nos ha servido para determinar que la lealtad, puede dividirse en dos niveles: por una parte, el asociado al comportamiento y, por otro lado, el asociado a la actitud que desarrollamos a partir del nivel cognitivo. La recompra sería una consecuencia del nivel de comportamiento, y el sentido de pertenencia la consecuencia del nivel actitudinal. Ello nos permite que planteemos un modelo intermedio en cual el concepto de lealtad queda disociado en el aspecto del comportamiento (recompra) y en el aspecto actitudinal (sentido u orgullo de pertenencia).

El modelo que finalmente se ha utilizado como punto de partida de esta investigación es el que se muestra en la figura correspondiente incluida en el desarrollo del trabajo y a la que posteriormente se le ha incorporado todas las referencias de las hipótesis planteadas (ver figura 3.11) que se recogen a continuación:

H1: El sentido de pertenencia influye positivamente en la intención de recompra.

H2a: La calidad percibida influye positivamente en la intención de recompra.

H2b: La calidad percibida influye positivamente en el sentido de pertenencia.

H3a: La satisfacción del cliente influye positivamente en la intención de recompra.

H3b: La satisfacción del cliente influye positivamente en el orgullo de pertenencia.

H4a: El valor percibido influye positivamente en la intención de recompra.

H4b: El valor percibido influye positivamente en el sentido de pertenencia.

Estas son las hipótesis principales del modelo principal que relacionan las variables independientes (calidad, valor, satisfacción y sentido de pertenencia) con la variable dependiente de esta investigación (intención de recompra), teniendo el sentido de pertenencia un papel de variable mediadora tal y como se ha planteado el modelo.

Además, se formulan las siguientes hipótesis de acuerdo con las variables de control: relacionadas con los aspectos sociales, demográficos y laborales de la población que ha participado en esta encuesta:

H5a: La posibilidad de una mejora profesional a través de un nuevo curso en una institución de educación superior de un exalumno es un factor de mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5b: El factor de proximidad a una institución de Educación Superior de un exalumno es un factor de mediación positivo entre el sentido de pertenencia y la intención de recompra.

H5c: La metodología online para realizar un programa en una institución de Educación Superior de un exalumno es un factor de mediación positiva entre el sentido de pertenencia e intención de recompra.

H5d: La metodología presencial para realizar un programa en una institución de Educación Superior de un exalumno es un factor de mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5e: El acceso a contenidos novedosos a través de un programa en una institución de Educación Superior para un exalumno es un factor de mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5f: La posibilidad de realizar un programa en un idioma diferente al primero en una institución de Educación Superior para un exalumno es un factor de mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5g: La posibilidad de acceder a ayudas económicas para regresar a una institución de Educación Superior para un exalumno es un factor de mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5h: Las condiciones personales de un exalumno son una mediación positiva entre el sentido de pertenencia y la intención de recompra.

H5i: La perspectiva de una mejora profesional es una variable mediadora que tiene una mayor influencia indirecta en la relación entre el sentido de pertenencia y la intención de recompra.

H5j: El contenido novedoso es una variable mediadora que tiene una mayor influencia indirecta en la relación entre el sentido de pertenencia y la intención de recompra.

H5k: El acceso a la ayuda económica es una variable mediadora que tiene una mayor influencia indirecta en la relación entre el sentido de pertenencia y la intención de recompra.

H6a: El sentido de pertenencia de las mujeres influye más en la intención de recompra que el del hombre.

H6b: Los exalumnos de Norteamérica y Centroamérica tienen un sentido de pertenencia que influye más en la intención de recompra que los exalumnos de las otras dos áreas de nacimiento.

H6c: El sentido de pertenencia de los exalumnos más jóvenes es el que menos influye en la intención de recompra en comparación con los otros dos grupos de edad.

H6d: El sentido de pertenencia de los exalumnos que siguieron un curso por metodología *blended* es el que más influye en la intención de recompra en comparación con los exalumnos de las otras dos metodologías”.

H6e: El sentido de pertenencia de los exalumnos que se desempeñan en empresas y organizaciones públicas influye más en la intención de recompra que el sentido de pertenencia de los exalumnos que trabajan en, al menos, otros tres tipos de empresas”

H6f: El sentido de pertenencia de los exalumnos que están trabajando en pequeñas y microempresas y emprendimientos es más influyente para la intención de recompra que el sentido de pertenencia de los exalumnos que están trabajando en, al menos, otros tres tipos de empresas”.

H6g: El sentido de pertenencia de los exalumnos que ocupan altos niveles de responsabilidad en sus empresas y organizaciones donde están trabajando influye más en la intención de recompra que el sentido de pertenencia de los exalumnos que están desempeñando niveles inferiores en sus empresas”.

METODOLOGÍA Y DISEÑO DE LA INVESTIGACIÓN

Como se ha ido comentando a lo largo de este resumen, esta investigación se ha llevado a cabo a través de una encuesta con sesenta y seis preguntas que se implementó en la aplicación de Google Forms y fue enviada por medios electrónicos a las diferentes bases de datos de las comunidades *alumni* de las tres instituciones que han colaborado en esta investigación: Escuela Internacional de Gerencia (EIG) de España, Westfield Business School de Estados Unidos y Fundación Universitaria CEIPA de Colombia.

El cuestionario utilizado para esta investigación ha sido diseñado de acuerdo con otros muchos estudios previos relacionados con estos temas. Asimismo, para elaborarlo se ha tenido en cuenta la opinión de expertos y de gestores del mundo académico.

Rectores y directores académicos de las instituciones que han participado en esta investigación hicieron sus comentarios sobre los temas planteados en este cuestionario. Una vez concluido el borrador, volvieron a dar sus opiniones con el alcance de mejorar y delimitar el sentido de algunas preguntas y sus posibles respuestas.

El cuestionario consta de tres partes. La primera parte tiene cuatro bloques, cada bloque por cada una de las variables latentes independientes que se integran en el modelo: percepción de la calidad del servicio (20 preguntas), valor percibido (6 preguntas), satisfacción (8 preguntas) y sentido de pertenencia (6 preguntas). Para responder a estas preguntas se utilizó una escala Likert de 1 a 7, considerando que la respuesta 1 representa desacuerdo total o que la probabilidad de que ocurra es 0% y la respuesta 7 representa un acuerdo total o que la probabilidad de que ocurra es de un 100%.

La segunda parte del cuestionario incluye las cuatro preguntas que dan forma a la variable dependiente latente de esta investigación: intención de recompra, tal como se ha definido en el marco teórico. También, todos estos ítems relacionados con la intención de recompra se evaluaron mediante una escala Likert de siete puntos desde 1 = "muy en desacuerdo" hasta 7 = "totalmente de acuerdo".

La última parte de este cuestionario estuvo enfocada a obtener información sobre las variables moderadoras y mediadoras en la relación entre el orgullo de pertenencia y la recompra, y las variables sociodemográficas de la muestra. Esta sección, por tanto, trató de obtener la información que pudiera explicar a través de los aspectos personales de cada encuestado y sus antecedentes de cada, sus respuestas de acuerdo con sus respectivos contextos, ya que la encuesta se ha realizado en tres Instituciones de Educación Superior diferentes.

En cuanto al modelo de análisis empleado, se ha utilizado la herramienta PLS-SEM (*"partial least square – structural equations models"* modelo de ecuaciones estructurales a través de la aplicación de mínimos cuadrados parciales, o modelos de estructura de varianza).

El método PLS se basa en el análisis de varianza, lo que implica una metodología de modelización flexible que no requiere supuestos paramétricos rigurosos, principalmente en lo referido a la distribución de los datos. En este sentido, Wold (1980) afirmó que el modelado de ecuaciones estructurales con mínimos cuadrados parciales (PLS-SEM) no requiere las condiciones exigidas por el modelado tradicional de ecuaciones de covarianza estructural (CB-SEM) para las distribuciones estadísticas (normalidad de los datos de tamaño muestral en referencia a las variables observadas) (Hair *et al*., 2017).

La modelización con PLS-SEM permite considerar indicadores para las variables latentes tanto reflectivos como formativos. Para el presente estudio se han considerado todos los indicadores reflectivos, lo que significa que compiten entre ellos y estos son representativos de la variable latente; la relación causal va de la variable latente a los indicadores y cualquier cambio en la variable tendría efecto en sus indicadores (Bollen, 1989; Diamantopoulos, 1999).

PLS-SEM es una técnica de análisis multivariante cuyo propósito es probar modelos estructurales y aunque se ha venido desarrollando durante varias décadas, se considera todavía hoy una técnica emergente. Esta metodología tiene como principal objetivo el análisis causal-predictivo en el que los problemas analizados son complejos y el conocimiento teórico puede ser escaso (Urbach & Ahlemann, 2010).

Una de las características del PLS-SEM es precisamente que puede utilizarse con tamaños pequeños de muestra. El tamaño mínimo de la muestra depende del número de relaciones (entre las variables latentes) que se especifican en el modelo (Marcoulides & Saunders, 2006; Wong, 2013).

Aunque la metodología PLS-SEM es conocida por su capacidad para manejar tamaños de muestra pequeños, (ver tabla 4.2), se recomienda un tamaño de muestra de 100 a 200 para potenciar los resultados del modelo, ya que con al menos 100 observaciones se pueden alcanzar niveles aceptables de potencia estadística, dada una cierta calidad en el modelo de medición (Hoyle, 1995; Reinartz *et al.*, 2009).

En nuestro caso, la muestra utilizada contiene más de 300 observaciones de la recopilación de las encuestas realizadas en las tres instituciones que han colaborado con esta investigación. Para la evaluación de cada una de las muestras de cada una de la instituciones y para la muestra global se ha seguido por lo descrito por Hair *et al. (*2017) en los que para los modelos reflectivos se han de realizar los siguientes pasos: 1. Comprobación de la fiabilidad de la consistencia interna a través del coeficiente Alpha de Cronbach; 2. Validez convergente, examinando los factores de indicadores para determinar la media de la varianza extraída (AVE) para cada constructo; y, 3. Validez del discriminante (criterio de Fornell-Larcker).

Por último, esta metodología PSL-SEM permite la evaluación del modelo estructural por medio del cálculo de los coeficientes R^2, Q^2 y coeficientes de paso estandarizados.

RESULTADOS

A partir de las respuestas obtenidas hemos realizado una primera evaluación del modelo global para las hipótesis H1, H2 y H2b, H3 y H3b, y H4 y H4b que representan las 7 relaciones principales que inicialmente hemos planteado.

El modelo PLS-SEM implementado, utilizando el software SmartPLS, en una primera evaluación arrojó validez convergente para todos los indicadores de las cinco variables excepto para el indicador PQ20 de la calidad percibida, y el indicador SOB5 del sentido de pertenencia que fueron eliminados del modelo por ser menores de 0,7 (Carmines & Zeller, 1979) (ver tabla 5.1). Analizados el resto de los criterios necesarios: Alpha de Cronbach, fiabilidad compuesta y media de la varianza extraída (AVE) aplicados a los criterios usados para tales valoraciones, se obtienen resultados que por una parte, permiten no rechazar las hipótesis: H1 (el orgullo de pertenencia influye positivamente en la intención de recompra); H3b (la satisfacción del estudiante influye positivamente en el sentido pertenencia); y H4b (el valor percibido influye positivamente en el orgullo de pertenencia). Por el contrario, se rechaza la hipótesis H2 (la calidad percibida influye positivamente en la intención de recompra) y no son rechazadas, pero no son significativas las hipótesis: H2b (la calidad percibida influye positivamente en el orgullo de pertenencia), la H3 (la satisfacción del estudiante influye positivamente en la intención de recompra) y la H4 (el valor percibido influye positivamente en la intención de recompra).

En una fase posterior del cálculo, y con el fin corregir la discrepancia que por el criterio de Fornell-Larcker se había detectado en la validez del discriminante que el modelo tenía tal y como se había diseñado (algunos coeficientes de correlación entre variables eran mayores que la media de la varianza extraída, AVE, de las variable), se optó por eliminar la variable satisfacción del estudiante con el fin de tener un modelo cuyas variables tuvieran todas ellas correlaciones menores a sus varianzas extraídas. Esta decisión reducía el modelo a tres variables independientes: calidad, valor y pertenencia (esta con un papel de mediadora, también) y la variable dependiente: intención de recompra (ver figura 5.2).

Este nuevo modelo con el cual se han podido contrastar las hipótesis H1, H2b, H4 y H4b, depara unos resultados también muy similares, no rechazándose de forma significativa las hipótesis H1, H2b y H4b. En cuanto a las hipótesis H2 y H4 tampoco se rechazan, pero sus resultados no son significativos de acuerdo con el test aplicado. Por otro lado, al suprimir del modelo la variable satisfacción, las hipótesis H3 y H3b no han podido ser contrastadas.

Por otra parte, el coeficiente R^2 para las variables intención de recompra tiene un valor de 0,391 y para el sentido de pertenencia del 0,652. Esto significa que, para la variable sentido de pertenencia un 65,2% de su varianza queda explicada por medio del comportamiento de las variables del modelo según Chin (1998), llegando casi al nivel substancial (nivel substancial=0,67) y para la variable de la recompra el modelo tiene un nivel predictivo moderado (nivel moderado=0,33).

Este mismo procedimiento de cálculo y de valoración de los resultados se ha seguido para la segmentación de las respuestas de acuerdo con las tres instituciones que han participado en el estudio. Por una parte, la institución española, de otra la institución estadounidense y finalmente la institución colombiana, obteniéndose en los tres casos resultados muy similares tal y como se puede ver en la tabla 6.4.

Estos resultados confirmaron para las tres instituciones que la hipótesis H1 (el sentido de pertenencia influye positivamente en la intención de la compra) no es rechazada con niveles de significación $p<0{,}0001$ (caso de la institución colombiana y caso global) y $p<0{,}001$ (caso español y estadounidense) al igual que la hipótesis H4b (el valor percibido influye positivamente en el sentido de pertenencia), no rechazada para todos los casos con niveles de significación de $p<0{,}0001$ para las tres instituciones.

También se muestran los resultados de los coeficientes de correlación obtenidos entre la variable sentido de pertenencia e intención de recompra, cuyos valores se encuentra entre un 0,622 (caso global y caso estadounidense) y un 0,694 (caso colombiano).

Haciendo uso de un nuevo modelo en el que solo se han considerado las variables sentido de pertenencia e intención de recompra de acuerdo con los modelos teóricos que conocemos (Carrión *et al*., 2017) (ver figura 5.9), se han realizado los cálculos para evaluar las hipótesis H5´s y las H6's que se plantean a partir de las variables mediadoras y moderadoras que esta investigación ha contemplado.

Estos cálculos realizados para los distintos escenarios que suponen cada una de las variables mediadoras tenidas en cuenta y las diferentes causas moderadoras en los efectos de la pertenencia sobre la intención de recompra, ha requerido la evaluación que la metodología PLS-SEM señala, comenzando por la comprobación de los indicadores reflectivos de cada variables latente y los procedimientos de comprobación de la fiabilidad de la consistencia interna del modelo, la validez convergente y la validez del discriminante. Por tanto, ello también ha dado lugar a que algunos indicadores se hayan tenido que ir eliminando para garantizar que el modelo sea fiable. De esta manera que, los modelos que se han ido construyendo para cada caso contenían solo aquellos indicadores que permitían obtener un resultado conforme a las garantías que se exigen.

Por tanto y una vez que señalada la necesidad de evaluar el modelo de cálculo para cada una de las variables mediadoras o moderadoras, podemos decir que, bajo estas circunstancias descritas, de ajuste y supresión de indicadores, se han obtenido resultados que permiten no rechazar con altos niveles de fiabilidad dichas hipótesis (ver tablas 6.9 y 6.10), tanto para las H5´s como para las H6´s.

Para concluir esta breve exposición de los resultados que se han obtenido en esta investigación, queremos mencionar uno de los objetivos específicos que este trabajo tenía y que era el de la estimación del tiempo de recompra. El principal resultado, de acuerdo con el modelo de cálculo que representa la figura 5.35, de la mediación que tiene declarar la intención de volver en cualquier momento respecto a la declaración de hacerlo en algún momento concreto, es que el mayor efecto del sentido de pertenencia se tiene en el periodo entre los dos y cinco años.

CONCLUSIONES: APLICACIONES Y FUTURAS INVESTIGACIONES

Defendemos que la principal conclusión de esta investigación doctoral, con todas incertidumbres que cualquier investigación empírica conlleva, que el orgullo o sentido de pertenencia como variable del marketing es un predictor válido para la intención de recompra. A través de este estudio en el contexto de la Educación Superior hemos analizado la lealtad del cliente a través de dos hechos consustanciales a ella, que serían el sentimiento de pertenencia que el antiguo alumno tiene hacia su institución de Enseñanza Superior (universidad, colegio universitario, escuela de negocios, etc.) y la posibilidad de volver a ella para retomar un nuevo programa.

En la presentación del contexto y elaboración del marco teórico hemos constatado las realidades de la educación de posgrado y la exigencia del mundo profesional con respecto a la formación. Varios hechos relevantes (digitalización, mercantilización de la formación, exigencias de un mundo más global y que crece de manera exponencial) confluyen en un mismo punto obligarán a que los profesionales, ejecutivos y directivos tengan que acortar sus periodos de reciclaje profesional. Estas realidades deberían traer consigo muchas nuevas oportunidades también para estas instituciones, sobre todo desde el punto de vista del posgrado y formación senior.

Los resultados obtenidos a través de modelo propuesto, en el cual se quiso modelizar la intención de recomprar a través de la influencia del sentido de pertenencia y otras variables, como la calidad y el valor percibidos, ha deparado, que se permite no rechazar la hipótesis de la influencia positiva de este sentido de pertenencia sobre el comportamiento de lealtad que es la nueva compra de un cliente. Y ello supone la principal aportación de acuerdo con el gap académico encontrado en el estado del arte sobre la cuestión: la posibilidad de emplear el sentido de pertenencia como un predictor de la intención de compra, al menos en el contexto de la Educación Superior en particular y en el marketing asociado a los servicios y a productos en los que el sentido pertenencia podría ser valorado.

Este resultado nos parece que es un arranque motivador para estudiar esta variable y concepto desde el punto de vista del Marketing. La idea de pertenencia, muy asociada a otras disciplinas como la Psicología, la Sociología o incluso la Política, puede ser incorporada al Marketing como variable medible y sobre la cual se pueden tomar decisiones de gestión, de igual manera que se toman sobre la calidad, el precio o la distribución. El sentido de pertenencia del cliente hacia empresas y marcas puede ser incorporado como un objetivo de gestión orientado hacia futuras compras y vemos, particularmente posible fomentar esta pertenencia en aquellos sectores en los que el vínculo entre empresa y cliente llega a través del servicio.

Inicialmente se analiza en profundidad el sentido de pertenencia, integrada por seis indicadores muy vinculados al sector de la Educación y a la relación que un antiguo alumno puede tener con la institución en la que estuvo, como son la utilización del “boca a oreja” para dar referencias, la pertenencia a asociaciones y clubes de antiguos estudiantes, la participación en eventos, el seguimientos de la actualización institucional a través de las redes sociales, las donaciones a la instituciones y las recomendaciones de otros compañeros para la contratación en empresas. Aunque probablemente la modelización de la variable del sentido de pertenencia sea muy específica para este contexto de la Educación Superior, pero pensamos que abre la posibilidad de buscar otros indicadores precisos para cada sector o actividad, asumiendo que algunos de ellos pueden ser comunes como el “WOM” o el seguimiento en las redes sociales.

Por tanto, vislumbramos oportunidades para seguir investigando a partir de este trabajo doctoral. Por una parte, la aplicación de similares modelos al utilizado en este trabajo en cualquiera de las Instituciones de Enseñanza Superior que considere que le pueda ser de utilidad. A este respecto, y también de acuerdo con los resultados, estos muestran la importancia que el valor percibido por el antiguo alumno tiene en la generación del sentido de pertenencia, y posteriormente en la influencia que está tiene para la recompra. Por otra parte, y como se ha señalado anteriormente, la posibilidad de seguir profundizando en la conceptualización de este orgullo o sentido de pertenencia asociado al Marketing.

El desarrollo de este concepto creemos que puede ser de utilidad, sobre todo, para tomar iniciativas que busquen fomentar los vínculos y los lazos de pertenencia de los clientes hacia las empresas o las marcas proveedores de servicios mayormente, como una decisión económicamente rentable, que ayude a la sostenibilidad financiera de estas.

En el caso concreto de la aplicación al contexto de la Educación Superior, pensamos que puede ser de mucha utilidad sobre todo en esta era post-COVID19 que trae cambios de paradigmas en las relaciones con los alumnos, que afectará a la universidad, las escuelas de negocios y la educación senior de todo el mundo.

Concluimos este resumen reiterando nuestro agradecimiento a las instituciones que han colaborado en esta investigación, así como a la Universidad Complutense, que a través de su programa de doctorado en Administración y Dirección de Empresas me dio esta oportunidad, y por supuesto, a mi director de tesis el profesor D. Jesús García de Madariaga PhD.,. quien, con sus ideas para enfocar la investigación, sus ánimos, paciencia y seguimiento, no hubiese sido posible concluir este trabajo.

APPENDIXES

QUESTIONNAIRE

Research Survey: Opinion of Postgraduate Students about their Higher Education Institution

Answer the following questions considering that to answer with number 1 represents your total disagreement or that the probability that it occurs is 0% and answer 7 represents a total agreement or that the probability that it happens is from a 100%

- **Quality Service**

Question Number	Question	Level of Responses						
1	Up-to-date equipment	1	2	3	4	5	6	7
2	Visually appealing physical facilities	1	2	3	4	5	6	7
3	Appearance of physical facilities	1	2	3	4	5	6	7
4	Sympathetic and reassuring faculty management	1	2	3	4	5	6	7
5	Dependable faculty	1	2	3	4	5	6	7
6	Receiving prompt service from teaching staff	1	2	3	4	5	6	7
7	Receiving prompt service non-teaching staff	1	2	3	4	5	6	7
8	Willingness to help staff (non-teaching staff)	1	2	3	4	5	6	7
9	Willingness to help students (teaching staff)	1	2	3	4	5	6	7
10	Trustful teaching staff	1	2	3	4	5	6	7
11	Trustful non-teaching staff	1	2	3	4	5	6	7
12	Polite teaching staff	1	2	3	4	5	6	7
13	Polite non-teaching staff	1	2	3	4	5	6	7
14	Adequate job for teaching staff	1	2	3	4	5	6	7
15	Adequate job for non-teaching staff	1	2	3	4	5	6	7
16	Faculty provides personal attention	1	2	3	4	5	6	7
17	Teaching staff provides personal attention	1	2	3	4	5	6	7
18	Non-teaching staff provides personal attention	1	2	3	4	5	6	7
19	Teaching staff knows students' needs	1	2	3	4	5	6	7
20	Non-teaching staff knows students´ needs	1	2	3	4	5	6	7

- **Perceived Value**

Question Number	Question	Level of Responses						
21	My relationship to school is very beneficial to me	1	2	3	4	5	6	7
22	It is more valuable to me to study at my school than at anoother school.	1	2	3	4	5	6	7
23	I consider it very advantageous to be a student at school	1	2	3	4	5	6	7
24	I consider that the fee (cost of registration) corresponds to the value of the course taken in this institution	1	2	3	4	5	6	7
25	I consider that the dedication, the effort and the time dedicated are in agreement with the contribution in knowledge I've acquired in the course	1	2	3	4	5	6	7
26	Overall instruction received from the Institution has a very high value for me	1	2	3	4	5	6	7

- **Satisfaction**

Question Number	Question	Level of Responses						
27	The Program and its curricular design have covered all my expectations	1	2	3	4	5	6	7
28	Faculty teaching has covered all my expectations	1	2	3	4	5	6	7
29	Accompaniment of Faculty has covered all my expectations	1	2	3	4	5	6	7
30	Accompaniment of non-faculty staff covered all my expectations	1	2	3	4	5	6	7
31	All questions that have emerged during my stay at the Institution have been resolved	1	2	3	4	5	6	7
32	Technological tools put at my disposal have covered my expectations	1	2	3	4	5	6	7
33	The facilities and all the resources related to non-teaching have covered all my expectations (answer only face-to-face totally or partially)	1	2	3	4	5	6	7
34	All expectations have been reached	1	2	3	4	5	6	7

- **Sense of Belonging**

Question Number	Question	Level of Responses						
35	References that I give of the institution are always positive	1	2	3	4	5	6	7
36	I want to participate in the events and activities that the Institution organizes	1	2	3	4	5	6	7
37	I am (or would be) a member of alumni associations that the Institution promotes	1	2	3	4	5	6	7
38	I follow the Institution in social networks with interest	1	2	3	4	5	6	7
39	I made (or would make) a donation for the development (if requested)	1	2	3	4	5	6	7
40	I recommend (or recommend) those who have studied at the Institution to be hired in my Company	1	2	3	4	5	6	7

- **Returning to the Institutions (Repurchasing)**

Question Number	Question	Level of Respondes						
41	I will probably return to the Institution. I will return in a period of less than one year	1	2	3	4	5	6	7
42	I will probably return to study at this Institution. I will return in a period between two to five years	1	2	3	4	5	6	7
43	I will probably return to study at this Institution. I will return in a period between five to ten years	1	2	3	4	5	6	7
44	I will probably return to study at this Institution at some point.	1	2	3	4	5	6	7

- **Mediating and moderator influences**

Question Number	Question	Level of Responses						
45	Studying a new program in this institution will depend on the possibility of gaining new professional skills or advancing in my professional level	1	2	3	4	5	6	7
46	Studying a new program will depend on the proximity or accessibility to the Institution	1	2	3	4	5	6	7
47	Studying a new program will depend on the possibility of on-line studying	1	2	3	4	5	6	7
48	Studying a new program will depend on the possibility of studying in classroom setting	1	2	3	4	5	6	7
49	I will return to study at this Institution if the Program offered me is of a very novel content	1	2	3	4	5	6	7
50	I will return to study at this Institution if it offers me a program in a language different from the one used in the first program	1	2	3	4	5	6	7
51	I will return to study at this Institution if it offers some kind of scholarship or financial aid	1	2	3	4	5	6	7
52	My personal situation (time, cost and availability) conditions my decision	1	2	3	4	5	6	7

- **Social and demographic questions**

Answer the following classification questions and in case some of the proposed questions do not apply, answer do not want or do not know, how to answer, point out NK/NA/NA (I do not know, I do not answer, it does not apply to me)

Question Number	Question	Select or Indicate Responses
53	Sex	Man
		Women
		NK/NA/NA
54	Country of birth	
55	Country of residence	
56	Year of birth	
57	Indicate your age according to intervals	Less 26
		26-30
		31-35
		36-40
		41-45
		More 45
58	Indicate the last level of your studies	Grade
		Postgraduate
		Doctoral
		NK/NA/NA
59	Indicate the year in which you began your studies at this Institution	
60	Indicate the year in which you finished your studies at this Institution	
61	Indicate duration in years of the studies performed in the institution	1 year or 1 course
		2 years or 2 courses
		3 years or 3 courses

		More 3 years or courses
		NK/NA/NA
62	**Indicate the type of study**	**Presential**
		Online
		Blended
		NK/NA/NA
63	**Indicate kind of company where you are currently employed**	**Multinational**
		Local company (with more 200 employees)
		Local company (with more 50 or less 200)
		Local company (with less 50)
		Public company
		In no company or I have not been employed yet
		NK/NA/NA
64	**Indicate your current level in the organizational chart in your company**	**First level (President or General Manager)**
		Second level (executive or operative management)
		Third level or lower
		No position until now
		NK/NA/NA
		Other………………………………
65	**Indicate civil status**	**Married or cohabiting**
		Single (engaged)
		Single (not engaged)
		Widowed
		NK/NA/NA
66	**Number of children**	**1**
		2
		3 or more
		None
		NK/NA/NA

CUESTIONARIO EN ESPAÑOL

Cuestionario de Investigación sobre calidad, valor percibido, satisfacción del Estudiante y su probabilidad de retorno a la Institución y sentido de pertenencia

Este cuestionario es completamente anónimo, y la información obtenida será empleada con fines científicos. Tardará menos de 10 minutos aproximadamente en responder a todo el cuestionario. La mayoría de las preguntas las evaluará en una escala Likert del 1 al 7; en donde 1 significa que está completamente en desacuerdo con la afirmación y 7 completamente de acuerdo respecto a la afirmación que se le propone.

- **Calidad del Servicio**

Conteste a las siguientes veinte preguntas con respecto al funcionamiento de las partes de la Institución y como considera la calidad de estas. Recuerde el 1 significa que está en total desacuerdo y el 7 que está totalmente de acuerdo.

Número de pregunta	Pregunta	Nivel de respuesta						
1	**Los medios puestos a disposición del estudiante y utilizados están actualizados en esta Institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2	**Las instalaciones físicas de la Institución son atractivas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3	**La gestión administrativa de la Institución es amable y tranquilizadora**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4	**El Claustro de la Institución es confiable**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5	**El servicio del personal docente es puntualmente el esperado**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6	**El servicio del personal no docente es puntualmente el esperado**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7	**El personal no docente se muestra dispuesto para ayudar a los estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8	**El personal docente (Claustro) se muestra dispuesto a ayudar a los estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9	**El personal docente (Claustro) es de confianza**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10	**El personal no docente es de confianza**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11	**El personal docente (Claustro) se muestra cordial**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12	**El personal no-docente se muestra cordial**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13	**El personal docente cuenta con el apoyo adecuado para realizar su labor**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14	**El personal no docente cuenta con el apoyo adecuado para realizar su labor**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
15	**La Institución Brinda una atención personalizada al Estudiante**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16	**Los profesores brindan una atención personalizada a sus Estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
17	**El personal no docente brinda una atención personalizada a sus estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
18	**El Claustro conoce las necesidades de los estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
019	**El Personal no docente conoce las necesidades de los estudiantes**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

20	**El interés que la Institución pone en su relación con el estudiante es sincero y de corazón.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Valor Percibido**

Número de pregunta	**Pregunta**	**Nivel de respuesta**						
21	**Mi relación con esta Institución ha sido beneficiosa para mi**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
22	**Estudiar en esta Institución ha sido más valioso que estudiar en otras instituciones en las que anteriormente he estudiado.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
23	**Considero que es muy ventajoso para mi haber sido estudiante de esta institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
24	**Considero que el precio pagado (coste de la matrícula) responde al valor que para mi ha tenido el curso (Máster, Maestría o Grado) realizado en esta institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
25	**Considero que la dedicación, el esfuerzo y el tiempo dedicado están acorde con lo que me ha aportado en conocimiento adquirido en el curso (Master, Maestría o Grado)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
26	**Lo recibido globalmente de la Institución personalmente tiene un valor muy elevado para mi**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Satisfacción del Estudiante**

Número de pregunta	**Pregunta**	**Nivel de respuesta**						
27	**El Programa y su diseño curricular ha cubierto todas mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
28	**El Claustro en su labor docente ha cubierto todas mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
29	**El Claustro en su labor docente de acompañamiento ha cubierto todas mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
30	**El personal no docente en su tarea de acompañamiento ha cubierto todas mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
31	**Todas las cuestiones surgidas a lo largo de mi estancia en la Institución han sido resueltas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
32	**Los medios tecnológicos puestos a mi disposición han cubierto mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
33	**Las instalaciones y todos los recursos a parte de los relacionados con la docencia han cubierto todas mis expectativas.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
34	**Se han alcanzado todas mis expectativas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
35		**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Sentido de Pertenencia**

Número de pregunta	**Pregunta**	**Nivel de respuesta**						
35	**Las referencias que doy de la Institución son siempre positivas**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

36	**Quiero participar en los eventos y las actividades que la Institución organice**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
37	**Soy (o sería) miembro de las asociaciones de antiguos alumnos que la Institución promueve (o promoviese)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
38	**Sigo con interés en las redes sociales a la Institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
39	**Realizo (o realizaría) alguna donación para el desarrollo de la Institución (si me lo solicitara)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
40	**Recomiendo (o recomendaría) la contratación por parte de mi empresa a quienes hayan estudiado en la Institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Intención de Regresar a la Institución**

Número de pregunta	**Pregunta**	**Nivel de respuesta**						
41	**Probablemente volveré a estudiar en esta institución en un periodo inferior a dos años**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
42	**Probablemente volveré a estudiar en esta institución en un periodo entre dos años a cinco años**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
43	**Probablemente volveré a estudiar en esta institución en un periodo entre cinco a diez años**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
44	**Probablemente volveré a estudiar en esta institución en algún momento**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Preferencias o tendencias**

Número de pregunta	**Pregunta**	**Nivel de respuesta**						
45	**La realización de un nuevo programa en esta Institución dependerá de la posibilidad de ganar nuevas competencias profesionales o ascender en mi nivel profesional**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
46	**La realización de un nuevo programa dependerá de la cercanía o accesibilidad a la Institución**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
47	**La realización de un nuevo programa dependerá de la posibilidad de estudiar en la modalidad online**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
48	**La realización de un nuevo programa dependerá de la posibilidad de estudiar en la modalidad presencial**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
49	**Volveré a estudiar en esta institución si el Programa que me ofrece es de un contenido muy novedoso**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
50	**Volveré a estudiar en esta Institución si me ofrece un programa en una lengua diferente a la que realicé el primer programa**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
51	**Volveré a estudiar en esta Institución si me ofrece a algún tipo de beca o ayuda económica**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
52	**Mi situación personal (tiempo, costes y disponibilidad) condiciona mi decisión**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

- **Variables Sociodemográficas o de Clasificación**

Conteste a las siguientes preguntas de clasificación y en caso de que algunas de las respuestas propuestas no represente, no quiera o no se sepa, como contestar, señale NS/NC/NA (no sabe, no contesta, no aplica).

Número de pregunta	Pregunta	Nivel de respuesta
53	Sexo	Hombre
		Mujer
		NS/NC/NA
54	País de Nacimiento	
55	País de Residencia	
56	Año de Nacimiento	
57	Señale su edad de acuerdo a los siguientes intervalos	Menor de 26
		Entre 26 y 30
		Entre 31 y 35
		Entre 36 y 40
		Entre 41 y 45
		Más de 45
58	Nivel de los últimos estudios realizados (en esta o en otra Institución)	De grado
		De posgrado (master, maestría o especialización)
		De doctorado
		NS/NC/NA
59	Señale el año en el que comenzó sus estudios en esta Institución	
60	Señale los o cursos que empleo en obtener su título	1 año o 1 curso
		2 años o 2 cursos
		3 años o 3 cursos
		Más de 3 años o cursos
		NS/NC/NA
61	Señale la modalidad en la cual estudió en esta Institución, mayormente	Presencial
		Online
		Blended (presencial + online)
		NS/NC/NA
63	Tipo de empresa en la que se desempeña actualmente (o en su última empresa)	Multinacional
		Nacional (de más de 200 empleados)
		Mediana empresa (entre 50 y 200 empleados)
		Pequeña empresa (de menos de 50 empleados) microempresa o cuenta propia
		Empresa pública
		En ninguna empresa o no he trabajado todavía
		NS/NC/NA
64	Posición que ocupa actualmente en su empresa (o en su última empresa)	Primer nivel jerárquico (presidencia o director general)
		Segundo nivel jerárquico (dirección ejecutiva u operativa)
		Tercer nivel jerárquico o inferior
		No he desempeñado ningún puesto en empresa
		NS/NC/NA
		Otro………………………………
65	Estado civil en el que se encuentra ante la posibilidad de reanudar estudios	Casado o viviendo en pareja
		Soltero con pareja
		Soltero sin pareja
		Viudo
		NS/NC/NA

66	**Número de hijos**	**1**
		2
		3 o más
		Ninguno
		NS/NC/NA

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Year	Title of Publication
1955	Hillery, G., 1955. Definitions of community: Area of agreement. *Rural Sociology*, Volume 20, pp. 111-123.
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1966	Anant, S. S., 1966. Need to belong. *Canada's Mental Health*, 14(2), pp. 21-27.
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1970	Betz, E., Klingensmith, J. E. & Menne, J. W., 1970. The measurement and analysis of college student satisfaction. *Measurement and evaluation in guidance*, 3(2), pp. 110-118.
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1974	Kasarda, J. D. & Janowitz, M., 1974. Community attachment in mass society. *American Socialogical Review*, pp. 328-339.
1974	Stone, M., 1974. Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society: Series B (Methodological)*, 36(2), pp. 111-133.
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1975	Geisser, S., 1975. The predictive sample reuse method wirh applications. *Journal of the American Statistical Association*, 70(350), pp. 320-328.
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1978	Doolittle, R. J. & MacDonald, D., 1978. Communication and a sense of community in a metropolitan neighborhood: A factor analytic examination. *Communications Quarterly*, 3(2-7), p. 26.
1978	Jacoby, J. & Chestnut, R. W., 1978. *Brand loyalty: Measurement and management*. New York: Wiley.
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1979	Bakal, C., 1979. *Charity USA: An Investigation into the Hidden World of the Multi-Billion Dollar Industry.* Nueva York: Times Book.
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1984	Gronroos, C., 1984. A service quality model and its marketing implications. *European Journal of marketing,* 18(4), pp. 36-44.
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1986	Baron, R. M. & Kenny, D. A., 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.. *Journal of personality and social psychology,* 51(6), pp. 1173-1182.
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Number of publications referenced for this research	**12**

PHOTOGRAFIC REPORT

Escuela Internacional de Gerencia – EIG

(Granada, Andalucía - Spain)


Insólito


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ESCUELA

Westfield Business School

(El Doral-Dade County, Florida – US)


Westfield
International Experiences
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Singapore
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Westfield
Business
School
FAPSC

Fundación Universitaria CEIPA

(Sabaneta-Medellín, Antioquia – Colombia)


CREATIVIDAD


EDUCACIÓN DIFERENTE
Proyectos del Centro de
Emprendimiento y
Empresarismo
3.132
Sensibilizados
174
Planeación
empresarial
128
Gestión
empresarial
74
Aceleración
Business
School
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EN ESTE 2017
Business
School
CEIPA