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Preferences of university students on the choice of internet service provider

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Abstract
In Spain, there is a wide range of Internet Service Providers (ISP). Within this context, it is extremely difficult for consumers to determine which ISP is the most beneficial for them. Therefore, this article aims to identify the factors that most influence consumers' choice of ISP companies. The analysis of these factors is based the opinions of a sample of university students, who are generally considered to be representative of the trends taking place in the ISP sector. In addition, conjoint analysis is used for the first time to analyse consumers' preferences on the choice of ISP companies. Our results show that price and the inclusion of a mobile phone in the package are the two most valuable attributes for university students. Meanwhile, other attributes like the requirement to sign a fixed-term contract and data allowance in offer are not taken into account as much by university students when choosing an ISP. Therefore, our results may be highly valuable for both users and ISP brands.

Keywords
Preferences; Internet; Internet service provider; university students; conjoint analysis.

Contents

Translation by **Cruz Alberto Martínez-Arcos**
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1. Introduction

Without a doubt, the expansion of the Internet is a driving force of economic growth in many countries, which contributes, on the one hand, to the development of the cultural and creative industries and, on the other, to the digitalisation of the business and institutional sectors (González and García, 2012). The digital divide between different markets and territories is closely related to the social, political, and even cognitive inequalities that derive from this technology, which can lead to the fragmentation of social and cultural forms.

Today, the Internet has become an essential tool of communication and work, both in domestic and business environments. Currently, it is very difficult to conceive every-day life without the Internet. People use this tool primarily to obtain information, to carry out electronic commercial and banking transactions and to interact with other people, among many other things. Without a doubt, the Internet has also become a fundamental tool in the learning processes of many young people (Boza and Conde, 2015). Moreover, in recent years the Internet has prompted new forms of social interaction through various platforms of virtual relationship (Cáceres *et al.*, 2013). Within this context, choosing an Internet Service Provider (ISP) is important, since the features of the service differs from company to company.

ISP companies and organisations began to emerge in the late 1980s and early 1990s to offer access to Internet and related services. ISP connect Internet users through networks. Often, ISP are companies that provide telecommunications services, including communications data and telephone connections. Most telephone companies are now also Internet service providers.

Unlike the usual Internet connections used for the residential sector, such as cable modem and wireless broadband, in the business sector the most used connection types are DSL, Gigabit Ethernet, Synchronous Optical Network (SONET), and Integrated Services Digital Network (ISDN), among others. In addition, and as additional services, many of these providers offer their customers the option to acquire email accounts, web hosting, online marketing tools, and website-creation tools and services. In recent months, ISP companies have also started to bet on offering cloud computing services and software as a service (SaaS).

In the residential sector, ISP companies offer people a wide range of options to obtain Internet access. In order to choose the option that best suits their budget and needs, users must assess a number of variables. As in many other countries, in Spain the supply is plentiful and it is extremely difficult to choose between the wide diversity of ISP. Thus, this article aims to identify the factors Spanish people take into account the most when choosing an ISP.

The ISP sector is an important area of research for several key reasons (Kugyte and Sliburyte, 2007): 1) is a services sector in continuous growth and of great importance to the lives of consumers, 2) the decisions and criteria involved in people's selection of an ISP have been hardly analysed from the scientific point of view, and 3) the practical applicability of this topic is very important for telecommunication marketing specialists to improve different areas and increase competition between ISP companies.

In the scientific literature, there is a large number of publications that have dealt with the problem of ISP selection. However, most of these works are focused on the industrial sector, and very few have addressed the services sector (Amin and Razmi, 2009). In the case of ISP selection there is just a couple of scientific works (Amin and Razmi, 2009; Datta *et al.*, 2013; Kugyte and Sliburyte, 2007). Our literature review indicates that there is no evidence of the existence of scientific works addressing this issue in Spain.

According to a survey on ICT household equipment and use, carried out in 2014 by Spain's National Institute of Statistics (INE, 2015), Internet use is much higher among young people than among adults. In fact, according to this survey, 98.3% of people aged 16 to 24 have used the Internet in the past three months. The percentage decreases to 93.7% for people aged 25 to 34 years, to 55.4% for people aged 55 to 64 and to 26.2% for people aged 65 to 74, respectively. These results show that there is an important digital divide among youth and adult people, with a more intense Internet use among the former group. It is important to note that adults do not feel prepared or comfortable with new technologies, since they have not received the necessary training in their use (González *et al.*, 2015). Some authors point out that young people reflect very precisely the trends coming in the future in the communications sector (Fernández-Planells, 2015). As a consequence, in many households the ISP is chosen by young people, not adults, because the former has much more expertise in the market of new technologies. This fact is consistent with the premise of other studies, which state that the level of training is an important factor, although not the only one, for the incorporation of citizens to the World Wide Web (Castells and Tubella, 2002; Valor and Sieber, 2004). For this reason, this study focuses on the preferences of young university students on the choice of ISP, as a way to approach the preferences of the general population.

At the generic level, in the process of ISP selection, a group of ISP companies is chosen previously based on a number of criteria (Aissaoui *et al.*, 2007). Most of the previous studies used models that do not analyse all the criteria simultaneously (Amin and Razmi, 2009). Moreover, these studies hardly combine qualitative and quantitative criteria. In terms of techniques, these studies have mainly used the analytic hierarchy process, multi-objective programming, data envelopment analysis, genetic algorithms and cluster analysis, among others. However, this work will be based on the use of a technique that has not been used in this field but can be adapted perfectly to the problem under study: conjoint analysis, which is an important contribution to the scientific literature.

Undoubtedly, this work also contributes in some way to the understanding of preferences not as tools but as extensions of humans, since technologies are to be understood as a means to extend the powers of the body. All this justifies significantly the development of this work.

According to the aforementioned survey on ICT household equipment and use, carried out in 2014 by Spain's National Institute of Statistics (INE, 2015), 74.4% of Spanish households had Internet access in 2014, nearly five percentage points higher than in 2013. This figure means that there are nearly 11.9 million households with Internet access in Spain. In terms of Internet connection type, 73,0% of households (about 11.7 million) used broadband (ADSL and cable modem), which represents an increase of nearly 800,000 households with respect to the previous year. Narrowband has a very limited presence. The households that did not have access to the Internet pointed out that the main reasons for such situation were that *they did not need Internet* (60.6%), *they did not have*

enough knowledge to use it (38.6%) and also pointed out economic reasons: *the equipment costs were too high* (31.0%) and *connection costs were too high* (28.8%).

Moreover, according to this survey, for the first time in Spain there are more Internet users (76.2%) than computer users (73.3%). In addition, the survey pointed out that 77.1% of Internet users accessed it via mobile phone. Frequent Internet users (those who connect at least once a week in the last three months) constitute 93.5% of the total of Internet users. This percentage translates into 24.5 million people. Every-day Internet users represent 60.0%, or 20.7 million people, of the population aged 16 to 74 years. Concerning expenditure, it is important to comment that the total amount spent on Internet services during the first quarter of 2014 was 747 million euros, with an average household expenditure of €22.9 per month (VAT included) (ONTSI, 2014).

Another aspect of the use of the Internet is the use of social networks. Since 2008 social networks have experienced an exponential growth in Spain (García *et al.*, 2013). Similarly, there are a number of activities that involve an increased use of the Internet, like the downloading of music, movies, TV series, the use of instant messaging systems, chats and forums, and the uploading of videos and photos.

2. The telecommunications market in Spain

The telecommunications market in Spain has exhibited contradictory signs. It has transitioned from a long expansion stage in the 1990s along with the boom of the so-called new economy" to a stage of intensive adjustment and depuration. Moreover, structural changes have occurred in the telecommunications sector as a consequence of the trend towards further consolidation through mergers and acquisitions (CNMC, 2014). The companies that are not capable of adapting their offer to the current technologies will become vulnerable in view of the consolidation of this industry (Breeding, 2011).

On 7 October, 2013, the National Commission for Markets and Competition (CNMC) became operational in Spain. This Commission assumed the activities and functions of the Telecommunications Market Commission, including the supervision functions conferred by the 2010 Law on Audiovisual Communication (Ley 7/2010). The new National Commission became the independent regulator of the audiovisual sector in Spain, with specific supervisory competences related advertising, the rights of minors and people with disabilities, in addition to the generic monitoring functions over competition in the sector.

In order to carry out this work, data was obtained from a sample of telecommunications companies that currently operate in Spain. Following the line of Contec (2012), the present study does not take into account ISP companies that operate only in one region of Spain. In other words, our study focuses on ISP that can be referred to as "national operators" according to their scope. The operators selected for the study are: Telefónica (Movistar), Vodafone, Orange, Ono and Jazztel. It is important to bear in mind that according to the 2014 report on economy and the telecommunications and audiovisual sectors, produced by the National Commission for Markets and Competition (CNMC, 2014), the operator with the largest market share, based on the volume of national traffic, was Telefónica with 49.9%, followed by Ono (15.2%), Jazztel (12%), Vodafone (8.8%) and Orange (6.4%).

In the current competitive state of the telecommunications market in Spain, companies are looking for strategies to attract and retain consumers and to adapt to the emerging technologies. A clear example is Movistar which wants to expand its optical fibre network across Spain to make it available to all households and businesses by 2020 (Rodríguez, 2014). The competition between telecom companies to retain customers has prompted some companies to carry out even illegal activities (Facua, 2013).

Faced with this scenario, companies must adapt their offer to the desires of consumers. Telecommunication companies will reach a greater competitive advantage to the extent that their offer is adapted to users' preferences. This work tries to shed some light on these preferences.

The overall objective of this study is to identify the factors that university students take into account when selecting an ISP. In particular, this article aims to: a) establish a ranking of the criteria taken into account to select an ISP based on the importance students attach to each of them, and b) to identify the combination of attributes preferred the most by students when choosing an ISP. Similarly, this work will offer some simulations that may help ISP to choose the right strategy to get a larger number of clients through the knowledge of the preferences stated by university students.

3. Methods

This research study aims to measure the preferences of the internet service users when selecting an ISP in Spain. To this end, we used conjoint analysis, which is a technique that had not been previously applied in this area. In general, conjoint analysis is a method in which the researcher describes products or services through a set of attributes, combining different levels of attributes, with the objective of determining what attributes are important to consumers. Conjoint analysis was applied to the answers of a sample of students of the Pablo de Olavide University of Seville (Spain), who were given a questionnaire that address a series of previously-selected attributes.

3.1. Attributes and sample

Lancaster's consumer theory (1966) proposes that consumers establish their preferences based on the characteristics of the goods rather than on the goods themselves. As a result, consumers form their preferences taking into account the different alternatives offered by the market. Generally, researchers accept the hypothesis that consumer preferences are based on their assessment of the various elements that distinguish the goods or services. That is why the analysis of how these elements contribute to consumers' selection process is object of numerous research works. However, we detected only one work that specifically addresses the selection of ISP: Veà (2002). This work was carried out in a distant period and dramatic technological changes have occurred since then. This and the scarce presence of works directly related to the theme of consumer selection of ISP justify the present study.

As mentioned, in order to apply conjoint analysis, it is necessary to previously define a set of attributes or factors, along with the levels of each of them. From the psychological field, Levy and Varela (2003) define an attribute as a property obtained from human experience and, therefore, an attribute is considered as the property of an entity and not the entity itself. Each attribute is expressed

through levels, which are precisions about the attribute. Finally, each profile or stimulus is characterised by a combination of levels of attributes (Ramirez *et al.*, 2011).

According to Ramírez *et al.* (2011), "in conjoint analysis, the total utility, i.e. the overall satisfaction provided by a product or service to a person, is obtained as a fundamental measurement. Total utility is obtained from a set of values or part-worth utilities that correlate the levels of the different attributes with the preferences of consumers, assuming a rule of composition".

I order to implement the conjoint analysis it is necessary to identify all those attributes that are going to be part of our study, and to establish the levels associated with each of them. Their definition, although not as difficult as that of attributes, is not simple, because the levels may have a very strong influence on the choice of the consumer, since they constitute the practical realisation of the attribute in the set of stimuli, from which the consumer can choose. In the case of this work, to identify the attributes we examined the websites of the leading ISP in Spain. After analysing the offers made by these companies, we selected the following attributes: type of access, the requirement to sign a long-term contract, the inclusion of a mobile phone in the package, provision of technical assistance, data allowance, and price.

The next step was to define the levels. The specification of levels is a very important aspect of conjoint analysis given that they represent the actual measures in the construction of the attributes. However, the selection of the range of levels and of the number of levels is not as easy as it seems. In fact, the importance or worth of an attribute is sensitive to the range and the number of levels of attributes (Wittink *et al.*, 1990). In this case, after analysing the offers made by the different ISP we defined the following levels:

Table 1. Selected attributes and levels.

Attribute	**Levels**
Type of access	ADSL Optical fibre
Retention contract	Yes No
Mobile phone	Included Not included
Technical assistance	Yes Not
Data allowance	Up to 20Mb Up to 50Mb More than 100Mb
Price	Up to €20 per month €20 to €40 per month More than €40 per month

Source: Authors' own creation.

The selection of the attributes and levels was followed by the collection of information. From the existing types of conjoint analyses, we selected the Full-Profile approach, which consists in describing each alternative or stimulus separately through a profile card (table 2). This method involves the entire set of factors or attributes simultaneously. The respondent has to order or assess all the profiles resulting from the combination of attribute levels, which is the most used data-collection method in conjoint analysis. The descriptions that are carried out with the full-profile method are much more relevant to the objective pursued, since the respondent deals with a complete description of the product or service (Green and Krieger, 1993).

Table 2. Example of Full-profile card.

Type of access: ADSL Retention contract: No Mobile phone: Included Technical assistance: Included Data allowance: Up to 20Mb Price: €20 to €40 per month *Least preferred* □ *Most preferred* 1 - 2 - 3 - 4 - 5 - 6 – 7 *(Select an option)*

Source: Authors' own creation.

The main advantage of the full-profile approach is that it provides a more realistic vision and has the ability to reduce the number of comparisons through the use of fractional factorial designs (Hair *et al.*, 1999). In the case that the number of levels varies between attributes, for example N attributes with k levels and M attributes with l levels, the number of stimuli to evaluate would be $k \cdot k \cdots k \cdot l \cdot l \cdots l = k^N \cdot l^M$. For example, if we have 2 attributes with 4 levels and 3 attributes with 2 levels, the total number of stimuli to evaluate would be $4^2 \cdot 2^3 = 128$. Using a fractional factorial design respondents do not have to assess the total number of profiles, but a much smaller number.

A full factorial design provides estimates of the parameters corresponding to all the main effects and all effects of interaction. Obviously this case provides a lot of information, but has the disadvantage that as the number of attributes and levels increases, the number of stimuli to evaluate grows so much that respondents cannot rank or score in a meaningful way. Respondents' interest would not be maintained and his evaluation would negatively influence the quality of the answers (Vázquez, 1990). Fractional factorial designs are used to solve this problem.

A fractional factorial design is a part of a full factorial design. Most conjoint analyses often estimate the main effects, assuming that the interaction effects do not exist or are not significant. Therefore, we can dispense with the interaction effects and use a fractional factorial design, which allows us to estimate the main effects with a smaller number of combinations than with a full factorial design. In the case of this study, the design was obtained from an orthogonal fractional design carried out with

SPSS Orthoplan procedure. Our study consists of 4 attributes with 2 levels and 2 attributes with 3 levels. With these figures, the total number of combinations or profiles would be $2^4 \cdot 3^2 = 144$. However, the fractional factorial design with SPSS consists of 18 profiles, which can be easily evaluated by respondents.

Finally, another aspect to be considered when applying the conjoint analysis is the measurement of the dependent variable. In this case, we used a ratio scale. This method is based on the evaluation of the profiles or stimuli by respondents, which assign a score on a given quantitative scale (Green and Srinivasan, 1978; Darmon and Rouzies, 1999). This score is related to the degree of preference, purchase intent, or the global worth of each stimulus. Its ease of application is one of the main arguments in its favour. In the case of this study, we choose to measure the dependent variable with a scale of 1 to 7, where 1 means "least preferred profile" and 7 means "most preferred profile".

To obtain the data, we selected a sample of 235 university students from different degree programmes and courses through convenience sampling, establishing quotas on the basis of sex to have a similar representation of men and women, since according to the aforementioned survey on household ICT equipment and use in 2014, the digital gender divide is very low. The data were taken in October 2015. Students were given a questionnaire which asks them to rate 18 profiles with a scale of 1 to 7.

3.2. Conjoint analysis procedure

To obtain the estimates through conjoint analysis, SPSS uses the *conjoint* procedure and the following formula: $r_i = \beta_0 \sum_{j=1}^{p} u_{jk_i}$ where r_i is the answer to the *i*-th profile or stimulus $(i = 1, \ldots, n)$, β_0 is the constant or independent term, u_{jk_i} is the part-worth utility associated with the *k*-th level of the *j*-th attribute of the *i* stimulus or profile and *p* is the total number of attributes or factors. Through the *conjoint* procedure SPSS carries out an estimation by ordinary least squares of the preference data to obtain the estimation of the parameters.

4. Results

The data were analysed with SPSS. First of all, SPSS indicates that the values of the Pearson correlation coefficient and the Spearman correlation coefficient are 0.988 and 0.879, respectively, so that the correlation between the observed preferences and the estimated preferences is very high. Thus, the results obtained with the conjoint analysis are very reliable.

To establish the combination of internet services preferred the most by respondents, SPSS provides a results table that shows the utility (part-worth) scores and their standard error for each factor level (Table 3). The part-worth utility can be defined as the satisfaction that each level affords to respondents, so the most preferred level of an attribute will be the one with the highest part-worth utility. The total utility of a combination is defined as the sum of the part-worth utilities and the constant. As we can see in Table 3, the most preferred ISP offer combination among university students is one that offers ADSL, no retention contract, mobile phone, technical assistance, a monthly fee of 25 or less euros per month, and data allowance of more than 50 Mb. The total worth of this service combination is 5,799. This result obtained by means of conjoint analysis is not very

surprising, except perhaps for the preferred type of access, where ADSL is preferred over optical fibre. This result can perhaps be explained by the fact that people know that many regions in Spain do not have access to optical fibre networks.

The total utility of any other combination is lower than 5.799, since the previous combination is the most preferred by students. Thus, for example, the total utility of an ISP that offers optical fibre, retention contract, a mobile phone, technical assistance, a monthly price of 45 euros, and more than 50 Mb of data allowance, is 3.125. Thus, with these results any ISP can determine the total worth or satisfaction generated by a certain service combination to university students.

Table 3. Part-worth utilities of the levels

		Utility estimate	Standard error
Connection type	*ADSL*	.003	.077
	Optical fibre	-.003	.077
Retention contract	*Yes*	-.281	.077
	Not	.281	.077
Mobile phone	*Included*	.813	.077
	Not included	-.813	.077
Technical assistance	*Yes*	.332	.077
	Not	-.332	.077
Price (euros)	*Up to 25*	-1.334	.092
	25 and 45	-2.668	.185
	More than 45	-4.002	.277
Data allowance	*20 Mb*	.232	.092
	50 Mb	.465	.185
	More than 50Mb	.697	.277
(Constant)		5.569	.241

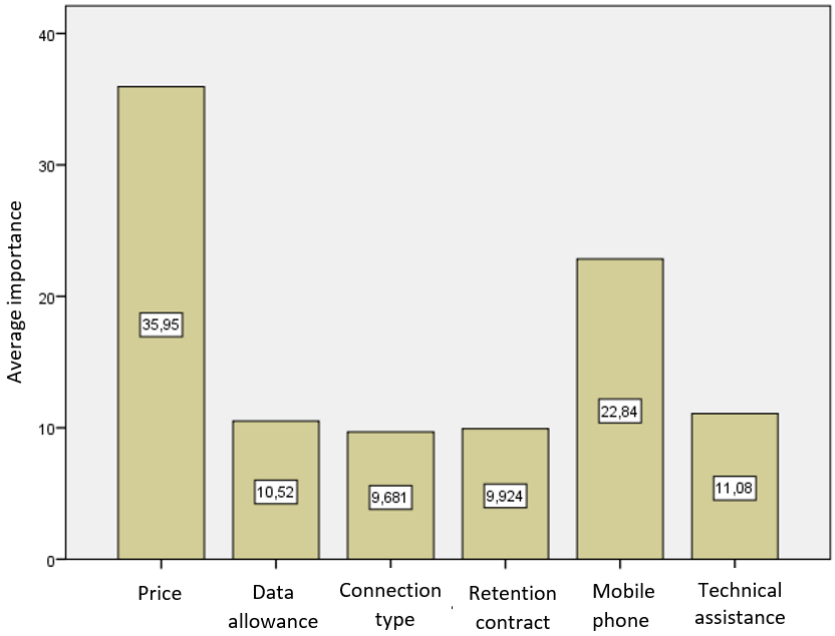
Source: Authors' own creation.

Another tremendously interesting result provided by the conjoint analysis is the relative importance of each attribute. This importance is obtained from the part-worth utilities of each of the levels that are part of the attribute. An attribute or factor will be more important the greater the difference between the highest and lowest part-worth utilities (difference in absolute value). In this way, the importance of the attribute *i* is given by $IMP_i = Range_i / \sum_{j=1}^{p} Range_j$ where the range must be calculated previously for each attribute through $Rango_i = \max(u_{ik}) - \min(u_{ik}) \quad \forall i = 1,..., p \quad \forall k$.

Figure 1 shows the importance of each attribute. As we can see, the attribute most valued by university students is price, with a relative importance of 35.95%, followed by the inclusion of a mobile phone, with an importance of 22.84%. The other attributes are behind at a more considerable distance.

Finally, SPSS also allows us to obtain the total worth of the service combinations or simulated combinations that respondents did not evaluate during the collection of data but may be of interest. There are three simulation models (Pedret *et al.*, 2000; Levy and Varela, 2003; Ramírez *et al.*, 2007): *Maximum utility* model, the *Bradley-Terry-Luce* model and the *Logit* model. The idea is to simulate, based on the obtained results, new combinations in order to determine which of them would has better acceptance. Simulation provides the probability of acceptance of a given combination by users. This information is of great value to ISP because it allows them to adapt their offer to the preferences of users.

Figure 1. Summary of importance of attributes.



Source: Authors' own creation.

In the case of this work, three simulations were run to determine which one had the highest probability of choice. The three combinations are the following: A) ADSL: no retention contract, no mobile phone, with technical assistance, monthly fee of up to 25 euros, and 20 Mb of data allowance; B) ADSL: with retention contract, no mobile phone, no technical assistance, price up to 25 euros per month and 50 Mb of data allowance; and C): optical fibre, no retention contract, without moving, service, monthly fee of up to 45, and more than 50 Mb of data allowance. Table 4 shows the probabilities of choice obtained with SPSS from the simulations with the three previous combinations. As we can see, the combination preferred the most by university students is A, followed by B and then C.

Table 4. Probability of choice of the simulations.

Combination	Maximum utility	Bradley-Terry-Luce	Logit
A	59.2%	40.3%	45.9%
B	23.8%	37.2%	34.3%
C	17.0%	22.5%	19.8%

Source: Authors' own creation.

This way any set of combinations that correspond to certain offers or packages of an ISP can be simulated, so that a probability would be obtained for the preferences of users on each of the combinations. This, undoubtedly, is very valuable information for companies in this sector.

5. Discussion and conclusions

In recent years the use of the Internet has experienced a spectacular growth, influenced significantly by technological advancements. Within this dynamic, young people have been, undoubtedly, the more active users, since this system brings them benefits in the educational and social spheres. Thanks to the Internet, many young people expand their educational knowledge, maintain permanent contact with friends and even get to known new people and also become friends with them. So, the Internet has become a mechanism of socialisation and communication (Gallardo *et al.*., 2015).

For the sector of new technologies, it is very important to know and understand the uses and attitudes of young people on the Internet. This knowledge is extremely important so that these companies can adapt their service and customer strategies to meet the needs of young people and turn them into loyal customers.

Therefore, the profound knowledge that young people have about this type of market and the study of their preferences is vital for these companies that operate in a very competitive and changing environment. This study aims to contribute to the discovery of this knowledge. In particular, the results of this study provide a number of valuable conclusions about the preferences of university students regarding ISP.

The first important conclusion of this study is that, when selecting an ISP, the attribute that young people value the most is price. The results have showed that of all the attributes analysed in this study, price has a relative importance of 35.95%, well above the other attributes. Price is a factor that has always been important when it comes to hiring a service. Although in recent years the prices of the services offered by different ISP companies have dropped significantly due to strong competition in the sector, it is important to highlight that the results obtained in this study may be influenced by two factors. On the one hand, this study is aimed at young university students and most of them are not working and generally have few economic resources to pay for Internet services, so they tend to ask their parents to pay for this service. On the other hand, in 2008 Spain began to experience an important economic crisis and since them the majority of citizens have faced important economic restrictions. These two facts can be exerting a significant influence on the importance given to price

when selecting an ISP. Possibly, if the study had been directed to other sector of the population with other financial resources and in an era with a more favourable economic environment, the relative importance of price would be lower.

The second most important attribute for young university students is the possibility of obtaining a mobile phone with the contracted service. The use of mobile telephony has experienced unprecedented growth in recent years. The mobile phone is no longer only a voice-transmission device and has become an element of relationship (Valor and Sieber, 2004). This has been prompted by the emergence and development of social networks. Innovative mobile messaging applications have turned the mobile phone into the medium par excellence to interact with others at any time and from anywhere. In fact, the capabilities of the mobile phone are unlimited and have favoured its transformation into a tool of expression, even of one's personality, as some authors have pointed out (Chu, 1997; Tapscott, 1998).

The third most valued attribute among young university students, albeit at a considerable distance from the previous two, is the availability of technical support to solve the problems that may arise. Young people give this attribute a relative importance of 11.08%. Many companies offer this service for free, while others charge for it. However, for young people this attribute is not as important as price or the inclusion of a mobile phone.

The rest of the attributes that have been taken into account in this study have a similar relative importance. It is striking that the type of internet access is the least important attribute for young people. University students prefer to have access via ADSL instead of optical fibre. As noted, this can be due to the fact that young people know that many geographical areas in Spain still do not have an optical fibre communication infrastructure. On the other hand, another policy implemented by ISP companies to retain customers is retention contract. However, this attribute is not very important for young people (9.92%). Finally, it is also interesting that data allowance is neither a very important attribute for young people. This may be due to the fact that with the options available today on the market day, users can widely meet their own needs.

For this work we also carried out various simulations with the conjoint analysis method in order to increase the knowledge that companies in this sector should have about the preferences of users.

The information obtained in this study is of great value to the companies that provide Internet services, which can use this information to adapt their strategies more intelligently to attract and retain customers.

Like any other research work, this study presents a series of limitations. The first one is the chosen methodological design. When conjoint analysis is used, its results are significantly influenced by the choice of the attributes and their corresponding levels. This fact, despite being a limitation, by its very nature becomes also a future line of research. Other studies can be carried out to examine preferences in the selection of ISP, but taking into account other attributes or factors, such as the brand of the ISP and the variety of offers.

Finally, it would also be appropriate to replicate this study but based on a wider audience in terms of age, so that it can provide conclusions on the basis of certain socio-demographic variables, such as sex, employment status and income.

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