

HOW DOES SERVICE QUALITY AFFECTS CASINO PLAYERS' SATISFACTION

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Abstract

Over the years, consumers are getting more and more demanding and companies are struggling to attend to their needs. Casinos' customers are not an exception, as its core service has not changed much in the past years. As a consequence, it is important, for casinos to understand the additional services they can provide. This way, by differentiating themselves from other casinos, they will achieve high levels of customers' satisfaction.

Previous studies regarding this matter, focused on the determinants of service quality that contributed to the overall satisfaction of customers in general. Those researches did not focus on any types of customers; they treated all customers as part of one group.

In this thesis investigation, casinos customers are divided into four different groups (Challenge/Winning Seekers, Only Winning Seekers, Light Gambling Seekers and Multi-Purpose Seekers), according to their motivations and personalities. The aim is to study their individual satisfaction, considering six service quality variables (Tangibles, Access, Courtesy, Understanding, Responsiveness and Empathy).

The respondents were asked to choose one of those four casino players' profiles, regarding their characteristics and preferences. After that, they evaluated how much a certain determinant of service quality influences their own satisfaction. By analyzing all the answers it was possible to take some conclusions regarding each one of the four types of casino players.

The final results proposed that Tangibles and Responsiveness have a positive influence on Light Gambling and Multi-Purpose Seekers' satisfaction and Courtesy has a positive contribution on Only Winning and Light Gambling Seekers' satisfaction.

Key Words: Motivations, Determinants of Service Quality, Types of Casino Players, Customers' Satisfaction

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Resumo

Com o passar dos anos, os consumidores tornaram-se muito mais exigentes. Posto isto, as empresas tentam arranjar novas formas de apresentar os seus produtos ou serviços. Como o serviço principal do casino é o jogo, e este não tem sofrido alterações consideráveis, os casinos são forçados a encontrarem novas formas de se diferenciar. Assim, conseguirão atingir níveis mais altos na satisfação dos consumidores.

Estudos anteriores que abordam este tema focam-se nas variáveis da qualidade do serviço que contribuem para a satisfação dos consumidores, no entanto nenhum se concentra nos tipos de jogadores que frequentam o casino por diferentes motivações. Assim, nesta tese, os consumidores do casino estão divididos em quatro grupos: *Challenge/Winning Seekers*, *Only Winning Seekers*, *Light Gambling Seekers* e *Multi-Purpose Seekers*. O objetivo principal deste estudo é, tendo em conta estes tipos de jogadores, descobrir quais as variáveis da qualidade do serviço (Tangíveis, Acessos, Cortesia, Compreensão, Capacidade de Resposta e Empatia) que contribuem para a satisfação de cada jogador.

De acordo com estes quatro tipos de jogadores, foi pedido aos participantes que escolhessem o perfil que mais se adequa ao seu, enquanto jogador. Após esta primeira abordagem, estes avaliaram o seu nível de satisfação baseando-se nas seis variáveis anteriormente mencionadas. Portanto, foram retiradas as devidas conclusões para cada tipo de jogador.

Os resultados finais ditaram que as variáveis Tangíveis e Capacidade de Reposta têm um contributo positivo para a satisfação dos *Light Gambling* e *Multi-Purpose Seekers* e a variável Cortesia na satisfação dos *Only Winning* e *Light Gambling Seekers*.

Palavras-chave: Motivação, Qualidade do Serviço, Tipos de Jogadores de Casino, Satisfação dos Consumidores

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Table of Contents

1. Introduction	1
2. Literature review	3
2.1 Motivations	3
2.1.1 Intrinsic and Extrinsic motivations.....	3
2.1.2 Gambling motivations	4
2.2 Casino activities	5
2.2.1 Gaming activities.....	5
2.2.2 Non-gaming activities	8
2.3 Types of customers.....	10
2.3.1 Types of players according to their profiles	10
2.3.2 Professional vs recreational players	12
2.3.3 Slot machine players	14
2.3.4 Typical internet casino and poker players	14
2.4 Service Quality – The importance of Marketing-Mix.....	16
2.5 Factors that contribute for players’ satisfaction	18
2.5.1 Tangibles	19
2.5.2 Access	21
2.5.3 Courtesy	22
2.5.4 Understanding	22
2.5.5 Responsiveness and Empathy	23
2.6 Service Quality.....	25
2.6.1 Determinants of Service Quality:.....	26
2.7 Customer satisfaction	26
2.7.1 Types of satisfaction.....	27
2.8 Conclusion.....	28
3. Methodology	29
3.1 Investigation’s hypotheses and Conceptual Model.....	29
3.1.1 Investigation’s hypotheses	29
3.1.2 Conceptual model.....	32
3.2 Methodology behind the quantitative study	32
3.2.1 Sampling Process	33
3.3 Statistical Techniques for the Quantitative Data Analysis	34
3.3.1 Descriptive Analysis	34

3.3.2 Hypotheses' Test	34
3.3.3 Reliability and Principal Component Analysis	35
3.3.4 Multiple Linear Regression Models	36
4. Data Analysis	37
4.1 Descriptive Analysis	37
4.2 Hypotheses' Tests for the 26 dimensions	39
4.3 Reliability and Principal Component Analysis	43
4.4 Hypotheses' Tests for the 6 variables	46
4.5 Multiple Linear Regression Model	47
5. Conclusions	53
5.1 Results Obtained	53
5.2 Implications on Casinos' Marketing	53
5.3 Discussion with other authors	54
5.4 Hypotheses validation	57
5.5 Limitations	60
5.6 Contributions	60
5.6.1 Academic contributions	61
5.6.2 Contributions for casinos	62
5.7 Future Research	62
References	63
Appendices	71
Appendix 1	71
Appendix 2	75
Appendix 3	81
Appendix 4	87
Appendix 5	89
Appendix 6	92

List of Tables

Table 1 – Casino Player’s Characteristics.....	16
Table 2– Determinants of Service Quality on Casinos	26
Table 3 - Social-demographic characteristics	38
Table 4 – Type of players Choice	39
Table 5 – Responsiveness Levene’s Test	40
Table 6 – Access Levene’s Test	40
Table 7 – Understanding Levene’s Test	41
Table 8 – Tangibles Levene’s Test	41
Table 9 – Tangibles’ ANOVA Test	42
Table 10 – Tangibles (q11.4) Multiple Comparisons.....	42
Table 11 – Cronbach’s Alpha for Tangibles.....	50
Table 12– Tangibles’ Reliability analysis.....	43
Table 13 – KMO and Bartlett’s Test for Tangibles.....	44
Table 14 – Tangibles communalities.....	51
Table 15 – Tangibles Variance Explained	44
Table 16 – Tangibles communalities after the extraction	45
Table 17 – Tangibles Variance Explained after the extraction	45
Table 18 – R Square values of satisfaction	47
Table 19 – Satisfaction’s Regression Model.....	47
Table 20 – R Square values of Challenge/Winning Seekers’ Satisfaction.....	48
Table 21– Challenge/Winning Seekers’ Satisfaction Regression Model.....	48
Table 22 – R Square values of Only Winning Seekers’ Satisfaction.....	49
Table 23– Only Winning Seekers’ Satisfaction Regression Model	49
Table 24 – R Square values of Light Gambling Seekers’ Satisfaction	50
Table 25 – Light Gambling Seekers’ Satisfaction Regression Model	50
Table 26 – R Square values of Multi-Purpose Seekers’ Satisfaction.....	50
Table 27 – Multi-Purpose Seekers’ Satisfaction Regression Model	51
Table 28 – Responsiveness’ Levene’s Test.....	75
Table 29 – Access’ Levene’s Test’	75
Table 30 – Courtesy’s Levene’s Test.....	75
Table 31 – Empathy’s Levene’s Test.....	75
Table 32 – Understanding’s Levene’s Test.....	75
Table 33 – Tangibles’ Levene’s Test	76
Table 34 – Responsiveness’ ANOVA Test.....	77
Table 35 – Access’ ANOVA Test.....	77

Table 36 – Courtesy’s ANOVA Test	78
Table 37 – Empathy’s ANOVA Test	78
Table 38 – Empathy’s ANOVA Test	79
Table 39 – Tangibles’ ANOVA Test	79
Table 40 – Tangibles’ (q11.4) Tukey and Scheffe’s Test	80
Table 41 – Responsiveness’ KMO and Bartlett's Test	81
Table 42 – Access’ KMO and Bartlett's Test	81
Table 43 – Courtesy’ KMO and Bartlett's Test.....	81
Table 44 – Empathy’ KMO and Bartlett's Test.....	82
Table 45 –Understanding’s KMO and Bartlett's Test	82
Table 46 –Tangibles’ KMO and Bartlett's Test	82
Table 47 – Responsiveness’ Extracted Components.....	82
Table 48 – Access’ Extracted Components.....	83
Table 49 – Courtesy’s Extracted Components	83
Table 50 – Empathy’s Extracted Components	83
Table 51 – Understanding’s Extracted Components	84
Table 52 – Tangible’s First Extracted Components	84
Table 53 – Tangible’s Final Extracted Components	84
Table 54 – Responsiveness’ Total Variance Explained	85
Table 55 – Access’ Total Variance Explained	85
Table 56 – Courtesy’s Total Variance Explained	85
Table 57 – Empathy’s Total Variance Explained	85
Table 58 – Understanding’s Total Variance Explained	86
Table 59 – Tangibles’ Total Variance Explained (Before extracting component number 2)	86
Table 60 – Tangibles’ Total Variance Explained (After extracting component number 2).....	86
Table 61 – Service Quality’s Variables Levene’s Test	87
Table 62 - Service Quality’s Variables ANOVA Test	87
Table 63 - Service Quality’s Dimensions ANOVA Descriptive Analysis.....	88
Table 64 - Responsiveness’ Reliability if item deleted.....	90
Table 65 - Access’ Reliability if item deleted.....	90
Table 66 - Courtesy’s Reliability if item deleted	90
Table 67 - Empathy’s Reliability if item deleted	91
Table 68 - Understanding’s Reliability if item deleted	91
Table 69 – Levene’s Test for the 6 variables	92
Table 70 - Service Quality’s Variables ANOVA Test	92
Table 71 - Service Quality’s Variables – Descriptive Analysis	93

List of Figures

Figure 1– Service Quality’s variables’ impact on Casino Players’ Satisfaction Model.....	32
Figure 2– q6.1 Kruskal-Wallis Test	40
Figure 3 – q7.1 Kruskal-Wallis Test	40
Figure 4– q10.2 Kruskal-Wallis Test	41
Figure 5 – q11.5 Kruskal-Wallis Test	41
Figure 6 – Mean of Tangibles (q11.4) for the type of player	42
Figure 7 – Hypotheses Validation	59
Figure 8 – Responsiveness Kruskal Wallis Test	76
Figure 9 – Access Kruskal Wallis Test	76
Figure 10 – Understanding Kruskal Wallis Test	76
Figure 11 – Tangibles Kruskal Wallis Test.....	77
Figure 12 – Responsiveness’ Reliability	89
Figure 13 – Access’ Reliability	89
Figure 14 – Courtesy’s Reliability	89
Figure 15 – Empathy’s Reliability	89
Figure 16 – Understanding’s Reliability	90

1. Introduction

Over years, gambling has always been seen as a deviant activity, condemned by the society (Hulbert, Boldero, Id, & Vargas-sa, 2019). This negative connotation is aligned with the effortless monetary rewards, which despises the work ethic.

Whilst, in a common job, workers are rewarded for their hard work and merit, on gambling the rewards are a result of pure chance. Some players believe in transcendent forces such as luck or fate, but the truth is that, although some games also involve skill, all of them depend on chance. Because of that, they were considered a threat to the social hierarchy and, consequently, unaccepted and criticized (Smith, Hodgins, & Williams, 2007).

Later on, with the industrial revolution, gambling started to be treated as a vice compared to alcoholism and prostitution (Quirk, Denise F, Ohare, Carol & Moss, 2019). It was no longer a matter of religion or justice but it was converted on a disease. Many authors from that time defended that gamblers were sick people that fall into these regressive disease. Besides the immorality, gambling was considered a defect of the human being.

On a sociological perspective gambling was seen as an escape of the daily life with its problems and frustrations. Especially people from the bottom of the social hierarchy were using gambling to release their tensions, so this activity turned out to be beneficial for this niche (Diller, 1969).

Until then, most forms of gambling were illegal all through America and Europe. Until the late 1960s, they were strictly regulated. Although the rigid legislation, those forms of gambling were often associated with scandals of fraud and corruption, which did not help to change societies' mentality about gambling (Shaffer, Hall, & Hall, 2010; Smith *et al.*, 2007).

This tight state intervention on public and private life ended in the 1970s, with the neo-liberal economic policies. Instead of this closed regulation and the scandals involved, governments started regulating the gambling market through taxing its profits (Calcagno & Walker, 2016). This way, they would take a slice of the cake and both entities would benefit from this new situation. Gambling was no longer seen as an offense or an immorality no more. Due to the lack of regulation, in the following years

the market started to grow exponentially and gambling was now seen as a leisure activity and not as a disorder (Churchill & Farrell, 2019).

After the 1980s more than half of western population was gambling because the gambling industry changed their mentalities. The term gambling got old-fashioned as it had a negative connotation, involving financial losses (Shaffer *et al.*, 2010). By that time this industry was providing happiness and hope to this consumerist society. It started to be called gaming because its main purpose was to entertain people. This industry was clearly a product of a consumerist society that seeks for instance rewards and self-fulfillment without working hard. The only way possible was by putting their money on fate's hands and hopping that luck would favor them (Cosgrave, 2006; Smith *et al.*, 2007).

Nowadays many studies involving gambling were conducted, however it remains a very contested field due to its complexity. Apart from the common motivations that moved people to visit casinos since ever, in these times is not that linear as it was. More and more, people are dissatisfied with their lives and see in casinos a way to escape and to change their reality.

Even though most of them know that, throughout history, casinos have enriched very few people, they keep going there. Casinos are not just a place, with tables and slots, where people gamble (Smith *et al.*, 2007). Casinos are the restaurants, bars, spas, hotels, shows, between other amenities. Casinos are a set of different amenities, which primarily existed to complement gaming activities, but, with consumers being more and more demanding, they started to be as important as the others (Suh, 2011).

It is casinos managers' concern to understand what do consumers value on casinos and how can they provide the right services to the right people (Suh, 2011). As casinos' resources cannot be wasted in vain, allocating them according to consumers' preferences it is a must to guarantee their satisfaction and loyalty. This dissertation will investigate this matter and, after that, provide casino managers with useful information about their customers, their preferences and what can be done to secure their satisfaction and loyalty.

2. Literature review

To fulfill the objectives presented in the previous chapter, a literature review on the mentioned topics is required to develop the research. The current chapter provides a summary of the existing literature on motivation (intrinsic and extrinsic motivations as well as gambling motivations); different types of gaming and non-gaming activities and types of casino customers.

Furthermore, it is analyzed the importance of service quality on customer satisfaction and the factors that influence it. Lastly, it is made a brief conclusion about the importance of employees and customer satisfaction.

2.1 Motivations

Motivations are the reasons that move people to do something. If someone is energized and has the willing to do an activity towards an objective, then this person is motivated (Peters, 2015).

Motivation may vary in two factors: the level of motivation and its orientation (Guardia, Ryan, Couchman, & Deci, 2000). The first one is the amount of motivation that moves someone to perform an action. For example, a student may be more motivated to learn History rather than Sciences due to his preferences. The second one concerns the type of motivation, as someone can be moved to do an action with different purposes. A student may be motivated to do his homework for pleasing his parents, for improving his skills or just to search teacher's approval (Deci, 1971; Ryan & Deci, 2000).

2.1.1 Intrinsic and Extrinsic motivations

Having this definition in consideration, motivation can be distinguished between intrinsic and extrinsic motivations. An action intrinsically motivated does not receive any tangible outcome or reward, as it is performed only seeking inherent satisfactions. With no apparent goals or consequences, the motivations here are simply the enjoyment, challenge or altruism, for instance. Human beings are curious and active, always seeking for fun, so there is no need to incentive them with a specific reward if the action of performing that activity is enjoyable by itself (Deci, 1971; Guardia *et al.*, 2000).

On the other hand, there are the extrinsic motivations. Instead of focusing on the satisfaction of doing something, this type of motivation emphasizes the goals and the rewards that come from performing an activity. These objectives may be economic incentives, positive feedback or even self-improvement (Pritchard, Campbell, & Campbell, 1977). Using the student again as an example, he can be motivated to study hard to become a well succeeded person in the future or just to avoid sanctions from his parents or teachers.

Even though he is performing the same activity, the goals are different as he is motivated regarding his objectives and not so much because he enjoys doing it (Ryan & Deci, 2000).

When it comes to gamble, there are different approaches that help explaining why people choose to gamble instead of doing any other thing.

2.1.2 Gambling motivations

According to Jang (2000), gambling can be seen by a sociological perspective. For some players, ego-enhancement and seek approval are the factors that drive them to gamble. Other people play because their peer also plays and they do not want to feel apart and just watch. There are also the ones that prefer to play alone, so they do not play to feel integrated on a social group. Finally, we have the players that seek excitement, risk and thrill and the ones that use gambling as a way of escaping from their daily life (Ho-Chan Jang, Bongkoo Lee, Minkyung Park, 2000).

Another approach is viewing gambling on a socio-psychological point of view. On one hand, Chantal (1995) developed a self-determination theory that classifies the different players according to the degree of self-determination. While high self-determined motivational profile gamblers are motivated by the sense of accomplishment and excitement, the low self-determined motivational profile gamblers are only moved for monetary rewards, being the last ones less involved in gambling than the others.

On the other hand, Lee (2006) believe that motivation is based on the benefits that come from gambling. The main factors are escape, enjoyment, monetary reward and social bond. Still on a socio-psychological perspective Platz and Millar (2001) examined gamblers and divided them in recreational and pathological gamblers according to their motivations. The first ones gamble due to the feeling of winning, risk,

being with friends and socializing while the second ones also gamble to win and to feel excited, but they do it mainly to escape from the daily routine and to feel independent.

The last approach sees gambling motivations as an experiential consumption perspective. Cotte (1997) divides them in four categories: firstly the economic motives (gamblers play for winning money); then the symbolic motives (sense of control and taking risk); the experiential motives (playing for leisure, curiosity, companionship) and finally the hedonic motives (strong feeling that come out from gambling such as entertainment, enjoyment, relaxation).

In Cotte's (1997) study, composed by 1018 respondents, hedonic motives were the ones that gamblers were more identified with: "It is the best way to relax completely"; "It allows me to enjoy myself" and "It is exciting to play or money" (Cotte, 1997). On the other hand, symbolic motives were the ones less valued by gamblers: "To show others I am a dynamic person"; "To be envied by others" and "It's the best way to meet my friends".

Whether it is the sociological, socio-psychological or experiential consumption, people are affected by many different motives that drive them to go to casinos (Garnett, 2018). Once there, they are faced with both gaming and non-gaming activities. According to their preferences, casino customers will choose the option that best fits their needs.

2.2 Casino activities

2.2.1 Gaming activities

2.2.1.1 Gaming activities on physical casinos

In general, casinos' services can be differentiated through gaming and non-gaming activities. Depending on the dimension of the casino, managers use the available space on casino areas to invest on non-gaming activities. Of course, larger casinos will have more of those activities available for their customers than the smaller ones (Lutri *et al.*, 2018).

Firstly, focusing on gaming, casinos offer a wide variety of games. There are the table games that include all card games such as poker, blackjack, baccarat and also dice games and roulette. Furthermore there are slot machines, where the player is seated in front of a machine and, each bet he makes, generates a spin which may result on a win.

Video poker, blackjack or roulette work in the same way as the table games, however these ones are played on machines. Finally, there are the lottery games, bingo, scratches and sports betting that are included on a different category (Lutri *et al.*, 2018).

For all of these games, good fortune is very important, however some of them involve more skill while others is just a matter of chance. For instance, chess is a game of skill: if you are a better player than your opponent and you play wiser, you will beat him and there are no external factors such as luck or chance that may influence that. Games like blackjack or poker are considered games of mixed skill and chance: of course if you have a good hand, you have better chances of winning, however skill is fundamental to know how much and when you should bet. Roulette, dice and slots are games of pure chance (Walker, 1992). They are all fair games and with no skill involved. The outcome has no human/mechanical intervention as it is controlled by mathematical distributions. Because there are different games, involving chance and skill, there are also three different types of payouts. The first one is the one used on poker tables. The winner gets paid by the total pool of bets from the other players minus a casino's fee. The second one is the one used on sports betting.

Prior to the event, the house establishes the odds that vary according to the most likely outcomes from a specific event. If the player wins, the amount of money he gets is his bet times the odd. The third type of payout is used in games like blackjack, roulette or dice. Players bet on a hand/color/number against the house. If they win, they get paid accordingly to the odds already established by the house (color on roulette pays 1:2 and number on roulette pays 1:36, for example). If not, the house keeps their bet (Walker, 1992).

According to Kale and Spence (2009), around the world there are different habits concerning different cultures. For example, on Western markets, most of the players prefer slot machines. On Nevada, almost 70% of the gaming revenues came from slots. On Asia, the scenario is completely different as table games are predominant in these markets (mainly blackjack and baccarat). Casinos' managers need to take this in consideration when planning the room layout and on deciding the amount of slot machines and table games (Kale & Spence, 2009).

These concerns with layout and the number of slots or tables, for example, are not an issue when gambling online. Apart from physical casinos, there are many online

platforms that allow gamblers to play as long as they have internet on their laptop or smartphone.

2.2.1.2 Gaming activities online

Nowadays, besides gambling on casinos, gamblers have plenty of options online as they can play almost every game and feel the same excitement and thrill as if they were on a casino (Sirola, Kaakinen, & Oksanen, 2018). Many studies divided gamblers in two groups; online and offline gamblers. However, this distinction is problematic because most of the online gamblers also play offline. By treating those two groups as exclusive groups, casino marketers are missing loads of useful information about their target.

For instance, according to Wardle and Griffiths (2011) research, that defines the online gambler in Great Britain (a typical country where many forms of gambling are legal), “*the majority of online only gamblers were people who simply used the Internet to purchase their National Lottery tickets online*”(Wardle *et al.*, 2011). Using this example we can see that there needs to be a distinction between only online gamblers, online and offline gamblers and only offline gamblers.

It is important to distinguish people that buy certain activities online different from the offline options (lottery, sports bets) and the ones who spend more time playing casino games online, that can also be found offline (roulette, bingo, pokers, slots). These mixed mode groups show higher levels of gambling involvement than the others due to the simple fact that the more engaged a person is with gambling activities, the more they will search for different modes of accessing those activities. As a consequence, this type of gamblers shows more gaming dependency.

Other aspects that need to be considered, when operators want to go online in different countries, are the different jurisdictions, legal availability and popularity of gambling activities. When, for instance, in countries where there are plenty of gaming options available, online gaming is just another easy way of gambling, whereas in more prohibitive regimes it may be seen as a new form of gambling not available before. Besides that, internet is an excellent tool to interact easily with gamblers and online operators are in a privileged position to analyze the individuals levels of risk and to promote socially responsible practices in order to help preventing gaming problems (Wardle *et al.*, 2011).

2.2.2 Non-gaming activities

Finally, apart from gaming activities (offline and online), casinos also have complementary or non-gaming activities. As Bryan Allison, vice president of marketing at Vegas.com, said “*gaming is a major part of why people come to Vegas, but it’s no longer the dominant reason. There is much more here than just casinos*” (Suh, 2011). Vegas has the largest and richest casinos in the world, with a wide range of non-gaming activities; some of them more unique than others.

Casino resorts include restaurants with celebrity chefs known worldwide, spas, nightclubs, shops, bars, showrooms for any kind of acts and of course luxury accommodation (Suh, 2011). On medium-size casinos, usually there are one or two restaurants a showroom and bars all over the gaming area to serve the players. On medium/small-size casinos it is hard to find showrooms or restaurants, however there are normally one or two bars apart from the gaming tables and machines. These amenities are important to attract a diverse customer base. On one hand, they satisfy the players’ needs of eating and drinking while playing, for example. If players feel comfortable while playing, they will tend to stay longer because their needs are being satisfied. Also people who attend to showrooms or go to restaurants inside the casino area use to put some bets for entertainment (Suh, 2011).

Although non-gaming activities contribute (even if it is a small contribute) for gaming revenue, most casinos operate this amenities at a loss or break-even point. Nowadays, non-gaming activities are not that used for increasing gaming revenue, but for increasing the guests’ expenditures per visit. For instance, if a person goes to a showroom on a casino area, after he has the possibility of having dinner there, do some shopping or just have a drink on a bar. This way, showrooms and restaurants mainly exist to increase the traffic on other activities by attracting a different type of customer, one that spends more money on beverage and food than the typical casino player (Suh & West, 2010).

According to Suh (2011), high-end restaurants have a significant and positive effect on coin-in generated by high-worth segments (people that spend higher amounts of cash), while casual restaurants cause the same effects on coin-in in medium/low-worth segments. Also on the study, attendees of large and small-scale shows spent more money than the ones that did not attend to any type of show or attended to different

ones. These complementary activities are considered free offerings to gamblers in order to increase the volume wagered.

To understand better the importance of non-gaming amenities for the major players in commercial gaming worldwide, Tom Cantone (vice president of entertainment at Mohegan Sun) explains the contribute of the different facilities on the overall experience (Mantini, 2017).

Mohegan Gaming and Entertainment operates on North America and has partnership with properties and resort casinos from Washington, Atlantic City and even South Korea. They have an Arena for concerts and sporting events which brings millions of additional customers that would not have stayed in that specific resort if it was not for those amenities. No other gaming properties are able to compete with them as their facilities also include the Madison Square Garden and Staples Center.

Besides the people that go there specifically for those events and end up playing for a while, there is also other type of customers that this operator is reaching. Mantini (2017) explains that now, every Saturday, he books a young show with young artist. Before, this concert would not make any sense to a marketer because the concert was not directed for the typical gambler. However, nowadays, this concert is a place where parents can drop off their kids while playing for a couple of hours. During this time, kids may enjoy the other property amenities including concerts that fit into their interests (Mantini, 2017).

Using Vegas again, as an example to present some data, only 38.7% of the total revenue of Las Vegas Strip casinos comes from gaming. More than half of the total revenue was derived from non-gaming activities in 2009.

As we can see in Las Vegas casinos, people spend time and money on these amenities, so managers find them to be a good investment. The same happens in Europe casinos, however, in the Asian markets, the scenario is different (Kale & Spence, 2009). For example, in Macau, people spend an average of 1.26 days in the territory which means that most of them do not book a hotel room and there are some cases that they bring their own food. Managers and marketers have to know very well their consumers in order to provide them with proper marketing strategies and do not waste resources in vain (Kale & Spence, 2009).

After defining gamblers motivations and the activities available in the casinos, it is now relevant to define different casino customers' profiles. This way, it will be possible to know who seek these activities and how do they behave.

2.3 Types of customers

Taking in consideration the motivations that lead people to casinos, the findings in this area, provided by different researches, are very similar. The most relevant motives are winning, challenge, socialization and learning (Platz & Millar, 2001; Tarras, Singh, & Moufakkir, 2000). Based on that, Lee (2006) gathered people with similar motives into groups, generating four clusters groups: "challenge/winning seekers"; "only winning seekers"; "light gambling seekers" and "multi-purpose seekers".

Even though Lee (2006) divided gamblers in four groups, Lesieur (1979) was the first to mention the pathological gamblers. They are characterized by always trying to win to get back previous losses, with no control on themselves. It is important for casinos to identify this type of gamblers, to better help them through responsible gaming promotion and psychological counseling.

2.3.1 Types of players according to their profiles

2.3.1.1 Challenge/winning seekers and only winning seekers

The first group, "challenge/winning seekers", is motivated to win essentially for money and challenge and not so much because of escaping or socialization. These ones are mainly people with medium incomes that see gambling as their primary motivation, so they tend to stay in casinos for longer periods of time. They use to gamble alone or with friends or relatives and prefer to play blackjack rather than other games. Also they place medium to high bets (Lee *et al.*, 2006).

The "only winning seekers" are motivated to play for money and for winning back their previous losses as well. Just like the first ones, they do not care much about escaping or socialization. They have high incomes, usually married people, and their primary purpose is gambling and that is why they also stay for longer periods. Characterized by higher wager amounts, this group of people gambles together with their friends/relatives and their favorite games are blackjack and baccarat (Lee *et al.*, 2006; Tarras *et al.*, 2000).

When it comes to slot machines, these heavy players prefer video machines rather than reel machines and also play more often on progressive machines than medium/light players. In average, most of “only winning seekers”, that play slot machines, (88%) are aged between 45 and 74 years old (Chen, Shoemaker, & Zemke, 2013).

A good example of players included on these two groups are the Asian gamblers, more specifically, Chinese players. For Chinese people, gambling is a sign of individual wealth and that is the main reason why they are so committed on winning and do not see it as an entertainment. Also, they are very superstitious, leading to an illusion of control based on false beliefs. In the Asian culture, people believe in “*Feng Shui*” (wind and water), which is a spiritual discipline from China regarding the balance between ourselves and the environment we are in. For instance, inside the casino, Chinese gamblers need to feel that the area transmits good “*Feng Shui*” and the machines design is in accordance to which they believe that brings luck (Prentice & Wong, 2015).

Another factor that is valued by them is the socialization factor. From an historical view, gambling was always part of ordinary people’s lives as it is considered a social activity in this society. Due to those two points (control and socialization), Chinese players prefer table games rather than slot machines because gamblers feel they have more control. Also, it allows them to interact with other players and with the dealer (Chen *et al.*, 2013).

Marketing strategies for these two groups need to focus on attracting more of these players, increasing the amount wagered and extending the duration of their stay. Because they are the most valuable players for gaming activities on a casino, casino managers could adjust the rules in order to generate more excitement and thrill on these customers.

2.3.1.2 Light gambling seekers and multi-purpose seekers

Then, there are the “light gambling seekers”: players that are not strongly motivated by anything. They go to a casino to gamble, win, be entertained, socialize, and enjoy the whole experience (Tarras *et al.*, 2000). Mainly high educated with medium incomes, these players visit casinos more often than the other two groups and use to gamble with friends or family both on slot machines and table games. On slot

machines, specifically, these gamblers are the youngest ones, even though there is only 21% aged 21-44. Also they prefer playing reel machines than video machines (Chen *et al.*, 2013). In comparison to other groups, “light gambling seekers” are less motivated by the act of gamble and more by enjoying gambling as a leisure activity. They also like to socialize and be entertained on the casino area. For these ones, casino may opt for increasing the number of recreational activities, link local tourism with casino activity (thematic shows, local food) and also provide some coupons or discounts on restaurants, bars, hotels and entertainment activities (Tarras *et al.*, 2000).

Lastly, “multi-purpose seekers” are motivated by all of the factors mentioned before. There is a high proportion of married people with high education level and medium to high incomes on this group. Gambling is both primary and secondary purposes and they use to play alone or with family/friends, mainly on slot machines with medium/high amount wagered. For these ones, casino marketers should focus on special events such as gambling or golf tournaments and on the development of the recreational facilities to promote socialization and entertainment (Lee *et al.*, 2006; Weinstein, Klein, & Dannon, 2015). The majority of these players (70%) are aged 45-64 years old; a tendency that occurs in every typical casino player but more marked on multi-purpose and only winning seekers (Chen *et al.*, 2013).

These last two groups of customers tend to see gaming as entertainment, so they do not take gambling as serious as the first two groups do. Whereas, “challenge/winning seekers” and “only winning seekers” include both professional and recreational gamblers, “light gambling seekers” and “multi-purpose seekers” are only composed by recreational gamblers.

2.3.2 Professional vs recreational players

Professional or hardcore players represent around 70% of the total gaming revenue of a casino. These types of gamblers are very important for casino operators and their needs must be fulfilled as much as casinos’ managers and marketers can. They prefer table games such as Baccarat and also demand high standards on the service quality of casinos (Chen *et al.*, 2013). Female hardcore players give more importance to the game service quality, while male hardcore players care more about the service environment quality. On the other side, recreational or leisure players are, most of the

times, white-collar or blue-collar workers that do not get many complementary services in comparison with hardcore players (Chen *et al.*, 2013).

Mainly, professional gamblers are poker players. It is very unusual to see professional roulette or slot players as these games do not involve skill at all. On the other hand, games like blackjack or poker are the ones that, if someone is skillful enough, that person can make money with it (McCormack & Griffiths, 2012). Some of the most important skills for playing these games are: “*evaluative skills; mathematical skills; interpersonal skills; problem-solving skills; self-awareness skills; self-control skills and analytical and strategic skills*” (A. Parke, Griffiths, & Parke, 2005).

First of all, professional players are very discipline. Beforehand, they establish a budget, in order to have a good bank roll management and do not end up spending more money than they should. Secondly, professional gamblers do not overestimate the skill involved on poker by treating it as work and never losing composure (A. Parke *et al.*, 2005). Recreational players treat poker as entertainment; so many times they get affected by wins or losses, which make them more emotional and not rational.

Another thing that leisure players do is chasing their losses because they think a big win will compensate all the previous losses. In most of the cases it does not happens that way. Due to that, they take many more risks than professional players and make informed decisions based on appearances and initial judgments (Lee, 2004). Contrarily, hardcore players have the ability to be detached from the game, analyze the type of players on the different tables and target the weaker ones. They also provide very little information about themselves, so other players cannot know if they are amateur or professional gamblers. Usually they play with high stakes for longer sessions (up to 10hours a day) and in many tables at the same time (up to 8 tables), whereas recreational players play mostly at the minimum for shorter sessions (up to 2hours a day) in few tables at the same time (up to 2 tables) (McCormack & Griffiths, 2012).

The key word that differentiates professional from recreational gamblers is self-control. If a player wants to be pro and win money with poker or blackjack, that person needs to treat the game as something serious and do not get affected by emotions. Sometimes recreational players enjoy an alcoholic drink when playing, what can drive them to take unnecessary risks and makes them more vulnerable (McCormack &

Griffiths, 2012). These players do not seek the easier games to play and the ones that most appeal to their emotions: machine games.

2.3.3 Slot machine players

Slot machines, video-poker machines and other machine games are considered cash cows for casinos. It is an asset that, once paid off, generates gross and consistent revenue over its lifespan. In Europe, casino gamblers prefer machine games rather than other games and that is related with this type of gamblers' personality traits.

Slot machine gamblers, in comparison to card-game players, are more impulsive and materialist and less competitive and excited (Fang & Mowen, 2009). “*Conventional wisdom says that slot machine gamblers are poverty-stricken, geriatric widows spending their retirement checks on the slot machine*” (Chen *et al.*, 2013). However, more recent studies proved that the majority of slot machine players in US are, in fact, women aged around 46 years with an annual household income around 55.000 US dollars. On the other side, because video-poker machines require more skill to be played, video-poker players are characterized by having a more dominant personality while slot machine players are more submissive (Chen *et al.*, 2013; Fang & Mowen, 2009).

Due to the characteristics of machine games, some players get affected by the sounds/music that come out from the machine in case of win, or by the immediacy of rewards what causes problems with gambling. Other factors are the “near wins”, irrational thinking/false beliefs and even the personification of gaming devices. All of those (1% to 3.3%), affects mainly women and high risk-taking gamblers that tend to be influenced by these marketing strategies (Stewart, 2010).

In general, gamblers who prefer machine games are much more emotive than the ones who prefer table games. The last ones are more rational, as their prime objective is to win money. Another example of gamblers that are mainly moved by economic motives is the internet casino and poker players.

2.3.4 Typical internet casino and poker players

Parke (2007) conducted a study, analyzing the attitudes and behaviors of internet casino and poker players. They used both focus groups with 94 participants from 5 different countries aged between 17-60 years old and surveys with the total respondents

of 10.865 people from 96 different countries, including the European and American continent, which more less 60% were males and 40% females. The outcome is that the typical internet casino player is likely to be female (55%), aged between 46-55 years old (30%), plays 2-3 times per week 1-2 hours per session and have visited more than 6 casinos in the preceding three months (25%).

This confirms that most of online gamblers are also in-person gamblers. For this type of gamblers, winning money is the most important factor for playing internet casino and the least common motivation is to socialize. When to choose where to play, gamblers value bonuses (76%), game variety (62%), deposit method (56.8%) and trust (focus groups) the most (Parke *et al.*, 2007).

On the other hand, the most typical internet poker player use to be male (73.8%), aged between 26-35 years old (27%) and plays both cash games and tournaments (34%). The visits to poker sites, the hours per session and the fact that they have played for 2-3 years (24%) are characteristics common to the internet players as well. Around 12% of internet poker players prefer to play online because they can be whoever they want and avoid (especially females) sexual harassment and disrespectful comments (Parke *et al.*, 2007).

When asked about the best things of playing online, more than half of the respondents answered convenience and accessibility (3925/6654) because you can play online in any device connected to internet in any place. Also fun/excitement and winning/financial reward were strong motives that drive players to go online. The worst things about online gambling are mainly losing and financial implications (1668/6654), payment issues (1075/6654) and also the addiction factor and the low level of trust and cheating on online games (Parke *et al.*, 2007).

All of these players, despite their characteristics and behaviors, want to have a positive consumption experience. Some of them will value more the service provided by the casino. Others to the environment or to the dealers work. Overall, casino customers have preferences and demands that must be fulfilled by casinos in order to get their satisfaction and subsequent retention and loyalty.

	Challenge/Winning seekers	Only winning seekers	Light gambling seekers	Multi-purpose seekers
Primary motivations	Wining money and challenge	Winning money and getting back previous losses	Not strongly motivated by anything	Winning money, challenge, socialize, having fun, escape from daily life
Type of players	Professional and Recreational	Professional and Recreational	Recreational	Recreational
Main Activities	Gaming Activities	Gaming Activities	Gaming and Non-gaming activities	Gaming and Non-gaming activities
Games	Skilled and chance	Skilled and chance	Chance	Chance
Platforms	Online and offline	Online and offline	Offline	Offline
Income	Medium	High	Medium	Medium/High
Amount waged	Medium/High	High	Low	Medium/High
Age	Younger	Older	Younger	Older
Period of stay	Longer periods	Longer periods	Shorter periods	Shorter periods

Skilled games: Blackjack, Baccarat, Poker

Chance games: Roulette, Slot machines, Dices

Table 1 – Casino Player’s Characteristics (Chen *et al.*, 2013; McCormack & Griffiths, 2012; A. J. Parke *et al.*, 2007; Lee *et al.*, 2006)

2.4 Service Quality – The importance of Marketing-Mix

It does not matter what the business is about, marketers are worried on satisfying customers’ needs and retain them, so they can spend more money than expected. In the recent years, consumers are more concerned on reducing their expenses and not so much focused on buying loads of products. Due to that, the marketing approaches suffered some changes over the years (White, 2010).

Before, back in 1960, marketing plans, used to increase consumerism and to reduce marketing issues, were based on the 4Ps mix: product, price, place and promotion. This division was first set by McCarthy in 1960 and, even though it has been improved by other authors, it is still used nowadays (Azeem & Sharma, 2015).

Products or services are the core offering of the retailer. The quality involved, variety, assortment, those are all competitive advantages that possibly distinguish a product/service from another similar one from the competitors. The price strategy is also a mandatory component of the marketing plan. A company may opt to compete by

assigning lower prices to their products in order to penetrate the market quickly: penetration pricing. This way, they will sell a large number of products/services and will have a large market share.

The other strategy is establishing high prices, making the product exclusive to certain segments of the population. There will be fewer sales with this strategy; however they will be more profitable. The other P, standing for place, refers to the location of the retail store, where the products or services are available for consumers, and the distribution process. Lastly, promotion includes all the efforts and activities that communicate the features of the product and the benefits, for the customer, from acquiring it (Ayu, Citra, Ayu, & Suryawardani, 2019; Ekonomi, Saidani, & Sudiarditha, 2019).

Although those 4Ps are essential on a marketing plan, for retail marketing they are not enough. Markets got much more competitive since then and customers more demanding, so retailers are more concerned on differentiating their stores and on the way they deliver the product/service. Product, price, place and promotion do not focus on this matter and Booms and Bitter (1981) were the first ones to make this association. They thought that, to achieve consumers' satisfaction and loyalty, they needed to explore further than just those 4Ps. Having this in mind, these two authors added three more elements: Physical Environment, People and Process (Azeem & Sharma, 2015).

Stores needed to start offering not only products and services, but also a full consumption experience by creating a unique atmosphere that stimulates consumers to stay longer in-store and, consequently, increasing consumption. *“Such atmospheric planning can make the difference between a business success and failure”* (Turley & Milliman, 2000).

One way of doing it is by changing the overall consumption experience using entertainment to get consumers' attention (Pantano & Ñ, 2010). This tendency of gathering retail shops with entertainment is called retailtainment. It first appeared on shopping centers and malls that were trying to get consumers' attention while communicating their brand.

Retaining customers for longer periods, apart from increasing their consumption, also generates satisfaction, positive word-of-mouth and loyalty. The key point here is,

through entertainment, encourage consumers to spend more by giving them a motive to stay inside the store. This concept aims to create curiosity and engagement on consumers (Blut, Teller, & Floh, 2018; White, 2010).

Apart from physical environment, the competence and friendliness of workers are also an element, much valued by consumers (Hansen, 2001). On retailing, it is very important to have motivated and satisfied workers because they are the ones in direct contact with consumers. By guaranteeing that, the chances of providing a prompt service and being helpful and kind with costumers are high. The last P stands for process, which includes the systems the organizations use to increase their profitability and minimize costs. Those can be focused on the distribution channels, payment methods, suppliers; anything that affects the execution of the service (Azeem & Sharma, 2015; Lucas, 2003).

This extension from 4Ps to 7Ps was widely accepted by many authors such as Rafiq and Ahmed (2004), since it focuses more on the relationship between brand and costumer. More and more, consumers want to feel unique and valuable for brands. They do not just want to enter in a store, buy a product/service and get out. They want the brand to communicate with them, to feel comfortable and happy when they are purchasing something. It is important for them to receive a special treatment because they know there are more companies offering similar products. If they do not feel satisfied with the whole experience, they will search for another brand that fulfills their expectations. These last 3 Ps came to strengthen the bonds that will positively influence customers' satisfaction and loyalty to a certain brand (Ekonomi *et al.*, 2019).

2.5 Factors that contribute for players' satisfaction

In casinos, physical environment and personnel are two crucial elements of the retail-mix that should be taken into consideration. When casinos manage to have their employees satisfied and motivated to give their best on their jobs, they will be ready and able to cooperate on providing an excellent internal service (Lai, Chan, & Lam, 2013).

There are many authors that defend different theoretical models, explaining the different determinants that influence the overall consumption experience. One of those researches was conducted by Lucas (2003) as an extended work of two other authors: Bitner (1992) and Wakefield and Blodgett (2016). They studied the role of physical

environment on the satisfaction process of leisure services consumers and also included casino players, more specifically slot players.

Lucas (2003) developed a model where he considers satisfaction casino service-escape, gaming value, prompt service and staff friendliness as the main determinants of the satisfaction overall slot experience. In order to accomplish high levels of satisfaction on casino services it is important to analyze seven components:

- Ambient conditions;
- Interior décor;
- Casino navigation;
- Cleanliness;
- Seating comfort;
- Service promptness;
- Staff friendliness.

On the other hand, according to Botelho, Faias, Couto and Batista (2014), Kumbhar (1993); Bharwana and Mohsin (2013) and Zeithaml and Berry (1985) service quality can be defined through the combination of six dimensions:

- Tangible;
- Access;
- Courtesy;
- Understanding;
- Responsiveness;
- Empathy.

2.5.1 Tangibles

The first dimension, tangible, includes physical facilities (bars, showrooms, hotels, restaurants, the casino itself), equipment (machines, tables, chairs) and the appearance of the personnel (dressing code and physical appearance).

The ambient conditions have a crucial role in casino environment and are composed by five aspects:

- According to previous researches, the **temperature** should be set between 20°C and 23°C so players can feel comfortable (Zhu, Meyer, Zhu, & Puntoni, 2016).

- The **ventilation** needs to be capable of reducing the most of cigarette smoke. Thus, air quality is improved and nonsmokers do not get affected by it (Zhu *et al.*, 2016).
- The **video quality of the machines** is composed by game features and different attractive and entertaining sounds, such as the sound of coins falling. Nowadays, interactive screens are enriching the consumer experience. They are very user-friendly and players get more entertained with this ability of interacting with game through touchscreens (Zhu *et al.*, 2016). All of those aspects generate more excitement on gamblers and contribute to the quality of the gambling experience.
- **Lights** and **music** are very important too. Attractive lights and music help to create a good environment, reduce the negative moods and encourage customers to gamble more, feeling comfortable and not tired or stressed out (Hui, Bradlow, & Fader, 2009; Lucas, 2003).

Furthermore, the interior décor, decoration, light system, colors, wall and floor treatment, they all matter to guarantee gamblers happiness (Zeithaml & Berry, 1985). For instance, neon lighting usually creates excitement. Wall and floor treatment contribute to the appeal of the service-escape. It is relevant to make periodically changes on the interior décor, so gamblers do not lose motivation and interest on that casino. Stay updated and trendy by adapting different lifestyles and personalities of the consumers to the environment (Russell & Pratt, 1980).

The aspects regarding ambient conditions and interior decoration affect all types of players. The temperature and air quality are fundamental for guarantying that all players, regardless of their purpose to be in the casino, are able to spend a decent and quality time there (Zhu *et al.*, 2016). Also, a casino by staying trendy and up to date with on-going events and celebrations will increase the satisfaction of all their customers (Min, Raab, & Tanford, 2016). The light system they use and the way casinos dispose their tables and machines are key elements that affect all players in the same way.

However, for example the sound of coins falling and the interactive screens may have a stronger contribution on multi-purpose seekers satisfaction, as this type of players wants the overall experience and not to play just because of the outcome.

Another example concerning ambient conditions is the lights and music inside casino areas. These aspects will generate positive moods on consumers, making them spend more time in the casino (Min *et al.*, 2016). For only winning seekers and challenge/winning seekers this means more time and money spent on gaming activities. On the other side, although light-gambling and multi-purpose seekers do not stay in casino for longer periods, if they feel comfortable and entertained they will always stay longer than expected.

2.5.2 Access

The accessibility is also an important aspect to be considered. By entering on a casino area, it is important that gamblers do not feel disoriented as the amount of machines, design and casinos' layout may cause a sensation of crowding. Players need to be able to locate slots/table games, bars, restaurants, stages fast and easy, so, the casinos' task is to facilitate their navigation (Min *et al.*, 2016). For that, there are signs pointing out the direction of the facilities on that casino and sight lines that help orienting players and limit their frustration, on the search for a specific machine or any other amenity. Many studies support the idea that, in unfamiliar environments, people need to feel they are able to navigate without any issues, what contributes for their overall satisfaction on casinos' services (Bitner, 1992).

As all casinos' slot machines and table games are usually displayed in the same way, players who are used to go to casinos for gambling do not feel disoriented when entering in a casino. There is always an area dedicated to slot and video machines, another one for the baccarat and blackjack, the poker tables are placed in a different one, so as the roulettes and dice tables.

However, for other players whose primary motivations are socializing at the bars, have a dinner, go to a show, apart from gambling, they may feel disoriented and frustrated when trying to find all of these amenities.

On one hand, there is the only winning and challenge/winning seekers whose main focus is to gamble, so they tend to ignore the other amenities. This way, they will always know where their favorite slot or table is.

On the other hand, light gambling and multi-purpose seekers focus their attention on both gaming and non-gaming activities. Nowadays, since casinos always

have non-gaming options for these types of players (the amount of amenities depends on the casinos dimension), they need to guarantee that they do not feel disoriented as it can cause frustration and dissatisfaction (Bitner, 1992).

2.5.3 Courtesy

Another important component is courtesy and the importance of maintaining the amenities clean and well cared, as well as creating a neat appearance of public contact personnel (Zeithaml & Berry, 1985). No one enjoys playing side by side with empty/dirty glasses or dirty ashtrays (Wakefield & Blodgett, 2016).

Thus, it is crucial to have a special attention from casino managers on having enough employees and porters to guarantee the cleanliness of the area during peak hours. If needed, casinos should hire additional employees to clean fingerprints on the machines or to replace the dirty glasses by new cocktails, for the gamblers. On this study and on previous studies from Wakefield and Blodgett (2016), they all prove that cleanliness is the component with the greatest impact on consumers' satisfaction with casinos' services.

2.5.4 Understanding

This aspect involves understanding customers' needs and satisfying them (Zeithaml & Berry, 1985). Spatial conditions, such as the space between chairs on slot machines or the available space on table games for players placing their bets, can produce the crowding sensation due to the restricted movement on those areas (Stokols, 1972). For players whose primary motivations are not gambling, the lack of space on a specific table or the occupancy of a specific video machine may not be urgent concerns.

Even so, for players, whose main motivation is to win money, such as only winning and challenge/winning seekers, those issues are a major concern for casinos. These types of players enjoy playing for long sessions and have their favorite games and machines. If they are not able to access the game they want to play due to spatial conditions, these players will be stressed, impatient and, consequently, dissatisfied. Since these last two types of players are usually the regular customers of casino that spend more money there, it is even more important to provide an individualized attention to them (Zeithaml & Berry, 1985).

Casinos' managers and marketers need to be able to identify what are the important and valuable attributes for the customers in order to make them feel comfortable while playing. This will lead to an increase on the gaming sessions and, as a consequence, more profit for the casino.

According to Lucas (2003) model, all of these five components are part of the service-escape satisfaction and have a weight of 0.46 on the satisfaction overall slot experience.

Some industry professionals may think that gaming value is the one that contributes the most, however the results of this study show that is the environment variable. Even though, Gaming Value contributes with 0.43 for whole experience which is also a large contribution.

2.5.5 Responsiveness and Empathy

Besides the environment and gaming value variables, Lucas (2003) also includes the service promptness (responsiveness) and staff friendliness (empathy).

Responsiveness is the service agility, the ability and quickness on delivering the service, while empathy consists on the individual attention that employees give to customers; if they care about them, if they know their needs and concerns (Valarie & Leonard, 1988).

No matter what type of game a gambler is playing, he will always seek for efficient machines/dealers/waiters, to serve as fast and kind as possible (Zeithaml & Berry, 1985). By gathering all of those determinants, if a casino is able to fulfill all of the needs described on them, it will lead to the overall experience satisfaction on slots (focus of this study) and table games (as many of the determinants also affected them) (Botelho *et al.*, 2014). Thus, it will reinforce the re-patronage intentions, the desire to stay in casino and will generate positive word-of-mouth, contributing for the acquisition of new players (Richard, 1997).

Even so, to guarantee high standards on the internal service provided to customers, first casino managers need to assure that employees are 100% dedicated and motivated to make every effort on satisfying casino customers' needs (Botelho *et al.*, 2014).

Prentice (2017), together with two specialists in tourism and game management in Macau, studied the service profit chain in the casino industry starting with the internal service quality. They pointed out some aspects that influence not only casinos' performance and customers' satisfaction but also the profitability and the customers' loyalty.

Having in mind that a casino is not only a place where people go to gamble, but it also has many facilities dedicated to non-gaming activities, it is plausible to deduce that service promptness and staff friendliness are not only directed to the croupiers but to every staff member involved in all of gaming and non-gaming activities (Prentice *et al.*, 2017).

This way, because there are different types of players, due to different motivations, some of them will value more a personalized service and a special attention on the game tables while others will prefer on bars, restaurants or hotels (Lee *et al.*, 2006).

2.5.5.1 Employee satisfaction

Creating empathy with customers is not possible if employees are dissatisfied with their job conditions. Before demanding employees to create boundaries with costumers and to be as kind as possible with them, first casino managers need to guarantee that they are motivated and satisfied with their jobs.

To assure that, managers provide them with training opportunities, which allows workers to increase their know-how by giving them specific useful skills that will improve the quality of the service, salaries and benefits that may include the tips they get from gamblers that are also an extra incentive. Besides that, there are the communication and motivation, essential factors that contribute for employees' satisfaction and performance (Gu & Siu, 2009).

Although casino employees may receive a higher salary and benefits comparing to similar jobs in other service industries, they face job insecurity as they are limited to the casino industry.

Moreover, on peak periods, some casinos need to hire more staff to give response to the high demand and, in low season, lay off some employees. Actions like these ones will generate stress, dissatisfaction and job insecurity. As we can see, casinos

managers need to be aware of that and find ways to motivate and retain their employees (Lai *et al.*, 2013).

Even if managers have the capacity to reduce the job rotation, low percentage of job rotation may not be the same as satisfaction.

On one hand, employees' retention may be explained by the lack of job alternatives. In this case, dealers/croupiers/waiters may not feel identified with their occupation but still keep working on that due to the lack of job alternatives.

On the other hand, employees' retention may be attributed to the fact that they enjoy working for a specific casino because of their initiatives and their values and morale. If a casino operator cares about corporate social responsibility towards the society and stakeholders, this will generate high levels of brand quality and preference, appreciated by both employees and customers (Lai *et al.*, 2013). "*Employee satisfaction affects customer satisfaction, which results in customer loyalty*" (Anderson, Fornell, & Lehmann, 1994, p. 53).

Even though employees' satisfaction is indeed a complex subject, it is important to guarantee their friendliness with consumers.

2.6 Service Quality

One of the key drivers that contributes to customer satisfaction and is included in all areas defined by Botelho, Faias, Couto and Batista (2014); Bharwana and Mohsin (2013); Lucas (2003); Kumbhar (1993) and Zeithaml and Berry (1985) was the service quality. Those studies showed that there was a significant and positive relationship between service quality and costumers' satisfaction.

While service quality refers to the ideal scenario where consumers' expectations are met to the fullest, customers' satisfaction refers to the predicted service, on what the service is expected to be. Even though they are different concepts, one is caused by the other. Consumers' satisfaction or dissatisfaction is a result of a high or low service quality. Zeitham, Berry and Parasuraman (1996) defined service quality through ten quality values that will influence satisfaction: quality, value, timeliness, efficiency, ease of access, environment, inter-departmental teamwork, front line service behavior, commitment to the costumer and innovation.

2.6.1 Determinants of Service Quality:

Determinants of SERVQ	Explanation	Determinants of SERVQ on casinos	Authors
Tangibles	Physical facilities; tools or equipment used to provide the service; physical disposition	Ambient Conditions Interior Decor	(Botelho <i>et al.</i> , 2014; Bharwana & Mohsin, 2013; Lonial, Tarim, & Zaim, 2005; Lucas, 2003; Zeithaml & Berry, 1985)
Access	Approachability; ease of contact; the service is easily accessible; waiting time not extensive	Casino Navigation	(Lucas, 2003; Zeithaml & Berry, 1985)
Courtesy	Consideration for the consumers' property; clean and neat appearance; politeness	Cleanliness	(Wakefield & Blodgett, 2016; Lonial <i>et al.</i> , 2005; Lucas, 2003; Zeithaml & Berry, 1985)
Understanding	Learning the customers' specific requirements, providing individualized attention	Seating Comfort	(Lucas, 2003; Zeithaml & Berry, 1985)
Responsiveness	Willingness of employees to provide a service; giving prompt and quick service	Service Promptness	(Botelho <i>et al.</i> , 2014; Bharwana & Mohsin, 2013; Lonial <i>et al.</i> , 2005; Lucas, 2003; Stafford, Stafford, & Wells, 1998; Zeithaml & Berry, 1985)
Empathy	Employees' disposition to provide a personalized service; be concerned and aware of customers' needs	Staff Friendliness	(Botelho <i>et al.</i> , 2014; Bharwana & Mohsin, 2013; Lucas, 2003; Stafford <i>et al.</i> , 1998)

Table 2– Determinants of Service Quality on Casinos (Wakefield & Blodgett, 2016; Botelho *et al.*, 2014; Lucas, 2003; Zeithaml & Berry, 1985)

2.7 Customer satisfaction

When playing a casino game, whether it is slot machine, roulette, blackjack or poker, gamblers know that most of them will lose and a few will win. However, players focus on the number of opportunities to win as those bring them satisfaction and

happiness. But, because there are more people losing than winning, there will always be complaints about the inability to win which will influence the overall satisfaction (Lucas, 2003).

Consumers' satisfaction is a state of mind that results from meeting or exceeding consumers' expectations towards a product or a service (Botelho *et al.*, 2014). It is the feeling or attitude that consumers have while and after using the product or service. As consumers are the ones who pay, they expect to have fulfilled minimum expectations in exchange for their loyalty. These expectations mainly concern quality, price, information, variety and after sale service.

More and more consumers are getting more demanding. This way, it is mandatory for companies to understand the key drivers that contribute for their satisfaction, in order to fulfill their needs on a more efficient way (Iglesias, Markovic, & Rialp, 2018).

2.7.1 Types of satisfaction

Yi and La (2004) explained satisfaction by dividing it into two different concepts:

- Transaction-specific;
- Cumulative satisfaction.

The first concept approaches satisfaction as the result of a specific consumption experience. It is an evaluation made after using the product or after providing the service.

On the other hand, cumulative satisfaction takes into account the overall consumption experience. It includes all the interactions and encounters with the company that is selling the product or providing the service.

Since this second type of satisfaction values the interactions and boundaries between consumers and brand, it has a stronger contribution for their satisfaction at a long-term. According to Jones (2000) the overall satisfaction has a direct influence on repurchase intentions and this thesis will focus on this type of satisfaction, understanding what do players value the most on casinos.

2.8 Conclusion

The truth is that “*casinos have become an oasis for gamblers to fulfill an array of needs*” (Prentice *et al.*, 2017). There are many different options for both gamblers and people that prefer non-gaming activities. Because of that, casinos that have this wide variety of choice on gaming and non-gaming activities, satisfied and happy employees and a pleasant environment, have more chances of getting customer satisfaction, generating positive word-of-mouth and loyalty (Lam, Chan, Fong, & Lo, 2011).

Wong (2013) was another author that explored this theme and, for him, the service experience is related with the service environment, employee service, service convenience (staff promptness) and hedonic service. The last one includes the non-gaming activities and the fact that they enhance customer experience reflecting the need for pleasure and excitement.

This thesis, supported by the Literature Review, aims to understand what the main determinants of service quality in casinos (which contribute to customers' satisfaction) are, finding out what are the variables valued by each of the 4 types of customers.

3. Methodology

3.1 Investigation's hypotheses and Conceptual Model

This thesis investigation was initiated with a Literature Review section, where topics such as gaming and non-gaming activities and gambling motivations are approached. It was important at first to understand what the services that casinos are providing are and also the main motivations that lead people into them. This way, using Lee (2006) study as a starting point, four different clusters were developed in order to study their satisfaction in casinos. As these four types of players have different characteristics, according to their objectives and personalities, they value different aspects (involving casino service quality) that will contribute for their satisfaction. With that in account, the investigation's hypotheses were drawn.

3.1.1 Investigation's hypotheses

Both challenge/winning seekers and only winning seekers are primarily motivated to go to casinos due to the possibility of winning money. They have similar profiles and characteristics regarding the motivations, main activities, type of games and platforms and also the period of stay. However, considering their age, income and amount waged it is possible to state that they do have some differences, which may stand out in the data analysis. Those characteristics, common to each one of them, are the ones who influence their choices and their actions. Because of that, each type of player values different aspects on the casino service. Below, there are the hypotheses that will test challenge/winning and only winning seekers' satisfaction:

Hypothesis 1

H1a: Tangibles has a positive and significant effect on challenge/winning seekers' satisfaction.

H1b: Access has a positive and significant effect challenge/winning seekers' satisfaction.

H1c: Courtesy has a positive and significant effect on challenge/winning seekers' satisfaction.

H1d: Understanding has a positive and significant effect on challenge/winning seekers' satisfaction.

H1e: Responsiveness has a positive and significant effect on challenge/winning seekers' satisfaction.

H1f: Empathy has a positive and significant effect on challenge/winning seekers' satisfaction.

Hypothesis 2

H2a: Tangibles has a positive and significant effect on only winning seekers' satisfaction.

H2b: Access has a positive and significant effect on only winning seekers' satisfaction.

H2c: Courtesy has a positive and significant effect on only winning seekers' satisfaction.

H2d: Understanding has a positive and significant effect on only winning seekers' satisfaction.

H2e: Responsiveness has a positive and significant effect on only winning seekers' satisfaction.

H2f: Empathy has a positive and significant effect on only winning seekers' satisfaction.

Those two profiles included both professional and recreational players that played both online and offline, spending longer periods on gaming activities. Contrarily, Light Gambling Seekers and Multi-Purpose Seekers are only recreational players. They do not focus exclusively on gaming activities, as they prefer to enjoy all casino amenities. Light Gambling Seekers are not strongly motivated by anything. Usually they are younger and do not want to spend a lot of money on betting. So, it is relevant to study which of these six variables will significantly influence their satisfaction:

Hypothesis 3

H3a: Tangibles has a positive and significant effect on light gambling seekers' satisfaction.

H3b: Access has a positive and significant effect on light gambling seekers' satisfaction.

H3c: Courtesy has a positive and significant effect on light gambling seekers' satisfaction.

H3d: Understanding has a positive and significant effect on light gambling seekers' satisfaction.

H3e: Responsiveness has a positive and significant effect on light gambling seekers' satisfaction.

H3f: Empathy has a positive and significant effect on light gambling seekers' satisfaction.

The last type, Multi-Purpose Seekers, is mainly composed by older people, whose main motivations regard socializing, winning money, having fun and escaping from daily life. Their incomes and amount waged is significantly higher in comparison with Light Gambling Seekers, so it is also relevant to study them in order to find out the determinants of service quality that contribute to their satisfaction. So, the last hypotheses to be tested will be the next ones:

Hypothesis 4

H4a: Tangibles has a positive and significant effect on multi-purpose seekers' satisfaction.

H4b: Access has a positive and significant effect on multi-purpose seekers' satisfaction.

H4c: Courtesy has a positive and significant effect on multi-purpose seekers' satisfaction.

H4d: Understanding has a positive and significant effect on multi-purpose seekers' satisfaction.

H4e: Responsiveness has a positive and significant effect on multi-purpose seekers' satisfaction.

H4f: Empathy has a positive and significant effect on multi-purpose seekers' satisfaction.

3.1.2 Conceptual model

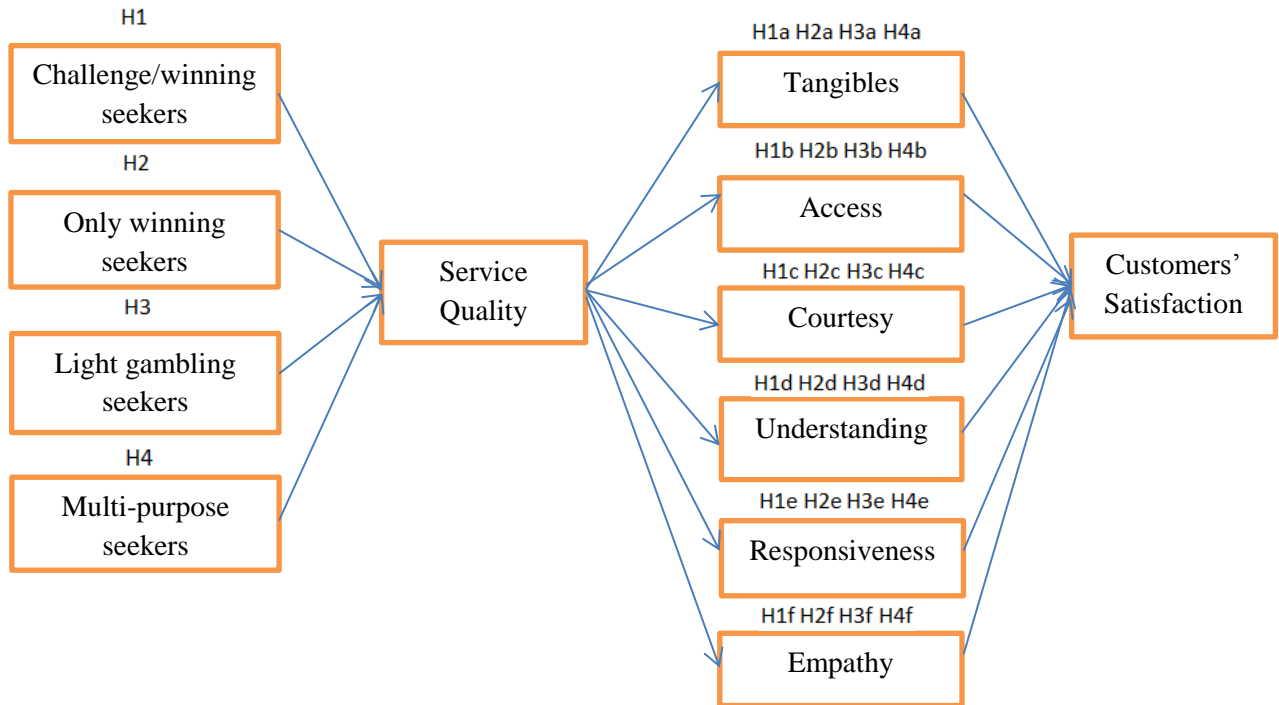


Figure 1– Service Quality’s variables’ impact on Casino Players’ Satisfaction Conceptual Model

The previous model is focused on three main concepts: Types of players (Only Winning seekers, Challenge/Winning seekers, Light Gambling seekers and Multi-Purpose seekers); Service quality (Responsiveness, Access, Courtesy, Empathy, Understanding, Tangible) and Customers’ Satisfaction (Bharwana & Mohsin, 2013; Lee et al., 2006; Stafford et al., 1998; Kumbhar, 1993; Zeithaml & Berry, 1985). The aim of the model is to understand what determinants of service quality will contribute for the satisfaction of each player, supported by studies conducted by Botelho, Faias, Couto, e Batista (2014); Bharwana and Mohsin (2013) and Zeithaml and Berry (1985).

3.2 Methodology behind the quantitative study

The quantitative study consists on a survey directed to people that have been at least once to a casino. Besides that, the second and last restriction is that respondents must be over 18 years old. The sample was composed by 207 respondents, half of them male, half of them female. The majority was young people who already finished their high school or a bachelors’ degree and are currently working. The survey had the

support of 5 papers that contributed for its formulation. The first one was a study conducted by Lee (2006) where he divides the different types of players in 4 clusters. This way, according to their different personalities, this author tests the motivations that lead people to casinos, whether it is for socialization, escape, winning money or challenge.

Then, the survey's purpose was to understand what the determinants that contribute for customers' satisfaction are. In order to study them, 4 papers were used as a support for this study: 3 regarding service quality in general (Bharwana & Mohsin, 2013; Botelho *et al.*, 2014; Zeithaml & Berry, 1985) and 1 regarding service quality in casinos (Lucas, 2003). Those papers helped defining the variables in study (Responsiveness, Access, Courtesy, Empathy, Understanding and Tangible) and also to relate them with the ones regarding casinos' service quality (Ambient Conditions, Casino Navigation, Interior Décor, Seating Comfort, Cleanliness, Staff friendliness and Service Promptness). In that manner, those 6 determinants are reliable and well-measured and it is stated that they contribute for customers' satisfaction.

3.2.1 Sampling Process

The survey is composed by an introduction where it is specified who is eligible to participate in this study. It also explains what it aims and how long it will take to answer it. If the person meets the requirements, that person will move to the next section that regards respondents' social-demographic information. There, the first question was about the gender of the respondent: whether it is "Male" or "Female". The next question regarded the age of the respondent. Then, the last two questions aimed to know the respondent's academic degree and also their current professional situation.

The second section had the purpose of segmenting the respondents in 4 profiles, according to their motivations and characteristics. The respondent analyzed a table where these 4 types of players are described (Only Winning seekers, Challenge/Winning seekers, Light Gambling seekers and Multi-Purpose seekers) and decide which one of them is the most similar to his/hers type. Then, there was asked a question where respondents needed to choose between those 4 options.

The third and last section is the largest one. In this section all of the determinants of service quality in casinos (Ambient Conditions, Casino Navigation, Interior Décor, Seating Comfort, Cleanliness, Staff friendliness and Service Promptness) are measured

using 5-point Likert scales. The scale determined “It does not contribute for my satisfaction” as 1 and “It has a strong contribution for my satisfaction” as 5. In each one of them there are 4 statements and respondents classify them; regarding the contribution each statement represents on their satisfaction. In order to study Ambient Conditions and Interior Décor, as these two variables are both included in one (Tangibles), instead of only 4 statements as the other variables have, they have 6. Finally, on the last question, is used a 6-point Likert scale to measure how much is the contribution of each variable to the overall customers’ satisfaction of the casino service.

3.3 Statistical Techniques for the Quantitative Data Analysis

In this section of the thesis, there will be used some statistical analysis to help validating or not the proposed hypotheses. Those analyses are divided in 4 groups: Descriptive Analysis, Hypotheses’ Tests, Reliability and Principal Component Analysis and also Multiple Linear Regression Models.

3.3.1 Descriptive Analysis

Descriptive Analysis is used to get to know the population who answered the survey. First of all, there were two restrictions respondents needed to fulfill in order to be able to participate in this study: they needed to be over 18 years old and it was mandatory that, at least once, they had visited a casino before. There were 207 respondents and, through the descriptive statistics, it was possible to understand what kind of casino players they are (Challenge/Winning Seekers, Only Winning Seekers, Light Gambling Seekers or Multi-Purpose Seekers).

3.3.2 Hypotheses’ Test

The following tests to be performed aim to detect if the means between groups (4 types of players) are equal regarding first the 26 dimensions and then, the 6 service quality’s variables. To analyze it, it is crucial to take the One-Way ANOVA Test (Stata, Park, & Ph, 2009). However, before proceeding with the test, there are three assumptions that need to be taken in consideration:

1. The 4 groups are independent and random.
2. Each group have a normal distribution ($N > 30$).
3. The equality of variances needs to be confirmed for all of the groups.

The third assumption is verified through the Levene's Test. If this test does not confirm the null hypothesis ($\text{Sig} < 0.05$), the next phase is running a non-parametric test; the Kruskal Wallis Test. In this test if the significance value is lower than 0.05, the next step is to move to Dunnet and Games-Howell tests. If the significance value is higher than 0.05, then the null hypothesis is retained and the analysis continues to the ANOVA.

If all of the three assumptions are validated, the following procedure is to verify the ANOVA table, more specifically the significance values. If $\text{Sig} > 0.05$, it means the equality of means is confirmed and the analysis ends there. Otherwise, when $\text{Sig} < 0.05$, the following step is performing a Tukey's HSD Test. This specific test compares the means between the 4 groups and analyzes what are the groups in which a specific variable is more disparate.

3.3.3 Reliability and Principal Component Analysis

According to MacLennan (2019) the Reliability analysis is used to measure the level or correlation between variables. For that purpose, the CronBach's alpha is taken into account. In order to have a high level of correlation, this value needs to be higher than 0.7. Then, it is mandatory to verify if the CronBach's alpha for each dimension is not higher than the CronBach's alpha for the entire variable. If this happens, the dimension that compromises it is not reliable.

After this analysis, the next step is to proceed to the Principal Component Analysis. Due to the fact that the Reliability Test was previously done, in PCA the attentions will be focus on the variables/dimensions that were not reliable. The main objective of this analysis is to find out what are the components to be extracted, so that the Percentage of the Explained Variances gets higher.

Before going into that, the KMO and Bartlett's Test is fundamental to see if there is a satisfactory level of correlation ($\text{KMO} > 0.7$ and $\text{Sig} < 0.05$). If this restriction is met, the following step is to verify if the extracted dimensions have a level of correlation higher than 0.5. The ones who do not comply with this rule should be extracted and not taken in consideration in the variable's analyze.

3.3.4 Multiple Linear Regression Models

The last analysis to be considered will be the Multiple Linear Regression Models. According to Yang (2013) this analysis is one of the most relevant ones, as it allows creating different models regarding the contribution each variable has on each group. Besides that, the R squared Tests are also useful on elucidation how much of the independent variable explains the dependent one.

In order to use wisely and effectively the Regression Models, some assumptions need to be confirmed:

1. The Regression is linear.
2. No correlation between residual values.
3. The mean of residuals is zero.
4. The variables and residual values are not correlated.
5. The residuals have a normal distribution.
6. The residuals' variance is constant.

4. Data Analysis

4.1 Descriptive Analysis

Prior to a more detailed analysis, it is crucial to perform a descriptive analysis and interpret the social-demographic data. In this thesis, this data was explained through 4 groups: **Gender**, **Age**, **Qualifications** and **Professional Status**.

Regarding **Gender**, there are two options: “Male” or “Female”. According to table 3, 104 respondents were “Male” and 103 “Female”. It is possible to see here that both men and women go to casinos in the same proportion (all respondents must have gone to a casino at least once, in order to be answer to the survey). Barely half of the respondents are women and half are men.

Concerning **Age**, the group 18 – 24 was clearly the largest one and >65 the smallest one. There are more young people answering the survey as more than a half of the respondents are below 34 years old. This can be explained through the different motivations that influence people to go to casinos, previously explained on the literature review. As younger people are easily attracted by socialization, monetary rewards and enjoyment, they tend to be the more than the older people. However it does not mean that, because they are more, they spend more money than the other groups.

Also on table 3, the group **Qualifications** is subdivided into 5 subgroups. The majority of the respondents, whether they studied until High school (87 respondents) or they went further to the completion of a Bachelor’s degree (85 respondents). Only 14.5% of the 207 respondents completed a Master’s degree and just 1 person the PhD.

Lastly, through the analysis of the **Professional Status** group, it is visible that the major part of the respondents (130) is currently working, 19.3% are studying and the rest of them are student workers, unemployed or retired people.

	Frequency (N)	Valid Percent (%)
Gender		
Male	104	50,2
Female	103	49,8
Total	207	100,0
Age		
18 - 24	85	41,1
25 - 34	31	15,0
35 - 44	30	14,5
45 - 54	29	14,0
55 - 64	22	10,6
>65	10	4,8
Total	207	100,0
Qualifications		
Primary school	4	1,9
High school	87	42,0
Bachelor's degree	85	41,1
Master's degree	30	14,5
PhD	1	0,5
Total	207	100,0
Professional status		
Student	40	19,3
Worker	130	62,8
Student Worker	19	9,2
Unemployed	6	2,9
Retired	12	5,8
Total	207	100,0

Table 3 - Social-demographic characteristics

Besides the social-demographic, in this study, there was the need of diving all of the 207 respondents into 4 clusters. This way, it was possible to study them individually as each of them has different characteristics, motivations and personalities. Not all of the respondents go to casinos with the same purposes, so it was mandatory to divide them in Challenge/Winning Seekers, Only Winning Seekers, Light Gambling Seekers and Multi-Purpose Seekers. As the majority of respondents are younger people, it was predictable that the largest group would be Light Gambling Seekers (99 respondents). Then, there are the Multi-Purpose Seekers with 30.4% of the respondents. These two first groups are only composed by recreational players. The groups with fewer respondents are the Only Winning Seekers (11.6%) and Challenge Winning Seekers (10.1%). They are only composed, mainly, by professional players, although some of

the recreational ones may be included on those two groups. By looking at table 4, it is evident that there are way more respondents that are recreational players and fewer professional players.

	Frequency (N)	Valid Percent (%)
Type of Player		
Challenge/Winning Seekers	21	10,1
Only Winning Seekers	24	11,6
Light Gambling Seekers	99	47,8
Multi-Purpose Seekers	63	30,4
Total	207	100,0

Table 4 – Type of players Choice

4.2 Hypotheses' Tests for the 26 dimensions

In this section, all of the 26 dimensions regarding each of the 6 variables will be tested through the One-Way ANOVA test. However, before running the test, 3 assumptions need to be verified. As previously mentioned the groups must be independent and random and they also need to follow a normal distribution ($N > 30$). The second restriction is only verified for the Light Gambling Seekers and Multi-Purpose Seekers. On the first two groups, the sample is composed by less than respondents as it was really difficult to find people that fit into those categories. However, all of the groups will be tested, even though the final results for these two groups (Challenge/Winning and Only Winning Seekers) may not be as conclusive as the ones regarding the other two groups (Light Gambling and Multi-Purpose Seekers). The last restriction (the variances need to be equal) will be tested using the Levene's Test.

On the **Courtesy** and **Empathy** dimensions, through Levene's Test, the result is that variances are equal ($\text{Sig} > 0.05$) for all of the variables (q8.1; q8.2; q8.3; q8.4; q9.1; q9.2; q9.3; q9.4). Proceeding with the ANOVA test, the null hypothesis was not rejected by in any of the cases ($\text{Sig} > 0.05$) which imply that the means between all groups are equal.

For **Responsiveness**, **Access** and **Understanding** there was one dimension in each group with different variances (q6.1; q7.1; q10.2). On **Responsiveness**, the q6.1 ("Não haver erros nos pedidos de comida/bebida no bar/restaurante do casino")

dimension did not had equal variances as the significance must be over 0.05 to verify the condition. As it can be verified on table 5, in this case the value was 0.010. After that, the next step is to run a Non-Parametrical Test: the Kruskal-Wallis' Test. In this test if the significance value is under 0.05, then de null hypothesis is rejected and the hypothesis should proceed to other tests like Dunnet and Games-Howell. In this specific case, the null hypothesis was not rejected (figure 2), so it should be retained on the ANOVA test. Proceeding with the ANOVA test, the equality of all of the means was verified (Sig>0.05), meaning that there is no significant difference on the dimensions between the 4 types of players, concerning **Responsiveness**.

	Levene Statistic	Sig.
Responsiveness - q6.1		
Based on Mean	3,889	0,010

Table 5 – Responsiveness Levene’s Test

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q6.1 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,152	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 2– q6.1 Kruskal-Wallis Test

For the **Access** and **Understanding** groups the procedure was the same and the results were similar as the ones from the **Responsiveness group**: q7.1 (“*Placas que indicam a direção dos serviços*”) and q10.2 (“*Ter disponível a minha máquina/ mesa favorita*”) were firstly rejected on the Levene’s Test (table 6 and 7), then on the Kruskal-Wallis’ Test they both got retained (figure 3 and 4) and finally on the ANOVA it was proved that the means between those variables are equal (Sig > 0.05).

	Levene Statistic	Sig.
Access - q7.1		
Based on Mean	3,127	0,027

Table 6 – Access Levene’s Test

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q7.1 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,136	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 3 – q7.1 Kruskal-Wallis Test

	Levene Statistic	Sig.
Understanding - q10.2		
Based on Mean	3,980	0,009

Table 7 – Understanding Levene’s Test Test

The last group submitted to this test was **Tangibles**. In this group, 4 of the 6 dimensions had equal variances; however 2 of them needed further tests. The variable q11.5 (“Cores”) was firstly rejected by Levene’s Test (table 8), but then, using the Kruskal-Wallis’ Test, the null hypothesis got retained.

	Levene Statistic	Sig.
Tangibles - q11.5		
Based on Mean	2,845	0,039

Table 8 – Tangibles Levene’s Test

The other dimension that needed further tests was q11.4 (“Temperatura”). On the Levene’s Test the hypothesis was not rejected (Sig > 0.05) but, when moving forward to the ANOVA Test, it got rejected (table 9) as its significance level was 0.018 (less than 0.05). Progressing with this dimension’s analysis, q11.4 was put to the Tukey HSD Test. By analyzing table 10 it is evident that the means are not equal between two groups: Challenge/Winning Seekers and Multi-Purpose Seekers (Sig < 0.05).

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q10.2 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,123	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 4– q10.2 Kruskal-Wallis

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q11.5 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,314	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 5 – q11.5 Kruskal-Wallis Test

	Sum of Squares	df	Mean Square	F	Sig.
Tangibles - q11.4					
Between Groups	9,417	3	3,139	3,433	0,018
Within Groups	185,636	203	0,914		
Total	195,053	206			

Table 9 – Tangibles’ ANOVA Test

Types of players				Sig.
Tangibles q11.4	Tukey HSD	Challenge/Winning Seekers	Only Winning Seekers	0,995
			Light Gambling Seekers	0,306
			Multi-Purpose Seekers	0,045

*. The mean difference is significant at the 0.05 level.

Table 10 – Tangibles (q11.4) Multiple Comparisons

With the support of all of these 4 tests, it is verified that the only dimension that has different means concerning the different type of players is q11.4 (“*Temperatura*”). **Temperature** proved to be less important for Challenge/Winning Seekers then it is for Multi-Purpose Seekers. By looking at figure 6, **Temperature** has a stronger contribution for the Multi-Purpose Seekers’ satisfaction (4.4/5) and a weaker contribution for Challenge/Winning Seekers’ satisfaction (3.8/5). The other dimensions, they all have equal means, which means that all of the players have similar opinions regarding those variables.

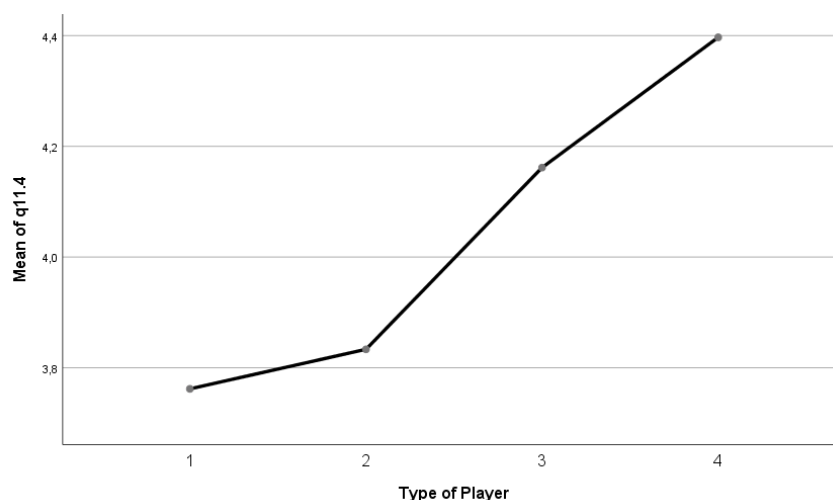


Figure 6 – Mean of Tangibles (q11.4) for the type of player

4.3 Reliability and Principal Component Analysis

Prior to the Principal Component Analysis, it is relevant to run the Reliability's Tests. On those tests, the value that indicates if there is a high or low correlation between the dimensions and the subgroups they belong is the CronBach's alpha. If this value is less than 0.5 there is a low correlation between them, 0.5–0.7 moderated, 0.7-0.9 high and more than 0.9 excellent correlation.

On the subgroups **Responsiveness**, **Access**, **Courtesy**, **Empathy** and **Understanding** the CronBach's alpha is always higher than 0.7 and lower then 0.9, meaning that there is a high correlation between the dimensions on those subgroups (Figures 11, 12, 13, 14, 15) (Appendix 5). After checking (tables 64, 65, 66, 67, 68) (Appendix 5), the CronBach's alphas if Item deleted for each of the variables is always lower than the general CronBach's alpha. This means that all of those dimensions are reliable.

On the other hand, on **Tangibles**, although the CronBach's alpha is 0.886 (high correlation), there is one dimension that is not reliable. By analyzing table 12, it is possible to see that CronBach's alpha if Item deleted for q11.2 ("*Sons das moedas e músicas das máquinas de jogo*") (0.887) is higher than the general CronBach's alpha (0.886) (table 11). This way, it is concluded that the variable q11.2 is not reliable.

Reliability Statistics			Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items					
0,886	0,888	6					
Tangibles							
q11.1			19,39	17,366	0,642	0,476	0,875
q11.2			20,25	16,818	0,580	0,414	0,887
q11.3			19,81	15,756	0,805	0,658	0,848
q11.4			19,63	16,361	0,757	0,614	0,857
q11.5			20,12	16,379	0,691	0,510	0,867
q11.6			19,71	16,486	0,738	0,604	0,860

Table 11 – Cronbach's Alpha for Tangibles

Table 12– Tangibles' Reliability analysis

Moving forward to the Principal Component Analysis (PCA), the aim of this analysis is to reduce the number of construct dimensions that help studying the 6 variables. Initially this study was composed by 26 dimensions but, through PCA, those dimensions may be reduced.

Before using the PCA, those dimensions will pass through a KMO and Bartlett's Test to see if they are significantly correlated. The KMO and Bartlett's Test showed that all of the dimensions had a satisfactory correlation level, as the KMO > 0.7 and Sig < 0.05, including the dimensions from Tangibles (q11.1; q11.2; q11.3; q11.4; q11.5; q11.6) (table 13).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,761
Bartlett's Test of Sphericity	Approx. Chi-Square	317,395
	df	6
	Sig.	0,000

Table 13 – KMO and Bartlett's Test for Tangibles

As verified before, on the reliability's tests, all of the 26 dimensions with the exception of q11.2 were reliable. So, the attention goes to the value of the extracted dimension q11.2. Considering table 14, from the PCA, it is observed that the value in question is lower than 0.5. When this happens, the dimension is extracted as it is compromising the correlation level between all of those 6 dimensions. Before the extraction, by looking at table 15, the cumulative percentage with 1 Component is only 64.340%.

	Communalities	
	Initial	Extraction
q11.1	1,000	0,573
q11.2	1,000	0,480
q11.3	1,000	0,764
q11.4	1,000	0,719
q11.5	1,000	0,626
q11.6	1,000	0,698

Extraction Method: Principal Component Analysis.

Table 14 – Tangibles communalities

	Total Variance Explained		
	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative (%)
1	3,860	64,340	64,340
2	0,692	11,537	75,877
3	0,545	9,076	84,953
4	0,358	5,969	90,922
5	0,287	4,789	95,711
6	0,257	4,289	100,000

Extraction Method: Principal Component Analysis.

Table 15 – Tangibles Variance Explained

After the extraction of the dimension q11.2, all of the other dimensions got higher levels of correlation between them (table 16) and the Cumulative percentage with 1 Component increased to 69.099% (table 17).

Communalities		
	Initial	Extraction
q11.1	1,000	0,604
q11.3	1,000	0,736
q11.4	1,000	0,749
q11.5	1,000	0,626
q11.6	1,000	0,740

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a
a. Only one component was extracted. The solution cannot be rotated.

Table 16 – Tangibles communalities after the extraction

Total Variance Explained			
Initial Eigenvalues			
Component	Total	% of Variance	Cumulative (%)
1	3,455	69,099	69,099
2	0,562	11,248	80,347
3	0,402	8,042	88,389
4	0,300	6,007	94,396
5	0,280	5,604	100,000

Extraction Method: Principal Component Analysis.

Table 17 – Tangibles Variance Explained after the extraction

The PCA was important to know what dimensions should be not considered when analyzing the different variables. After running that analysis, only 25 of the 26 variables are highly correlated with each other, concerning their correspondent variables. The q11.2 (“*Sons das moedas e músicas das máquinas de jogo*”) should be excluded as it does not significantly explain the variable **Tangibles**.

4.4 Hypotheses' Tests for the 6 variables

As previously verified through the One-Way ANOVA Test, it was concluded that the opinions of the 4 types of players, regarding the 26 dimensions, were very similar. The equality of means was proved in all cases, with the exception of q11.4 ("*Temperatura*") that belongs to the **Tangibles**' variable.

On the Reliability and Principal Component analysis it was confirmed that q11.2 ("*Sons das moedas e músicas das máquinas de jogo*"), also from the **Tangibles**' variable, is not reliable and does not has a high correlation level with the other 5 dimensions. This way, this dimension was extracted so the correlation between all of the dimensions could stay higher.

After those analyses, it is relevant to find out if the equality of means is confirmed but now using the 6 variables, rather than the 26 dimensions. Before proceeding to the One-Way ANOVA Test, there are 3 conditions that need to be verified: the subgroups are independent; follow a normal distribution ($N > 30$) (was already discussed and it will be discussed again, later on the limitations sector) and their variances need to be equal (using Levene's Test). As showed on table 69 (Appendix 6), the equality of variances was proved on all of the 6 variables ($\text{Sig} > 0.05$). Moving on to the ANOVA, it is also stated on table 70 (Appendix 6) that all of the variables have equal means ($\text{Sig} > 0.05$). With this test it was detected that all of the 4 types of players have similar opinions regarding **Responsiveness**, **Access**, **Courtesy**, **Empathy**, **Understanding** and **Tangibles**.

Due to the fact they have quite similar opinions, regarding these 6 variables, the data analyses will proceed in order to extract more relevant and conclusive results. As observed on table 71 (Appendix 6), the variables that have a stronger contribution for players' satisfaction are **Courtesy** (4.1063/5); **Tangibles** (3.9638/5); **Understanding** (3.9251/5) and **Responsiveness** (3.8418/5). By looking at this table it is possible to confirm the evaluation of different players regarding each variable. To use this information to gather relevant conclusions for casino managers, it is pertinent to find out what are the variables that contribute for each type of player's satisfaction. With that purpose, the last analysis will consist on a Multiple Linear Regression Model. This way, after discovering which variables are important for each player, casino managers and

marketers will know where they can have a stronger influence on each player's satisfaction.

4.5 Multiple Linear Regression Model

In this analysis, before testing the impact of each variable on players' satisfaction, it will be studied the impact of each variable on the general satisfaction. By observing table 18, the 6 chosen variables explain 74.4% of the total satisfaction variance.

	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,869	0,756	0,744	0,38934

Table 18 – R Square values of satisfaction

On table 19 it is visible that only 4 of the 6 variables have a significant contribute on explaining satisfaction (Sig < 0.05). The variable who contributes the most is **Tangibles** with 38.4%, followed by **Courtesy** with 21.3%, **Responsiveness** with 16.4% and lastly **Understanding** with 10.7%. The model for satisfaction is:

$$\text{Satisfaction} = 0.692 + 0.384*\text{Tangibles} + 0.213*\text{Courtesy} + 0.164* \text{Responsiveness} + 0.107*\text{Understanding}$$

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,100	0,162		6,792	0,000
tangibles	0,767	0,040	0,801	19,153	0,000
2 (Constant)	0,930	0,148		6,300	0,000
tangibles	0,553	0,047	0,577	11,727	0,000
responsiveness	0,265	0,038	0,346	7,029	0,000
3 (Constant)	0,734	0,147		4,998	0,000
tangibles	0,420	0,053	0,438	7,873	0,000
responsiveness	0,211	0,038	0,276	5,590	0,000
courtesy	0,227	0,049	0,255	4,649	0,000
4 (Constant)	0,692	0,146		4,732	0,000
tangibles	0,384	0,055	0,401	7,028	0,000
responsiveness	0,164	0,042	0,214	3,890	0,000
courtesy	0,213	0,049	0,239	4,380	0,000
understanding	0,107	0,045	0,133	2,411	0,017

a. Dependent Variable: satisfaction

Table 19 – Satisfaction's Regression Model

The variables **Access** and **Empathy** do not contribute significantly for the overall satisfaction. If, from all of the variables, only 4 of them contribute to satisfaction it is plausible to believe that the variables that will contribute for each of the players' satisfaction will not be any of the other two (**Access** and **Empathy**). To test it, a multiple linear regression model was applied for each one of the 4 players, regarding the variables that contribute for their satisfaction.

The first group was Challenge/Winning Seekers and by looking at table 20 it is visible that the variables in study only explain 48.8% of the total variance. However, there are no variables that significantly impact this group's satisfaction (Sig > 0.05). With this being tested, Challenge/Winning Seekers are not significantly influenced by any of the 6 variables (table 21).

	R	R Square	Adjusted R Square	Std. Error of the Estimate
Challenge Winning Seekers	.801	0,641	0,488	0,56656

Table 20 – R Square values of Challenge/Winning Seekers' Satisfaction

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,644	0,684		2,405	0,031
responsiveness	0,287	0,414	0,294	0,694	0,499
courtesy	0,074	0,224	0,090	0,332	0,745
access	-0,064	0,316	-0,067	-0,202	0,843
understanding	0,633	0,365	0,795	1,736	0,105
empathy	-0,131	0,344	-0,123	-0,380	0,710
tangibles	-0,218	0,269	-0,245	-0,811	0,431

a. Type of Player = Challenge/Winning Seekers

b. Dependent Variable: satisfaction

Table 21– Challenge/Winning Seekers' Satisfaction Regression Model

Moving forward to the second group, Only Winning Seekers, 82.1% of their satisfaction variance is justified by the variables (table 22). By observing table 23 it is possible to notice that only one variable, **Courtesy**, has a significant impact (41.1%) on

this group’s satisfaction. The other variables have significance values higher than 0.05, meaning they are powerful enough to contribute for their satisfaction. Therefore, the model is the following:

$$\text{Only Winning Seekers} = 0.411 * \text{Courtesy}$$

	R	R Square	Adjusted R Square	Std. Error of the Estimate
Only Winning Seekers	,932	0,868	0,821	0,33944

Table 22 – R Square values of Only Winning Seekers’ Satisfaction

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0,239	0,424		-0,564	0,580
responsiveness	0,088	0,150	0,107	0,584	0,567
courtesy	0,411	0,171	0,397	2,406	0,028
access	-0,042	0,111	-0,059	-0,375	0,712
understanding	0,149	0,156	0,163	0,956	0,352
empathy	0,057	0,139	0,070	0,411	0,686
tangibles	0,395	0,208	0,391	1,905	0,074

a. Type of Player = Only Winning Seekers

b. Dependent Variable: satisfaction

Table 23– Only Winning Seekers’ Satisfaction Regression Model

The third group, Light Winning Seekers, is the one who has more variables significantly impactful that contribute to their satisfaction (table 25). The most relevant one is **Tangibles** as it explains 42.6% of their satisfaction, then **Courtesy** with 23.6% and lastly **Responsiveness** with 18.8%. The rest of the variables are not significant enough to be considered on this group’s satisfaction. The model presented is:

$$\text{Light Gambling Seekers} = 0.426 * \text{Tangibles} + 0.236 * \text{Courtesy} + 0.188 * \text{Responsiveness}$$

	R	R Square	Adjusted R Square	Std. Error of the Estimate
Light Gambling Seekers	,911	0,830	0,819	0,33311

Table 24 – R Square values of Light Gambling Seekers’ Satisfaction

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,536	0,185		2,900	0,005
	responsiveness	0,188	0,059	0,249	3,189	0,000
	courtesy	0,236	0,062	0,269	3,789	0,000
	access	-0,058	0,057	-0,066	-1,005	0,318
	understanding	0,016	0,059	0,020	0,264	0,792
	empathy	0,098	0,056	0,105	1,745	0,084
	tangibles	0,426	0,069	0,447	6,188	0,000

a. Type of Player = Light Gambling Seekers

b. Dependent Variable: satisfaction

Table 25 – Light Gambling Seekers’ Satisfaction Regression Model

The fourth and last group to be tested is the Multi-Purpose Seekers. Through the analysis of table 26, **Tangibles** and **Responsiveness** are the only two variables that contribute for their satisfaction. **Tangibles** has a stronger contribution, with 45.4% and **Responsiveness** with 16.5%. Those variables explain 68.7% of this group’s satisfaction (table 27). Hereafter, the model will be:

$$\text{Multi-Purpose Seekers} = 0.454 * \text{Tangibles} + 0.165 * \text{Responsiveness}$$

	R	R Square	Adjusted R Square	Std. Error of the Estimate
Multi-Purpose Seekers	0,847	0,718	0,687	0,39761

Table 26 – R Square values of Multi-Purpose Seekers’ Satisfaction

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	0,805	0,334		2,412	0,019
responsiveness	0,165	0,073	0,239	2,268	0,027
courtesy	0,100	0,102	0,113	0,985	0,329
access	0,000045	0,071	0,000	0,001	0,999
understanding	0,094	0,096	0,119	0,979	0,332
empathy	0,048	0,127	0,054	0,378	0,707
tangibles	0,454	0,102	0,472	4,469	0,000

a. Type of Player = Multi-Purpose Seekers

b. Dependent Variable: satisfaction

Table 27 – Multi-Purpose Seekers’ Satisfaction Regression Model

5. Conclusions

5.1 Results Obtained

The previous data analysis aimed to study the veracity of the proposed hypotheses. Those hypotheses were constructed in a way that casinos marketers and managers would get relevant information, on the service quality variables that most influence casino players.

Before getting into those conclusions, it was crucial to first analyze if there was any significant difference between the means of the 26 dimensions in players' satisfaction. The conclusions were that there was no significant difference, meaning that the 26 dimensions contributed almost in the same way for their overall satisfaction. The exception was q11.4 ("Temperature"), from **Tangibles**, that has a stronger contribution on Multi-Purpose Seekers' satisfaction in comparison with Challenge/Winning Seekers' satisfaction. The same analysis was conducted to test the equality of means of the 6 variables. The results confirmed it, meaning that the 4 types of players have similar opinions on the variables that contribute for their satisfaction.

Apart from these 2 ANOVA analyses, the Reliability and Principal Component Analyses were also useful, as they eliminated one component from the **Tangibles'** variable q11.2 ("Coins' falling noises and machines' music") because it did not have a high correlation value with the other 5 dimensions.

Lastly, in order to verify what variables have a positive and significant contribution on each players' satisfaction, there were used the Multiple Linear Regression Models. Those models showed that, for Only Winning Seekers, there is no specific variable contributing for their satisfaction. On Challenge/Winning Seekers, there is only one variable (**Courtesy**) that has a positive and significant impact on their satisfaction. For Light Gambling Seekers those variables are **Tangibles**, **Courtesy** and **Responsiveness**. Lastly, for Multi-Purpose Seekers, both **Tangibles** and **Responsiveness** are the only Service Quality determinants that contribute for their satisfaction.

5.2 Implications on Casinos' Marketing

The results obtained are significantly relevant and conclusive to be used by casino managers or marketers, regarding the determinants of service quality that most

affect each type of player. Regarding this thesis, the most important aspects to retain is that if casinos want to provide a most efficient and impactful service, they most focus on **Courtesy** for Challenge/Winning Seekers and Light Gambling Seekers and on **Tangible** and **Responsiveness** for Light Gambling Seekers and Multi-Purpose Seekers. The priority should be **Courtesy** for Only Winning Seekers and **Tangibles** for both Light Gambling Seekers and Multi-Purpose Seekers as those are the variables with a most significant and positive impact on their satisfaction. Although, in order to increase service quality for these players, they should invest on those variables, they must not forget about the other ones. Even though they are not meaningful enough to contribute for their satisfaction, if casinos do not maintain the quality on those services, they might start contributing negatively for players' satisfaction.

5.3 Discussion with other authors

As exposed earlier on the literature review section, there were several authors who studied the determinants of service quality on customer's satisfaction, regarding different services. However, none of them investigated what are the service quality determinants that most affect customer's satisfaction, considering the different customers' profiles. This thesis uses 6 of those service quality determinants and studies their impact on the satisfaction of 4 different casino types of players. The choice of the 6 variables was based on the determinants of service quality that are more related with the services provided by casinos. This way, in this section, the objective is to verify, between those 6 variables, which ones have a positive and significant effect on customer's satisfaction and which ones do not. As there are some authors who have studied this subject, below there will be presented their results and will also be compared with this thesis conclusions. The studies in analysis belong to Bharwana and Mohsin (2013) (sector: satisfaction on private colleges); Stafford, Stafford and Wells (1998) (sector: financial service providers); Lonial *et al.* (2005) (sector: service quality in Turkey) and Lucas (2003) (sector: casinos).

1. **Tangibles:** According to Bharwana and Mohsin (2013) the variable **Tangible** has a positive and significant relationship with customer's satisfaction. The Lonial, Tarim and Zaim's (2005) study also states the same. However, between all of the 6 variables (Tangibility, Reliability, Responsiveness, Assurance, Courtesy and Empathy), **Tangibility** was only the sixth most important factor. On Stafford, Stafford and Wells' (1998) research, the results showed exactly the

opposite. There was a significant and negative relation on the contribution **Tangibles** has on the service quality and customers' satisfaction. This can be explained due to the fact that the business focus is the financial industry and consumers may not value much the offices and the equipment related. Lucas (2003), regarding **Ambient Conditions** and **Interior Décor** (two determinants of service quality on casinos represented by **Tangibles**), concluded that both of them contributed for players' satisfaction. Although keeping the **Interior Décor** of a casino may be an expensive task, Lucas (2003) findings show that it is crucial in order to maintain the draw capability of the environment. On **Ambient Conditions**, the author defends that they are important and should be managed wisely so that casinos can maintain the high levels of customer satisfaction.

Results from this thesis: Considering the present study's results, it is possible to confirm that **Tangibles** are the service quality determinant that contributes the most to Light Gambling Seekers and Multi-Purpose Seekers' satisfaction.

2. **Access:** This specific variable was introduced by Zeithaml and Berry (1985) in a conceptual model of service quality. Their objective was suggesting different variables to create a model to be studied in the future. The variable Access, defined in that study, was used in this thesis with the purpose of finding out if it really significant enough to be considered by customers as a positive contribution to the quality of the service. Another author who also studied this was Lucas (2003). The **Access** in a casino service regards its **Navigation**. In his study, he found that **Navigation** has a positive and significant effect on satisfaction. In his opinion, people have a strong need to orientate themselves on unfamiliar environments.

Results from this thesis: Access did not proved to be a significant a positive contribute to any of the 4 player's satisfaction.

3. **Courtesy:** On the Lonial's *et al.* (2005) research, **Courtesy** was the service quality determinant with the highest regression coefficient (0.843). Therefore, it means that keeping the space clean and organized affects positively costumers' satisfaction. A similar conclusion was taken by Lucas (2003) as he affirms that **Cleanliness** was the second most impactful variable of service quality. In Wakefield and Blodgett's (2016) study, **Cleanliness** was the variable with the

greatest influence on service-escape quality. Regarding this variable, all of the authors were in agreement that it does have a positive and strong contribution for the service quality and customer's satisfaction.

Results from this thesis: **Courtesy** has a positive and significant relation on Only Winning Seekers and Light Gambling Seekers' satisfaction.

4. **Understanding:** This variable was another one proposed by Zeithaml and Berry (1985) in their conceptual model to be studied in the future. For them, this variable has potential to be considered a relevant contribution for the service quality. On Lucas' (2003) paper, regarding service-escape satisfaction on casinos, the variable **Seating Comfort** is the one who implies casino managers to know and understand players' needs and behaviors, so they can be satisfied in a proper way. With this being said, Lucas' (2003) results show that the costs with the spatial configuration, the individualized attention and the comfort while playing have a positive and significant effect on customers' satisfaction.
Results from this thesis: **Understanding** does not have a positive and significant effect on any of the 4 types of players.

5. **Responsiveness:** After verifying others authors' findings, with the exception of Stafford *et al.* (1998), all of them considered this variable one of the most important ones on explaining service quality and contributing for customers' satisfaction. On Stafford's *et al.* (1998) there was not found any relationship between **Responsiveness** and the other two dependent variables. On Bharwana and Mohsin's (2013) and Lonial's *et al.* (2005) papers, **Responsiveness** is a factor much valued by consumers and it contributes heavily to their satisfaction.
Results from this thesis: **Responsiveness** has a positive and significant impact on Light Gambling Seekers and Multi-Purpose Seekers' satisfaction.

6. **Empathy:** This last variable was the most controversial one, according to the studies papers. On one hand, Lonial's *et al.* (2005) results showed that **Empathy** was the fourth most impactful variable on a positive way. On the other hand, Bharwana and Mohsin (2013) found out that this variable depicts a negative link between Service Quality and Customers' satisfaction. Then, there are also the

findings from Stafford *et al.* (1998), concluding that the **Empathy** dimension has occasional influence on customers' satisfaction.

Results from this thesis: **Empathy** did not prove his positive significance on influencing any of the 4 players' satisfaction.

5.4 Hypotheses validation

Hypotheses	Validation
<p style="text-align: center;">Hypothesis 1 – Challenge/Winning Seekers</p> <p>H1a: Tangibles has a positive and significant effect on challenge/winning seekers' satisfaction</p> <p>H1b: Access has a positive and significant effect challenge/winning seekers' satisfaction</p> <p>H1c: Courtesy has a positive and significant effect on challenge/winning seekers' satisfaction</p> <p>H1d: Understanding has a positive and significant effect on challenge/winning seekers' satisfaction</p> <p>H1e: Responsiveness has a positive and significant effect on challenge/winning seekers' satisfaction</p> <p>H1f: Empathy has a positive and significant effect on challenge/winning seekers' satisfaction</p>	<p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p>

<p style="text-align: center;">Hypotheses 2 - Only Winning Seekers</p> <p>H2a: Tangibles has a positive and significant effect on only winning seekers' satisfaction</p> <p>H2b: Access has a positive and significant effect on only winning seekers' satisfaction</p> <p>H2c: Courtesy has a positive and significant effect on only winning seekers' satisfaction</p> <p>H2d: Understanding has a positive and significant effect on only winning seekers' satisfaction</p> <p>H2e: Responsiveness has a positive and significant effect on only winning seekers' satisfaction</p> <p>H2f: Empathy has a positive and significant effect on only winning seekers' satisfaction</p>	<p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Not Validated</p>
<p style="text-align: center;">Hypothesis 3 - Light Gambling Seekers</p> <p>H3a: Tangibles has a positive and significant effect on light gambling seekers' satisfaction</p> <p>H3b: Access has a positive and significant effect on light gambling seekers' satisfaction</p> <p>H3c: Courtesy has a positive and significant effect on light gambling seekers' satisfaction</p>	<p style="text-align: center;">Validated</p> <p style="text-align: center;">Not Validated</p> <p style="text-align: center;">Validated</p>

<p>H3d: Understanding has a positive and significant effect on light gambling seekers' satisfaction</p> <p>H3e: Responsiveness has a positive and significant effect on light gambling seekers' satisfaction</p> <p>H3f: Empathy has a positive and significant effect on light gambling seekers' satisfaction</p>	<p>Not Validated</p> <p>Validated</p> <p>Not Validated</p>
<p style="text-align: center;">Hypothesis 4 - Multi-Purpose Seekers</p> <p>H4a: Tangibles has a positive and significant effect on multi-purpose seekers' satisfaction</p> <p>H4b: Access has a positive and significant effect on multi-purpose seekers' satisfaction</p> <p>H4c: Courtesy has a positive and significant effect on multi-purpose seekers' satisfaction</p> <p>H4d: Understanding has a positive and significant effect on multi-purpose seekers' satisfaction</p> <p>H4e: Responsiveness has a positive and significant effect on multi-purpose seekers' satisfaction</p> <p>H4f: Empathy has a positive and significant effect on multi-purpose seekers' satisfaction</p>	<p>Validated</p> <p>Not Validated</p> <p>Not Validated</p> <p>Not Validated</p> <p>Validated</p> <p>Not Validated</p>

Figure 7 – Hypotheses Validation

5.5 Limitations

The principal limitation, that most affected this study's results, was the reduced sample of both Challenge/Winning Seekers and Only Winning Seekers. It was only possible to have 21 respondents that were more identified with the Challenge/Winning Seekers' profile and 24 respondents with the Only Winning Seekers' profile. As previously explained throughout the Literature Review, even though they might be some recreational players there, the majority of players included on those two groups are professional players. By taking a close look to the universe of casino players, it is possible and easy to verify that most of the people that have been at least once to a casino are considered recreational players. As professional players are a niche, it was very difficult to find a larger sample. People that answered the survey were mainly my friends, family and people that I caught leaving a casino. Therefore, most of them were recreational players, as I personally do not know any professional players, and some of the people that I met leaving the casinos were, in fact, professional players. With this being said, the sample for both Challenge/Winning Seekers and Only Winning Seekers were below 30 respondents. To perform the ANOVA test and Multiple Linear Regression Models, in order to confirm the normality, the sample must be larger than 30. In this case it was not possible. Probably if the sample was larger than 50 respondents (like Light Gambling Seekers and Multi-Purpose Seekers), the results would be more precise and conclusive regarding these two groups. However, even with this limitation, the data analysis was performed equally for all of the groups and the conclusions were taken.

5.6 Contributions

This investigation brought to light three main concepts: Segmentation, Service Quality and Customers' Satisfaction. The main idea was to relate them, by connecting each customer with one or more service quality variables which would contribute to their satisfaction. As the market in study is the casino market, it was relevant to divide casino customers in clusters. This way is it would be easy to study them and understand what the factors that contribute to their satisfaction are. Previous studies, whether they only focus on the segmentation and on the division of different players, according to their characteristics and motivations, or on the variables of service quality that

contributes to customers' satisfaction (considering that all customers are included in only one big group).

5.6.1 Academic contributions

Regarding academic contributions, this thesis emphasizes three marketing concepts that are explored according to this thesis' purpose. Firstly, in order to divide targets into 4 clusters, there were 9 segmentation criteria taken in consideration (Primary Motivations, Type of Players, Main activities, Games, Platforms, Income, Amount Waged, Age and Period of Stay). It is essential that these criteria is properly chosen and supported by the literature review, as it will define the targets this service will affect. The correct choice of segmentation criteria helps guaranteeing that the targets will be independent groups with different characteristics. This way, it is much easier to study their behaviors and to take further conclusions for each one of the clusters.

Another pillar of this investigation is service quality. To study it, it is mandatory to understand the 7p's of Marketing-Mix and its contribution to the quality of casino services, as the six service quality variables were chosen based on that. Concerning this thesis focus, the most relevant Marketing-Mix variables, the ones that have a stronger influence on customers' satisfaction, are Physical Environment (Tangibles and Courtesy) and People (Responsiveness). People proved to have a positive and significant contribution on Light Gambling and Multi-Purpose Seekers. Physical Environment had a greater impact on Only Winning, Light Gambling and Multi-Purpose Seekers. As it can be observed, the Marketing-Mix variables were the base of all 6 service quality determinants. In the end, only two of them proved to be more useful on explaining casino customers' satisfaction.

The last concept developed on this study is customers' satisfaction. Throughout this investigation the variables that directly affect casino customers' satisfaction are explored and tested. However, this concept can be seen in a much wider perspective. Every business that provides services to their customers can use this model to study satisfaction. The only section that needs to be changed is the segmentation. By using the same method as this thesis, customers can be divided according to their profile, personality, motivations and characteristics. After adapting segmentation to the business in question, the same six service quality variables can be used to study customers' satisfaction.

5.6.2 Contributions for casinos

Besides that, the conclusions that came out from this investigation point that casinos must pay more attention to some determinants of service quality, as some of them have a stronger influence on some customers' satisfaction than others. If casino managers and marketers want to know where they can invest, in order to have a significant impact on satisfaction, this study is, for sure, something they should take into account. Before investing on ideas and projects to increase customers' satisfaction, first, not only casino managers, but all business managers need to know: who will be affected and how much. This project helps answering this question, regarding the casino business.

5.7 Future Research

This thesis investigated the impact of 6 determinants of service quality on the satisfaction of 4 types of casino players. The studies and researches regarding this subject were more focused on explaining the overall consumers' satisfaction, while this thesis added the different types of players that were not on those models. Considering what this thesis purpose was and what can still be studied regarding this theme, future studies may focus on:

- **Studying the exact same 6 variables regarding the same 4 types of players.** This time, it would be perfect if there were at least 30 respondents for each group of players. Maybe other different conclusions, regarding Challenge/Winning Seekers and Only Winning Seekers, will be taken.
- **Maintaining these 4 types of players but using different variables of service quality to study their satisfaction.** This thesis used 6 variables based on another studies, however there are other relevant variables that can also be studied. It would be interesting to find out which other variables may contribute for casino players' satisfaction.
- **Gathering the different casino players in other groups and study them according to these 6 determinants of service quality, used on these thesis.** Another plausible way to segment casinos players may be through professional and recreational players. It would be relevant to study the satisfaction of those two types of players.

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Appendices

Appendix 1

Relação do consumidor com o casino

No âmbito da minha tese de mestrado em Marketing no ISCTE-iul, o presente questionário tem por objetivo compreender as diferentes relações que os consumidores têm com o casino e o que cada um espera do serviço prestado pelo mesmo. Para o responder é obrigatório ter mais de 18 anos e já ter entrado pelo menos 1 vez num casino.

Este questionário tem uma duração de aproximadamente 3 minutos e todas as informações partilhadas no mesmo serão confidenciais e apenas serão utilizadas para fins académicos.

***Obrigatório**

1. Género *

Marcar apenas uma oval.

- Masculino
 Feminino

2. Idade *

Marcar apenas uma oval.

- 18 - 24
 25 - 34
 35 - 44
 45 - 54
 55 - 64
 >65

3. Habilitações Literárias *

Marcar apenas uma oval.

- Ensino Básico
 Ensino Secundário
 Licenciatura
 Mestrado
 Doutoramento

4. Situação Profissional *

Marcar apenas uma oval.

- Estudante
 Trabalhador
 Trabalhador Estudante
 Desempregado
 Reformado

Destes 4 perfis, qual destes é o que mais se aproxima a si enquanto consumidor do casino?

	Challenge/Winning seekers	Only winning seekers	Light gambling seekers	Multi-purpose seekers
Motivações	Ganhar dinheiro e sentir adrenalina de jogar	Ganhar dinheiro e recuperar o que possa ter perdido	Não me sinto motivado por nada em concreto	Socializar, adrenalina, divertir-me, esquecer as preocupações do quotidiano, ganhar dinheiro
Tipos de jogadores	Profissionais ou lazer	Profissionais ou lazer	Apenas lazer	Apenas lazer
Principais atividades	Actividades de Jogo	Actividades de Jogo	Actividades de Jogo e sem ser jogo	Actividades de Jogo e sem ser jogo
Jogos	Skill e sorte	Skill e sorte	Apenas sorte	Apenas sorte
Plataformas	Online e/ou offline	Online e/ou offline	Só Offline	Só Offline
Quantidade apostada	Médio/Alto	Alto	Baixo	Médio/Alto
Tempo no casino	Periodos longos	Periodos longos	Periodos curtos	Periodos curtos

- Challenge/Winning Seekers
 Only Winning Seekers
 Light Gambling Seekers
 Multi-Purpose Seekers

Numa escala de 1 a 5 (1- não contribui ; 5- contribui bastante), classifique as seguintes afirmações tendo em conta o quanto estas contribuem para a sua satisfação no casino.

6. Serviço prestado *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Não haver erros nos pedidos de comida/bebida no bar/restaurante do casino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Não haver erros nos pagamentos dos prémios de jogo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Não haver erros/atrasos/cancelamentos de eventos que ocorram no casino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rapidez e eficácia do crupiê/empregado no desempenho da sua tarefa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Navegação no casino *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Placas que indicam a direção dos serviços	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Luzes no chão que delimitam os corredores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disposição dos equipamentos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Largura dos corredores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Limpeza *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Não haver copos/pratos sujos visíveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Não haver dedadas nas máquinas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limpeza do casino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff estar asseado e vestido a rigor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Simpatia dos funcionários *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Staff seja simpático e prestável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Staff conheça os meus gostos e personalidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Possa confiar no staff e no casino para resolver qualquer questão que possa surgir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ligação que se estabelece entre crupiê e jogador	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Comodidade *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Sentir-me confortável enquanto jogo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ter disponível a minha máquina/mesa favorita	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ter espaço suficiente para jogar na máquina ou mesa que eu quero	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ter espaço suficiente para estar confortável ao balcão/restaurante ou a assisir a um evento	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Ambiente e Decoração *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Ventilação para reduzir o fumo dos cigarros	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sons das moedas e músicas das máquinas de jogo (slots)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iluminação do casino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Temperatura	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O cuidado com o tratamento do chão, paredes e equipamentos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. De todas as 6 variáveis, quanto é que as mesmas contribuem para a sua satisfação? (1- não contribui, 5- contribui bastante) *

Marcar apenas uma oval por linha.

	1	2	3	4	5
Serviço prestado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Navegação no casino	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limpeza	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simpatia dos funcionários	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comodidade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambiente e Decoração	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2

		Levene Statistic	df1	df2	Sig.
Responsiveness					
q6.1	Based on Mean	3,889	3	203	0,010
q6.2	Based on Mean	0,399	3	203	0,754
q6.3	Based on Mean	1,443	3	203	0,231
q6.4	Based on Mean	1,985	3	203	0,117

Table 28 – Responsiveness’ Levene’s Test

		Levene Statistic	df1	df2	Sig.
Access					
q7.1	Based on Mean	3,127	3	203	0,027
q7.2	Based on Mean	0,371	3	203	0,774
q7.3	Based on Mean	1,468	3	203	0,224
q7.4	Based on Mean	2,165	3	203	0,093

Table 29 – Access’ Levene’s Test’

		Levene Statistic	df1	df2	Sig.
Courtesy					
q8.1	Based on Mean	0,918	3	203	0,433
q8.2	Based on Mean	0,925	3	203	0,429
q8.3	Based on Mean	2,196	3	203	0,090
q8.4	Based on Mean	0,550	3	203	0,648

Table 30 – Courtesy’s Levene’s Test

		Levene Statistic	df1	df2	Sig.
Empathy					
q9.1	Based on Mean	2,081	3	203	0,104
q9.2	Based on Mean	1,082	3	203	0,358
q9.3	Based on Mean	1,595	3	203	0,192
q9.4	Based on Mean	1,368	3	203	0,254

Table 31 – Empathy’s Levene’s Test

		Levene Statistic	df1	df2	Sig.
Understanding					
q10.1	Based on Mean	0,266	3	203	0,850
q10.2	Based on Mean	3,980	3	203	0,009
q10.3	Based on Mean	0,313	3	203	0,816
q10.4	Based on Mean	1,619	3	203	0,186

Table 32 – Understanding’s Levene’s Test

		Levene Statistic	df1	df2	Sig.
Tangibles					
q11.1	Based on Mean	1,151	3	203	0,330
q11.2	Based on Mean	1,170	3	203	0,322
q11.3	Based on Mean	2,425	3	203	0,067
q11.4	Based on Mean	1,349	3	203	0,260
q11.5	Based on Mean	2,845	3	203	0,039
q11.6	Based on Mean	0,317	3	203	0,813

Table 33 – Tangibles’ Levene’s Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q6.1 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,152	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 8 – Responsiveness Kruskal Wallis Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q7.1 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,136	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 9 – Access Kruskal Wallis Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q10.2 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,123	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 10 – Understanding Kruskal Wallis Test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of q11.5 is the same across categories of Tipo de Jogador.	Independent-Samples Kruskal-Wallis Test	,314	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 11 – Tangibles Kruskal Wallis Test

		Sum of Squares	df	Mean Square	F	Sig.
Responsiveness						
q6.1	Between Groups	4,900	3	1,633	0,889	0,448
	Within Groups	372,848	203	1,837		
	Total	377,749	206			
q6.2	Between Groups	1,011	3	0,337	0,263	0,852
	Within Groups	260,419	203	1,283		
	Total	261,430	206			
q6.3	Between Groups	8,839	3	2,946	1,903	0,130
	Within Groups	314,378	203	1,549		
	Total	323,217	206			
q6.4	Between Groups	1,460	3	0,487	0,320	0,811
	Within Groups	309,187	203	1,523		
	Total	310,647	206			

Table 34 – Responsiveness' ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Access						
q7.1	Between Groups	9,194	3	3,065	2,503	0,060
	Within Groups	248,545	203	1,224		
	Total	257,739	206			
q7.2	Between Groups	1,358	3	0,453	0,373	0,772
	Within Groups	246,188	203	1,213		
	Total	247,546	206			
q7.3	Between Groups	6,144	3	2,048	1,829	0,143
	Within Groups	227,257	203	1,119		
	Total	233,401	206			
q7.4	Between Groups	4,164	3	1,388	1,172	0,322
	Within Groups	240,426	203	1,184		
	Total	244,589	206			

Table 35 – Access' ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Courtesy						
q8.1	Between Groups	4,206	3	1,402	1,481	0,221
	Within Groups	192,181	203	0,947		
	Total	196,386	206			
q8.2	Between Groups	4,978	3	1,659	1,424	0,237
	Within Groups	236,500	203	1,165		
	Total	241,478	206			
q8.3	Between Groups	6,389	3	2,130	2,399	0,069
	Within Groups	180,201	203	0,888		
	Total	186,589	206			
q8.4	Between Groups	3,138	3	1,046	0,946	0,419
	Within Groups	224,379	203	1,105		
	Total	227,517	206			

Table 36 – Courtesy’s ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Empathy						
q9.1	Between Groups	6,216	3	2,072	2,532	0,058
	Within Groups	166,113	203	0,818		
	Total	172,329	206			
q9.2	Between Groups	4,859	3	1,620	1,158	0,327
	Within Groups	283,905	203	1,399		
	Total	288,763	206			
q9.3	Between Groups	5,878	3	1,959	1,813	0,146
	Within Groups	219,426	203	1,081		
	Total	225,304	206			
q9.4	Between Groups	5,775	3	1,925	1,447	0,230
	Within Groups	269,974	203	1,330		
	Total	275,749	206			

Table 37 – Empathy’s ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Understanding						
q10.1	Between Groups	2,028	3	0,676	0,666	0,574
	Within Groups	206,156	203	1,016		
	Total	208,184	206			
q10.2	Between Groups	9,870	3	3,290	1,982	0,118
	Within Groups	336,999	203	1,660		
	Total	346,870	206			
q10.3	Between Groups	4,679	3	1,560	1,197	0,312
	Within Groups	264,577	203	1,303		
	Total	269,256	206			
q10.4	Between Groups	6,440	3	2,147	1,670	0,175
	Within Groups	260,865	203	1,285		
	Total	267,304	206			

Table 38 – Empathy’s ANOVA Test

		Sum of Squares	df	Mean Square	F	Sig.
Tangibles						
q11.1	Between Groups	5,664	3	1,888	2,182	0,091
	Within Groups	175,640	203	0,865		
	Total	181,304	206			
q11.2	Between Groups	4,283	3	1,428	1,182	0,318
	Within Groups	245,195	203	1,208		
	Total	249,478	206			
q11.3	Between Groups	5,559	3	1,853	1,824	0,144
	Within Groups	206,267	203	1,016		
	Total	211,826	206			
q11.4	Between Groups	9,417	3	3,139	3,433	0,018
	Within Groups	185,636	203	0,914		
	Total	195,053	206			
q11.5	Between Groups	3,694	3	1,231	1,143	0,333
	Within Groups	218,635	203	1,077		
	Total	222,329	206			
q11.6	Between Groups	2,469	3	0,823	0,868	0,459
	Within Groups	192,584	203	0,949		
	Total	195,053	206			

Table 39 – Tangibles’ ANOVA Test

				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Tangibles q11.4	Tukey HSD	Challenge/Winning Seekers	Only Winning Seekers	-0,071	0,286	0,995	-0,81	0,67
			Light Gambling Seekers	-0,400	0,230	0,306	-0,99	0,20
			Multi-Purpose Seekers	-,635*	0,241	0,045	-1,26	-0,01
		Only Winning Seekers	Challenge/Winning Seekers	0,071	0,286	0,995	-0,67	0,81
			Light Gambling Seekers	-0,328	0,218	0,434	-0,89	0,24
			Multi-Purpose Seekers	-0,563	0,229	0,070	-1,16	0,03
		Light Gambling Seekers	Challenge/Winning Seekers	0,400	0,230	0,306	-0,20	0,99
			Only Winning Seekers	0,328	0,218	0,434	-0,24	0,89
			Multi-Purpose Seekers	-0,235	0,154	0,424	-0,63	0,16
		Multi-Purpose Seekers	Challenge/Winning Seekers	,635*	0,241	0,045	0,01	1,26
			Only Winning Seekers	0,563	0,229	0,070	-0,03	1,16
			Light Gambling Seekers	0,235	0,154	0,424	-0,16	0,63
	Scheffe	Challenge/Winning Seekers	Only Winning Seekers	-0,071	0,286	0,996	-0,88	0,73
			Light Gambling Seekers	-0,400	0,230	0,390	-1,05	0,25
			Multi-Purpose Seekers	-0,635	0,241	0,077	-1,31	0,04
		Only Winning Seekers	Challenge/Winning Seekers	0,071	0,286	0,996	-0,73	0,88
			Light Gambling Seekers	-0,328	0,218	0,518	-0,94	0,29
			Multi-Purpose Seekers	-0,563	0,229	0,114	-1,21	0,08
		Light Gambling Seekers	Challenge/Winning Seekers	0,400	0,230	0,390	-0,25	1,05
			Only Winning Seekers	0,328	0,218	0,518	-0,29	0,94
			Multi-Purpose Seekers	-0,235	0,154	0,508	-0,67	0,20
		Multi-Purpose Seekers	Challenge/Winning Seekers	0,635	0,241	0,077	-0,04	1,31
			Only Winning Seekers	0,563	0,229	0,114	-0,08	1,21
			Light Gambling Seekers	0,235	0,154	0,508	-0,20	0,67

*. The mean difference is significant at the 0.05 level.

Table 40 – Tangibles' (q11.4) Tukey and Scheffe's Test

Appendix 3

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,761
Bartlett's Test of Sphericity	Approx. Chi-Square	317,395
	df	6
	Sig.	0,000

Table 41 – Responsiveness' KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,815
Bartlett's Test of Sphericity	Approx. Chi-Square	359,408
	df	6
	Sig.	0,000

Table 42 – Access' KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,812
Bartlett's Test of Sphericity	Approx. Chi-Square	421,875
	df	6
	Sig.	0,000

Table 43 – Courtesy' KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,653
Bartlett's Test of Sphericity	Approx. Chi-Square	293,714
	df	6
	Sig.	0,000

Table 44 – Empathy’ KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,750
Bartlett's Test of Sphericity	Approx. Chi-Square	408,672
	df	6
	Sig.	0,000

Table 45 –Understanding’s KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,872
Bartlett's Test of Sphericity	Approx. Chi-Square	661,538
	df	15
	Sig.	0,000

Table 46 –Tangibles’ KMO and Bartlett's Test

Communalities		
	Initial	Extraction
q6.1	1,000	0,552
q6.2	1,000	0,639
q6.3	1,000	0,727
q6.4	1,000	0,722

Extraction Method: Principal Component Analysis.

Table 47 – Responsiveness’ Extracted Components

Communalities

	Initial	Extraction
q7.1	1,000	0,739
q7.2	1,000	0,761
q7.3	1,000	0,690
q7.4	1,000	0,597

Extraction Method: Principal
Component Analysis.

Table 48 – Access’ Extracted Components

Communalities

	Initial	Extraction
q8.1	1,000	0,762
q8.2	1,000	0,681
q8.3	1,000	0,796
q8.4	1,000	0,666

Extraction Method: Principal
Component Analysis.

Table 49 – Courtesy’s Extracted Components

Communalities

	Initial	Extraction
q8.1	1,000	0,549
q8.2	1,000	0,541
q8.3	1,000	0,685
q8.4	1,000	0,643

Extraction Method: Principal
Component Analysis.

Table 50 – Empathy’s Extracted Components

Communalities

	Initial	Extraction
q8.1	1,000	0,708
q8.2	1,000	0,689
q8.3	1,000	0,821
q8.4	1,000	0,565

Extraction Method: Principal
Component Analysis.

Table 51 – Understanding’s Extracted Components

Communalities

	Initial	Extraction
q11.1	1,000	0,573
q11.2	1,000	0,48
q11.3	1,000	0,764
q11.4	1,000	0,719
q11.5	1,000	0,626
q11.6	1,000	0,698

Extraction Method: Principal
Component Analysis.

Table 52 – Tangible’s First Extracted Components

Communalities

	Initial	Extraction
q11.1	1,000	0,604
q11.3	1,000	0,736
q11.4	1,000	0,749
q11.5	1,000	0,626
q11.6	1,000	0,740

Extraction Method: Principal
Component Analysis.

Table 53 – Tangible’s Final Extracted Components

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,640	66,006	66,006	2,640	66,006	66,006
2	0,659	16,482	82,489			
3	0,390	9,752	92,241			
4	0,310	7,759	100,000			

Extraction Method: Principal Component Analysis.

Table 54 – Responsiveness’ Total Variance Explained

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,786	69,649	69,649	2,786	69,649	69,649
2	0,517	12,933	82,583			
3	0,397	9,923	92,506			
4	0,300	7,494	100,000			

Extraction Method: Principal Component Analysis.

Table 55 – Access’ Total Variance Explained

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,905	72,633	72,633	2,905	72,633	72,633
2	0,435	10,864	83,497			
3	0,425	10,618	94,115			
4	0,235	5,885	100,000			

Extraction Method: Principal Component Analysis.

Table 56 – Courtesy’s Total Variance Explained

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,905	72,633	72,633	2,905	72,633	72,633
2	0,435	10,864	83,497			
3	0,425	10,618	94,115			
4	0,235	5,885	100,000			

Extraction Method: Principal Component Analysis.

Table 57 – Empathy’s Total Variance Explained

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,783	69,583	69,583	2,783	69,583	69,583
2	0,633	15,832	85,415			
3	0,385	9,623	95,038			
4	0,198	4,962	100,000			

Extraction Method: Principal Component Analysis.

Table 58 – Understanding’s Total Variance Explained

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,860	64,340	64,340	3,860	64,340	64,340
2	0,692	11,537	75,877			
3	0,545	9,076	84,953			
4	0,358	5,969	90,922			
5	0,287	4,789	95,711			
6	0,257	4,289	100,000			

Extraction Method: Principal Component Analysis.

Table 59 – Tangibles’ Total Variance Explained (Before extracting component number 2)

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,455	69,099	69,099	3,455	69,099	69,099
2	0,562	11,248	80,347			
3	0,402	8,042	88,389			
4	0,300	6,007	94,396			
5	0,280	5,604	100,000			

Extraction Method: Principal Component Analysis.

Table 60 – Tangibles’ Total Variance Explained (After extracting component number 2)

Appendix 4

		Levene Statistic	df1	df2	Sig.
responsiveness	Based on Mean	0,380	3	203	0,768
courtesy	Based on Mean	0,124	3	203	0,946
access	Based on Mean	1,057	3	203	0,368
understanding	Based on Mean	0,626	3	203	0,599
empathy	Based on Mean	1,160	3	203	0,326
tangibles	Based on Mean	0,980	3	203	0,403

Table 61 – Service Quality’s Variables Levene’s Test

		Sum of Squares	df	Mean Square	F	Sig.
responsiveness	Between Groups	3,000	3	1,000	0,988	0,399
	Within Groups	205,381	203	1,012		
	Total	208,381	206			
courtesy	Between Groups	3,843	3	1,281	1,736	0,161
	Within Groups	149,819	203	0,738		
	Total	153,662	206			
access	Between Groups	3,354	3	1,118	1,354	0,258
	Within Groups	167,600	203	0,826		
	Total	170,954	206			
understanding	Between Groups	0,483	3	0,161	0,175	0,913
	Within Groups	187,231	203	0,922		
	Total	187,714	206			
empathy	Between Groups	3,114	3	1,038	1,492	0,218
	Within Groups	141,256	203	0,696		
	Total	144,370	206			
tangibles	Between Groups	3,060	3	1,020	1,592	0,193
	Within Groups	130,085	203	0,641		
	Total	133,145	206			

Table 62 - Service Quality’s Variables ANOVA Test

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
responsiveness	1	21	3,4881	0,81193	0,17718	3,1185	3,8577
	2	24	3,9167	0,97987	0,20002	3,5029	4,3304
	3	99	3,8636	1,03403	0,10392	3,6574	4,0699
	4	63	3,8968	1,02650	0,12933	3,6383	4,1553
	Total	207	3,8418	1,00576	0,06991	3,7040	3,9796
courtesy	1	21	3,7500	0,95197	0,20774	3,3167	4,1833
	2	24	4,0833	0,77553	0,15830	3,7559	4,4108
	3	99	4,1010	0,89208	0,08966	3,9231	4,2789
	4	63	4,2421	0,80192	0,10103	4,0401	4,4440
	Total	207	4,1063	0,86367	0,06003	3,9879	4,2246
access	1	21	3,4762	0,83256	0,18168	3,0972	3,8552
	2	24	3,4479	1,14678	0,23409	2,9637	3,9322
	3	99	3,6540	0,89976	0,09043	3,4746	3,8335
	4	63	3,8175	0,84387	0,10632	3,6049	4,0300
	Total	207	3,6618	0,91097	0,06332	3,5370	3,7867
understanding	1	21	3,9286	0,99418	0,21695	3,4760	4,3811
	2	24	4,0521	0,87842	0,17931	3,6812	4,4230
	3	99	3,8939	1,00705	0,10121	3,6931	4,0948
	4	63	3,9246	0,90098	0,11351	3,6977	4,1515
	Total	207	3,9251	0,95459	0,06635	3,7943	4,0559
empathy	1	21	3,6786	0,74642	0,16288	3,3388	4,0183
	2	24	3,6563	0,98580	0,20123	3,2400	4,0725
	3	99	3,6439	0,83840	0,08426	3,4767	3,8112
	4	63	3,9167	0,79184	0,09976	3,7172	4,1161
	Total	207	3,7319	0,83715	0,05819	3,6172	3,8466
tangibles	1	21	3,6825	0,88805	0,19379	3,2783	4,0868
	2	24	3,8264	0,79473	0,16222	3,4908	4,1620
	3	99	3,9798	0,82075	0,08249	3,8161	4,1435
	4	63	4,0847	0,73803	0,09298	3,8988	4,2705
	Total	207	3,9638	0,80395	0,05588	3,8536	4,0739

Table 63 - Service Quality's Dimensions ANOVA Descriptive Analysis

Appendix 5

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,824	0,827	4

Figure 12 – Responsiveness' Reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,854	0,854	4

Figure 13 – Access' Reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,871	0,874	4

Figure 14 – Courtesy's Reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,778	0,781	4

Figure 15 – Empathy's Reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,849	0,853	4

Figure 16 – Understanding’s Reliability

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q6.1	11,87	9,580	0,569	0,368	0,820
q6.2	11,07	10,364	0,627	0,455	0,789
q6.3	11,58	9,176	0,717	0,524	0,746
q6.4	11,58	9,429	0,696	0,538	0,757

Table 64 - Responsiveness’ Reliability if item deleted

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q7.1	10,81	7,535	0,731	0,547	0,799
q7.2	11,18	7,555	0,750	0,579	0,791
q7.3	10,88	7,996	0,689	0,488	0,817
q7.4	11,07	8,242	0,615	0,380	0,847

Table 65 - Access’ Reliability if item deleted

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q8.1	12,16	7,067	0,754	0,613	0,824
q8.2	12,63	6,846	0,691	0,487	0,851
q8.3	12,11	7,051	0,787	0,649	0,813
q8.4	12,38	7,042	0,679	0,462	0,854

Table 66 - Courtesy’s Reliability if item deleted

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q9.1	10,59	7,729	0,521	0,467	0,756
q9.2	11,89	6,484	0,552	0,432	0,744
q9.3	10,87	6,696	0,632	0,529	0,699
q9.4	11,43	6,188	0,640	0,477	0,692

Table 67 - Empathy's Reliability if item deleted

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q10.1	11,42	9,263	0,704	0,524	0,806
q10.2	12,14	7,914	0,682	0,601	0,815
q10.3	11,79	8,020	0,811	0,701	0,753
q10.4	11,76	9,262	0,580	0,383	0,852

Table 68 - Understanding's Reliability if item deleted

Appendix 6

		Levene Statistic	df1	df2	Sig.
responsiveness	Based on Mean	0,380	3	203	0,768
courtesy	Based on Mean	0,124	3	203	0,946
access	Based on Mean	1,057	3	203	0,368
understanding	Based on Mean	0,626	3	203	0,599
empathy	Based on Mean	1,160	3	203	0,326
tangibles	Based on Mean	0,980	3	203	0,403

Table 69 – Levene’s Test for the 6 variables

		Sum of Squares	df	Mean Square	F	Sig.
responsiveness	Between Groups	3,000	3	1,000	0,988	0,399
	Within Groups	205,381	203	1,012		
	Total	208,381	206			
courtesy	Between Groups	3,843	3	1,281	1,736	0,161
	Within Groups	149,819	203	0,738		
	Total	153,662	206			
access	Between Groups	3,354	3	1,118	1,354	0,258
	Within Groups	167,600	203	0,826		
	Total	170,954	206			
understanding	Between Groups	0,483	3	0,161	0,175	0,913
	Within Groups	187,231	203	0,922		
	Total	187,714	206			
empathy	Between Groups	3,114	3	1,038	1,492	0,218
	Within Groups	141,256	203	0,696		
	Total	144,370	206			
tangibles	Between Groups	3,060	3	1,020	1,592	0,193
	Within Groups	130,085	203	0,641		
	Total	133,145	206			

Table 70 - Service Quality’s Variables ANOVA Test

		N	Mean	Std. Deviation	Std. Error
responsiveness	CWS	21	3,4881	0,81193	0,17718
	OWS	24	3,9167	0,97987	0,20002
	LGS	99	3,8636	1,03403	0,10392
	MPS	63	3,8968	1,02650	0,12933
	Total	207	3,8418	1,00576	0,06991
courtesy	CWS	21	3,7500	0,95197	0,20774
	OWS	24	4,0833	0,77553	0,15830
	LGS	99	4,1010	0,89208	0,08966
	MPS	63	4,2421	0,80192	0,10103
	Total	207	4,1063	0,86367	0,06003
access	CWS	21	3,4762	0,83256	0,18168
	OWS	24	3,4479	1,14678	0,23409
	LGS	99	3,6540	0,89976	0,09043
	MPS	63	3,8175	0,84387	0,10632
	Total	207	3,6618	0,91097	0,06332
understanding	CWS	21	3,9286	0,99418	0,21695
	OWS	24	4,0521	0,87842	0,17931
	LGS	99	3,8939	1,00705	0,10121
	MPS	63	3,9246	0,90098	0,11351
	Total	207	3,9251	0,95459	0,06635
empathy	CWS	21	3,6786	0,74642	0,16288
	OWS	24	3,6563	0,98580	0,20123
	LGS	99	3,6439	0,83840	0,08426
	MPS	63	3,9167	0,79184	0,09976
	Total	207	3,7319	0,83715	0,05819
tangibles	CWS	21	3,6825	0,88805	0,19379
	OWS	24	3,8264	0,79473	0,16222
	LGS	99	3,9798	0,82075	0,08249
	MPS	63	4,0847	0,73803	0,09298
	Total	207	3,9638	0,80395	0,05588

a. Warning: Between-component variance is negative. It was replaced by 0.0 in computing this random effects measure.

Table 71 - Service Quality's Variables – Descriptive Analysis