



INSTITUTO
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THE GOLF INDUSTRY IN THE PORTUGUESE ECONOMY

Pedro Guerreiro Costa

Dissertation submitted as a partial requirement to obtain the degree of
Master in Business Administration

Advisor:

Professor Renato Lopes da Costa, PhD.

Iscte Business School, Marketing and Management Department

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Acknowledgments

To my parents and my sister for giving me this opportunity, for believing in me and for always putting myself in the best possible situation to succeed.

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To my friends that were there to help me.

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Abstract

The golf business may seem irrelevant in the eyes of most, but it is of significant importance in the economy of certain areas of the country, with special emphasis on the Algarve region, which, due to its geographical location, enables the practice of the sport under favorable conditions during the twelve months of the year, which is one of the factors that helps to reduce seasonality in tourism. This study intends to analyze in depth this impact from a social, economic and ecological point of view, not only in the mentioned region, but also throughout the national territory, to later present solutions for its sustainable growth and a return to normality in a post-pandemic era, that decimated the tourism sector. In order to obtain concrete results, this study will be based on theoretical-practical questions whose answers will be obtained through interviews carried out in a formal context with golf professionals, especially course directors, coaches, professional players and golf business companies.

Keywords: Golf, Economy, Tourism, Sustainability, Algarve, Portugal.

JEL Classification:

Z21 Sports Economics: Industry Studies

Z31 Tourism Economics: Industry Studies

Z32 Tourism Economics: Tourism and Development

Resumo

O negócio do golfe pode parecer irrelevante aos olhos da maioria, porém apresenta uma importância significativa na economia de certas zonas do país com especial destaque para a região do Algarve, que devido à sua localização geográfica proporciona a prática da modalidade em condições favoráveis durante os doze meses do ano, sendo este um dos fatores que mais faz reduzir a sazonalidade no turismo. Este estudo pretende analisar aprofundadamente este impacto do ponto de vista social, económico e ecológico, não só na região mencionada, mas também em todo o território nacional, com o objetivo de verificar se este negócio é de facto sustentável na totalidade do território nacional e da forma como este está desenhado, ou seja, baseado no turismo para posteriormente apresentar soluções para o seu crescimento sustentável e um retorno à normalidade numa era pós pandemia. Para a obtenção de resultados concretos este estudo irá basear-se em questões teórico-práticas cujas respostas serão obtidas através de entrevistas realizadas num contexto formal com profissionais da área do golfe, em especial diretores de campos, professores, jogadores profissionais e empresas de negócios de golfe.

Palavras-Chave: Golfe, Economia, Turismo, Sustentabilidade, Algarve, Portugal.

Classificação JEL:

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Chapter I- Introduction

1.1. Framework and Research Problem

Portugal is considered by many renown people in the golf world as one of the best countries to play and enjoy a round of golf, winning for five straight years the “World’s best golf destination” (from 2014 until 2018), award from the World Golf Awards. Based on this, the investigation intends to, on the one hand, analyze and compile all the information regarding the sport and its interconnections with the economy but also present viable options for its growth in all the country and not only in the Algarve region, where golf has a higher importance compared to other Portugal’s regions.

This growth of the game involves solving several problems that persist for a long time. For example, it is well known that the “dependence on the outside is high, since domestic players accounted for only about 21% of total demand.” (CNIG, 2013). Hence, this first is that there is a small number of Portuguese golfers and that the outside demand is much higher than this national demand. However, it is important to understand that if the golf industry is based on the outside demand, its survival depends on tourists and visitors and not on the national player that lives all year round in Portugal.

1.2. Objectives and Research Questions

In fact, from a personal perspective and based on this very simple information the main objectives of this dissertation are to understand if golf, both as a sport, leisure activity and a business, is viable and sustainable the way it is built and designed for Portugal, to explore and find initiatives to attract new players to the game and to verify if the COVID-19 pandemic had any impact on these numbers. Besides the fact that the demand is primarily foreign the data also shows a small number of national players; 15.200 practitioners in 2018 (Deloitte, 2020), and a high average age among these players, which consists in a serious problem regarding the sustainability of the industry. More than two thirds of Portuguese golfers have more than 50 years old (Deloitte,

2020), and records show that the number of young adults and children hasn't increased, leaving a lot of uncertainty about the future.

Although these problems are clear and visible the recent Covid-19 pandemic might have brought a new life to the game as it is played in an open space and allows no contact between players. Countries like the United States have found a significant increase of people that started playing the game in 2020 and 2021 (Beditz, 2022). With this information in mind, another goal of this dissertation is to find evidence and data that confirms if the tendency registered in the US is also true for Portugal. Therefore, three research question arise:

- Is the Golf business sustainable in Portugal the way it is built, based on tourism and on the international player?
- Taking into consideration the average age of the Portuguese golfer, is there a plan to attract new and younger players to the game?
- Considering that the golf business in Portugal is supported by tourists and foreigners, did the golf industry in the country have any positive effects after the COVID-19 pandemic?

In short, the goal of this dissertation is not just to identify these challenges but mainly to find and create solutions and suggestions about ways to mitigate and resolve these issues. For this, several interviews with professionals of the golf industry were conducted to get their view, opinions, and ideas in order to maintain and develop on a sustainable basis the business of golf in Portugal.

1.3. Dissertation's Structure

The structure of the following dissertation is divided into three main parts. The first one is the literature review, which is divided in four subchapters; the second one describes the theoretical approach and the methodology; and last, the third part contains the results and the main conclusions.

The first part presents pertinent information and data, starting with the history and the origins of the game of golf, it's growth around the world and a short introduction to the game itself, what it is and how it is played. After this, we transition to the Portuguese

reality of the golf industry. Beginning with a presentation of data related to the number of registered players, passing to the number of courses where they are located, its dimensions in number of holes and when were they opened. Then, and following this introductory information, the golf's impact in the Portuguese economy is presented based on data provided by the Portuguese Golf Federation. Following this line of thought, it is important to address in more depth the golf tourism industry in the sense that this is the factor that has the greatest impact in the previous chapter, related to the economy.

Still inside the literature review theme, chapter IV addresses the environmental sustainability of the golf courses which is one of the delicate points when talking about this subject because the construction and maintenance of a golf course consumes a fair number of resources, primarily water and fertilizers. Lastly, chapter V presents an analysis of the impact Covid-19 pandemic in the golf industry specially regarding the number of new players in the United States.

The second part, addresses the issues identified in the literature review and presents three objectives of study:

- To understand if the golf business is sustainable and profitable, specially outside the Algarve region.
- To identify special programs or initiatives to attract new players from younger generations.
- To analyze the evolution of the number of players in Portugal after the COVID-19 pandemic, in order to understand if the country followed the trends of countries like the United States.

In this part, it is also presented a methodology that explains how this dissertation is able to respond and clarify these points, with clarity and information provided by the source through interviews with direct stakeholders from the Portuguese golf industry.

Lastly, the third part compiles not only information gathered in the interviews that answer the research questions and end up reaching the objectives proposed but also presents the final conclusions. These conclusions must be interpreted with caution as they are based both in the author's opinions, fieldwork, analytic capabilities and the answers provided by the industry professionals throughout the interviews.

Chapter II- Introduction to Golf

2.1. The Origins of Golf

According to Ben Johnson in *History of Scotland*, golf was born from a game played near the royal capital of Edinburgh on the east coast of Scotland. At that time, players tried to hit pebbles with sticks and clubs that were bent around dunes and railroad tracks. In the 15th century, Scotland re-prepared to protect itself from the "old enemy" invasion. However, as a result of the country's enthusiasm for golf, many people neglected military training so much that James II's Scottish Parliament banned the sport in 1457. (Johnson, n.d.)

The ban was largely ignored, but the game was not royal approved until 1502, when Scottish James IV (1473-1513) became the world's first golf monarch. Thanks to the support of this royal family, the popularity of this game spread throughout Europe in the 16th century. (Johnson, n.d.). The game of golf officially became a sport when in 1744 the first golf club was created and established the first homogeneous set of rules, in Leath, a seaside resort, very close to Edinburgh (Green, 1987).

The first 18-hole golf course was built in 1764 in St Andrews and set the standard for games recognized today. William IV honored the club with the title "Royal & Ancient" in 1834, and with this recognition and its excellent golf course, the Royal and Ancient Golf Club in St Andrews was founded as the world's leading golf club. (Johnson, n.d.)

Golfers during the time used hand-crafted wooden clubs, typically made of beech with ash or hazel shafts, and balls made of compressed feathers wrapped in stitched horse skin. The game was played in public parks, as well as in traditional golf courses, by all types of people from different social classes. However, around 1783 some rules about the behavior of the players and spectators were implemented, for instance: "while a stroke is playing none of the party shall walk about, make any motion, or attempt to take off the player's attention, by speaking or otherwise" (The Rules of Golf, 1783). These types of changes started to adjust the status quo of the game as well as the type of player as the game began to be seen as a sport for the upper classes since "this sport

gradually became a vehicle for social improvement” (Ceron-Anaya, 2010). In 1824 the Thistle Golf Club included a more detailed statement about code of behavior: “it may not be improper here to mention certain points of etiquette, which it is of importance should be observed by all who are in the habit of attending matches at Golf” (The Rules of Golf, 1824). This way, golf clubs were excluding the lower classes from the sport as the rules also began to impact clothing and equipment: “the early history [of golf] does suggest that there was popular participation in the 18th century, [but] formalization began to shift it toward being a middle-class preserve” (Lowerson, Golf and the making of myths, 1994). Nevertheless, the doors were not fully closed for the under classes of society, because golf clubs started to offer memberships with less advantages and rights including free work as a way of payment to just be able to play: “If the poor played, then they did so as the servants or the cleaners of an established, patronizing and self-regarding Scottish bourgeoisie” (Lowerson, Sport and the English Middle Classes, 1870-1914)

The game itself started to expand to other countries, specially to England where in 1914 there were already 1.200 golf clubs (Lowerson, Sport and the English Middle Classes, 1870-1914). And here is where the game suffered the biggest developments, the more relevant being the introduction of a handicap: “the handicap allowed individuals displaying uneven physical condition or golfing skills to play a competitive round together, which was not a feature found in many other games.” (Ceron-Anaya, 2010). These other games, such as football or rugby relied on physical capacities as strength, speed, agility and skill. On the other hand, golf relied mainly on the financial capability of the individual “[In the early 20th century] taking club subscriptions, balls and clubs, caddy and professional fees, transport, and lunch together golf might typically cost around ten shillings a week—half an unskilled weekly wage” (Holt, 1998).

More recently, the game has developed not only into a sport but also into a global business valued at 84 billion of dollars just in the United States (National Golf Foundation, n.d.). According to (Correia & Martins) between 1985 and 2000, the number of golfers worldwide registered an increase from 35 to 56 million. This evolution had a special contribution from countries like the United States, United Kingdom, Japan, Canada and Australia, where golf has a bigger tradition and popularity.

In Portugal, the game was introduced in 1890 when British colonies established in Oporto to produce wine founded the first golf course, the Oporto Niblicks Club (today the Oporto Golf Club). In Lisbon the same thing happened, as British workers found in 1922 the Lisbon Sports Club, in Belas, that exists to this day with the same name (Fragoso).

2.2. The game of golf

After a brief explanation about the history and the origins of golf and since this dissertation intends to study the golf business, it is also important to mention and understand how the game is played.

There are many ways to play the game, meaning that depending on the number of players, the groups/teams or the disparity between the playing ability of the players there are several different types of matches. The most genuine game mode of golf is called *Match Play*, where two golfers play against each other (Park, 1896). This game mode consists of both players starting from the first tee, each one with their own ball and who ever holes the ball “in the fewest strokes wins the hole” (Park, 1896). If they both take the same number of shots to finish the hole (putting the ball in the hole) “the hole is set to be halved- neither wins it” (Park, 1896). The match continues throughout the desired length of the course (usually 18 holes) and at the end “the player who wins the greater number of holes wins the match” (Park, 1896).

However, the most popular way of a game of golf and the one used in most competitions is called *Stroke Play*. The USGA (United States Golf Association) states that “stroke play is a form of play where a player (or players) competes against all others in the competition by comparing a total score for one or more rounds”. This means that, at the end of a tournament, whatever its length or duration is, the player with the fewest strokes to complete the course wins.

It is also possible to play as a team, where a group up to four golfers, according to William Park (1896) a *foursome* is divided into teams of two players. At the end of the day, the goal of the game is the same as the modes mentioned before but this time “after the tee-shot, each of the players who are partners take alternate strokes at the ball, until the hole is finished” (Park, 1896). And again, the team who takes less shots to complete

the hole wins it and at the end the one who wins the most holes wins the match. If tied, the teams play another hole to untie the game (Park, 1896).

Chapter III- Golf in Portugal

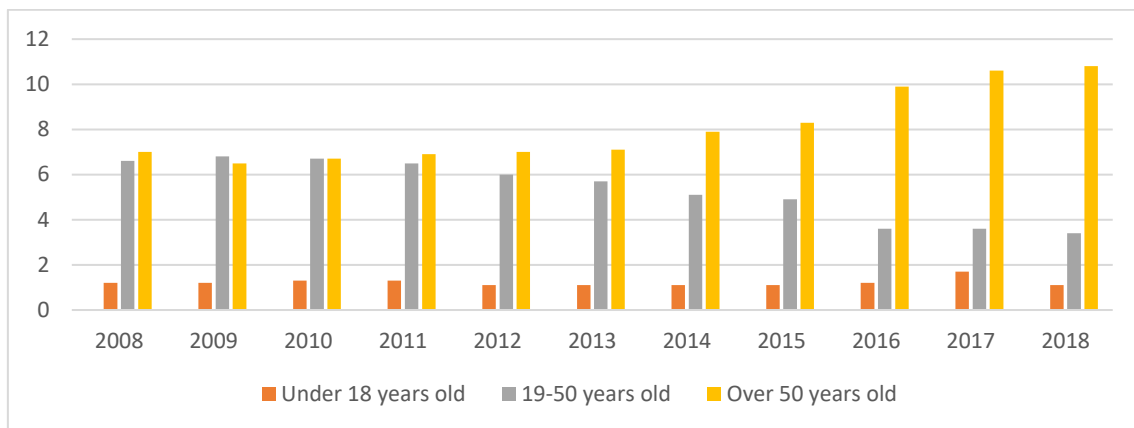
When diving into this chapter it is important to understand the environment of the industry: from the type of player and where they come from, to the golf courses, how many exist in the country and where they are located.

3.1. Golfers in Portugal

The most important piece of this puzzle, the players, who are the customers and the foundations for this whole activity. As said in the previous chapter, the *Federação Portuguesa de Golfe* (FPG) states that from 2008 until 2018 there was a small increase of registered golfers in the country, just only 488, ending up with a total of 15.200 practitioners in 2018. This increase was made possible because of the number of male players that went from, approximately, 11.600 in 2008 to 12.100 in 2018, as the number of female players kept constant, at around 3.200.

One of the main problems with the is the lack of young players and the absence of plans and programs both from the clubs, federation and the government. Table 3.1 shows a graph that illustrates this exact issue.

Table 3.1 Evolution of National Golfers in Portugal



Source: (Deloitte, 2020)

Here it is possible to see how this is really an important and impactful issue but it is easily explained. At the beginning of this study in 2008, both age groups over 18 years old were very close in number of players, however as the years passed by players that were 40 years old and over started to transition to the third category (>50 years old), increasing that age group numbers. So far, everything makes sense and is pretty normal. The problem started around 2013, when the age group from 19 until 50 years of age started to be unable to keep the same values, losing 1.000 players in just 3 years. Looking at the younger generations, under 18 years old, the numbers were also very consistent. From this we can understand that the middle age group was not getting enough new golfers, either from the younger generations that were, as said before, very consistent, but mainly from new players that started to practice already with more than 19 years of age. The majority of these players are either from Faro (5.461 players) or Lisbon (4.033 players), according to data from 2018. Regarding their nationality, in 2017, international golfers registered in FPG accounted for around 33% of the whole group, an 11% increase since 2008 (Deloitte, 2020)

3.2. Golf Courses and Golf Clubs in Portugal

According to the *Federação Portuguesa de Golfe*, in 2018 there were a total of 95 golf courses in Portugal. The district with the most courses was Faro with 40, 26 courses more than Lisbon that, at the time, was in second place with 14, followed by Oporto with only 8. The remaining districts of the country, including the archipelagos of Azores

and Madeira, all had less than 10 courses with exceptions to Évora and Guarda that had zero.

Table 3.2 is a list of all golf courses in the country by holes, the inauguration year and the region in the country.

Table 3.2 Golf Courses in Portugal by the year 2022

Name Holes Opening Year Region	West Cliffs 18 2017 Centre
Amarante 18 1997 North	Academia Golfe 6 2017 Lisbon
Estela 18 1988 North	Aldeia dos Capuchos 9 2008 Lisbon
Estela Pitch&Putt 9 1997 North	Aroeira 36 1973 Lisbon
Guardizela 18 2016 North	Belas 18 1997 Lisbon
Miramar 9 1932 North	Campo Real 18 2005 Lisbon
Oporto 18 1890 North	Estoril 27 1927 Lisbon
Paredes - Aqueduto 9 2012 North	Jamor 9 2013 Lisbon
Ponte de Lima 18 1995 North	Lisbon 18 1922 Lisbon
Quinta do Fojo 6 1997 North	Montado 18 1992 Lisbon
Rilhadas 9 2008 North	Oeiras 9 2013 Lisbon
Vale Pisão 9 2009 North	Oitavos 18 2001 Lisbon
Vidago Clube 9 2009 North	Paço do Lumiar 9 2003 Lisbon
Vidago Palace 18 2010 North	Penha Longa 27 1992 Lisbon
Bica Clube de Golfe 9 2019 Centre	Quinta da Beloura 18 1994 Lisbon
Bom Sucesso 18 2008 Centre	Quinta da Marinha 18 1984 Lisbon
Cantanhede 9 2009 Centre	Quinta do Peru 18 1994 Lisbon
Montebelo 27 1997 Centre	Troia 18 1980 Lisbon
Praia D'El Rey 18 1997 Centre	Ribagolfe 36 2004 Ribatejo
Royal Óbidos 18 2012 Centre	Santo Estêvão 18 2004 Ribatejo
Name Holes Opening Year Region	Quinta do Lago 36 1974 Algarve

Alto Golfe 18 1991 Algarve	Laranjal 18 2009 Algarve
Amendoeira 36 2008 Algarve	Quinta do Vale 18 2008 Algarve
Benamor 18 2000 Algarve	Salgados 18 1994 Algarve
Boavista 18 2002 Algarve	San Lourenzo 18 1998 Algarve
Castro Marim 27 2001 Algarve	Santo António 18 1987 Algarve
Espiche 18 2012 Algarve	Vale do Lobo 36 1985 Algarve
Golfe de Silves 18 2006 Algarve	Vila Sol 27 1991 Algarve
Golfe do Morgado 18 2003 Algarve	Millennium 18 2000 Algarve
Golfe dos Álamos 18 2006 Algarve	Pinhal 18 1976 Algarve
Gramacho 18 1991 Algarve	The Old Course 18 1969 Algarve
Monte Rei 18 2007 Algarve	Victoria 18 2004 Algarve
Palmares 27 2011 Algarve	Palheiro Golf 18 1993 Madeira
Penina 18 1966 Algarve	Porto Santo 18 2004 Madeira
Pine Cliffs 9 1990 Algarve	Santo da Serra 27 1937 Madeira
Pinheiros Altos 27 1992 Algarve	Terceira 18 1954 Azores
Pinta Course 18 1992 Algarve	Verdegolf- Batalha 27 1986 Azores
Quinta da Ria 36 2002 Algarve	Verdegolf- Furnas 18 1936 Azores

Source: (Conselho Nacional da Industria do Golfe, 2022); (Federação Portuguesa de Golfe, 2022)

From table 3.2 we can reach important conclusions regarding the development of some regions of the country in terms of the creation and implementation of golf courses. Primarily, and on a global view, there's never a golf course built alone or as far from others, in terms of opening year. A good example of this is in the north region where between 1995 and 1997 four golf courses were opened, and again between 2008 and 2010 other four new courses were built.

The Lisbon area has openings more spread around in time, although we can observe some with pairs in the same year, in 1992 emerged Penha Longa and Montado and in 1994 Quinta do Peru e Quinta da Beloura.

In the Algarve, the heart of golf courses in Portugal, there was a significant increase in number of golf courses in the 2000's: were created 16 new courses (cases of Castro Marim, Quinta da Ria and Amendoeira count as 2 courses each as they have either 27 or 36 holes).

3.3. Direct and Indirect Impact in the Economy

The direct impact generated in the economy by the game of golf itself was 123 million Euros (Deloitte, 2020). This is an estimated revenue from financial information available from clubs and golf courses in Portugal, taking into account the following revenue allocation: 55% green fees, 11% membership fees, 8% buggy rental, 1% drive-in-range, 8% other services. This topic does not include pro-shops (the stores at the golf courses) or food and beverages revenue.

The next topic in this study is housing and the impact of the golf sport on five-star hotels' revenues in the Algarve region, in 2018. This value is calculated based on the number of foreign tourists whose main goal was to play golf (259.585 tourists) and the number of national tourists with the same goal (88.466). The averages used for both scenarios were the same, staying 7 nights and spending 164€ per night just in housing. This comes to a total of 303 million euros of direct impact in the Portuguese economy (Deloitte, 2020). From another perspective, it is also presented that golf tourists have, approximately, on average a daily budget of 189€ including all the housing, golf and living expenses (PwC, 2018).

Also related to the living expenses of tourists and national players comes the food and beverages topic. The value was based on financial information made available by golf clubs and courses and the expenses made outside the golf environment, mainly in the restaurant industry. In 2018, there were 83 golf courses in Portugal, their average revenue comes around 1.8 million euros per year of which, 13% were allocated to the food and beverages line. On the other hand, the funds spent by tourist in restaurants and bars was calculated using the same number of tourists as the last topic (259.585) and the same number of nights (7), however tourists spent, on average 82€ every day on food and beverages. All values considered, the total for this theme is 168 million euros. (Deloitte, 2020).

Transportation is also a very relevant issue related to the golf industry, from the international player perspective that had to book a flight to visit Portugal and golf here. Again, the calculations use the same assumptions as the last points, the 259.585 number of non-resident golfers and the 7 nights spent in Portugal. To these assumptions, add the average daily spending on transportation which is 62€. This number is calculated based on the “Estudo Candidatura Ryder Cup 2018”. On the other hand, the revenues registered by two main airline companies in the airports of Lisbon and Faro are 19 million euros; The airport fees cost were around 20 million and the revenues from handling companies count up to 6 million euros, all the values account for the same airports mentioned before (Deloitte, 2020). After the calculations we can say that the direct impact of the transportation sector in the Portuguese economy related to the golf industry was €157 million.

For 2018, FPG calculates that the direct impact of the Real Estate sector related to the golfing activity was around 17 million euros (Deloitte, 2020). The approach used for this calculation was based on the number of properties traded to foreigners, 19.912, of these 6.775 were traded in the Algarve and West regions, FPG assumes that 1% is the number of properties directly related to golf, which give us a number of approximately 68 houses. It is also assumed that the average price of the properties is 1 million euros, of which 25% is considered to be both the margin of sale and the commission of transaction, which are the values that have an effective impact in the economy (Deloitte, 2020). From these assumptions FPG also calculates the impact generated by the construction industry, with 75% of the total value of each property referring to construction costs, its total reaches the 51 million euros.

Regarding the events and competitions, in 2018 there were 35 golf tournaments organized by FPG, these include the *Expresso BPI Golf Cup*, the *Corporate Golf Challenge* and the main events, the *Open de Portugal* and *Portugal Masters* (Deloitte, 2020). Considering that the average revenue of each tournament is 77 thousand euros, the total revenue for all tournaments was 2.7 million euros (Deloitte, 2020).

Another important topic of consideration is the amount generated with the maintenance of a golf course. The average outlay of a golf course in Portugal is 1.2 million euros early, of these 10% are believed to be allocated to the maintenance of the course (Deloitte, 2020). In 2018, FPG accounted for 83 golfing infrastructures, which means

that the total impact of maintenance activities was of approximately 10 million euros. (Deloitte, 2020).

For the Retail industry, FPG presents two different points of view. The first and with the least impact in the Portuguese economy is the revenues generated by the Pro Shops (stores in golf courses). This number is calculated considering the 83 golfing infrastructures mentioned before, that from the annual revenues of each of them 4% was generated by the Pro Shop, therefore, a total of around 6 million euros were accounted for (Deloitte, 2020). The second is based on the touristic point of view, and uses assumptions mentioned before regarding this matter (259.585 number of non-resident golfers and the average of 7 nights spent in Portugal). Adding to the scale 103 euros spent daily in retail and other services, the calculations reach 187 million euros, that with the 6 million generated by the Pro Shops, the total impact on the economy for 2018 for the retail industry is 192 million euros (Deloitte, 2020).

Lastly, and with the smallest values is the specialized press with only one magazine *Golfe Portugal & Islands* (Deloitte, 2020). In 2018, the magazine was published 10 times, each time printed 10 thousand units, all sold by 3,50 euros a unit, reaching a total of 350 thousand euros (Deloitte, 2020). At the end of the presented categories and summing up all these and values, the total impact on the Portuguese economy related to the golfing industry and activity for the year of 2018 is 1.025 million euros (Deloitte, 2020). On a general perspective, for the same year studied, 2018, Portugal as a whole generated a GDP of 198.528,8 million euros (Instituto Nacional de Estatística, 2022). This way, the golfing industry had an impact of around 0,5% on the country's GDP.

3.4. Tax Revenues of the Golfing Industry

From the data provided by the last chapter and according to Deloitte (2020) we are able to say based on table 3.3 that besides its direct impact in the Portuguese economy, the golfing industry generated almost 141 million euros of direct tax revenue.

Table 3.3 Tax Revenues (values in millions of euros)

	Direct Revenues	Applicable VAT	Tax Revenue
Sporting activities	125.7	23%	29
Housing & food	472	6%/13%	40

Transportation	157	6%	9
Real Estate	17	23%	4
Construction	51	23%	12
Maintenance	10	23%	2
Retail	192	23%	44
Press	0.35	23%	0.08
Totals	1.025	N/A	140.08

Source: (Deloitte, 2020)

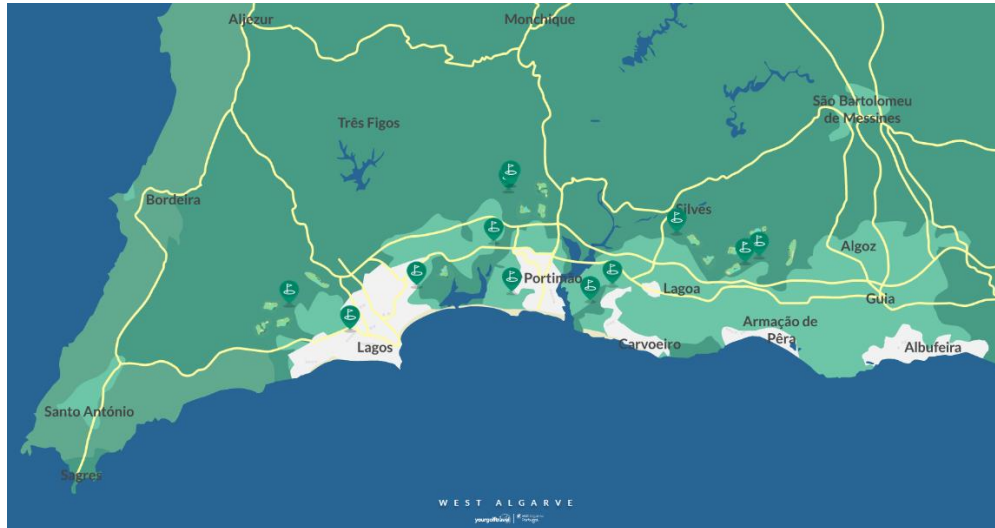
3.5. Golf Tourism in Portugal

Golf is both a sport and a recreational activity that includes aspects of tourism, hospitality, and real estate. Because several classifications of the golf tourist have been created, Tassiopoulos & Haydam (2008) believe that the definition of the golf tourist is more problematic than that of the notion of golf tourism. The golf tourist, on the other hand, can be defined as someone who travels and stays away from home to play in or attend the sport of golf (López-Bonilla, Reyes-Rodrigues, & López-Bonilla, 2020).

In Portugal the Algarve is a golfers' paradise, with a total area of 4,997 km², which constitutes 5,4 percent of the total area of Portugal (Instituto Nacional de Estatística, 2022). Located in the southern end of the country, bathed by the Atlantic Ocean to the West, South and borders Spain to the East, this region has a population of about 222,615 inhabitants and 27 million visitors annually, with an ideal temperature, with an average of 17.5 Celsius degrees, that enables golfers to play all year and at a large variety of about four dozen courses (Instituto Nacional de Estatística, 2022). Most of the courses are set in natural settings with breathtaking views. They are known around the world for the high quality of their facilities, which were designed by renowned players and legends including Sir Henry Cotton, Rocky Roquemore, Arnold Palmer, and Ronald Fream. (Portugal, n.d.). In addition, there are outstanding golf professionals, a diverse network of hotels, and strong accessibility, which includes direct flights to many cities across the world as well as fast transfers between Faro airport and the numerous resorts.

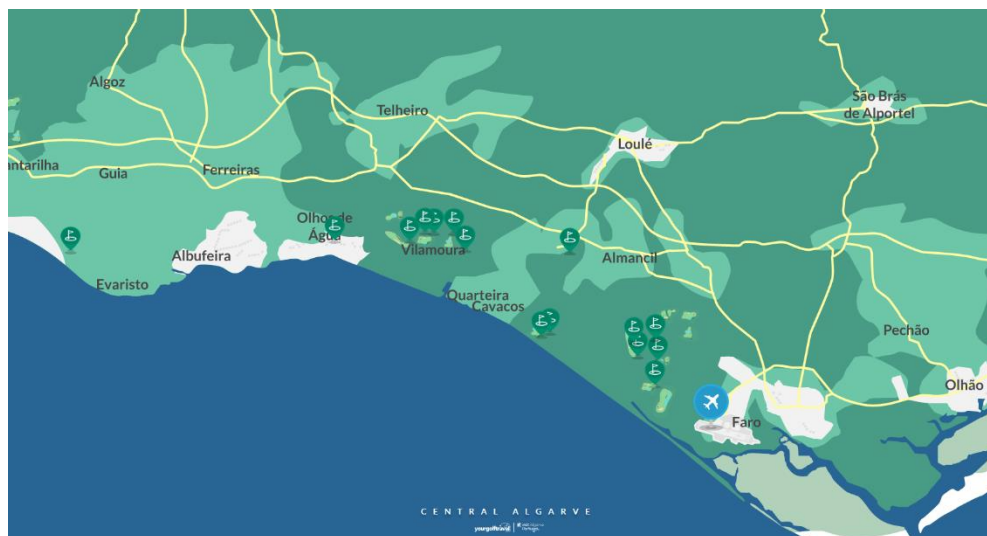
In figures 3.1, 3.2 and 3.3 it is possible to see where all the golf courses are geographically located in the Algarve region (Your Golf Travel, n.d.).

Figure 3.1 Golf Courses Location in West Algarve



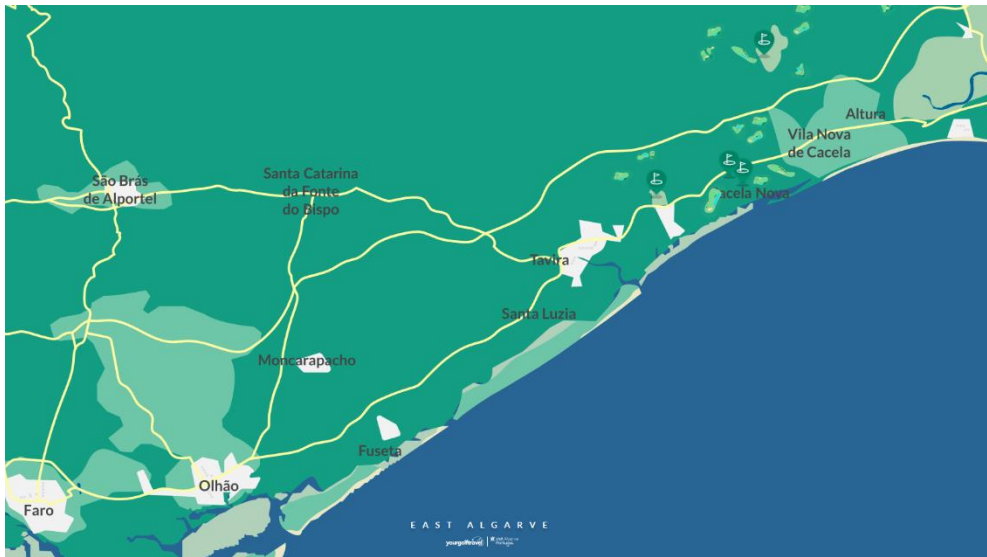
Source: (Your Golf Travel, n.d.)

Figure 3.2 Golf Courses Location in Central Algarve



Source: (Your Golf Travel, n.d.)

Figure 3.3 Golf Courses Location in East Algarve



Source: (Your Golf Travel, n.d.)

While most visitors come to the Algarve during the summer season, from May to August, golfers come all year and have become a key driver of regional tourism. It's crucial to note that our environment is ideal for the activity and that it can be enjoyed all year, with more than 300 days of sunshine on average. For example, in 2012, IAGTO ranked it as the second-most important country for golf tourism in the winter season, after only Spain. Portugal currently features eleven golf courses in the top 100, the best of which being Monte Rei in the Algarve, which is ranked 12th. According to various estimates, the golf tourism market “grows at a rate of 7% per year, it is expected that by 2018 the volume, accumulated in ten years, reach 2 million trips” (Turismo de Portugal, 2007).

Regarding the origin of the tourists that come to the Algarve, the top five countries include Ireland (5 percent); Germany (5 percent); Sweden (11 percent); Portugal, tourists from other regions of the country (14 percent); and finally, and with the highest percentage, the United Kingdom with 50 (Turismo de Portugal, 2018). On more recent data, for 2021 it is believed that the British and Irish represent 70% of the golfers that play in the Algarve (Antunes, 2021).

According to Fernando Nunes Pedro in Portugal Golf “Around 300 thousand people play more than one million rounds of golf in the Algarve” (Pedro, 2014), this generates directly and indirectly, €1.8 billion in revenue, accounting for 1.25 % of the national

GDP and 14% of the tourist GDP (Andrade & Antão, 2015). Although these values might seem high, golf is still considered as a niche business and sport, the impact it has on the economy is mainly due to tourism as golf tourists are the higher spenders than any other type of tourist, spending on average three to five times more (Pedro, 2014). *Turismo de Portugal* estimates that on average they spend 260€ per day 20% is spent on lodging, 18% on meals, 13% on golf green fees, 18% on shopping and leisure, 21% on transportation, and the remaining 10% is spent on other expenses at the location. For the year of 2018, *Federação Portuguesa de Golfe* estimated that 298€ million were spent by non-residents in accommodation associated with golf practice and 303 million euros in total. “(...)golf courses are not the main beneficiaries. The main topic of the money spent corresponds to extra hotel spendings, formed by outlay made at food & beverages, car rentals, taxis, shows and other events, tours and souvenirs” (Martins & Correia, 2004). Regarding food and meals, in this time frame, golf tourists account for 149 million euros of revenue, as the total comes up to 168 million and for Transportation, mainly by airplane, FPG calculates a total of 157 million euros in direct impact in the Portuguese economy. (Deloitte, 2020)

This last topic saw a significant improvement in recent years as we saw an increase in low-cost airlines "between 2006 and 2010 they grew at a rate of 18.7% per year" (Turismo de Portugal, 2012) This new business model of airline companies introduced a new way of tourism enabling tourists to travel for much lower prices than before, that also led to more frequency of traveling.

Another important aspect of the golf business and specially in the tourism sector is the number of jobs that had to be created in order to adjust with the increasing demand of both more golfers and more golf courses and infrastructures. Therefore, the golf business generated in 2018 8.065 direct jobs and 8.574 indirect jobs (Deloitte, 2020).

Chapter IV- Sustainability

At its essence, the definition of sustainability refers to “meets the needs of the present without compromising the ability of future generations to meet their own needs.” (World Commission on Environment and Development, 1987).

When it comes to this topic of the dissertation, apart from the talent and hard work of getting your swing smooth, hitting nothing but the sweet spot of the irons and driver and holing every putt you also need the golf course to play on. A golf course is usually designed to have either nine or eighteen holes (which makes a full round of golf) all of them different from each other, some harder than others but all of them include a tee box, where the player starts, a fairway, some areas of rough, a green and the hole, where the player ends its play (Park, 1896). Some holes, those harder ones, can include different types of hazards, such as, sand in bunkers, water hazards in creeks or lakes and wild areas with tall bushes or trees, all of this to make it even more challenging. Golf courses are an amazing example of where raw nature meets some humanization and both get involved to create a place where golfers can enjoy a great time playing their sport in contact with the wild environment.

Figure 4.1 Example of a Golf hole



Source: (Rocky River Golf Club, n.d.)

However, golf courses are sometimes accused of destroying ecosystems since most of them are situated in natural locations where wildlife can be found and have an impact on the course, as well as the other way around “as no other sport occupies and manages such large areas of green space in the landscape” (Petrosillo, 2019).

The main accusation made against golf courses are the extreme usage of water as an average golf course occupies several acres (Sousa, 2022). Today and in current times,

the shortage of water is impacting Portugal, 66% in severe drought and 33% in extreme drought (Sousa, 2022).

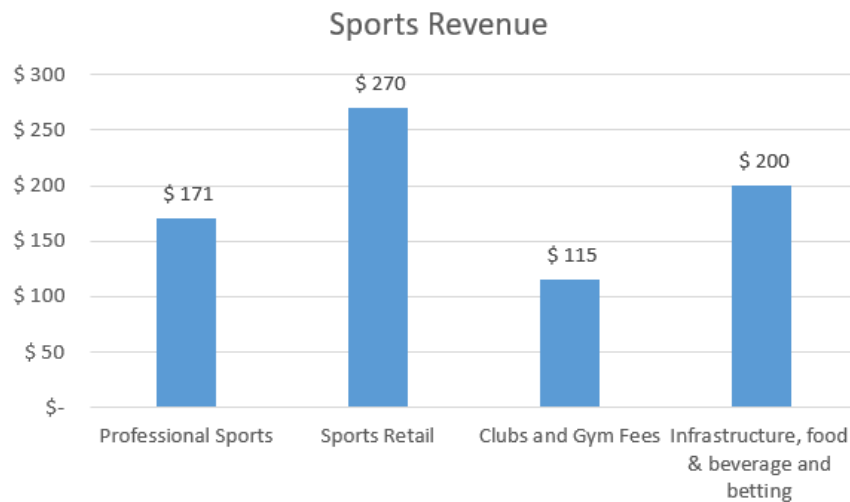
However, in the Algarve region, the usage of water directed to golf courses accounts to just 6,4% compared against agricultural and urban consumptions, 56% and 34% respectively (Direção Geral de Agricultura e Desenvolvimento Rural & Agência Portuguesa do Ambiente, 2020). Moreover, directly comparing the agricultural and golfing industry, in this region, the first occupies a total of 36.500 acres and consumes on average 64 hm³/year (cubic hectometers per year) as golf courses only take up 4% of that area, consuming 15 hm³/year (Sousa, 2022).

To finish, on a economical note, for each cubic hectometer of water spent on agriculture 845.000 euros are generated, as in golf each one generates 33 million euros (Sousa, 2022).

Chapter V- Covid 19 Pandemic

The sports business is a 756-billion-dollar industry per year, with the United States, Europe and China being its biggest markets (Somoggi, 2020). However, COVID-19 turned the international sports world around in an instant, resulting in a severe market shock for sports (Mohr, et al., 2020). In March 2020, the World Health Organization stated that COVID-19 had reached pandemic status and because of that professional and recreational sports around the world came to a halt in a matter of days as large gatherings, whether for music, religion, or sports, helped spread the virus (Adhanom, 2020); (Memish, et al., 2019). For example, the Olympic Games were postponed for the first time to the following year and almost every major sporting event around the world were either canceled or postponed to reduce the danger of transmission through close contact among spectators and participants (Clarkson, 2020); (Toresdahl & Asif, 2020).

Table 5.1 Sports Revenue by Income Stream



Source: (Somoggi, 2020)

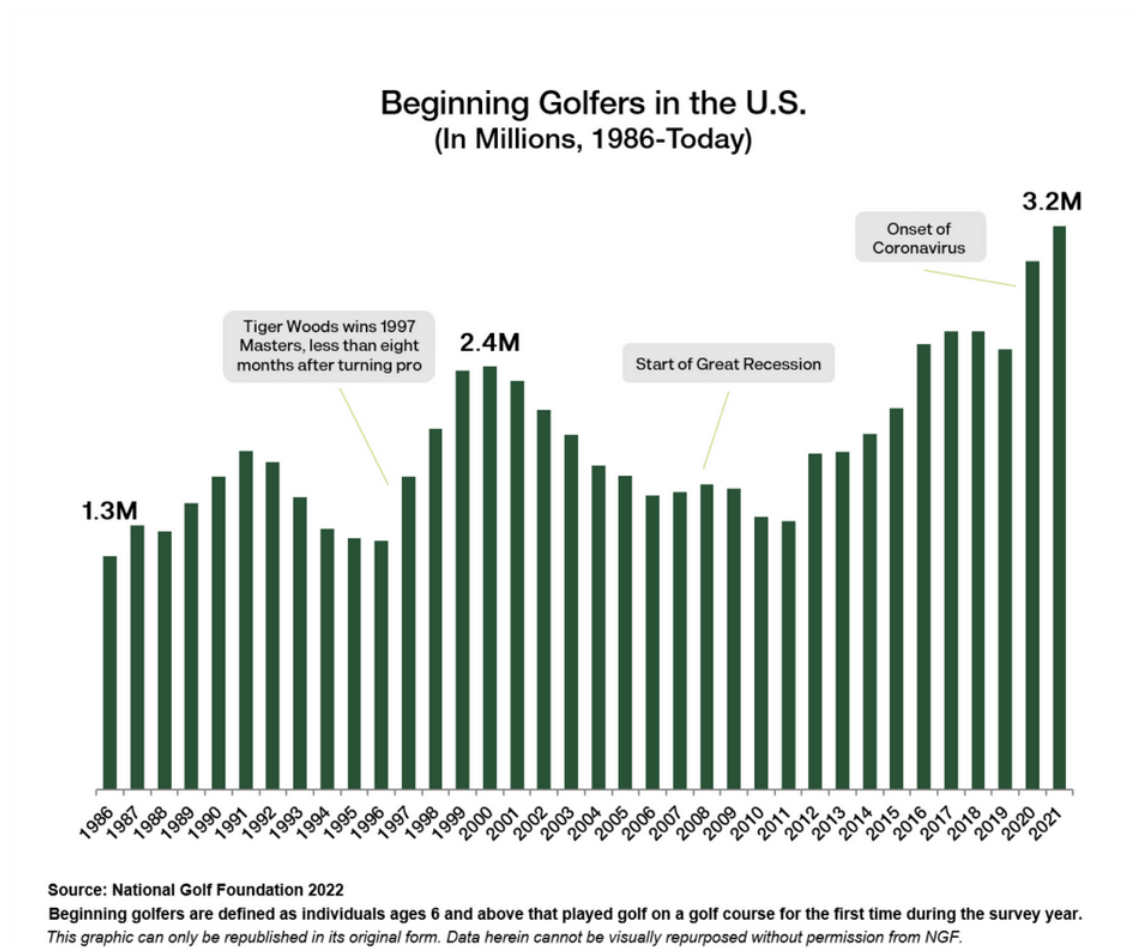
In Portugal, the first Coronavirus case was detected in the second of March and since that day until the nineteenth of March, hundreds of new cases were found, the whole economy shut down, working remotely became mandatory, borders with Spain were closed, planes were grounded and the Portuguese people were confined to their homes to help stop the spread of the virus (JN, 2021). With these measures, and as mentioned before, sports in general were forced to stop, including golf, resulting in a loss of more than 50% of most courses revenue for the year of 2020 (Amaral, 2022). However, for the Portuguese golfing industry it is possible to observe two different realities, one where courses with more National members had an increase in number of rounds played, cases of Estoril, Quinta da Marinha, Porto or Viseu, because these members pay annually. And another reality where courses only had between 25% and 30% of rounds played (Antunes, 2021).

Around June of that year sports started to come back to action when the pandemic slowed down, and with this, sports with less physical contact emerged as the favorites. Golf is played outside in settings that are the size of 65 to 100 football fields for an 18-hole course. It's also contactless, and only four players can play at a time on a golf hole that is several hundred meters long. A maximum of 72 players can play at full capacity on an 18-hole golf course, which typically exceeds a total length of 10 km (including walkways between the golf holes). This demonstrates that a sport like golf is ideal in

situations where players must maintain as much distance as possible (Huth & Billion, 2021). In a sports/health point of view, golf can deliver a moderate level of physical activity and therefore, regardless of age, have a positive impact on the players health. Playing golf and strolling a golf course at the same time is considered a moderate aerobic activity, and a game of golf can meet the weekly cardiovascular exercise guidelines (Robinson, Foster, & Murray, 2021)

Because of all these reasons and unlike other sports or businesses, the Covid 19 Pandemic brought a new life and a significant increase for golf. According to the National Golf Foundation, 3 million new golfers, just in 2020 (Beditz, 2022). This is the largest net increase in 17 years. The number of new players reached a record high of 6.2 million summing the newcomers from 2020 and 2021 (Beditz, 2022). These years also saw the largest increase in the percentage of new golfers and the largest increase in young golfers participating in the game since the 1997 Tiger Woods' first Masters victory (Stachura, 2021).

Figure 5.1 First time golfers per year in the US



Chapter VI- Theoretical Approach

Following the literature review in the previous chapters of this dissertation, there were presented several authors with different points of view in respect to the golf business spectrum in Portugal. After careful consideration and investigation on paper and on the field, with direct contact to the sport both on and off the golf course, some questions arise. These questions will be presented in detail during this chapter in the following pages.

There are several references in the literature review that refer to the importance tourism has on the overall business of golf in Portugal (Andrade & Antão, 2015); (Turismo de Portugal, 2007). However, it is important to understand that a sport, a business or an activity that has such an impact on a region, in our case the Algarve, both in terms of revenue and jobs (Deloitte, 2020) can't depend exclusively on tourists, that for some reason may stop coming to our country and start to choose other destinations. This leads us to the first research question:

Research Question 1. Is the Golf business sustainable in Portugal the way it is built, based on tourism and on the international player?

Another topic not much covered in the literature review related to the demographics of the national golf player, which, at a certain level, is also connected to the previous question. "We can't lose focus regarding the national market, without Portuguese players the courses won't exist" (Castro, 2014) this way, the aging and stagnated population of players registered in Federação Portuguesa de Golfe, brings us to a second research question:

Research Question 2. Taking into consideration the average age of the Portuguese golfer, is there a plan to attract new and younger players to the game? For two reasons, to renew the generations and to increase the number of players.

Since March 2020, all of us have been living in a very unstable world mainly due to the Covid-19 pandemic ((Stachura, 2021); (Adhanom, 2020)), among other important

events in recent years. As mentioned before, in order to stop and contain the spread of the virus, the Portuguese Government took unprecedented measures that resulted in closing the country's borders, closing non-essential businesses, including sporting and recreational activities where golf courses are included, putting restrictions on essential services and demanding the population to stay at home (JN, 2021) Therefore, the third and last research question is presented below.

In Portugal, golf courses were forced to close their doors at least 2 times in the past 2 years due to the covid pandemic. Our borders were closed for several months, and tourism stopped almost completely during this time. However, records show that golf grew in number of players in 2020 (Stachura, 2021) due to the environment of where the game is played, having less physical touch and being played outside (Huth & Billion, 2021).

Research Question 3. Considering that the golf business in Portugal is supported by tourists and foreigners, did the golf industry in the country have any positive effects after the COVID-19 pandemic, similarly to countries like the United States of America?

Chapter VII- Methodology

7.1. Research Model

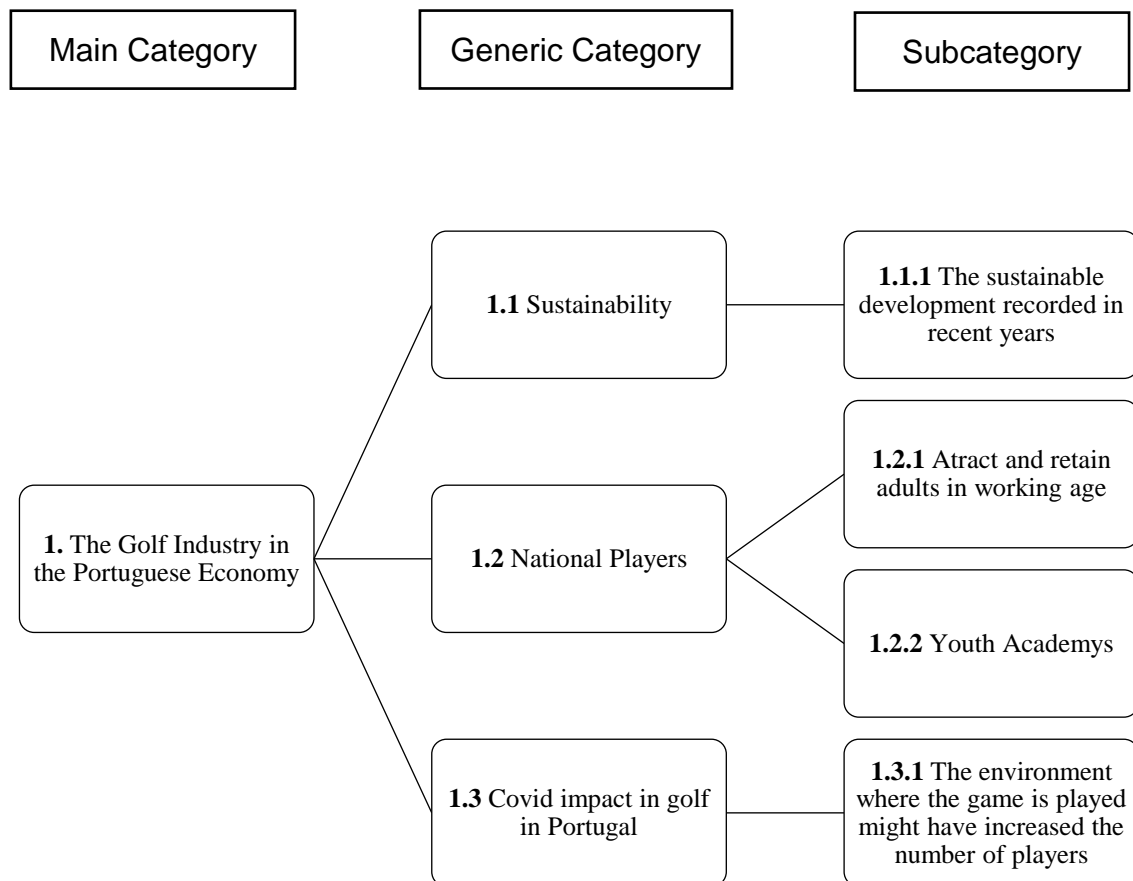
This study has an exploratory dimension, since it is a not much covered theme among Portuguese literature as it will also be the first independent study to cover the importance of the golf industry in the country (Carmo & Ferreira, 2015). This way it will be presented a qualitative study based on interviews with direct and indirect intervenient within the business with the objectives, on the one hand, giving a real and updated view of the global scope of the game, that otherwise would be impossible to obtain and, on the other hand, obtain answers and solutions to problems identified earlier that are essential to the sustainability of the industry.

The current study was based on a convenience sample that was non-probabilistic. In this particular example, 6 interviews were conducted with professionals from different areas of the golf environment in Portugal, of these 4 were in person interviews and 2 were conducted on-line with the usage of on-line meeting platforms. It's worth noting, however, that they had a purposeful aspect for the sake of forming the sample, as the

chosen participants best reflected the researched phenomenon in terms of knowledge. Even if the response rate is adequate, the dissertation's conclusions must be taken with caution because of the small sample. As a result, and given the inability of establishing broad generalizations, this element emerges as the investigation's fundamental constraint, with the caveat that generalization was not a key goal.

The information extracted from the interviews resulted in a content analysis, which was the qualitative analytic method applied. With this, the following image (Figure 7.1) shows in detail the interview *corpus*, which tries to match the goals of the study with the main category in order to better organize the data and therefore its analysis and comprehension.

Figure 7.1 Interview Corpus



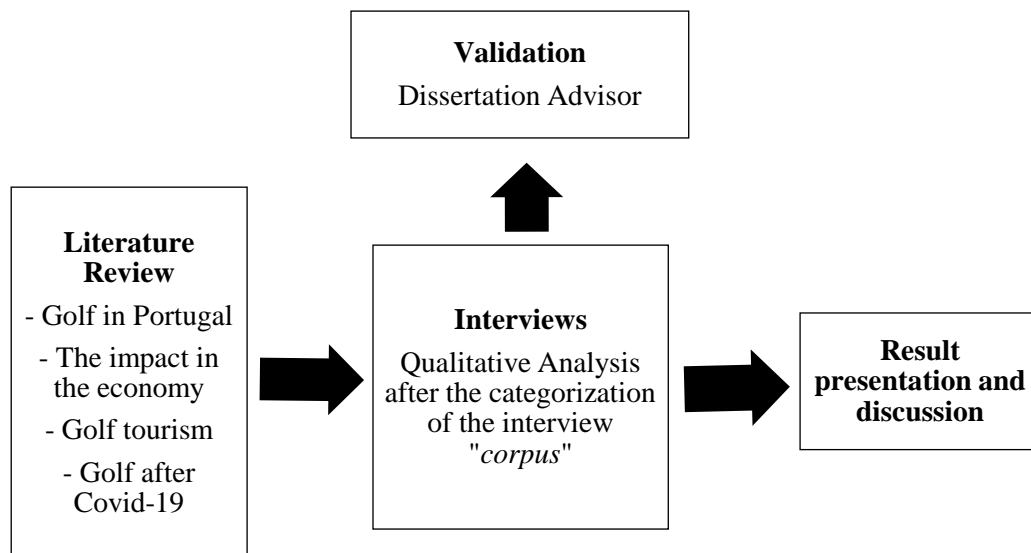
Source: The Author

Given the objectives of the dissertation, a semi structured interview was the preferred method to collect information. This is a method that enables the interviewed individuals to provide their own data and point of view regarding the study (Carmo & Ferreira, 2015).

In short, this investigation is based on four stages: the first being the literature research made almost in full from on-line platforms and personal knowledge; the second stage the literature review in chapters I and II, where it is possible to find the filtered information after the first stage regarding the theme of the study wrote by other authors; the third stage: is regarding the data collection on the field, that was enabled by the interviews mentioned earlier; and last but not least, the fourth stage: the analysis of the information obtained in the previous stage through the interviews that allowed the construction of an opinion, conclusions and future developments regarding the golf industry in Portugal.

The next image (figure 7.2) shows the investigation model used in the study and explained in the previous paragraph.

Figure 7.2 Investigation Model



Source: The Author

The relationship between the study's goals, the research questions presented in the theoretical method chapter, and their connection to the earlier literature review can be analyzed on the next table.

Table 7.3 Analysis framework that links the study's goals with its research questions and the literature review.

Study Goals	Research Question	Literature Review
SG1 – Understand if the golf business is in fact sustainable and profitable, specially outside the Algarve region.	RQ1 – Is the Golf business sustainable in Portugal the way it is built, based on tourism and on the international player?	N/A
SG2 – Identify special programs or initiatives to attract new players from younger generations to start play the game	RQ2 - Taking into consideration the average age of the Portuguese golfer, is there a plan to attract new and younger players to the game? For two reasons, on the one hand, renew the generations, and on the other hand increase the number of players.	(Deloitte, 2020) (Castro, 2014)
SG3 – Analyze the evolution of the number of players in Portugal after the COVID-19 pandemic, in order to understand if the country followed the tendencies of countries like the United States.	RQ3 - Considering that the golf business in Portugal is supported by tourists and foreigners, did the golf industry in the country have any positive effects similarly to countries like the United States of America?	(Antunes, 2021); (Stachura, 2021); (Huth & Billion, 2021); (Beditz, 2022);

Source: The Author

7.2. Data Collection

The main source of data to elaborate this study is the spoken word of the interviewed individuals. This way it is possible to capture not only the information and knowledge

of the industry but also the emotions and feelings that they expressed when talking and opening up about their work.

The interviews were semi structured with a script (appendix 1.) but the interviewees had freedom to elaborate about the topic and, on some occasions, add new topics to the conversation which enriched the interview and the global information provided. This way we can say we are in possession of primary data, since it is directly collected from the source. The interviews lasted on average, approximately, 22 minutes the first one conducted on April 22nd and the last one on July 20th.

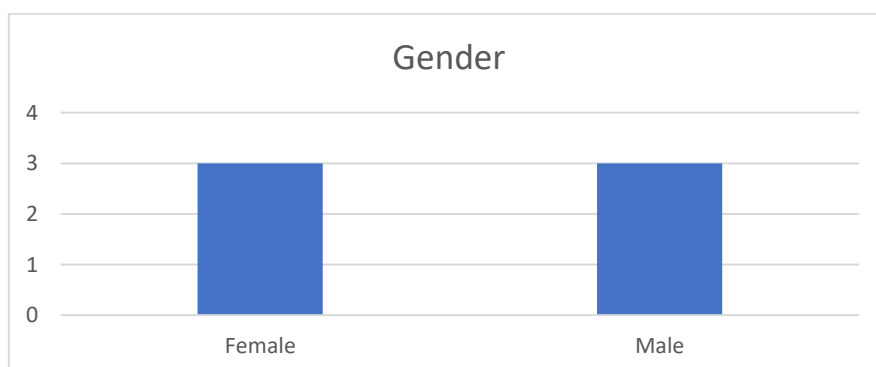
7.3. Sample Characterization

As mentioned earlier, the present study was built on a non-probabilistic sample by convenience, meaning the sample was framed based on the availability of the interviewed subjects which, regarding this study, were Portuguese golf players, business owners, club and course managers, among others, selected ranging from several organizations.

An analysis of all possible statistical indicator was conducted in order to better understand and characterize the sample, its level of experience and its professional knowledge and environment.

Starting with the gender the sample, composed by six individuals, show a perfect balance with three male and three female interviewees.

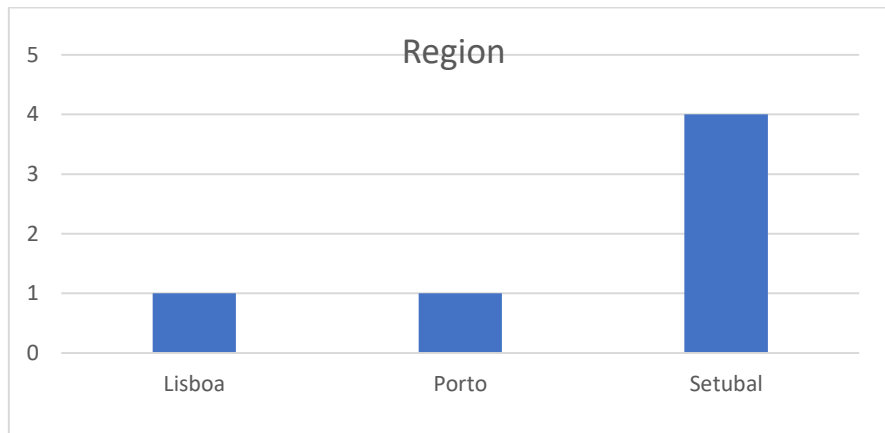
Table 7.4 Sample Distribution by Gender



Source: The Author

Regarding the geographic location of the individuals, we see a little more variety, however there is clear dominance of the Setubal district.

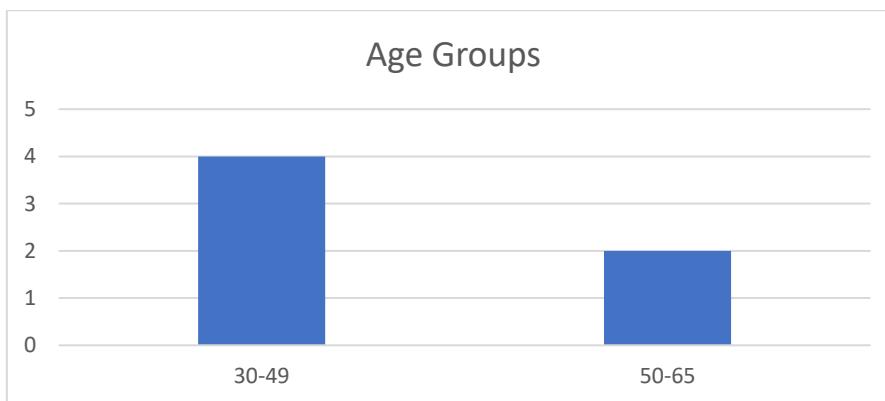
Table 7.5 Sample Distribution by Region



Source: The Author

The age groups show a slight superiority in the 30-49 age group, just as figure 11 shows.

Table 7.6 Sample Distribution by Age



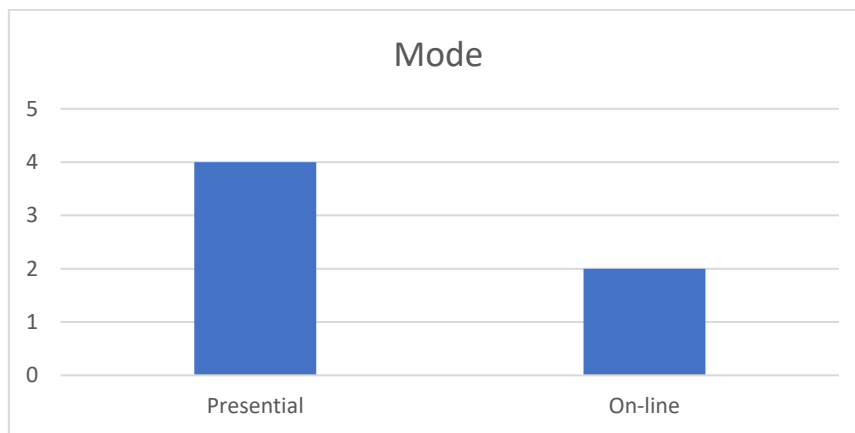
Source: The Author

Another important topics of the characterization of the sample are the years of experience in the golf industry and the handicaps. The average for the six individuals is approximately 17,7 years, with the lowest years of experience being 14 years and the highest 30 years. The handicap, according to *Federação Portuguesa de Golfe*, is “the value that represents the player’s demonstrated skill, in relation to a course with standard game difficulty” (Federação Portuguesa de Golfe, 2021). This means that the

lower the handicap the more skill an amateur player has. From the sample, we identify two golf professionals (whom don't have a handicap), another individual that although working in the industry does not play golf and from the other three interviewees, the average handicap is 12,4.

Lastly, the mode of interview should also be highlighted, with four presential interviews and two using on-line meeting platforms.

Table 7.7 Sample Distribution by Mode of Interview



Source: The Author

Chapter VIII- Presentation and Results Discussion

8.1. Sustainability of the golf industry in Portugal

With this first question the goal was to inquire the interviewees if they believed that there was a clear and sustainable growth in the industry since their start in it, which for all of them was more than 10 years. By not mentioning a specific type of sustainability we gave freedom to the individuals to reflect and explore any topic they wanted. However, the answers evolved around the same topics which were the human resources, the infrastructures and, in some cases, the environmental sustainability. Inside those topics the answers were very unanimous on an overall perspective they all believed that the industry grew although not on a solid base as a result of the way golf is sold in the country, as it is viewed and commercialized as a touristic product. It is possible to analyze the main answers in table 8.1.

Table 8.1 Sustainable development and growth of the golf industry in Portugal

Interviewee	Text	Generic Category	Sub-Category
Number 1	<p>It is not an easy answer. The image the sport passes is that it's boring, for the wealthy and for old people. It's hard for a person during his active life to spend 4 or 5 hours playing a game and also the elitism of the sport sometimes stops the entrance of new players.</p> <p>The number of players is clearly insufficient for the number of courses we have. We based golf in two concepts, the sport and real estate, but we forget that the land around golf courses is finite, which means that when it ends the golf course will lose its main source of revenue.</p>	1.1	1.1.1
Number 2	<p>Although, tourism has been enough to occupy our courses, I think we have some issues regarding the sustainability of golf. First the population of golfers is old and there aren't many programs to attract younger players to the sport, opposite to what happened in Spain when golf was introduced in schools. Also, there is little to no media coverage about the sport, when we have international events in the country and Portuguese players playing in the top European competitions. However, regarding the environmental sustainability side, there is a significant increase in the topic when building new courses, specially about the usage of water.</p>	1.1	1.1.1
Number 3	<p>We had a small increase in the number of players but that wasn't very significative. The courses had to reinvent themselves as most were built with from real estate point of view and when those projects don't result the financial sustainability is compromised. I think that we have a long way to go to achieve a sustainability of the courses, they aren't sustainable outside the Algarve region, because there we have triple the rounds played.</p>	1.1	1.1.1
Number 4	<p>Yes, I think it has been a sustainable development. We have more golf courses; people are starting to look at golf differently and for who it is. In the past, they looked at golf as a sport only for retired people and now that mindset is shifting.</p>	1.1	1.1.1
Number 5	<p>The only part of Portugal where golf is sustainable is in the Algarve. There is a concentration of real estate that helps, the Algarve is known internationally for the good weather the amazing variety of courses that players can play, and these are really important factors for tourists. From another point of view, the golf tourism as also a very significant impact in the region because they spend a lot also outside the courses. For the rest of the country</p>	1.1	1.1.1

	there are not enough players for the courses we have and most of them belong to hedge funds and are bankrupt. The only ones that can still survive are the ones that have a hotel. I think the strategy needs to be made for both we need to develop the national market but also the international one.		
Number 6	In my opinion, Portugal has one of the best infrastructures worldwide for the practice of golf as can be confirmed by the many awards received, such as the award for the best destination for golf. I think this was the main development in recent years.	1.1	1.1.1

Source: The Author

From these statements, the answer to this topic is complex in the sense that there are two completely different realities regarding the golf industry in the country. On the one hand, we have the Algarve region in which golf is primarily sold as a touristic product and where tourists are the main piece of the puzzle. It is because of the abundance of visitors throughout the whole year that the 40 golf courses in the Faro district (FPG, 2020) are suitable for the number of players that visit the region and with a very positive level of certainty, based on the interviews, we can say that if there were to be more courses, sustained by a real estate infrastructure (i.e., hotel) there would be more tourists, and the sustainability of the industry would be kept intact.

However, on the other hand, there is the rest of the country where the case is completely different. There are not enough national players to occupy the courses and the presence of tourists dedicated to play the sport is nowhere near the same as in the Algarve. Here, one of the main revenue streams of golf courses are the memberships, green fees but mainly the land related to real estate around the courses. However, and as stated by one of the interviewees, at some point in time there will be no more space to build houses in the neighborhood and when that happens the biggest revenue stream is lost and the courses are left with the only two income sources that are not enough to maintain a golf course that costs between six and seven hundred thousand euros per year (Amaral, 2022).

From another point of view, the environmental sustainability is increasingly present in the minds of the decision makers inside golf courses, especially with the usage of water and fertilizers in order to not impact the quality of life, and specially, do not damage the

food chain of the many species that take a golf course as their home, for example, rabbits, crows, eagles, falcons, among others.

8.2. National Golfers and the attraction of new Players

Regarding the second research question, the goal was to discover and verify what were the main reasons why in the last 10 years there was not a substantial increase and development of new players, only 488 from 2008 to 2018 (Deloitte, 2020). These players are the dependent variable within this business, it is because of them that courses are still being built in the country outside the Algarve and that complementary businesses like pro-shops and equipment stores are still being able to have clients.

Table 8.2 Analysis of the numbers of National Players

Interviewee	Text	Generic Category	Sub-Category
Number 1	Portugal is a sedentary country, if we go and take a look, shopping centers are full during the weekends and that type of person will probably never step foot into a golf course. If we want to look at this from another perspective, it is also connected to the fact that in Portugal we work way more hours than we should, people get home late, end up with no time for anything else and exhausted. And again, sports like padel, that can be played after they leave work and for just one and a half hours are chosen.	1.2	1.2.1
Number 2	We have an old population of golfers, and I think the biggest challenge here is to make golf available to the masses, which goes against the posture of the clubs and courses, mainly due to the prices of green-fees. It's still seen as an elitist sport, which restricts the entrance of new players. The game we play here is way too focused on the competitive side and not so much in the social part of the game, that ends up also not allowing people with different playing abilities to play together and have fun.	1.2	1.2.1
Number 3	There was an increase but not significant in terms of number of players. I think we need to work on the outside image of golf, especially the fact that it is inaccessible to the average person. We need human resources to work on the history of golf here and make people understand that things change and aren't the same as before.	1.2	1.2.1
Number 4	Here in Lisbon and in most areas of the country outside	1.2	1.2.1

	the Algarve, we work on the base of memberships and federated players and in that case, I think the numbers are growing and the sport is stating to been seen differently. The stereotype and the prices are changing but the word needs to be spread that golf is not only for retired people, that it is healthy for so many reasons specially for the stress, the mind and that can help with concentration.		
Number 5	The number of players increased but it was very subtle, I speak to a lot of non-players and my role is to be a little of a face of the sport and their idea is that golf is still seen as a very elitist sport. They think its expensive, that takes way too long, that the courses are expensive, that the game is very slow but at the heart of it, most of the people that come to me and have the very first contact with the sport don't know the concept of it, they know that we have clubs and hit a small ball but not more than that. Golf here is shown on paid TV channels, but the commentators don't explain what is happening. After my explanation about the clubs and mainly the course, then interest increases a lot. Now, regarding the price, for our country and the economy we are in it's pricy, honestly. It is a factor that has been reducing, meaning that clubs recently made efforts to make golf available for more people, specially to the younger generations, but it is still one of the main reasons.	1.2	1.2.1
Number 6	Well, I think that from a sporting development point of view the prices we charge are unsuitable because they are at a premium level that the National players aren't willing to pay.	1.2	1.2.1

Source: The Author

From the analysis of table 8.2, we can state that there are several reasons why the number of Portuguese players registered on the *Federação Portuguesa de Golfe* hasn't increased. All of the interviewed mention that the perception that most of the population has regarding the sport is that it is inaccessible for them because it is very expensive to play, it is only to the retired rich people, especially men, and that it is a closed group, meaning they wouldn't be well received. Of course, that after diagnosing these issues, it was asked, again, about what solutions have been implemented and if not, what should be done.

Table 8.3 Suggestions regarding the National Players

Suggestion	Frequency	Individuals
Reducing the prices for national players and make the game take less time.	4	1, 2, 5, 6
Courses and clubs need to reinvent themselves, think outside box in order to find new ways to attract and retain new members.	3	2, 3, 5
People don't talk about golf, the media doesn't cover it, there is not a newspaper or a magazine or an effective way to reach the target.	2	2, 5
Courses inside big cities like Lisbon and Porto have a big role in this matter because people do not lose that much time between commutes.	2	3, 5
It is necessary to better qualify the human resources inside the golf business, from the decision makers to the greenkeepers.	2	3, 5

Source: The Author

It is possible to see that, although the suggestions are difficult, require considerable investments both financially, from a human resources perspective and probably will take years to achieve, courses and golf professionals know what can and should be done to make the game of golf more opened to the society as it seems this is one of the main issues that is slowing down its development. Nonetheless, it is also important to mention that these ideas and suggestions need to be taken seriously because if nothing is brought out of the paper and turned into reality clubs and courses will, for sure, feel the difference in a medium to long term, as the considered old golf population of national players will start decreasing.

Apart from these, it is important to mention that *Federação Portuguesa de Golfe* has recently implemented a significant program designed specifically to attract new people to the sport. It is called “9 Semanas & ½” (Federação Portuguesa de Golfe, 2022) and it was designed for people, regardless of age or gender, that want to have the first contact with the sport. The program includes the golfing equipment and is composed by nineteen one-hour group lessons, with not more than eight students, that last over two months, hence the name “nine and a half weeks”. The great advantage of this program is

the fact that it can be done for free. According to the *Federação Portuguesa de Golfe* when enrolling in the program if a student chooses to sign for a membership at the club where the program was taken its value will be deducted from the first annuity (Federação Portuguesa de Golfe, 2022).

8.3. Youth Academies

Moving to the next part of the second research question, another extremely important point regarding the National Players is the creation and development of youth academies to attract, teach and coach young people about the game of golf. As seen in the literature review of this dissertation, there is a lack of under 18 players in the country (FPG, 2020) and this means that the renovation of generations is compromised, which implies that the number of players between 19 and 50 years old and specially the under 18 age group won't be able to substitute the age group over 50 years old and this way, at least maintaining the same number of total players, 15.200 in 2018 (FPG, 2020).

Table 8.4 Younger Generations in Golf

Interviewee	Text	Generic Category	Sub-Category
Number 1	The problem with the young generations is specially in the young adult's category, they start to work and are left with no time and money to play. Up until they are 18 years old probably the parents pay for everything but after those years maybe they don't help as much and they lose interest and start to focus on sports like tennis or padel that can be played at night for just one hour. Another thing that doesn't help is the lack of a reference, for example, before Miguel Oliveira join MotoGP almost nobody knew what it was and now it is been growing a lot. We had some opportunities for that, but that impactful player hasn't arrived yet. In our academy, we have 40 kids under 18 years old at the moment.	1.2	1.2.2
Number 2	Relating the younger players, I'll give you an example, I have a young client here in the store and he is really good, he's been playing European level tournaments and should have a good future, his issue is that he has very little support. He has no sponsors, his parents pay for everything and in this sport, this is a set up for failure,	1.2	1.2.2

	because the older you get the more costs you are going to have. The Federation should have a clear view on these types of situations where you have good value and need to invest in someone.		
Number 3	I think here it is a double responsibility between the clubs and the federation, because in fact the federation only exists because there are golf clubs. I believe that we can always do more, things are starting to be made and projects have come up, with <i>Projeto Drive</i> directly related to the teenagers, for example.	1.2	1.2.2
Number 4	We had a significant increase in the number of youth players in the last year. From my point of view courses besides ours have been changing their strategies and have started to focus on creating academies and programs to attract more kids and showing them what golf can do for them and that it is a very fun sport against the opinion of many that it's boring. Now, when going through that phase of life when college starts where they start to lose interest but I think it is not directly related to the sport and there's not much we can do. A full round of golf takes four to five hours, when you say that to an eighteen-year-old they rather play football that takes one hour. Although the interest stays and they come back to golf later.	1.2	1.2.2
Number 5	For the children and teenagers, it is rare to see a child or a young kid saying they want to play the game if nobody in the family plays golf, because there is no contact with it. The ones that play as kids know that if they want to compete, they need to practice and until they are 18 years old, they take it very seriously. After that time is where college starts, and they start to have less time for golf, for commutes, for tournaments, and the interest starts decreasing, although sometimes they come back later. Regarding the young adults, I believe the main issues are the low salaries, the long hours, especially in the beginning of the careers.	1.2	1.2.2

Source: The Author

It is relevant to divide the analysis of this topic in two different areas, the under eighteen category and the young adults from eighteen to twenty-four. For the first category, although presenting low numbers in terms of registered national players (Deloitte, 2020) these numbers are consistent. The explanation can be detected from the interviews, in the sense that in most cases, the costs of playing the game are relatively unexpensive and are covered by the parents, that are the main drivers to increase the interest in the children.

Apart from this, another reason and as mentioned by interviewee number three, the *Projeto Drive* from *Federação Portuguesa de Golfe* “aims to promote the practice of golf, especially for young people, but at the same time captivate their parents or family members” (Federação Portuguesa de Golfe, n.d.). It is divided in four categories, *Drive Prof*, designed for professors; *Drive School*, whose target are primary schools; *Drive Challenge*, built for juniors with handicaps that consists in a set of regional competitions organized by clubs and courses; and at last, *Drive Tour*, for juniors with low handicaps (considered elite players) with National level competitions, organized by the FPG (Federação Portuguesa de Golfe, n.d.).

On the other hand, and highlighted by most of the interviewees the big problem is the age group between eighteen and twenty-four years old, where, in general, life takes the biggest changes, especially with the start of university and work. Young adults stop competing in youth tournaments, and the interest reduces because they have less time and the membership prices increase, although, in most cases, courses started to implement discounts for this age group, this is still seen as obstacle. With this distancing from golf, young adults end up adopting new sports that take less time and are located in the city center, which reduces the commuting time from work or college.

Also mentioned throughout the interviews several times, there is a lack of a main figure of the sport, meaning a player, or players, that stands out at the highest international level. Comparing to other sports, we see a clear example of this with the Portuguese rider Miguel Oliveira in Moto GP, the pinnacle of motorbike motorsport. The increase of interest in the sport, the media coverage, the return of Moto GP championship to Portugal in 2020 (Tribuna Expresso, 2020) are all directly connected to Portugal having a winning rider among the paddock. The interviewees revealed that although existing highly talented Portuguese players competing at European levels, such as, Ricardo Melo Gouveia, Pedro Figueiredo or Ricardo Santos the reason why they haven't reached the top is due to the lack of funding and sponsorships, as these players need to financially support themselves. Organizations like the Federation should implement projects together with companies in order to create a budget with the objective of supporting, especially during the first years, these quality players to help them rise the name of Portuguese golf to the highest level and, with this, increase the interest in the sport, both from a media point of view and in that sense to attract new players.

On table 8.5 it is possible to analyze the three main suggestions made during the interviews, and from the conclusions taken from those, regarding the younger generations in the golf game.

Table 8.5 Suggestions on the Younger Generations on Golf

Suggestion	Frequency	Individuals
Focus on finding a Portuguese player that stands out on an international level.	3	1, 2, 5
Create programs that help young players during the start of their careers.	2	2, 5
Find new ways to make the game take less time, for example, introduce more nine-hole tournaments.	2	1, 4

8.4. The Impact of the Covid-19 Pandemic in Portuguese Golf

As mentioned during the literature review, Portugal and the world stopped during the first semester of 2020 due to start of a global pandemic (JN, 2021). With this, sporting activities, including golf, shut down and people were obligated to stay at home. With this research question, the goal is to identify objectively the financially impacts that the forced closing took on the courses revenues and if after the pandemic clubs and courses recorded an increase of members and interested people, following the tendencies of other countries, especially the United States (Beditz, 2022).

From table 8.6 we can observe the interviewees' answers from they're point of view regarding the COVID-19 pandemic's impact on golf.

Table 8.6 Differences Before and After the Pandemic

Interviewee	Text	Generic Category	Sub-Category
Number 1	On the negative side, in 2020 50% of the revenue was lost, not only in the first semester but the rest of the year was also affected. On the positive side, I don't have concrete data but from what I see we have increased in 50 members but I can't measure which of these are new players. Our professor tells me that she's never had so many classes as now and the Federation says there is a waiting list for their training center.	1.3	1.3.1

Number 2	Unquestionably yes, many people played other sports and shifted to golf because of its characteristics of being played outside, with no physical contact and this gave a completely different image of golf.	1.3	1.3.1
Number 3	After the pandemic we increased the number of students, and these are players that started to learn the game. Some of them didn't actually start to play on a more serious level, like actually changing from the practice areas to the course because with time the other sports re-opened and they went back to the origins. However, we had some players that came back to being members after some years and here I believe that the working from home was a major factor, they spent less time on commutes and coming to golf was a way to get out of the house. In general, I think it had a huge interest.	1.3	1.3.1
Number 4	What we noticed when we opened up again after the pandemic was a complete hunger for playing again. After the first weeks I didn't see that many changes. However, I do see more new people playing the game, specially because the way the game is played, it's like people needed a reason to leave the house and they chose golf, which was one of the first activities to open.	1.3	1.3.1
Number 5	The post pandemic for me was a complete surprise. I was a little negative when coming back but then turned out every week I had new people wanting to try golf for the first time. We see a lot more interested people, not playing on the course because there is a learning time and process but it was very positive yes.	1.3	1.3.1
Number 6	Because golf is played outside, in the middle of nature, having a lot of space, enough to keep social distancing and not being necessary to share materials (for example, a ball) makes people feel safer and wanting to try it. This is a reason why golf has risen a lot in these two years.	1.3	1.3.1

Source: The Author

Although the objective of this research question was not fully achieved because only one of the interviewees was able to present data related to the negative financial impacts during the closing time, the answer to this topic is unanimous, although many not having a quantitative basis, all of the interviewees state golf has grown in terms of memberships, number of players and interested people. This is due to the fact, as they mentioned, of the environment of where the game is played, the low to none existent level of physical contact and the not trading of materials, such as ball, golf clubs or tee pegs, as each player uses its own. Added to this, when golfing facilities started to re-

open after the first wave of the pandemic they were seen as a getaway from being at home all day and enjoying the peace and the nature of a golf course.

Hence, with a high level of certainty and based on the answers from the interviews, we can say that Portugal followed the tendencies of other countries where an increase of interest in golf and first-time golfers was registered.

Chapter IX- Conclusion

9.1. Final Considerations

The game of golf is an ancient sport that has been passing through generations and was implemented in Portugal over a century ago (Fragoso). However, taking into consideration the previous chapters of this dissertation it is clear that golf, just like any other sport, it is not just a leisure activity but is also a business and, in this specific sport, a touristic product. The objective of this thesis is to verify and analyze if golf is sustainable in Portugal, as a whole, meaning that it doesn't depend solely on one of the scale plates, in this case, the tourism and the real estate but if the sporting side of the activity helps sustain the industry as it is and to be able to grown in a near future.

To help answer this question, in table 9.1 a SWOT analysis was written, based both on the interviews and in the information acquired through the literature review, presented in the beginning of this thesis.

Table 9.1 Golf Industry Swot Analysis

Strengths <ul style="list-style-type: none">• Tourism;• Quantity, diversity and quality of the courses;• Climate conditions.	Opportunities <ul style="list-style-type: none">• New and more profitable tourism markets;• Luxury real estate for foreigners;
Weaknesses <ul style="list-style-type: none">• Small number of National players;• Aging population of players;• Low number of teenage golfers;	Threats <ul style="list-style-type: none">• Unstable Economy;• Low salaries;• Long working hours;• Lack of interest from young

<ul style="list-style-type: none"> • Considered an elitist sport; • Lack of media presence; 	adults;
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Source: The Author

From all this information combined, it is possible to state that the main conclusions are that, although representing 0,5% of the country's GDP, golf in Portugal is sustainable only due to the strong weight the golf tourism industry and the real estate built around the courses has over the total revenue of the golfing industry. However, it is important to distinguish two very different realities in the country. On the Algarve region this is clear, as said before tourism is the main source of revenue for the courses since the region is strategically prepared for this type of industry, the golf tourism, and geographically set on the south of Portugal where the courses are in perfect condition all year round. This golf tourism not only affects the golfing infrastructures but also the region's economy as a whole, as it is seen as one of the main industries that helps reduce the seasonality.

On the other hand, the rest of the country, while much less affected by tourism, is sustained by National golfers and the Real Estate industry. Regarding the Players situation, as said previously, the number is considered low for the quantity of courses in Portugal and its evolution, in the timeframe analyzed, seems to be stagnated. Hence the Federation together with the courses have improved their efforts in attracting more people to the game with projects and initiatives that introduce golf to the masses. When switching the focus to the Real Estate point of view, we can affirm that a golf course can only survive with a Real Estate project either houses or a hotel facility. Outside the Algarve region the most common are the luxury and gated neighborhoods around golf courses and here both the houses impact the golf course and the other way around.

First, a company or individual buys a property with intent to build a golf course. Secondly, this course is planned and built, because this sells and increases the value of the land around it, then, when these lots are sold this becomes the main source of revenue for the course that is owned by said company or individual. However, as alerted by one of the interviewees we cannot forget that the land is finite and when all the lots are sold in the whole property, the course will depend mainly on the memberships,

green-fees and its associates, hence the importance of increasing the interest around the sport that ultimately will lead to improve number of players.

9.2. Academical Experience

During the Covid-19 pandemic and while on lockdown, I found interest in the game of golf through videos on the internet. After lockdown was over and the normality slowly returned, I was able to start to learn how to play the game in a golf course near me. With this, and the fact that playing alone made me aware of the surroundings, I was in direct contact with the reality of the game and the superficial side of the business and in my mind, there was always a question “How do courses like this are still open? Do they actually make money?”. These questions were originated from the facts demonstrated during the dissertation, the low number of national players for the high number of courses, in the Lisbon region, because this was my personal experience every time I went playing, just an old and very small population of golfers. Truth be told, in some courses more than others.

When reaching the second year of the Masters in Business Administration the decision regarding the theme of my Master Thesis was very clear, I had to understand if golf was actually sustainable as a business. The knowledge acquired during the first year of the course enabled me to understand in a more analytic perspective the business side of the game of golf and to do it in much more professional and clear ways.

Personally, I can say that this was by far the most challenging work I have ever concluded, both in my academic and professional lives. It made me connections inside a business world that I admire and have a lot of interest for and also made me understand that the correlation between academic and professional worlds is real and is directly connected, as one can, for example in this case, study the environment of the golfing industry in Portugal and because of that be prepared to apply the knowledge obtained to the reality of the business in a professional positional.

9.3. Study Limitations

Firstly, it is important to highlight that the conclusions reached during the course of this thesis are based on a very small sample by convenience (interviewees), with a small variety of locations and it is only adequate to the Portuguese reality. It was interesting to see how similar the perspectives of each individual were when mentioning the current state of the industry, despite some exception.

Thus, although the conclusions of this study lead to a new theory, the results of this shouldn't be generalized and are just exploratory because a different context or sample could lead to a different outcome.

Chapter X- Bibliography

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Chapter XI- Appendix

Guião de Entrevista

Idade:

Empresa/clube:

Função:

Anos de experiência:

Handicap:

1º Tópico:

Desde o seu início no mundo do golfe, começando como jogador e passando depois para o mundo profissional, considera que tem sido uma evolução sustentável, nos mais diversos sentidos da palavra.

2º Tópico:

Considera um ponto positivo ou negativo o facto do golfe em Portugal ser baseado no turista e no jogador estrangeiro?

3º Tópico:

Quais são para si os principais desafios que o golfe em Portugal tem vindo a enfrentar e que soluções existem, se existirem, para o resolver?

Considera que o desporto está ainda associado a um estereótipo e se isso o torna também um impedimento à entrada de novos participantes, especialmente dos jovens?

4º Tópico:

Nos últimos 2 anos temos vivido um mundo estranho e sem certezas sobre o nosso futuro, os clubes fecharam durante muitos meses e aqui faço duas perguntas:

É possível quantificar o impacto que esses meses de paragem tiveram nas contas dos clubes?

E, se no mesmo sentido de países como os Estados Unidos ou o Reino Unido onde o número de praticantes aumentou durante este período de pandemia, é possível dizer o mesmo sobre Portugal.