



UNIVERSIDADE CATÓLICA PORTUGUESA

Transforming Traditions: Impact of COVID-19 on Personal Training Sector in Portugal

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Católica Porto Business School
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by

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Acknowledgments

As I come to an end of another accomplished goal. After months of dedication, effort, and perseverance, I am thrilled to finally reach this significance milestone.

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Abstract

This study investigates the profound impact of the COVID-19 pandemic on the operational dynamics of personal trainers' businesses and the emergence of novel opportunities within the personal training services. The research is guided by two primary questions: How has the COVID-19 pandemic influenced the traditional business models of personal trainers? What innovative business opportunities have arisen as a response to the pandemic-disruptions? To address these questions, the study employs a multifaceted approach by doing 21 interviews to personal trainers. It assesses the disruptive effects of the pandemic on operational strategies and revenue generation mechanisms, identifies and analyses the specific challenges faced by personal trainers, explores the diverse range of adaptation strategies employed to navigate pandemic challenges, and evaluates the effectiveness of these strategies, analyses emergent business opportunities within the personal training services sector. Through a comprehensive analysis, this study aims to provide valuable insights into the evolving landscape of personal training services in the wake of the COVID-19 pandemic.

The findings demonstrate that the pandemic transformed the personal training sector by prompting a reevaluation of traditional business models and the emergence of innovative opportunities for growth. Personal trainers demonstrated a resilience by swiftly adapting to virtual platforms and started engaging in technology and social media to keep their clients motivated and promoting their services.

Key words: Personal Trainers, training, pandemic, technology, online training, Portugal

Total of words: 6616

Resumo

Este estudo investiga o impacto profundo da pandemia de COVID-19 na dinâmica operacional dos negócios dos personal trainers e o surgimento de novas oportunidades dentro dos serviços de treino pessoal. A pesquisa é guiada por duas perguntas principais: Como a pandemia de COVID-19 influenciou os modelos de negócios tradicionais dos personal trainers? Quais oportunidades de negócios inovadoras surgiram como resposta às perturbações causadas pela pandemia? Para abordar essas questões, o estudo emprega uma abordagem multifacetada, realizando 21 entrevistas com personal trainers. Ele avalia os efeitos disruptivos da pandemia nas estratégias operacionais e nos mecanismos de geração de receita, identifica e analisa os desafios específicos enfrentados pelos personal trainers, explora a diversidade de estratégias de adaptação empregadas para enfrentar os desafios da pandemia e avalia a eficácia dessas estratégias, analisa as oportunidades de negócios emergentes dentro do setor de serviços de treinamento pessoal. Através de uma análise abrangente, este estudo visa fornecer insights valiosos sobre o cenário em evolução dos serviços de treinamento pessoal no rescaldo da pandemia de COVID-19.

Os resultados demonstram que a pandemia transformou o setor de treino pessoal, levando a uma reavaliação dos modelos de negócios tradicionais e ao surgimento de oportunidades inovadoras de crescimento. Os personal trainers demonstraram resiliência ao se adaptarem rapidamente a plataformas virtuais e começarem a utilizar tecnologia e redes sociais para manter seus clientes motivados e promover seus serviços.

Palavras-chave: Treino pessoal, treino, pandemia, tecnologia, treino online, Portugal

Total de palavras: 6616

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Introduction

In recent years, the fitness industry has experienced significant growth, with a demand for personalized training services and innovative fitness approaches (Benefits, S., Ocial B., Ndividualized, O. F. I., & S. Mall, 2017). The interest in fitness has shot over the years, reflecting a broader societal shift towards health and wellness. People are more focused on staying fit and leading healthier lifestyles, which has led to various fitness-related services, including personal training.

This industry plays a crucial role not only in promoting physical well-being but also in driving economic growth. Personal trainers have become indispensable in helping individuals achieve their fitness goals through personalized guidance and tailored programs, support, and motivation.

This expansion has been particularly pronounced considering global health crises, such as the COVID-19 pandemic, which underscored the importance of maintaining physical health and well-being (Morawska & Milton, 2020). However, the pandemic presented unprecedented challenges to the fitness industry. With lockdowns and restrictions on in-person activities, personal trainers had to quickly adapt and find new ways to deliver their services. This led to a rapid rise in online training platforms and virtual coaching sessions.

As the fitness landscape continues to evolve, driven by technological advancements and changing consumer preferences, it becomes imperative to understand the challenges and opportunities faced by personal trainers (Virke Trening, 2019).

Despite these challenges, personal trainers showed incredible resilience and creativity, finding innovative ways to engage clients and deliver effective

workouts. As we move forward, there's still much to explore and understand about how the fitness industry has evolved, especially in Portugal.

The aim of this study is to examine the impact of the COVID-19 pandemic on the operational dynamics of personal trainers' businesses, alongside an exploration of the novel opportunities that have arisen in response to the pandemic-induced disruptions. The research questions guiding this investigation are: "How has the COVID-19 pandemic affected the traditional business models of personal trainers?" and "What innovative business opportunities have emerged within the domain of personal training services as a result of the COVID-19 pandemic?"

To address these research questions, specific objectives have been outlined: assess the disruptive impact of the COVID-19 pandemic on the operational strategies and revenue generation mechanisms of personal trainers, including constraints on in-person training sessions and the closure of fitness facilities; Identify and analyse the specific challenges faced by personal trainers during the pandemic period, such as logistical constraints, client retention issues, and financial uncertainties; explore the diverse range of adaptation strategies employed by personal trainers to navigate the challenges posed by the pandemic, including the utilization of online training platforms, modification of service offerings, and implementation of health and safety protocols; evaluate the perceived effectiveness and efficacy of the adaptation strategies implemented by personal trainers in mitigating the adverse effects of the pandemic on their business operations and client engagement; conduct an in-depth analysis of the emergent business opportunities within the personal training services sector precipitated by shifting consumer preferences and behaviours in response to the pandemic-induced disruptions; assess the enduring implications of the COVID-19 pandemic on the broader fitness industry.

Chapter 1

Literature Review

1.1. Fitness Sector

The fitness industry, a multifaceted market encompassing sports, fitness, leisure, and associated products and services, plays a pivotal role in the socio-economic fabric of society (Pitts et al., 1994; Sadeqi-Arani et al., 2022; Rada & Szabó, 2022). Its relevance extends beyond the physical realm, incorporating elements of management, finance, marketing, and diverse administrative functions, reflecting societal achievements and power structures. The industry's adaptability to shifting living conditions, work dynamics, and global market forces is essential for its sustained success (Sadeqi-Arani et al., 2022). Moreover, the fitness industry, which describes any person, company, or entity that focuses on exercise, health, and overall maintenance of the body (Rada & Szabó, 2022), is an integral component of the broader sports industry ecosystem.

Engagement in physical activities, even in the form of light walking, has demonstrated profound health benefits, with reductions in all-cause mortality noted in both healthy individuals and those with coronary heart disease (Spoelder et al., 2023).

Inside this industry, we have the Personal Trainers (PT) who are fitness professionals who provide tailored guidance to individuals aiming to achieve their health and fitness objectives. Acting as mentors, educators, and motivators, they offer personalized support and encouragement, while also imparting knowledge on proper exercise techniques to prevent injuries and optimize outcomes (Benefits, S., Social B., Individualized, O. F. I., & S. Mall, 2017).

The global landscape witnessed an unprecedented upheaval with the emergence of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causing the infectious disease COVID-19. By July 2020, it had affected over 15 million people across more than 200 countries, primarily spreading through airborne droplets (WHO, 2020; Morawska and Milton, 2020).

Amidst the complexities of the COVID-19 pandemic, Europe faced unprecedented challenges, with stringent lockdown measures, social distancing protocols, and the closure of non-essential businesses disrupting various sectors. The fitness industry, a vital component of the economy and societal well-being, experienced profound transformations across the continent. In Norway, like many other European countries, the pandemic's impact reverberated throughout the occupational landscape, including the realm of personal training. Despite the adversities, the occupational group of personal trainers (PTs) in Norway has exhibited remarkable resilience and adaptability. Against the backdrop of societal upheaval, the PT community in Norway has thrived, witnessing significant growth and a surge in service sales (Virke Trening, 2019).

The fitness industry, a crucial component of the sports sector, faced staggering economic challenges during the pandemic. Sports centres, on average, suffered a 64% reduction in turnover between April 2020 and March 2021, amounting to a staggering €1.505 billion loss due to closures and restrictions (Valgo, 2021). This economic strain extended to entrepreneurs in the sports sector, particularly those in Spain, where 23.10% of businesses were strongly and severely negatively affected, and 29.20% were significantly negatively affected (González-Serrano et al., 2023).

1.2. Impact of Covid in the Fitness Sector

Before the onset of the COVID-19 pandemic, sports entrepreneurs were unprepared for the disruptive event, resulting in an unforeseen reduction in performance levels (González-Serrano et al., 2023).

As the pandemic unfolded, public health leaders, in spring 2020, categorized gyms and fitness centres as high-risk venues, recommending their closure. This categorization, coupled with governmental decisions, significantly impacted the fitness industry (Stone, 2020; DeMartini & Willett, 2022; Scott, 2020).

The pandemic went beyond economic ramifications, profoundly altering societal norms and business practices (Ratten, 2020). Entrepreneurial endeavours in the sports sector, specifically personal training centers, grappled with the unprecedented changes. The COVID-19 pandemic, as analysed in a European context, significantly transformed the performance and consumption patterns of sports and fitness activities (Demartini et al.). Lockdown measures had a significantly negative impact on the working and living conditions for personal trainers, an observation resonating in findings that imply the potential unnecessary severity of these consequences (Ong et al., 2023).

The COVID-19 has had a profound effect on the personal training sector, leading to a reassessment of conventional business models and the creation of creative alternatives. Riley and Blasi's research from 2021 explore the complex issues that personal trainers deal with; it highlights things like closed fitness centres and interruptions to in-person training sessions. In a similar vein, Hargreaves and Patania (2020) investigate the negative consequences of the pandemic on the personal training industry, stressing the necessity of flexible approaches in the face of shifting conditions.

Advocates for the fitness industry challenged these decisions, arguing for the classification of fitness facilities as part of the health and prevention sector rather

than the entertainment sector. This highlighted the industry's commitment to health and preventative care (Piotrowski & Piotrowska, 2021).

The COVID-19 pandemic created a seismic shift in the sports and fitness industries, affecting personal trainers and businesses profoundly. From economic downturns to altered working conditions, the repercussions were multifaceted, underscoring the need for adaptive strategies and comprehensive support mechanisms for the fitness sector.

Recognizing the need for resilience, sports entrepreneurs strategically developed measures to enhance commitment to resilience in their businesses (González-Serrano et al., 2023). The emphasis was not only on adapting to the crisis but also on innovating and strategically planning for long-term resilience.

During the crisis, strategies such as intensifying partnerships, exploring new suppliers, and reorganizing operational processes emerged as key components in mitigating the harmful effects. The industry demonstrated that a strategic orientation to the operation of personal training centres is nearly as crucial as implementing adaptive measures (González-Serrano et al., 2023).

Innovation emerged as a crucial coping strategy, offering sustainable effects that make companies stronger in the long term (Amankwah-Amoah, 2021; Wenzel et al., 2020; Li and Atuahene-Gima, 2001). The emphasis shifted towards the creation of new processes, products, and services to enhance overall market competitiveness.

1.3. Impact of covid in the Fitness industry in Portugal

Considering the Portuguese case, the COVID-19 pandemic has significantly impacted the fitness industry like in the other countries all over the world.

This led to widespread disruptions in operations and revenue streams. Measures such as lockdowns, social distancing regulations, and the closure of fitness facilities have posed immense challenges for gyms, fitness centres, and

personal trainers across the country. According to a report by the Portuguese Institute of Sport and Youth (2020), the practice of physical and sports activities in Portugal was notably affected during the pandemic, with restrictions limiting access to traditional fitness facilities. As a result, many fitness businesses were forced to adapt rapidly to the changing circumstances, with some transitioning to online platforms to continue offering services remotely.

These adaptations, seen in many other countries, were crucial for the survival of many fitness businesses in Portugal, allowing them to continue serving their clients while adhering to safety guidelines.

1.4. Impact of covid in industries with social contact

The COVID-19 pandemic has had profound effects on industries and services worldwide, particularly those involving social contact. For instance, the hospitality sector experienced significant disruptions due to lockdown measures and restrictions on gatherings (Gössling et al., 2020). Similarly, the entertainment and event management industries faced challenges with the cancellation of concerts, festivals, and sporting events, leading to substantial revenue losses (López-Bazo et al., 2021). Furthermore, the retail industry underwent transformations as brick-and-mortar stores struggled to adapt to social distancing guidelines, prompting a surge in online shopping (Chen et al., 2020). In the healthcare sector, hospitals and medical facilities faced overwhelming demands, while elective procedures were postponed prioritizing COVID-19 patients (Gostin & Wiley, 2020). The fitness industry witnessed closures of gyms and fitness centres, resulting in shifts towards online and virtual fitness services to accommodate social distancing measures (Diaz et al., 2021).

1.5. Technology and training

The COVID-19 pandemic and associated lockdowns presented challenges to the fitness industry, but also opportunities for transformation. Bratland-Sanda et al. (2020) argues that the experiences during the lockdown period could serve as an impetus for the fitness industry and PT's to unite, demand changes, and explore new avenues. The potential negative impact on public health prompted a shift in services toward online platforms, outdoors, and the development of new products, providing alternatives and opening doors to new groups of clients for personal trainers (Bratland-Sanda et al., 2020). Digital services, if properly planned and developed, emerged as potential income generators for personal trainers in this context.

Innovation, defined as the creation of new processes, products, or services, became crucial for maintaining competitiveness in the fitness market (Li and Atuahene-Gima, 2001). The internet platform played a pivotal role in promoting the continuous evolution of economic forms, fostering reform, innovation, and development (Liu et al., 2023). Like online shopping, online fitness emerged as a rapidly developing industry. The inability to access traditional gyms during the COVID-19 outbreak led to a surge in online fitness platform usage. Liu et al. (2023) note the development of new forms in the network fitness industry, such as network fitness and live sports, enhancing users' access and expanding the development space of the sports and fitness industry.

In the realm of online fitness platforms, several factors significantly influence user intention and activity. The social environment, community influence, perceived ease of use, and perceived value play pivotal roles in determining user intention. Higher levels of these factors correlate with increased user usage intention, emphasizing the need for operators to optimize these elements (Liu et al., 2023).

With this, PT's have embraced technology and online platforms to deliver virtual training sessions, as explored by Mendoza and Sánchez (2021). This shift towards remote training modalities has enabled trainers to maintain personalized interactions with clients while adhering to social distancing measures. Additionally, Smith and Johnson (2020) discuss the utilization of innovative tools and software to enhance the virtual training experience, fostering engagement and accountability among clients.

Despite all of this, there is still a lot to learn about the effects of COVID-19 on the fitness sector, particularly in Portugal, and the new business prospects that have resulted from it. Although some initial research has mentioned how the pandemic has affected the availability of personal training services, there is still a large knowledge vacuum on the precise effects in the Portuguese setting. Furthermore, there is a lack of literature that addresses the identification and thorough examination of new business prospects in the personal training industry. By addressing this research gap, we can gain a more holistic understanding of the impacts of COVID-19 on the fitness industry in Portugal and provide practical guidance to drive resilience and innovation in the sector.

Chapter 2

Methodology

This section delineates the methodological framework adopted for this study, providing a comprehensive rationale for its selection. It starts with clarifying the goals and research questions, then it argues that the selected research methodology is appropriate.

2.1. Research questions and objectives

The study aims to examine the impact of the COVID-19 pandemic on personal trainers' businesses and explore new opportunities arising from pandemic-induced disruptions. Specifically, it seeks to answer the following research questions “How has the COVID-19 pandemic affected the traditional business models of personal trainers?” and “What innovative business opportunities have emerged within the domain of personal training services as a result of the COVID-19 pandemic?”

To address these questions, the study will

- Assess the disruptive impact of the pandemic on operational strategies and revenue generation mechanisms.
- Identify and analyse challenges faced by PT's during the pandemic period.
- Explore adaptation strategies employed by PT's to navigate pandemic challenges.
- Evaluate the effectiveness of adaptation strategies in mitigating adverse effects.

- Analyse emergent business opportunities within the personal training services sector.
- Assess enduring implications of the pandemic on the broader fitness industry.

2.2. Research Methodology

The research methodology chosen for this study is qualitative, aiming to uncover the nuanced narratives of personal trainers during the pandemic. The methodology is designed to explore the subjective dimensions of the research questions, revealing the intricate interplay of challenges, adaptations, and broader implications for the fitness industry. The study focuses on the lived experiences of personal trainers through in-depth interviews, providing a narrative-rich understanding of their challenges, resilience, and resourcefulness during the pandemic (Creswell, 2013; Patton, 2015).

2.3. Data Collection Method

This study uses semi-structured interviews to explore personal trainers' experiences during the pandemic. The choice of data collection method is crucial for a nuanced understanding of their experiences. Semi-structured interviews, harmonizing structure and flexibility, enable tailored exploration of participants' journeys. Aligned with a qualitative approach's openness (Yauch and Steudel, 2003), study's open-ended questions empower participants to elaborate on responses, deepening the understanding of their experiences. This method proves crucial for delving into subjective topics, like the pandemic's impact on operational models, facilitating nuanced exploration of their journey. A rigidly structured interview might overlook emergent themes or unexpected insights, but the semi-structured format ensures adaptability to unforeseen revelations, enabling a more holistic portrayal of the participants' experiences. The semi-

structured approach fosters a conversational atmosphere, promoting collaboration between the interviewer and interviewee, building rapport and trust. This is especially important when exploring sensitive topics like challenges, adaptations, and professional resilience during challenging times.

2.3.1. Design Methodology

The main goal was to learn from personal trainers, regardless of whether they worked in studios, gyms, online, or independently, before and after the pandemic. The goal of this inclusivity was to present a complete picture of personal trainers' experiences in the contemporary environment.

The target sample consisted of a wide range of 21 PT's that are currently employed. This purposefully wide-ranging technique aimed to incorporate experts from diverse environments, guaranteeing a refined comprehension of the pandemic's effects in disparate work scenarios. Including trainers in the mix regardless of their employment status prior to or during the pandemic was essential for exploring the full spectrum of experiences.

This method made it possible to investigate a broad variety of pertinent subjects and guaranteed that the respondents' points of view could be fully recorded

Since every participant is Portuguese, only Portuguese was used throughout the interviews. This decision was taken to ensure that the respondents were at ease and that their freedom to freely share their experiences and viewpoints was not impeded by language problems. Preserving the authenticity of the participants' comments was another reason for choosing to conduct the interviews in their mother tongue.

Pilot sessions, such as the first and second interviews, were essential in confirming the usefulness of the interview guide. These preliminary interviews

made it possible to make changes to the guide, making sure it satisfied the target audience and addressed a wide range of pertinent subjects.

After the initial pilot interviews, the interview guide was improved to increase its efficacy in generating insightful replies

A brief introduction explaining the history of the researcher and the goals of the study was given before each interview began. The audio recording required explicit agreement, and participant confidentiality was guaranteed, among other ethical issues, were emphasized.

It functions as a thorough instrument designed to extract significant insights from the complex experiences of personal trainers throughout the epidemic.

2.3.2 Interview Procedure

The process included a mix of personal connections, recommendations, and direct Instagram outreach with a focus on both in-person and virtual communication.

This approach helped us gather insights from trainers with different backgrounds and experiences.

Most of the interviews took place online using apps like Zoom, Google Meet, and WhatsApp. Notably, four of the interviews took place face-to-face, providing a closer and more direct communication. The goal of combining in-person and virtual encounters was to convey the subtleties of experiences in various settings.

A considerate substitute was offered to participants (three in all) who felt uneasy conducting verbal interviews. These people were sent the interview guide by email, and they replied with a letter, thus their viewpoints were still recorded even if the method was different.

With an average duration of thirty minutes, each interview offered a succinct yet thorough examination of the subjects.

Interviews were conducted with 21 PT's, representing a diverse group of professionals, including 8 females and 13 males, aged between 20 and 35. All participants hold a bachelor's degree in sports and physical education, with additional qualifications as personal trainers for some. Only 2 participants work part-time as personal trainers while also teaching at schools. Among the 21, only 1 works under contract, and 5 have their own physical training space. Additionally, 5 exclusively engage in online training.

2.4. Data Analysis Methodology

The process of deriving pertinent insights from the intricate narratives of personal trainers involved several techniques, such as manual coding, transcription, and strategic utilization of the MAXQDA software. The procedures followed to guarantee a thorough and methodical study of the rich data gathered are explained in this section.

The manual process of creating a coding scheme gave the qualitative data structure. This allowed for a more detailed understanding of recurrent themes, difficulties, and modifications within the narratives.

Initially, the qualitative data analysis process commenced with the meticulous transcription of the interview recordings. Subsequently, the transcripts were systematically categorized into distinct temporal phases, delineated as pre-pandemic, during the pandemic, post-pandemic, and future projections concerning the personal training domain. Within each temporal segment, an iterative process ensued, aiming to discern recurrent patterns, themes, and subthemes across the interviews. These emergent patterns were then methodically organized into cohesive subthemes, representing the underlying structure of the data. Through this iterative analytical approach, a comprehensive framework of final codes was systematically derived, cover the multifaceted insights collected from the interviews, as we can

see in the Table 1.

Code	Subcode	
Challenges during pandemic	<ul style="list-style-type: none"> . Athletes did not do the training . Loss of connection . Alteration in training plan 	<ul style="list-style-type: none"> . Lack of material . Difficulty in correcting exercises . Difficulty with motivational strategies
Types of training during pandemic	<ul style="list-style-type: none"> . General . Personalized . Cardic 	<ul style="list-style-type: none"> . Group . Live . Relaxing
Communication during pandemic	<ul style="list-style-type: none"> . Zoom . Email . WhatsApp 	<ul style="list-style-type: none"> . YouTube . Recording videos . Platform
Athletes' reaction to pandemic	<ul style="list-style-type: none"> . Positive . Negative 	<ul style="list-style-type: none"> . Bought sport material
Types of training nowadays	<ul style="list-style-type: none"> . On site . Online 	<ul style="list-style-type: none"> . Online monitoring
Changes after pandemic	<ul style="list-style-type: none"> . Working with companies . Creation of podcast . Using apps 	<ul style="list-style-type: none"> . Alteration in prices . Safe distance . Greater hygiene
Online training	<ul style="list-style-type: none"> . Vantages . Disadvantages 	<ul style="list-style-type: none"> . Effectiveness . Athletes' reaction
Online monitoring	<ul style="list-style-type: none"> . Characteristics . Motivations 	<ul style="list-style-type: none"> . Challenges
Future of PT	<ul style="list-style-type: none"> . Price . Social media impact . Technology impact 	<ul style="list-style-type: none"> . Challenges . Need of on-site training

Table 1: Codes and subcodes

Source: Of my authorship

In the figure 1 we can see a scheme resume of the research framework adopted. This scheme graphically explains the main steps throughout the investigation.

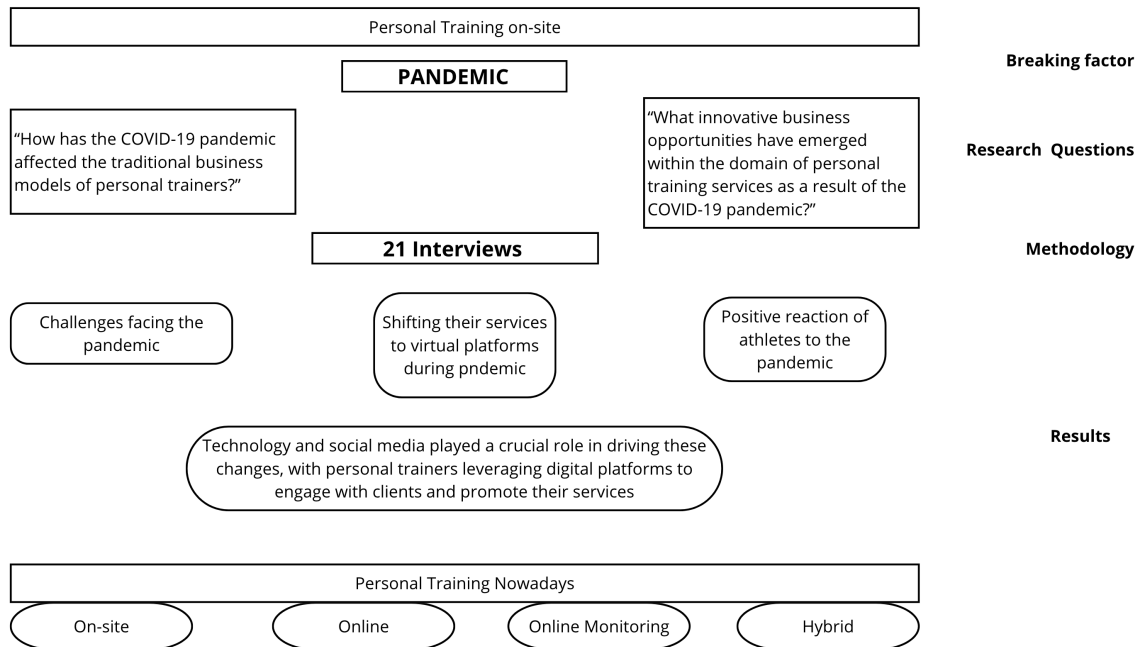


Figure 1: Scheme resume
Source: Of my authorship

Chapter 3

Results and Data Analysis

This chapter presents the results of the 21 different interviews with personal trainers that provide light on the seismic disturbances brought about by the COVID-19 pandemic.

With these challenges, the adaptive strategies employed by PT'S come to the fore, notably through the lens of personalized training, live sessions, and online training formats. As we delve into the multifaceted dimensions of their experiences, it becomes apparent that personalized training denotes tailoring fitness regimens to individual needs and goals, often exemplified through one-on-one interactions. On the other hand, live sessions embody synchronous, real-time engagements between trainers and clients, fostering a dynamic and interactive training atmosphere. The term online training, encompassing both live and recorded sessions, emerges as a pivotal element, offering flexibility and accessibility in the wake of the pandemic's challenges. In unravelling the narratives of these trainers, we navigate through the distinctive landscapes of personalized, live, and online training, each contributing uniquely to the resilience and evolution of the fitness industry in response to unprecedented global disruptions.

Besides all those types of training explained, it's important to refer that despite those training more personalized, there's more types of training as a group training which is group classes, metabolic training that is composed by cardio's exercises and the general training that's refer to equals exercises for every type of athletes.

3.1. The interviews

Out of the 21 interviewees, 13 are male and 8 are female, ranging in age from 22 to 35. Sixteen of them work in-person or in a hybrid format, primarily in the northern region of the country, while the remaining individuals, who exclusively offer online training, are located across the country. All of them hold certifications as personal trainers, and 19 additionally hold bachelor's degrees in sports-related fields. Currently, all of them are employed as personal trainers, with an average of 5 years of experience in the field.

In the Appendix B there is a resume of each interviewee and the interviews.

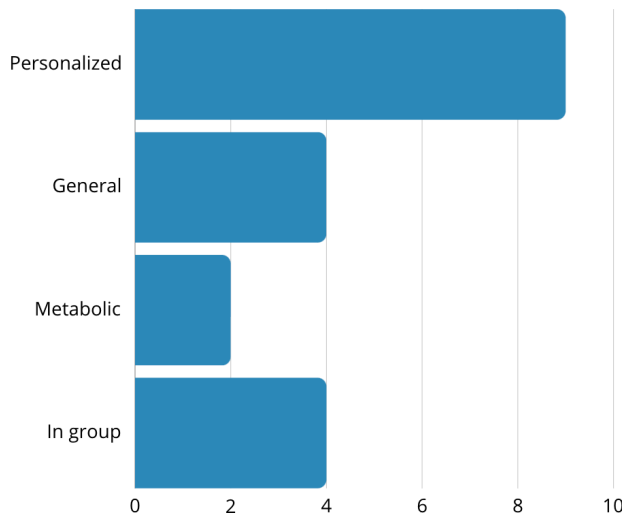
3.2. Personal Training

3.2.1. Personal Training during the pandemic

The adaptive strategies employed by all personal trainers in response to the pandemic's disruptions take center stage. Among these challenging circumstances, a prevalent approach emerged — the provision of live training sessions, demonstrating a pivotal link between live and personalized training methodologies. Live training sessions, marked by intimate one-on-one interactions, were not only a response to the limitations imposed but also retained a core element of personalization, tailoring each session to individual goals and conditions. The commitment to personalization in live sessions was particularly notable, as trainers navigated material shortages and other obstacles with tenacity. Despite those variances of training, personal trainers consistently upheld their commitment to delivering high-quality, personalized training experiences.

In the graph below, we observe the utilization and description of various training types by personal trainers. Specifically, personalized training was held by 9 personal trainers, while a more general training approach was adopted by 4

PT's. Additionally, 2 personal trainers implemented a metabolic-focused training, and 4 opted for group training sessions. It is noteworthy that these diverse training modalities were often combined, indicating that a personal trainer who provided personalized training might also have conducted group training sessions.



Graphic 1: Variety of training types by personal trainers during pandemic
Source: Of my authorship

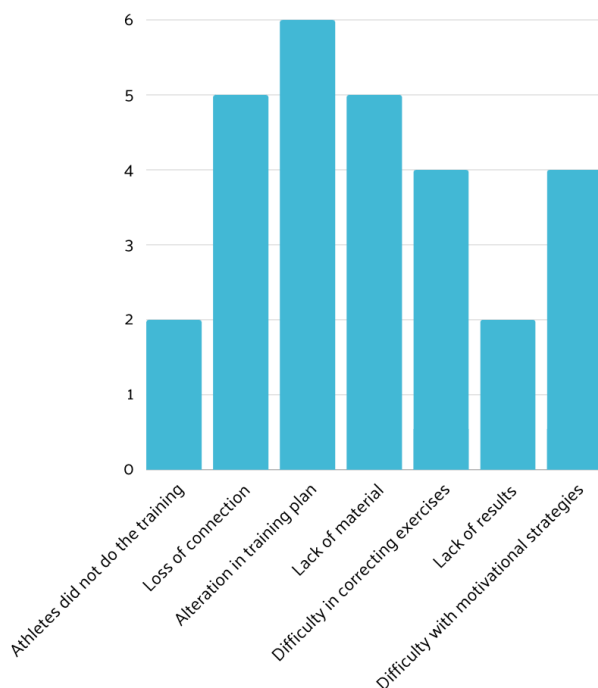
3.2.1.1 Challenges during the pandemic

Then, within personal training during the pandemic, 52% spoke about the challenges of it. Specifically, 19% of respondents who mentioned a lack of material as a difficulty also reported an alteration in training planning. Simultaneously, 14% of individuals who highlighted difficulty in correcting exercises also noted a loss of connection with athletes, as it can be seen in the figure 1

Quotations from the interviews demonstrate this dedication to personalized training: "Yes, exactly the same, but in live." (E17) elucidates a commitment to consistency, while "digital training plan and demonstrative video" (E15) and

"real-time training via video call" (E16) underscore the multifaceted approaches adopted. The transition to online platforms, as echoed in responses like "my experience, we continue to do everything the same, people have gone online, we assume we're going to have to work like this" (E17), was coupled with the initiation of "live, always personalized training" (E6), showcasing a seamless blend of technology and personalized guidance. Furthermore, the deliberate allocation of "defined hours daily for supervised training via video conference using the Zoom platform" (E15) exemplifies the strategic structuring of live sessions. As highlighted also by the following quotes, "just like group classes, where we recorded the classes here and every week, we had a schedule for virtual classes" (E17,) and "real-time training through video calls" (E16).

In the graph 2 below, we present some the difficulties reported by the interviewees.



Graphic 2: Difficulties facing the pandemic reported by the interviewees
 Source: Of my authorship

The paucity of essential training materials emerges as a substantial concern, as articulated by participants ("initially affected drastically" - E3; "affected significantly because we grappled with how to adapt to the situation and maintain performance akin to in-person sessions" - E14), leading to a noteworthy overhaul of training plans. This intricate dynamic underscores a pivotal relationship: the shortage of material intricately linked to a fundamental reshaping of training plan formulations.

Quotations distinctly articulate the challenges: "because the majority of people lack weights at home, they are without necessary materials" (E2); "for specific fitness goals, the absence of material posed a challenge" (E14). The profound impact of material scarcity is reflected in the imperative for methodological adjustments ("the training methodology had to evolve due to distinct training conditions and material constraints" - E4).

3.2.1.2 Positive reaction to the pandemic

The positive reaction emerges as a surprising feature. The athletes responded very well, even though at first, they found the new training paradigm weird and challenging. They adjusted to it with ease. Despite the difficulties described by personal trainers and the early deficiency of motivating techniques, attempts at adaption were successful. This good news is particularly connected to the domains of personalized classes and customized instruction throughout the pandemic.

Another topic with a significant impact on the gathered responses was the positive reaction of athletes to the pandemic, contrary to expectations. 48% of interviewees perceived this positivity among their athletes, with the type of training having a significant impact on this reaction. Five of the interviewees describing this positive reaction opted to provide personalized and live training to their athletes. However, five individuals who portrayed the reaction to the

pandemic as positive also described undergoing a change in planning, indicating that personal trainers positively reinvented themselves by finding alternative training methods.

The following quotations reflect this tale: "The feedback was great in that regard and, in return, my work was shared, and I knew that I would reap the benefits of that one day" (E20); "they began to accept it, and we started working in other ways because we had to adapt the training methods, and they realized that training at home was also demanding" (E17); "All students, whether young or older, faced situations and complications with computers and accessing classes, but I think everyone ended up embracing these things" (E3); "We noticed when we reopened that many people did not return, at least initially, because they liked this option of time freedom, not having to travel; we noticed that people were already accustomed to training more autonomously or with other means" (E3); "Even older people of 70 adapted very well, which worked well, something I never thought would happen" (E6); "People were quite satisfied because we found solutions to the problems. Even though it wasn't perfect, there was still a way to continue training" (E14); "It worked very well because I managed to retain the students" (E16); "they were very pleased, continuing to train with me to this day" (E16).

3.3. Technology and social media transformed the sector

During the pandemic, technology and social media emerged as indispensable tools, steering the fitness sector through challenges and undoubtedly continuing to do so in the future.

This feeling is encapsulated by E20, who leveraged the lockdown period to showcase work on social media, later attesting, "When I opened the studio, it was much easier due to the groundwork during the pandemic." E20 further

emphasizes the enduring significance, predicting, "This field will keep growing, and social media will remain a potent tool for all personal trainers."

The instrumental role of social media as a client-generating tool is echoed by E18, who asserts, "Social media is not just for amusement but a crucial work tool. Our 8,000 Instagram followers are potential clients." E13 underlines the post-pandemic surge in clientele facilitated by an active social media presence, describing how showcasing knowledge and daily posts garnered followers, translating into increased clients post pandemic.

This technologically driven era finds resonance in E16's viewpoint: "In my opinion, technology is the most empowered and abused tool in the fitness world today." E14 complements this perspective by underscoring the potential difference that having a notable presence and differentiation on social media can make in the fitness domain.

In the table 2 below are more interesting insights:

E20	<p>"I took advantage of the lockdown to show my work on social media and when I opened the studio it was much easier because of the work I had done during the pandemic. It was a great lever to open the face-to-face part."</p> <p>"I also think that social media has encouraged people to exercise for aesthetic reasons, and that's a good thing too"</p>
E13	<p>"I started using social networks, showing my knowledge, posting every day and, in other words, post-covid helped me a lot, because people started following me and liking my work and when everything came back my volume of students increased even more."</p>
E5	<p>"The visibility we can achieve today through social media is very important for the growth of this area."</p>
E8	<p>"I think that in the future there will be a lot more people online, but across all services. And that ends up being a spiral. I also think that whoever adapts better to these new technologies and manages to discover new opportunities in this field will be more successful."</p>

Table 2: Insights Personal Trainers gave about technologies and social media
Source: Of my authorship

3.4. New Business Opportunities

Within the broader exploration of "New Job Opportunities" arising from the pandemic, the emergence of online monitoring and training sessions stands out as a transformative facet. Online monitoring entails prescribing a workout routine and remotely supervising the athletes' execution through video submissions. This is distinct from online training, which involves live sessions with a personal trainer, offering real-time guidance. Nearly half of the interviewees engage in online monitoring, irrespective of whether they primarily operate in online or in-person formats. This shift reflects a dynamic blend, with some personal trainers highlighting the advantages of online training over traditional in-person formats.

As articulated by E21, "The surprising transition of in-person clients to home-based training, complete with material purchases, underscores the adaptability of clients to the evolving landscape." E17 highlights online monitoring as a novel tool for individuals desiring personalized training but facing constraints in attending in-person sessions. The perspective of E8 adds a nuanced layer, acknowledging challenges in gauging workout intensity and respiratory patterns in virtual settings.

The advantages of online training are delineated by E7, emphasizing "the time efficiency and the liberating flexibility for both trainers and clients." However, it's noteworthy, as pointed out by E9, that the online format may lack the social element integral to gym experiences, and E10 raises concerns about the potential for distraction in virtual settings. These nuances bring forth a multifaceted understanding of the impact of online training.

Shifting the focus to online monitoring, E18 illuminates the efficiency gains, citing "reduced workload through video verification." E6 acknowledges the pre-existence of online monitoring but underscores its underutilization, a sentiment echoed by E11, who describes the meticulous effort in creating comprehensive

workout plans. E18's experience reveals a financial advantage, affirming that "the online format can yield significantly higher earnings," prompting a strategic shift towards an exclusive online focus.

3.4.1 AI in the future of Fitness Industry

Some of the interviewees emphasized the importance of artificial intelligence for the future of personal training. The table 3 below presents some interesting insights:

E21	"Taking these new technologies and AI, the differentiator will always be oneself, and artificial intelligence will never be able to achieve that. There is personalization towards the client and each individual."
E17	"When it comes to the history of chatbot in GPT, I think it won't replace, at least in terms of prescribing the training, attention, and observation. Planning might provide some assistance, but ultimately, your observation as a professional is what will make the difference."
E13	"The training will never be online, even with AI, which they say can replace professions. I believe it will never replace personal trainers."

Table 3: Insights Personal Trainers gave about Artificial Intelligence
Source: Of my authorship

Chapter 4

Discussion

This chapter presents the main findings of the study, addressing the two research questions: “How has the COVID-19 pandemic affected the traditional business models of personal trainers?” and “What innovative business opportunities have emerged within the domain of personal training services as a result of the COVID-19 pandemic?”

Based on the research objectives outlined and the findings obtained from the interviews, a comprehensive discussion of the research objectives can be presented.

However, the interviews revealed significant disruptions to traditional business models of personal trainers due to the COVID-19 pandemic. A notable percentage (52%) of respondents highlighted challenges such as the loss of connection with clients, alterations in training plans, and material shortages. Specifically, 19% of respondents who faced material shortages also reported a corresponding alteration in training plans, while 14% cited difficulty in correcting exercises along with a loss of connection with athletes. Despite these challenges, personal trainers demonstrated resilience by adapting their services to virtual platforms. In fact, 38.1% of interviewees engaged in online training exclusively, while others adopted a hybrid approach combining online and in-person sessions.

The interviews highlighted the emergence of new business opportunities within the personal training sector. Nearly half (48%) of the interviewees perceived a positive reaction from athletes to the pandemic, with the type of training having a significant impact on this response. Personal trainers

capitalized on online monitoring and training sessions, with 38.1% engaging in online training exclusively and others incorporating it into their service offerings. Social media platforms also played a crucial role, with 62% of interviewees acknowledging its impact on client acquisition and retention.

Personal trainers also recognized the importance of technology and artificial intelligence in shaping the future of fitness, with 52% discussing its impact on both the current scenario and the future. Additionally, most interviewees (71.4%) expressed confidence in the continued growth of the fitness industry, emphasizing the irreplaceable role of human connection and personalized training.

Conclusions

Based on the findings from the study, it is evident that the COVID-19 pandemic had a profound impact on the personal training sector, leading to significant disruptions in traditional business models while also creating new opportunities for innovation and growth.

The pandemic forced personal trainers to adapt quickly to the changing landscape, with many facing challenges such as the loss of connection with clients, alterations in training plans, and material shortages. However, despite these obstacles, personal trainers demonstrated resilience and adaptability by shifting their services to virtual platforms, including online monitoring and training sessions.

One notable aspect that emerged from the study was the positive reaction of athletes to the pandemic. Contrary to expectations, many athletes embraced the transition to online training, highlighting the flexibility and convenience it offered. This shift in client behaviour opened new avenues for personal trainers to diversify their revenue streams and explore innovative training modalities.

Technology and social media played a crucial role in driving these changes, with personal trainers leveraging digital platforms to engage with clients and promote their services. The integration of artificial intelligence into training methodologies was also identified as a potential area for future development, offering opportunities for enhanced personalization and efficiency.

Looking ahead, the future of the personal training appears promising, with opportunities for continued growth and innovation. Personal trainers expressed confidence in the enduring relevance of their services, emphasizing the

importance of human connection and personalized training experiences. By embracing technology, social media, and innovative business strategies, personal trainers can position themselves for success in a rapidly evolving fitness landscape.

With this, the pandemic has reshaped the personal training sector, prompting personal trainers to adapt their business models and embrace new opportunities for growth. By embracing innovation and leveraging digital tools, personal trainers can navigate the challenges of the post-pandemic era and continue to thrive in an increasingly competitive market.

The study's reliance on interviews with personal trainers from Portugal may introduce sampling bias, limiting the generalizability of the findings to other geographic regions or cultural contexts. Additionally, focusing solely on personal trainers from the north of Portugal may further restrict the applicability of the results to a broader population. The use of qualitative interviews as the primary method of data collection may have limitations in capturing the full spectrum of experiences and perspectives within the personal training sector. Alternative methods, such as surveys or observations, could provide complementary insights. Despite efforts to maintain objectivity, the interpretations of the data collected through interviews may be influenced by the researcher's subjectivity or biases. Steps were taken to mitigate bias during data analysis, but it remains a potential limitation. The study focused primarily on understanding the impact of the COVID-19 pandemic on personal trainers' business models and opportunities in Portugal. As a result, other factors influencing the personal training sector, such as regulatory frameworks or socio-economic factors, were not fully explored. The study was conducted within a specific time frame, which may have limited the depth of analysis or the ability to capture long-term trends in the personal training industry. Future research could benefit from a longitudinal approach to track changes over time.

Participants may have been inclined to provide responses that they perceived as socially desirable or favourable, potentially leading to an overestimation of positive experiences or an underreporting of challenges.

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Appendix

Appendix A – Interview Script

1. Before the COVID-19 pandemic, were you involved in any form of remote training or coaching with clients, such as online training plans or virtual sessions?
2. When the pandemic and associated restrictions began in 2020 and continued into 2021, how did it affect your personal training services?
 - 2.1. Did you transition to remote training or video calls?
 - 2.2. Were there virtual training sessions?
 - 2.3. Were any videos recorded?
 - 2.4. Did you use social media more?
 - 2.5. How were training plans delivered?
 - 2.6. How was communication conducted?
 - 2.7. Did you increase marketing to attract new athletes?
 - 2.8. Were there any promotional campaigns?
 - 2.9. In terms of training methodology?
 - 2.10. Types of training and equipment used?
3. What technology or tools did you start using or increase usage of during the pandemic to facilitate remote training or coaching
4. How did these technological adaptations impact the effectiveness of your training sessions and communication with athletes?
 - 4.1. How did the athletes react?
 - 4.2. Is that type of training effectiveness and has results?
5. As restrictions were eased and lockdowns lifted, how did your personal training services evolve in terms of format and why did you choose these formats?

6. Looking to the future, how do you envision the future of personal training?
 - 6.1.Can technology play a key role in transforming this fitness sector?
 - 6.2.What are the main challenges and opportunities for personal trainers?
7. Is there anything else you would like to share or any important aspect related to your experiences as a personal trainer during and after the pandemic that we haven't covered in these questions?

Socio-Demographic Data:

- Name:
- Educational background and/or any relevant certifications:
- How long have you been working as a Personal Trainer:
- What type of affiliation or professional agreement do you currently have as a Personal Trainer?

Appendix B – Interviewees and interviews characteristics

Interviewee	Sex	Years of work	Type of working	Date	Duration (min)
E1	M	4	On site	10/10/2023	12
E2	M	5	On site	12/10/2023	18
E3	F	10	On site	13/10/2023	30
E4	M	6	On site	13/10/2023	15
E16	F	5	On site	19/10/2023	Mail
E6	M	9	Hybrid	17/10/2023	45
E5	F	0,5	Online	13/10/2023	37
E8	F	5	Online	19/10/2023	30
E7	F	2	Online	18/10/2023	37
E20	M	5	Hybrid	09/11/2023	48
E14	M	6	On site	21/10/2023	Mail
E10	M	6	On site	20/10/2023	35
E15	M	5	On site	18/10/2023	Mail
E13	M	7	On site	25/10/2023	43
E12	M	4	On site	23/10/2023	25
E11	M	3	On site	23/10/2023	41
E9	F	1	On site	20/10/2023	25
E17	M	7	On site	27/10/2023	32
E19	F	4	Hybrid	07/11/2023	45
E18	M	7	Online	02/11/2023	60
E21	F	2	Online	14/11/2023	48

Table 5: The interviewee and the interviews

Source: Of my authorship