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SCHOOL OF ECONOMICS AND BUSINESS

MASTER THESIS

THE FUTURE OF PERSONAL TRAINER CAREER:

ON-SITE VS. ONLINE

Ljubljana, June 2025 Moussa Ghazaly

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ABSTRACT

This thesis explores the impact of online fitness services on the on-site personal training career, and how the escalation of those services affected the client preferences in their fitness training. In order to address the research question and explore properly the driving forces, this study employs a comparison between Austria and Lebanon, through a mixed-methods, combining interviews with trainers and surveys with fitness trainees from both countries. The results show a notable pattern in the fitness training field, that using a hybrid method, a mix between on-site personal training, online services and technology usages, will provide a better income for the on-site trainers, gyms and fitness studios, and increase clientele satisfaction. The findings also emphasize the integration of online services and technological development in the academic institutions' curriculum in accordance with the fitness market evolution. This research undertaken here has the potential to establish a bridge between the traditional training and the modern one.

KEY WORDS: personal training, personal trainer, online trainer, online services, technology, academy, trainees, clienteles, fitness training, fitness programs, online programs.

SUSTAINABLE DEVELOPMENT GOALS



POVZETEK

Magistrsko delo raziskuje vpliv spletnih fitnes storitev na kariero osebnega trenerstva na lokaciji ter kako je širitev teh storitev vplivala na preference strank pri njihovi telesni vadbi. Za ustrezen odgovor na raziskovalno vprašanje in poglobljeno analizo dejavnikov vpliva, raziskava uporablja primerjalni pristop med Avstrijo in Libanonom z uporabo mešanih metod – kombinacijo intervjujev s trenerji ter anket med udeleženci fitnes vadbe iz obeh držav. Rezultati kažejo izrazit vzorec na področju fitnes treniranja, saj uporaba hibridne metode – kombinacije osebnega treninga na lokaciji, spletnih storitev in uporabe tehnologije – omogoča boljši zaslužek za osebne trenerje, fitnes centre in studie ter prispeva k večjemu zadovoljstvu strank. Ugotovitve prav tako poudarjajo pomen vključevanja spletnih storitev in tehnološkega razvoja v učne načrte akademskih v skladu

z razvojem fitnes trga. Ta raziskava ima potencial vzpostaviti most med tradicionalnim in sodobnim načinom treniranja.

KLJUČNE BESEDE: osebni trening, osebni trener, spletni trener, spletne storitve, tehnologija, akademija, pripravniki, klientelae, fitnes trening, fitnes programi, spletni programi.

CILJI TRAJNOSTNEGA RAZVOJA



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LIST OF ABBREVIATIONS

ACSM – American college of sports medicine
AI – Artificial intelligence
Apps – Applications
AR – Augmented Reality
Aus – Austria
CEO – Chief Executive Officer
COVID – Corona disease 2019
CPR – Cardiopulmonary resuscitation
FIIT – Functional intermediate interval training
IoT – Internet of Things
Leb – Lebanon

M – Mean
PT – Personal training
SD – Standard deviation
ST – Strength training
T1 – Trainer 1
T2 – Trainer 2
Tech – Technology
VR – Virtual reality

1 INTRODUCTION

In recent years, the personal training field has seen a huge growth, driven by the increase in awareness of how important physical fitness is, as well as the impact on one's well-being. This era of the personal training industry has witnessed a new shift, due to changes in the consumer preferences, advancements in technology, and the impact of the global health crises, challenging the traditional model of on-site personal training. Those challenges led to a paradigm shift, with the emergence of online personal training, rapid increase in the amount of mobile training software, implementation of artificial intelligence in our daily routines, virtual reality, wearable technology, biotechnology and robotics. All those options contributed to a revolutionization of how people engage with wellness activities (PerfectGym, 2023).

Moreover, COVID-19 was a digital catalyst for the fitness industry transformation, as social distancing and lockdowns forced fitness lovers to find alternative ways to keep their activities routine. From traditional group classes and gym workouts, to online training, virtual aerobic sessions, mind-body fitness classes and outdoor activities (PerfectGym, 2023).

In addition, the significant shift in the digital fitness industry led to a worldwide fitness phenomenon of influencers and gurus, who motivate and inspire audiences, through websites and social media accounts, such as TikTok, YouTube and Instagram, where they offer online free training programs, new workouts, wellness tips, healthy recipes, plus different merchandise, such as supplements, adjusted programs, books and small equipment (Karol, 2017).

Also, the convenience, cost-effectiveness, scheduling flexibility, accessibility and accountability, provided the opportunity for individuals looking to reach their fitness targets, to diverge to applications and online platforms that offer anywhere and anytime access for training. The majority of the fitness programs are carried on via workout plans, videos, nutrition guided and Zoom calls. All those services pose a notable challenge to the on-site model (Jain, 2022).

Therefore, this big shift raises critical concerns and questions, for the on-site personal trainers. How does the widespread presence of the digital platforms affect the services of in-person training demands? Are the clients more likely to opt for digital coaching over the traditional sessions at the gym? How can the on-site personal trainers face those factors affecting this shift related to the consumer behavior and modify their services accordingly. We are witnessing an era of PT market competition, where the on-site trainers need to consider how they maintain a competitive edge in this big market and how they can differentiate themselves to face the online competition. Meanwhile, as the fitness industry undergoes big transformation, questions concerning the industry standards and ethical considerations arise. Will this industry be able to establish standards and maintain ethical practices that accommodate both online and on-site personal training? (Read, 2023).

Further to the online trainer impact, the on-site industry is affected by the economic downturns, a worldwide recession that led to financial hardships on individuals, affecting the personal training industry and gym memberships, as people tends to cut firstly their gym expenses and personal training sessions, as they prioritize expenses such as food, healthcare and housing (Spraul, 2023). Eventually, the consideration of those issues will extend beyond the direct impact on the on-site personal trainers. The decline of this category of trainers could have an impact on the employment opportunities and traditional fitness facilities, and the overall continuity and productivity of the fitness industry (IDEA, 2022).

The purpose behind this thesis is to obtain a solution for the challenges arising ahead. Additionally, it can serve to assess the impact of these changes on the employment opportunities, job security, and explore possible strategies for on-site trainers, to thrive and adapt in this evolving era of the fitness industry. Moreover, fitness centers can benefit from this work, by gaining insights into the challenges, trends and opportunities that are arising ahead, and take all the measurements needed to adapt their business models in order to stay relevant and competitive in the evolution of the fitness industry. In addition, fitness centers can use the insights of this research to enhance their services, by understanding client's expectations and preferences regarding the online and on-site training, train their staff accordingly and tailor their offers, to meet the diverse clientele needs. This thesis research also will guide both on-site trainers and fitness centers in developing marketing strategies to position themselves successfully in the market, to attract more clients. Besides the fitness centers and on-site personal trainers, educational institutions and certification bodies can benefit from this academical thesis by incorporating relevant insights into their curriculum and thereby ensure through that the future professional trainers are equipped with the knowledge and skills needed to navigate into the changing landscape of the field.

The significance of this thesis lies in its examination of the forces shaping the traditional personal training, how the escalation of training software and online platforms affected the client preferences, competition and dynamics within this fitness career.

The focus was explicitly connected to the on-site trainers' point of view in relation to this research, and if it is considered for them a threat, or an opportunity to expand and grow. Until now, there have been no prior studies made in this field, and this research area remains underexplored despite the growing popularity of this fitness market.

Based on the defined purpose, the following goals were set:

1. To provide a comprehensive overview of the current PT industry.

2. To understand the historical context of the traditional personal training, fitness centers, and explore the evolution of the online alternatives.

3. To analyze the advantages and disadvantages of both on-site training versus the online alternatives.

4. Analyze the advancements of digital effects on the consumer behaviors and market trends related to fitness training.

5. Investigate how the traditional trainers adapt and perceive the increasing popularity of online alternatives.

6. Examine the difference in training methodologies and client-trainer relationship in both scenarios.

Based on the outlined purpose and goals, the research question is set:

– Does the recent digital era mark the end of the on-site personal training careers, and what factors could contribute to it?

To rigorously answer the proposed research question, this thesis methodology will help to analyze and investigate the many-sided aspects of this crucial issue facing the on-site personal trainers' careers, by exploring the motivations, challenges and preferences faced by both clients and trainers in resisting or embracing the digital fitness trend. This thesis's methodology includes two parts: theoretical and empirical. It additionally employs two types of data. Firstly, this literature review was outlined and reinforced with secondary data, based on up-to-date research from libraries and websites, and internal data was collected from fitness centers in Lebanon and Austria. Secondly, primary data was collected by conducting interviews with on-site personal trainers, from both countries, which helped to uncover how well those trainers are prepared in facing the challenges of this era. Additionally, structured survey questionnaires were done with users from fitness centers in Austria and Lebanon, to investigate their point of views concerning this scope of the research.

Hypothesis testing and descriptive comparative analysis methods will be used to analyze the demand for the on-site personal trainer versus the online alternatives in the current era, and what are the factors that influenced client's preferences for one method over the other.

From the practical perspective, this study will emphasize how on-site personal trainers can leverage the online alternatives (online tools and training software) to adapt to nowadays era in the fitness industry.

This Master's research is structured to guide the readers through a connected, in-depth analysis of the subject, consisting of 5 chapters. After the introductory first chapter, the second chapter incorporates the literature review, establishing the evolution of fitness context, both in terms of

industry dynamic and practice, serving as a foundation to understand the contemporary transformations and challenges witnessed within the domain of personal training. The third chapter details the empirical approach, providing the research strategy, collection of data from the CEO of "Inspire academy", Austrians and Lebanese personal trainers and trainees, and the methods of analysis used. The fourth chapter reviews the findings, highlights the theoretical and practical implementations, and elaborates recommendations for advanced research explorations. Lastly, the fifth chapter provides a summary of this thesis key factors and conclusions.

2 FITNESS AND ITS EVOLUTION

2.1 Evolution of the physical fitness and the fitness industry

The fitness industry, as we know it nowadays, is a contemporary innovation that started practically in the 70s, with "jazzercise and jogging". However, physical movement goes back well beyond that, millennia ago, a time when it was a method of life, moreover, a way of surviving. In the primal times, from the beginning of humankind to approximately 10,000 BC, men were urged by an inner voice to run for survival. Physical progress results from practical demands of existence in a wild terrain, but moreover a necessity to evade threats and exploit survival opportunities. To endure in this harsh environment full of enemies and natural obstacles, the "early man" needed to master not only the running, but also, balancing, crawling, jumping, climbing, lifting, throwing, carrying things and fighting. The physical agility and strength of the prehistoric man was not evolved through organized strategies, timetables or programs, but instead, crafted by the needs of instinctive skills (Le Corre, 2023).

Moving from the "Primal" era to the "Neolithic" one, between "10,000 and 8000 BC", the early man switched from being a hunter to a farmer, leading to considerable physical changes. Most of the daily tasks were repetitive, with a restricted range of motion, while most of the "Primal" movements started to be diminished with the farm environment. Moving forward to the "Ancient" times, between "4,000 BC and the Roman Empire" in 476 AD, societies thrived and collapsed through invasions and war. All those societies, from the Assyrians times to the Romans one, used mandatory motor activities to prepare men for battles. The classical training mostly has the same fundamental motions executed in the wildness by the early man, in addition to weapons practices. Physical culture was valued and admired by the ancient populations, and athletic competitions records existed since the Egyptian times, moreover with the Greek one, with the establishment of the "Olympic Games". The Greeks and Romans honored the somatic power and aesthetic, and adopted physical conditioning as an ideological concept and a fundamental component of comprehensive education. The culture of training becomes a "way of life", far beyond practical requirements and necessities (Le Corre, 2023).

As we move on to the “Dark Ages” times, lasted from the “5th to the 15th century”, a disruptive era with the rise and fall of kingdoms and regimes. The primary spread of Christianity teaching faith was to prepare the individuals for the immortality of the soul, and the focus on the body was considered nonessential and sinful. The education during that era was connected mainly to the church, and the main purpose of it was educating the mind preferably, rather than the body (Le Corre, 2023).

Following that, the “Renaissance” era, dating from “1400 to 1600”, which generated a growing interest in health, body, biology and physical education. In 1420, a famous school was opened by an Italian educator, Vittorino da Feltre, who had a particular focus on physical education, beyond the humanities ones. In 1553, a book called “El Libro del Corporal y Sus Provechos” by “Chirstobal Mendez” was the pioneer of his type to discuss the benefits of the physical exercise, where sports, games and exercises are all described and examined from a “medical standpoint”, and moreover, he offers recommendations on how to regain health from injuries arising from these physical endeavors. An Italian physician, named “Mercurialis”, published 16 years later the “De Arte Gymnastica”, which was the apogee of his medical and classical studies, especially in the ancient Romans and Greeks practices related to diet, exercise, hygiene and natural disease treatment. The book was acknowledged as the earliest in sports medicine, and significantly impacted the surge of training approaches and physical education in Europe, emerging two centuries later (Le Corre, 2023).

Shifting to the “Industrial Revolution” around 1760, marks a shift from “manual production” techniques to “machine-based’ fabrication procedures, which generated cultural, societal and economic patterns that led to modifications in individual’s life, work, moves and a number increase in sedentary people. While in Europe, “Johann Basedow” in 1774, established the “Philanthropinum”, focusing on games and physical exercises, including running, wrestling, dancing, riding, vaulting and fencing. Parallel institutions were inspired by this model, and fitness development became more organized and integrated in the “educational curriculum” (Le Corre, 2023).

In 1810 in Germany, Friedrich Jahn, called the “Father of Gymnastics”, played a crucial pioneer role of “physical education”, with his concepts spread across America and Europe. Jahn opened in 1811 the “Turnplatz”, first of its kind, an “open-air gymnasium”, and published in 1816, “Die Deutsche Turnkunst”, linked to his system of gymnastics. Moreover, he developed the “horizontal bar, pommel horse” and promoted the utilization of “gymnastic rings” (Le Corre, 2023).

A Swedish named Pehr Henrik Ling, properly informed about the ancient athletics and Jahn model, evolved the fundamentals of physical development, highlighting the incorporation of ideal physical development with muscular aesthetics. The Swedish structure endorsed “light gymnastics”, concentrating mainly on stretching exercises, breathing, massage, as well as

calisthenics. It has four types: “military, aesthetic, pedagogic and medical”. All the physical motions needed to be executed in a unified manner and correctly, under the guidance of a leader (Le Corre, 2023).

Moving forward to 1847, Hippolyte Triat, founded in Paris an enormous gymnasium for the aristocrats and bourgeois eager for fitness. “Survival of the fittest”, a concept created by Charles Darwin’s in England, provided momentum to the physical culture emerging in that country. As Europe began the 20th century, a French physical education instructor, named “Georges Herbert”, took a leading part in advancing the human movement studies. He initiated his personal “natural methods” which were dependent on natural physical abilities such as running, walking, balancing, climbing, lifting, crawling, jumping and self-defense. He issued in 1912 a book named “Physical education or complete Training by the Natural Method” (Le Corre, 2023).

Similarly, across the Atlantic in the USA, Catharine Beecher was an innovator of fitness consciousness across the country. Being a powerful supporter of the incorporation of movement education in schools, she starts a “calisthenics” program synchronized with music. In 1823, she established the first learning institution for women, while implementing courses of physical education as part of the curriculum. Several “Turners” from Europe migrated to the USA during that period, who became operative in the “American public education system” and impacted it significantly by establishing clubs and instructing gymnastics across different states. Dudley Allen Sargent, was one of the remarkable specialists of the European classical system in the United States, specifically the Swedish and the German ones, created several gymnasium gears, for stamina, speed and muscular power in 1902, and authored many books and academic texts on physical education. The insight key from tracking the improvement of physical education both in the US and Europe throughout this episode is that these systems shared many similarities, mainly linked to practical methods, the “Calisthenics” or “Gymnastics”, and their purpose during that period was not linked for acrobatics, but mainly these methods were essential for military preparation and real-life scenarios (Le Corre, 2023).

The emergence of competitive, specialized sports was marked in the 20th century, as well as the rise of a flourishing and structured “fitness” industry. At the beginning of the 20th century, professor “Edmond Desbonnet”, led the strength training and physical exercise to be more stylish and popular through opening of club’s chain and publishing “fitness journals”. This step is attributed to a solid foundation for Europe training culture, moreover to the fitness industry. Desbonnet had in the peak of his popularity, around 200 fitness training centers, frequented mainly by the European elite society, and then after World War 1, labor class started to have access to those facilities. Meanwhile in the USA, an American distinguished fitness guru named Bernarr Macfadden, recommended a simple way of life, linked to natural environment, with daily physical training, and the exclusion of white bread, coffee, alcohol and tea from an individual's diet. In 1899, he founded the “Physical Culture” magazine, and organized an initial contest for physique

in America, and similar others in 1921 and 1922. Moreover, Macfadden by 1935, had a publishing dynasty with "35 million readers". Desbonnet and Macfadden are considered the fathers of the fitness and health industry known today (Le Corre, 2023).

On the other hand, during the period dated from 1930 and 1940, the body was used as a propaganda tool called "the body image", which targeted physical, spiritual and mental health. This was seen clearly before and after the "Berlin Olympic Games" in 1936, where many sports films were published. During this period, sports and fitness were considered an instrument in recovering people's health, and securing military and political power. One of the leading entrepreneurs in fitness marketing, called Jack Lalanne, opened one of the first gyms in Oakland at the age of 21 years old. He then invented and developed the smith machine, moreover the weight and cable mechanisms of the pulley and leg machines, which are used until now in all the gyms worldwide (Garcia et al., 2023).

The episode between 1950 and 1960 saw an increase in the fitness companies with the concept of shaping the body structure according to the prehistoric conditions of living, when the power of the body was essential. In 1968, was a turning point in the world of fitness when Keene Dimick invented the "exercise bike" to improve his own physical fitness, and then it was spread in a short period worldwide for its importance in developing the physical capabilities. The 1970 is considered the symbol of the new fitness business sector, with the growth of professional trainers, sports magazines, fitness centers chains and private sports clubs. In addition, films caused the settlement of beauty, strength and muscle in the societies, such as "Conan, the Barbarian", with Arnold Schwarzenegger as the main actor. Arnold, who was previously a bodybuilder, was one of the main reasons for the commercialization and growth of this sport (Garcia et al., 2023).

Between 1980 and 1990, the integration of women to public fitness established the same phenomena as men. The widespread use of women fitness programs enables them to be more active in fitness (Garcia et al., 2023). A notable turning point was marked in the 20th century for the personal training concept as it matured into a knowledgeable career. The fast technological growth and the high fitness demand generated for the personal trainer new opportunities. Weight training equipment and treadmills became standards in fitness centers, offering essential tools for personal trainers to improve their client's fitness training. Sports popularity and the rise of "fitness trends" boosted the need and desire for trainers. In addition, the increase in consciousness linked to the fitness advantages and the beneficial effect on health, led people to pursue proficiency and guidance in order to achieve their goals (Foster, n.d.).

The fitness nowadays, is known as "fitness-as-business", with its ongoing aesthetics, supplanting, diversification in home and gym equipment, magazines, DVDs, books and the emergence of fitness apps lately. Over a century, a huge number of programs and methods came out, promising and guaranteeing to get people into great shape within a short period. Exercise has been quantified

and analyzed in laboratories, and a considerable number of data has been collected linked to the impact of motion on the physical human form (Le Corre, 2023).

As we contemplate on the fitness evolution over the centuries, we realize that a good amount of development and awareness came out about the importance of training, yet the general global population is more sedentary than it was in the previous centuries and the most common perspective about training is that individuals need machines for building strength, muscle and endurance, while adding some stretching exercises and supplementations to the whole process, to look good. People nowadays are removed from nature and real life, neglecting what their bodies are naturally structured to perform for thousands of years (Le Corre, 2023).

2.2 The fitness industry worldwide

In today's society, where social trends, culture and demographics take a considerable part, fitness appears as a strong power that affects our way of life. From the growth of fitness clubs to the widespread acceptance of online platforms, the effect of those trends cannot be dismissed. As demographics patterns change, and our societies become increasingly diverse, the fitness industry evolves and adapts to satisfy the interests, requirements and values of “different cultural groups”. In addition, culture, with its broad spectrum of beliefs and practices, operates as an essential part in influencing our choices. Whether it promotes a wellness life or focuses on the look, our “culture background” significantly affects our fitness preferences (Bourrelle, 2023).

Moreover, social trends greatly affect our fitness habits, especially with the emergence of social media and the continuous exposure of influencers marketing fitness, putting pressure to achieve the desired body appearance. The desire for health, fitness and sexual improvements, combined with the social pressure, led to this huge popularity of “fitness trends”. The growing focus on wellness and health, driven by the desire for vitality and longevity, has ignited a “fitness revolution” worldwide (Bourrelle, 2023).

As the Fitness industry is attracting more and more people all around the world, either as gym owners, personal trainers or individuals aiming to change their lives, their fitness level or their body shape, the world market size value of it keeps on increasing. In 2022, the market size was $104.05 billion, $124.7 billion in 2024 and is estimated to reach “$202.78 billion by 2030, with a compound annual growth rate of 8.83%”. In 2020, due to the COVID pandemic, the fitness market revenue declined by 32.45%. However, the online training and fitness apps saw a huge increase during that period. It is estimated that the usage of fitness app in 2024 was 1 over 10 people (9.76%), and it is expected to attain by 2027 a 12.2%, with a market worth of $22 billion, at a compound growth rate of 14.3% (Stankovic, 2024).

In addition, the emergence of some trends impacted the fitness industry market positively, such as the boutique fitness studios, which are small niche gyms, between 74–325 square meters, that focus mainly on group exercises classes (boxing, spinning, Pilates, yoga, etc.) and PT sessions. This type of studio created for the customers a social bond and belonging (Richter, 2024).

Also, the born out of the "Exercise is medicine" idea, which encourages physicians and medical practitioners to have a fitness activity in their assessment and to refer their patients to exercise as a recommendation for their treatment (Newsome et al., 2024). All those variations in trends, affected the fitness industry to grow.

With the growth of the fitness sector comes an increase in the total counts of gym/fitness studios memberships, and the number can vary depending on the population size of each country. It is estimated that 30% of the gym/fitness studios subscribers use personal trainers (Stankovic, 2024). Gyms/fitness studios are not limited to a specific generation's age group, but in contrast, all types are present, starting with Gen Z (1994 – 2022), which is estimated to be around 35% of the gym group, as they also prioritize their fitness health alongside their digital world. Moreover, the Millennials (1979 – 1993), estimated around 45%, embrace wellness and health, and are passionately dedicated to fitness. Also, the Gen X (1964 – 1979), estimated around 14%, combined with the Baby Boomers (1949 – 1963), around 6%, are still marking their attendance at the gyms (Max, 2024). Table 1 provides an overview of the approximate number of membership subscribers for gyms and fitness studios for some countries.

Table 1: Membership subscribers

Country	Population	Approximately Gym/Fitness Studios members
Austria	9 million	900,000–1.35 million
Brazil	203 million	10 million
China	1.4 billion	42–56 million
Lebanon	6 million	180,000–300,000
Slovenia	2.1 million	147,000 -210,000
United States of America	334 million	67.5-83.5 million

Source: Adapted from IHRSA (2023); Euroactive (2023).

Moreover, the PT market size has significantly increased in recent years. It is projected to reach in 2024, around 41.43 billion more than it was in 2023, with $39.06 billion at a compound annual growth rate of 6.1%. The market is expected to grow more in the upcoming years to reach 51.69 billion in 2028. The expected growth in the projected period could be linked to the popularity of personalized fitness training, the rise of VR and AR in fitness, growth in the home training equipment, integration of nutritional guidance, and the existence of online training and telehealth. The forecast period major trends include genetic fitness testing, AI training coaching, usage of

wearables and smart fabrics, expansion in fitness centers globally, nature-based and outdoors training activities.

Also, the widespread obesity worldwide is expected to grow more the demand for personal trainers in the future. Nevertheless, the big increase in the elderly population plays a role in the personal trainers market expansion. A report in October 2022 for the "World Health Organization", shows that the proportion aged 60 and above of the world population increased to 1.4 billion, and it is estimated to 2.1 billion by 2050 (The Business Research Company, 2023). The surge in demand for personal training over the years and the fast growth in popularity, drove to the formation of federations and the creation of various certification institutions.

2.3 What is personal training

2.3.1 Defining personal training

Personal training is a proper, customized approach to fitness and health, where you work face to face with a professional personal trainer to reach a specific fitness goal. It is, in another term, a tailored workout plan to each individual needs, whether it is building muscles, losing weight, increasing endurance, injuries recovery or improving flexibility. The personal trainer considers not only the objectives of each individual, but also the current limitations, medical history and the physical conditions of each one (Royston, n.d.).

2.3.2 Roles and responsibilities of personal trainers

Table 2 presents a detailed overview of the personal trainers' jobs, as it is not only linked to planning their client's fitness exercises routine, but furthermore, they ensure to track their fitness journey, by providing more services such as, valuable advice on lifestyle changes, nutrition, establishing achievable goals, assessing progress, providing continuing motivation and pushing each individual beyond their capacities. In each PT session, personal trainers track their client's performance progression, while aiming to implement discipline and instructing proper techniques to prevent any injuries.

Table 2: Key aspects of the personal trainers' role and responsibilities

Role	Description	Benefits
Mentorship	Journey of encouragement & motivation	Generate a supportive and positive environment
Personalization	Tailoring individual training workout, based on the goals and needs	Guarantee a supportive & positive environment
Performance tracking	Monitoring clients progress	Deliver concrete progress evidence
Education	Providing dietary guidance & teaching proper exercise techniques	Promote a healthy lifestyle & guide properly to avoid injuries

Source: Adapted from Royston (n.d.)

As we delve into the world of PT, we see how this industry has progressed and grown over the previous periods. Nowadays, greater prospects are available for both master trainers and novices surpassing previous records. Nevertheless, with this increase in prospects, emerge an escalation in battling, contests, between the trainers, on how to attract and retain clients. Therefore, to develop a successful personal training career, and to have an impact in the market, personal trainers should cultivate the following commitments and characteristics that occupy an intersection of psychology, applied science, and a balance between personal and professional, such as listener, supportive, respectful, trustworthy, enthusiastic, patient, sensitive and demonstrator (Cortes; 2016).

2.4 Importance and benefits of personal training

Diving into the world of fitness, in this fast-paced industry, with all the different types of training routines, exercises, researches, nutrition and techniques, can be sometimes challenging for people aiming to start new at the gym or to improve their skills and abilities. A certified personal trainer can provide guidance for those necessary elements, with a customized training workout, tailored for each individual specific needs, while delivering a proper technique to avoid injuries, and increase maximum results (Royston, n.d.).

On the other hand, personal trainers contribute majorly to the well-being of the fitness sector. Their contributions led the industry to the current public popularity level. Gym subscription offers, magazines publications, social media and marketing-related webs, assisted also in expanding the industry to that extend, but the diligent effort of those professional's trainers kept the fitness industry ongoing (Spraul, 2021).

Moving beyond the significant importance of personal training, it is essential to mention the numerous benefits of the personal trainer that empower individuals in their fitness journey. Firstly, one of the most important benefits of a personal trainer is the physical benefits that individuals can have. It consists of endurance and strength, where a personal trainer can maximize the client's general health by focusing on different types of training, such as the cardiovascular workouts that improve endurance and boost the health of the heart, enabling individuals to execute physical activities without fatigue, for an extended duration. Additionally, a strength training type can improve body strength and increase muscle mass (Nicole, 2021; Royston, n.d.).

Along with the endurance and strength, comes the weight management, where the personal trainer can help the individuals to maintain a healthy lifestyle, through guiding them with proper nutrition to achieve their goals, by either losing weight or lowering their body fat percentage. Therefore, it reduces chronic disease risk, like cardiovascular illness or diabetes. Moreover, it improves well-being by maintaining an optimal weight and providing all the required nutrients for muscle recovery and energy production (Nicole, 2021; Royston, n.d.).

In the same way, comes the flexibility and posture, where the personal trainer can enhance them through different strategies, such as applying corrective exercises that focus on building muscle weakness and improving instability, utilizing stretching exercises or foam rollers usage to increase the range of motion and flexibility of the muscles, implementing exercises that imitate the individuals daily movements to improve overall mobility and strengthening better movement patterns, reinforcing the core muscles to provide spine support and stability (Nicole, 2021; Royston, n.d.).

Secondly, comes the mental health benefits, which consist of the stress management, where the personal trainer, with his/her expertise guides the individuals through exercises, designed to increase and strengthen their muscles, but moreover, it helps the brain by releasing endorphin hormones that boost mood, combat stress and depression (Nicole, 2021; Royston, n.d.).

In parallel with the stress management, confidence and self-esteem are observed, where the personal trainer can boost individuals' self-confidence, with a proper training and nutritional guidance, as training steers to physical progress which strengthen individuals' belief in their abilities and can be shifted to other areas in life, such as career and daily challenges (Nicole, 2021; Royston, n.d.).

Coupled with stress management and confidence, follows the mind and body connection, where the personal trainer assists their clients in fostering and understanding the mind-body connection through different strategies, such as sharing the success stories of other clients as proof of their qualifications and expertise, providing therapeutic massage that helps in releasing muscle tension, tracking the progress made and inspire ongoing effort (Nicole, 2021; Royston, n.d.).

Thirdly, comes the efficient and customized workouts, where the personal trainer can tailor an individual's training workouts matching their abilities and fitness goals, making the sessions both effective and efficient. The personal trainer crafts those programs while considering the individual's potential limitations, fitness level and objectives. In other terms, an efficient personalized training plan, as individuals won't waste their time doing unsuitable exercises, and they will be provided with the proper motivation and guidance through each exercise correctly to avoid injuries (Nicole, 2021; Royston, n.d.).

Lastly, in discussing injuries prevention, it is necessary to highlight about this point, as the personal trainer, with the extensive knowledge of physiology, human anatomy and sports science, is capable of instructing correct methods of exercises, to ensure safety, and reducing the risk of sprains or strains. Moreover, with the presence of an injury, a personal trainer is capable of setting a recovery plan to get his/her clients on track. It is like possessing a "personal guardian" aiming to achieve the goals of each individual (Nicole, 2021; Royston, n.d.).

2.5 Personal training association and federations worldwide

Over the past couple of years, the fitness industry has expanded rapidly, and it has become more essential than ever for personal trainers to have a certification and an appropriate training. There is an abundance of worldwide certifications in the fitness industry, but the highly desired and respected ones are those of personal training. The certification of personal training verifies the expertise and knowledge of the trainers in the fitness field. Those who possess a certification are known as experts, and have the required skills to support and guide their clients to achieve their fitness targets. For an individual to obtain a personal training certification, a considerable amount of training and education is required, and therefore, a full-spectrum course must be completed, as it covers different up-to-date topics linked to nutrition, exercise science, anatomy, kinesiology, physiology, researches and fitness trends. In addition, to obtain the personal training certification, the individual must complete an external defibrillator and CPR certification. "Accredited organizations" provide such coursework all over the world (Lifem-fitness, 2023). Table 3 provides an overview of the most famous personal training academies in Europe, USA and Lebanon.

Table 3: Personal training academies

Certification body in Europe	Certification body in USA	Certification body in Lebanon
Internation Personal Training Academy (IPTA)	National Strength and Conditioning Association (NSCA)	Sports Performance Institute (SPI)
British Association of Sports and Exercise (BASES)	American Council on Exercise (ACE)	Sports Academy School (SAS)
Register of Exercise Professionals (REPS)	National Academy of Sports Medicine (NASM)	International Fitness Professionals Association (IFPA)
International Confederation of Registers for Exercise Professionals (ICREPS)	National Council for Certified Personal Trainers (NCCPT)	Inspire Fitness Academy (IFA)
European Register of Exercise Professions (EREPS)	National Exercise Trainers Association (NETA)	
Austrian Academy of Personal Training (AAPT)	National Exercise and Sports Trainers Association (NESTA)	

Source: Adapted from Loscin (n.d.); Europactive (n.d.).

2.6 Evolution of the online training and applications software

Online fitness training as we know it nowadays, can be seen as the evolutionary phase of traditional home training. Home training goes back far beyond our decade, as it started in the 1800, with Gustav Ernst, an Orthopedic machinist, who invented a “portable home gym”, with a series of exercises that can be executed with this machine, similar to the modern multi-functions one, as it was made with cords, attached weights and pulleys. After World War two, home fitness emerged in the West, and was driven by the attitude held toward women during that era and the capability for individuals of having television. One of the first icons of broadcasting TV fitness exercises was Jack Lalanne, targeting women, with the idea to maintain a slim, attractive appearance for their spouse. Lalanne training workouts did not require any materials, except for a chair and the individual's body weight. In addition, the home equipment’s “Vibrating thigh belts” and “sauna suits” were brought into the market in 1958, with 100 million units sold in the first six months (Douglas-Walton, n.d.).

Technology pushed again forward later on, with the emergence of the video home system (VHS) player in 1976. The workout tape of Jane's Fonda boomed in 1982, with over 17 million copies sold. TV success wasn't only linked to Fonda during this period, also Richard Simmons in the USA, Elle Macpherson in Australia and Mr. Motivator in the UK, had fame for their fitness shows. The "on-demand model platforms" as we know it today, is the reflection of the traditional home training recognized in 1980. As technology continued to progress, VHS tapes made room for the DVD's and gym equipment became affordable to purchase for the house (Douglas-Walton, n.d.).

The fitness industry, in the early 2000s, experienced the emergence of fitness influencers and trends, influenced by technological progress. Some of the most popular online fitness platforms and trends that changed people's home training ways are P90X, "wearable activity trackers", "Movement for Modern Life", Peloton, FIIT, Mirror, WithU, LES MILLS on-Demand and Online Coaching (Douglas-Walton, n.d.; Stieg, 2019).

Moving from the traditional home training era, to the actual digital revolution in online fitness training, the impact of technology on this sector is highly observed. The technology nowadays is integrated into all types of fields, disrupting every industry, especially the education, health and fitness ones. The awareness in those sectors is increasing massively, and technology presence is playing a big role by providing access to a huge amount of information. VR and home workouts programs have seen a wide spread recognition in modern times. The convenience of home training attracted more trainees' preferences, as it helps in avoiding packed gyms and the lack of driving time. Due to the appearance of online platforms, people have access to a wide variation of training classes and online live instructor's workouts, such as weight lifting, Pilates, yoga, dancing, spinning and high intensity training. Moreover, those platforms give a variation in nutrition assistance, training workouts and capability of monitoring and tracking progress (Spraul, 2023).

Most of the houses nowadays have at least one technological device capable of accessing any fitness app and streaming any designed fitness classes. Those devices include desktop PCs, smartphones, laptops, tablets and netbooks. The advancement of 4G and 5G made connectivity access fast and available. The affordability and the online framework of the customer camera and the flexible methods of receiving any content (apps, zoom and video players) allowed professional fitness experts and large companies to establish an online presence (Douglas-Walton, n.d.).

Also, technology evolution had an impact on the fitness industry. The traditional treadmill, as an example, evolved over the years and has now a big variation of options, such as a built-in TV, body scanner, Wi-Fi, ventilation fans and a heart-rate monitor (Sood, 2022). In addition to the technology impact, availability is another factor that contributed to the emerging of the online platforms. For customers, there is a big variation of choices suitable for all preferences, tastes and price ranges. Moreover, market competition raised the quality and price delivered (Douglas-

Walton, n.d.). In 2023, fitness apps counted 368 million users, and downloaded more than 850 million times (Curry, 2024).

In one word, those fitness platforms were able to give the people what they were looking for. In addition, the presence of an audience facilitated and contributed to the growth of those platforms demands. For the millennials (or generation Y) and the Gen Z, health and fitness are essential daily for most of those two generations, and this can be shown by eating healthier, exercising and less smoking from previous generations (Douglas-Walton, n.d.).

A significant role is played by celebrities in making training workouts popular and forming all types of wellness and health trends. With their number of followers and influence, celebrities act as role models, as they are capable of motivating individuals to adopt a healthy way of living, through various channels, including training workouts or fitness equipment, and promoting diets (Spraul, 2023). Smart devices such as environmental sensors and wearables made the collection of information on user's physical activities possible, as well as their biological metrics such as the blood pressure, heart rate and oxygen saturation in the blood.

The use of smart devices in home training comes with benefits linked to those new technologies and trends, such as the "internet of things" (IoT), which is a connection of network devices that provide personalized services, share and gather data to improve practitioners' experience. IoT devices involve activity tracker, smartwatches, environmental sensors and smart scales. Many of those technological devices showed effectiveness in enhancing health and boosting physical activities. They allow practitioners to monitor different parameters, such as sleep quality, heart rate and posture, providing instantaneous feedback and enable individuals to enhance their lifestyle and training, and moreover, they have the potential to cover a broad range of practitioners in diverse geographical areas (Fabbrizio et al., 2023; Tagliaferro, n.d.).

Next, comes the artificial intelligence (AI), which plays a role in handling a significant amount of data gathered from IoT devices. "AI algorithms" can detect trends and patterns that help practitioners' well-being and health. It can analyze workout information to deliver tailored suggestions, create training workouts, and supervise health conditions to prevent injuries and illnesses. Therefore, the features that fitness apps provide by AI support, give a real-time examination of the practitioner's movement and the ability to identify errors while providing correction for it. In addition, it provides modification of the training plan related to the individual's needs and has the ability to evaluate exercises intensity while giving a suggestion for change if needed, to prevent injuries and health issues before becoming serious. AI helped in increasing motivation in physical training and the link with the wearable devices encouraged individuals to have an active and healthier lifestyle (Fabbrizio et al., 2023; Tagliaferro, n.d.).

Also, the development and implementation of virtual reality (VR) and augmented reality (AR), changed people's way of exercising and interacting with the "tele-exercise" surrounding. VR provides a full engagement with the training experience, enabling practitioners to train in unreal or realistic virtual worlds. On the other hand, AR integrates "digital elements" in the actual environment, improving the workout experience with supplementary information, such as tips, customized goals and statistics. Both provide controlled and safe training conditions for practitioners' skills improvement and learning, as they refine analysis of the performance and feedback and increase practitioners' motivation during the workouts. Apple announced their new AR and VR headset, called "Vision Pro". With this trend in the market and other types, PT have the possibility to develop immersive and interactive virtual fitness events with their clients, from various geographical areas (Fabbrizio et al., 2023; Tagliaferro, n.d.).

In addition, the innovation in mobile applications and fitness exercises platforms, with their simplicity of usage and the capability to access a broad range of features and services. These platforms provide for the practitioners the facilities to have online training classes, track their improvement, share their training outcome with their surroundings and, moreover, participate in virtual competitions. These platforms enable tailored training experience, customized to practitioner's preferences and needs (Fabbrizio et al., 2023; Tagliaferro, n.d.).

Moreover, one of the biggest revolutions in the fitness field is wearable technology, as it gives practitioners the capacity to monitor their performance and health while training. Devices such as training bracelets, smart clothes and smartwatches can gather a considerable amount of data, including sleep quality, heart rate, consumption of oxygen and posture. Personal trainers can track the gathered information about their clients, to assess and provide tailored suggestions and feedback, improving the training efficiency and health. Wearable tech provides quickness and simplicity for participants' usage, and enhances attractiveness to older practitioners (Fabbrizio et al., 2023; Tagliaferro, n.d.).

Furthermore, more trends appear in the fitness market, such as social fitness and gamification. Online fitness is becoming more engaged socially, with apps and platforms encouraging practitioners to share their progression, engage in competitions and challenges, and connect with other training enthusiasts. Gamification, or in other terms, the application of elements and principles linked to fitness, has the capability to increase practitioners' engagement and motivation in online fitness goals, as leaderboards and virtual rewards can be utilized for encouraging individuals to continuously ameliorate and achieve new milestones during their training journey (Fabbrizio et al., 2023; Tagliaferro, n.d.).

Lastly, comes the advancement in robotics and automation, as they are stepping into the field of online training, providing new options for training workouts and individual support. Robots can operate as "virtual personal trainers", offering motivation, instruction and feedback during the

workouts. As for the automation, it can be used to streamline and simplify the guidance of fitness online platforms, improving participants' experience. For example, of “robotic applications” in online training, involves physical therapy robots that guide practitioners through rehabilitation training exercises, and robotic supportive devices that can assist practitioners with physical limitations or disabilities during the training. These robotic devices can be set up according to participants' needs and offer a customized level of support. Moreover, automation can help to enhance the data analysis gathered by fitness platforms and IoT devices. As an example, “machine learning algorithms” can be utilized for pattern identification in the data, and generation of personalized recommendations and suggestions for participants. This leads to improved workout quality and maximizes training results. The automation can also provide support in the maintenance and logistics of online training equipment. As an example, it can monitor the gradual damage and deterioration of equipment and arrange precautionary maintenance measures in order to reduce the risk of failures and malfunctions. The impact of robotics and automation on online training is expected to gain greater importance as these technologies keep on growing, helping in creating more personalized and engaging training experiences. With the evolving of AI, we can see the capability of the robots to adapt and learn to practitioners’ preferences and needs, offering more dynamic and personalized training workouts. Automation and robotics can support the online training to be accessible for a wide audience, taking out some logistic and economic barriers linked to the training out with a human PT or at the gym. The integration of technology with automation and robots, such as AI, IoT, VR and AR can drive new forms of online training, encouraging practitioners to sustain an ongoing dedication to improve their well-being (Fabbrizio et al., 2023; Tagliaferro, n.d.).

As the demand for online PT and fitness platforms services is still growing and furthermore, integrated into the people’s life, so the development and creation of new concepts and trends continue to emerge. What's evident is that the market will continue to evolve and expand, providing more options for participants seeking to train from their house (Douglas-Walton, n.d.).

2.7 On-site personal trainers’ advantages and disadvantages

The on-site personal trainers or known as the traditional ones, provide for their customers the proper training programs and nutritional advice, during their training sessions at the gyms or fitness studios. This option is ideal for individuals looking for a more engaged approach and direct motivation from their personal trainers. This engagement builds a true connection with a trainer as a human being, furthermore, a genuine client-trainer relationship.

One of the primary advantages of the on-site personal trainers is the ears and eyes directly engaged to the client’s goal. Another benefit, is the ability to deliver a proper psychological and physiological assessment for their client’s area of weaknesses, which will help in creating a fully tailored fitness program and, moreover, the capability to react directly to the client’s needs and

adjust it if necessary. Besides this, the on-site trainers can provide a direct guidance and technique correction for equipment usage, which ensure an effective and safe execution for the exercises (Read, 2024).

Nevertheless, there are certain disadvantages to be considered, such as the cost, as on-site personal trainers tend to have a higher price relative to the online personal trainers and software apps, which puts a limit on some individual's budget. Also, the need for individuals to have a physical presence in the same location as their trainers, can be frustrating and challenging for some to be on time, especially if they have a busy schedule, or for some frequent travel. Despite these facts, on-site personal trainers remain an effective and popular way to attain fitness targets and improve health (Read, 2024).

2.8 Online personal trainers'/programs advantages and disadvantages

The rise of e-commerce, online applications and on-demand culture have merged into attractive and unique fitness and health services. Through e-commerce, personal trainers are providing their packages and individuals can access them through portals. In addition, online reviews can provide feedback about the authenticity and validity of the trainers, which is difficult to find in the on-site trainers (Read, 2024).

One of the top primary advantages of online training is convenience. As long as the individuals have internet access and the proper equipment, they can engage in a virtual training or with an online private trainer, at any time and preferable location, without the need to access gyms and pay an additional membership fee. Moreover, online personal trainers are cheaper than traditional ones, as the operating expenses are low, and some trainers are providing personalized training plans without the need to take one-on-one private packages (Trainer Shawn, 2023).

In addition, individuals have access to the online training through a variation of platforms, such as tablets, computers and mobiles, and the capability to go back to previous workouts in just one click. However, this type of training has its drawbacks. One of the considerable obstacles is the accountability, as the personal trainer is not physically available to verify if their clients are performing properly the exercises, specifically if the clients are beginners and needs guidance, and moreover, this type of training may not be an appropriate one for those having medical injuries or conditions, as they require more adapted attention. Additionally, it is hard for clients to build a bond with their trainers, as most of the communication is through video chat, messages and emails, and this lack of bond may lead to a loss of client retention. Another downside of online training is that the individuals have no access to all the equipment available at the gym, and this could reduce the benefits of their workouts and prevent them from achieving their goals. Lastly, online trainers depend significantly on technology. Connectivity problems or technical issues can disturb the sessions and delay the progress (Trainer Shawn, 2023).

Nevertheless, the existence of online training programs, made it possible for individuals unable to have a one-on-one session with a personal trainer, to have the accessibility for either a general population program, or a more tailored program for an efficient price. In addition, these programs are easy to access, as they can be printed or online checked, they don't require any scheduled meeting with a trainer, and they can be performed at the gym or at home. But this convenience comes at a cost, with the absence of "interpersonal communication" and limited interconnection after purchasing the program. Most of the online training programs do not consider the individuals specific goals and medical history, and both, trainer and client are responsible for the lack of commitments to meet the expectation and results of the deal (Read, 2024).

2.9 Life in a post COVID world

Globally, the fitness industry was a flourishing sector before the pandemic, in terms of fitness clubs and members numbers. Even before the pandemic, "technological innovations" and online training existed. The COVID-19 brought the fitness sector growth to an immediate halt, from which it took him several years to recover. In all countries, all unnecessary infrastructures were closed, such as fitness centers and sports clubs, as governments executed strict procedures during the pandemic in order to the virus. It was only allowed to host professional athletes. In some countries, governments compensated around 80-90% of the fitness sector for lost earnings during the lockdown. But in most countries, the impact on this sector was rough "during and after the pandemic", where there were gym bankruptcies, decrease in gym memberships and job losses. Alternatively, there has been a notable rise in online training and outdoor activities and, moreover, an increase in investment into houses training equipment (Rada & Szabó, 2022).

Before the COVID pandemic, there was a broad consensus in the fitness industry that online training would never dominate over the on-site training, and house training would never be as popular and effective as the gym one. But at the beginning of March 2020, the proportion of online training increased, and numerous companies saw an opportunity to invest in this online sector (Rada & Szabó, 2022).

After COVID-19, several research firms, researchers and organizations have recognized the most essential trends, and the three primary ones were: technology importance (Wearable, apps, etc.), virtual/online training and outdoor training. According to the "International Health, Racquet & Sportsclub Association", despite the hard times caused by COVD-19 to the fitness sector, the health now is seen as a priority more than before, and more effective changes such as the adoption of online training, programs streamlining, outdoor fitness training, "members retention efforts", safety measurements, cleanliness and air quality, created a more mature sector (Rada & Szabó, 2022).

3 EMPIRICAL STUDY OF ON-SITE VS ONLINE TRAINERS

3.1 Research design

As this research aims to analyze the impact of online services on the on-site trainers' careers between Austria and Lebanon, interviews and surveys were conducted and examined through a comparison analysis, providing a rich qualitative and quantitative empirical evidence that shed light on the fitness market.

This section of this research involved 14 interviews with on-site personal trainers' (7 trainers from Austria and 7 others from Lebanon), an interview with "Inspire academy" CEO, specialized in educating and training future personal trainers, and an online survey with 63 fitness trainees (30 trainees from Austria, and 33 others from Lebanon).

The personal training questionnaire in Austria was faced by an unresponsive participation from the trainers', which limited the number, whereas in Lebanon, the participation was also limited, due to the war there and the unstable situation the country is facing. Also, for the same reasons, the surveys were affected by the number of trainees, and therefore, the analyses couldn't be done on a larger scale.

3.1.1 Interviews

3.1.1.1 Purpose

The goal of having the interviews with the personal trainers from two different countries, is to make a comparison of the impact of online training and technology from two different countries perspectives, to inspect deeply between the differences and similarities in both points of views, and to examine profoundly their opinion about the transformations happening in the fitness industry, as some of them have been in the training field for years. Analyzing the following countries, from different continents, can provide us with an in-depth analysis, if the impact applies dependently or universally. The chosen trainers were colleagues, friends of friends and random trainers from several gyms.

To expand the examination beyond the operational level, the CEO and founder of "Inspire academy" was interviewed to deliver a comprehensive analysis of the impact of online services on the fitness industry from his point of view, furthermore, to provide a profound understanding of the personal trainers current state market, and how the academy has adjusted its services in accordance with the increase in fitness technology, and the growth of the online trainers career.

Comparative sampling analysis was selected for the personal trainers' interviews as a sample method. According to Juan Kaluza, comparative analysis is defined as "a side-by-side comparison

that systematically compares two or more things to pinpoint their similarities and differences. The focus of the investigation might be conceptual—a particular problem, idea, or theory—or perhaps something more tangible, like two different data sets" (Kaluza, 2023).

3.1.1.2 Structure

The personal trainers' interviews were structured into 2 parts, featuring 7 sections with 24 short and open questions in total, designed to uncover in-depth understanding of the on-site trainers' approach and interactions aligned with the research literature review (interviews questions are provided in Appendix 2). The first part holds 2 sections that gathered general information about the trainers', which presented a foundational insight of their background. The second part holds 5 sections, that delve into 5 detailed core topics, compromised in 17 questions:

- Impact of the online services
- Comparison between the online training versus the on-site one
- Impact of COVID-19 on their daily job
- Services adjustment to changes
- The future of the on-site trainers.

The primary data was documented through different interview models, such as semi-structured ones (face to face), telephone interviews through WhatsApp calls and text-based interviews by emails and through WhatsApp platforms (in English and German forms). In addition, a Google questionnaire-based interview was created for some Austrian trainers', in German language, as it was easier for them to fill it. All the interviews were conducted between the months of August and October 2024. A full interview transcript is provided in Appendix 3, including all the answers of 2 trainers, one from each country.

All the trainers were affirmed of their anonymity, to guarantee confidentiality and encourage them to honest responses. Before each interview, the trainers were briefed on the research study objective, the voluntary aspect of their participation and the measures in place to ensure the protection of their personal information. They were notified that their names and information will not be revealed and that their answers will be used exclusively for these research purposes. This introduction contributed to developing a trust with them and enabled a frank discussion. (Trainers' information sheet is provided in Appendix 1)

The sample consisted of 7 on-site trainers from Austria, including 2 women and 5 men, aging between 22 and 44 years old, and 7 on-site trainers from Lebanon including 2 women and 5 men, aging between 23 and 46 years old, at the time of the 14 interviews in 2024. The interviews conducted highlight a large dominance of the men group, which is linked to the convenience sampling method adopted.

In addition, the interview with the CEO of “Inspire Academy” was held through a Zoom video meeting for 1 hour in total, in September 2024. The interview held 14 semi-structured questions that gave us an insight about the academy services and functions. It started with the academy vision and mission, followed by the number of graduated trainers and the working academic instructors. In addition, we explored the types of certifications and the period it takes to complete each one, while also discussing the academy adaptation to the rise of online personal training. Moreover, we addressed the impact of COVID-19 on the personal certification demands during and after the pandemic. Furthermore, we looked into the impact of online training and online programs on the on-site trainers and how on-site trainers can compete with the online trainers offers. As the interview progressed, we examined the future of the academy in the upcoming years and if the rise of the technology constitutes a threat. At the end of the interview, the CEO concluded with advice to the on-site trainers in the face of the online trainers and programs.

An overview of the trainers’ sample data is provided in Table 4, that includes for each trainer the following parts of information: country, years of experience, level of education, the current employment state, date of the interview, duration and interview method.

Table 4: Sample characteristics

Trainer	Country	Years of experience	Education	Employment status	Date	Duration	Interview method
1	Austria	10	PT's certifications	Self-employed	16/09/2024	-	Text-based
2	Austria	12	Master's and PT's certifications	Employed	24/09/2024	11 minutes	Semi-structured (face to face)
3	Austria	14	Bachelor's	Self-employed	18/09/2024	-	Text-based
4	Austria	15	Bachelor's	Self-employed	23/09/2024	-	Google questionnaire-based
5	Austria	7	High school	Employed	25/09/2024	-	Google questionnaire-based
6	Austria	3	High school	Employed	24/08/2024	15 minutes	Semi-structured (face to face)
7	Austria	16	PT's certifications	Self-employed	10/03/2024	-	Google questionnaire-based
8	Lebanon	5	Bachelor's	Employed	17/09/2024	-	Text-based
9	Lebanon	3.5	PT's certifications	Employed	22/09/2024	-	Text-based
10	Lebanon	3	Bachelor's	Employed	17/09/2024	-	Text-based
11	Lebanon	17	Master's	Self-employed	18/09/2024	18 minutes	Telephone interview
12	Lebanon	13	Bachelor's and PT's certifications	Employed	20/09/2024	6 minutes	Telephone interview
13	Lebanon	4	PT's certifications	Employed	20/09/2024	9 minutes	Telephone interview
14	Lebanon	10	Bachelor's and PT's certifications	Employed	17/09/2024	-	Text-based

Source: Own work

3.1.2 Surveys

3.1.2.1 Purpose

The goal of having the survey with gyms/fitness studios trainees from Austria and Lebanon, is to make a comparison of the impact of online services and technology, on their fitness training routines, and their preferences between on-site trainers and online options, from two different population perspectives. Analyzing the following countries, from different continents, can provide us with an in-depth analysis, if the impact and training preferences apply dependently or universally.

The survey was structured to gather both quantitative and qualitative data from the trainees' standpoint, based on the literature review and on-site trainers' questionnaire.

To identify the recurring themes, the responses from Austria and Lebanon trainees were analyzed, and then compared. To analyze the quantitative data collected from the surveys in a structured manner, for the core topics, the Inferential comparative analysis was adopted.

Inferential comparative analysis was selected for this study as a sample method. It is defined as "the aim to compare two or more groups to determine if there are statistically significant differences between them regarding certain parameters. In a comparative study, the null hypothesis (H_0) assumes that there are no differences between the groups being compared. The alternative or research hypothesis (H_A) suggests that there is a difference, indicating a rejection of the status quo (null hypothesis)" (Charan, n.d.).

In addition, the survey consists of linear scale ratings, checkbox and multiple-choices questions. The analysis follows an organized approach, starting with "descriptive statistics" before using the "inferential statistical tests", such as independent sample t-tests or p-values.

Independent sample t-test is defined as a "way to compare the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different" (Kent State University, n.d.).

The assumption of equal variances not assumed was made to conduct the independent t-test. It is defined as "when the two independent samples are assumed to be drawn from populations with unequal variances" (Kent State University, n.d.).

3.1.2.2 Structure

The trainees survey questionnaires include 25 questions of multiple-choice answers, checkboxes, short answers if needed and a linear scale format, divided into 2 parts. The first part gathered general information about the trainees, whereas, the second part includes 8 detailed core topics of the survey:

- Fitness background

- Current training habits
- Training preferences and satisfaction
- Motivation and effectiveness
- Social interaction and convenience
- Cost relative to training quality
- Options influencing trainees' preference
- Future preferences and encouragement

Considering the comparison between two countries' trainees, two online surveys were held in two different language forms: English form for the Lebanese people (as most of the population are bilingual or trilingual) and German form for the Austrians. The conduction of the surveys was done using "Google Forms" and titled "Impact of Online Trainers/Fitness apps/Online programs on On-site Trainers (at the gym/fitness studio) Careers and Client Preferences". Both survey data were conducted between the months of September and October 2024. The survey questionnaire transcript is provided in Appendix 5.

In the introduction of the survey, the trainees were affirmed of several points to develop trust with them and enable honest answers: the survey purpose, the estimated time, the confidentiality, the voluntary participation, and the consent.

The sample included 63 trainees (30 trainees from Austria and 33 from Lebanon), consisting of friends and random trainees from several gyms.

Table 5 provides an overview of the sample data, that includes trainees' information: country, gender distribution and age.

Table 5: Sample description

Demographic	**Austria**		**Lebanon**	
Total trainees	Total trainees		Total trainees	
Female	66.7%		54.5%	
Male	33.3%		45.5%	
	Female	Male	Female	Male
Age between 15-24	15%	20%	5.6%	6.7%
Age between 25-34	55%	40%	11.1%	40%
Age between 35-44	25%	30%	44.4%	40%
Age between 45-54	-	10%	38.9%	13.3%
Above 55	5%	-	-	-

Source: Own source

3.2 Research results

3.2.1 Trainers' and academy CEO perspectives

To identify the recurring themes in a structured manner for the Austrian and Lebanese trainers' perspective, their responses were analyzed, and then compared. Additionally, the interview with the CEO of Inspire academy, provides a broader comprehension of the online services impact, from an organizational perspective. The following subchapters are split into 6 sections, organized as follows: the first 5 sections focus on the central topics of the trainers' discussion, and the final section display the interview with the academy CEO. The interview with the CEO starts with a contextual summary of the academy, before transitioning into deeper elaboration on the initial research topic.

3.2.1.1 Impact of the online services

The responses from the Austrian and Lebanese trainers regarding the impact of online services reveal both similarities and differences across the 3 analyzed aspects in this section, as some see it as a destructive turning point in the fitness field, and others perceive it as constructive.

For the first aspect, in terms of the impact on the fitness industry and on the on-site trainers, both responses from Austria and Lebanon, reveal similar trends. 6 out 7 (85.71%) Austrian trainers and 6 trainers out 7 (85.71%) Lebanese trainers, predominantly expressed major concerns of the online services impact, with many emphasizing that the rise of online services can disturb and lower the quality of the personal training field, as clients will not be able to achieve their goals properly, especially for clienteles with special health cases. They frequently cited that the lower pricing of the online features makes it harder for the on-site trainers to earn a decent amount of money. Additionally, it makes the people more knowledgeable about fitness exercises, as it has a broad selection of training options, regardless the fact that it does not cover a proper technique as it is done with an on-site trainer, which can impact on people desiring on-site trainers services, and some may no longer go to the gym, as they prefer to stick to home training, especially those who have a limited time during the day. However, 2 trainers, one from each country, showed a more positive stance. For Trainer 3 from Austria, the online services are an opportunity for the fresh trainers starting in the fitness field, to reach a wider number of population and build clientele, while Trainer 10 from Lebanon showed in the online service an opportunity to provide an additional type of service to the on-site career.

Regarding the second aspect concerning the impact of online trainers on their day-to-day work and clientele, a shared standpoint emerged, as 4 trainers (57.14%) from each country agreed that the online trainers had no impact on them, as their on-site services are different, and for the clientele accustomed to on-site trainers' services, it is difficult to change for them this fact. On the other hand, 3 trainers (42.86%) from Austria and 1 trainer (14.29%) from Lebanon were affected by the impact of online trainers, with a decrease in their clientele

numbers, as those clients opted for less expensive options. While in Lebanon, the 2 remaining trainers (28.57%) were affected negatively during the COVID-19 crisis, but things went back to normal in the post pandemic period.

As for the last aspect, regarding the perception of online services popularity as a threat to their career, the responses reveal both convergence and divergence. 5 Austrian trainers (71.43%) and 4 Lebanese trainers (57.14%) saw in it a threat to their career, as it takes more effort to attract and convince clients to take personal training sessions at the gyms or fitness studios, while on the other side, the online services are more commercial and easier to sell with few social media videos. Also, people nowadays have the possibility to reach out for universal trainers and to access all types of apps, for a cheaper price than having an on-site trainer. Additionally, several trainers from both countries expressed a range of different opinions on the matter. Trainer 3 from Austria, saw it as an opportunity to move to the online services in the future and as for Trainer 2 from Austria, the online services do not present a threat, as the types of services provided by the on-site training, cannot be done online. Trainer 10 from Lebanon does not perceive it as a threat, as he includes the online training, alongside his on-site one. Also, 2 Lebanese trainers (28.57%), believe at this time, there is no threat associated with the online services, but it will be eventually, especially when it is gaining popularity, and the influence of artificial intelligence will increase the people's desire for online services.

3.2.1.2 Comparison between online vs on-site training

The responses from the Austrian and Lebanese trainers regarding the difference between online and on-site services reveal both similarities and differences across the 3 analyzed aspects in this section, as all the trainers see the beneficial perspective of their services and the associated harmony toward elderly, novice, and clientele in rehabilitation sessions. In terms of the first aspect, regarding the advantages and disadvantages of their services compared to the online ones, both showed a close resemblance associated with the benefits they offer to their customers. According to the Austrian trainers' perspective, on-site trainers can provide better services, such as the motivation, supervising high-risk exercises, the follow-up, hands on guidance and more engagement during the session, as it is possible to learn new movement and correct significantly more mistakes, especially in more technically demanding exercises, than having a camera or a video. Additionally, on-site trainers can build a closer face-to-face relationship with their clients, and therefore, it helps to build a deeper trust between both sides.

As for the Lebanese trainers' standpoint, on-site trainers can enhance the quality of the services they deliver and the outstanding experience they can provide to their clients, with greater coherence and higher quality of specialized programs, progress tracking, adaptive variations and providing the right tips and comments while correcting the exercises. In addition, the direct interaction with their clients shapes the sense of passion and affection toward them, and moreover, it helps to understand on a closure look, their frame of mind.

Conversely, trainers from both countries highlighted the challenging side of their career, where it possesses a significant amount of time-consuming, while the online training is more time efficient, as the trainers are able to train more than a client at the same time with a cost-effective option. Also, less physical effort is needed, where the online trainers don't have to maintain a standing position for an extended period of time. Notably, the accessibility of the on-site trainers, their availability and the requirement to have a physical presence, makes it hard for the clients to manage their time, while with the online services, it is way easier.

In examining the second aspect, on which types of clients can benefit more from the on-site personal trainers, a contrast in the Austrian trainers' opinions emerged. For some, the presence of on-site trainers is requested for advanced clientele, as they can copy smoothly difficult movements patterns and the trainers can assist them with lifting if needed. Whereas others think that beginners, elders, dispassionate clientele and injured ones need specific supervision and rehabilitation. Also, Trainer 7 from Austria, mentioned that many people prefer personal contact for social reasons, and they can adopt movements from others nonverbally. Much like the Austrian point of view, for the Lebanese trainers, all types of clienteles can benefit from the on-site services, especially the less experienced ones in the fitness field, the elderly, and for those seeking rehabilitation after an operation or an injury. Also, clientele who are seeking motivation, interaction and affection, as the presence with face-to-face trainers will be more effective.

Finally, regarding the third aspect related to the strategies needed for competing against the online services, all the Austrian trainers (100%) and 4 of the Lebanese ones (57.14%) believes that this can be achievable by increasing customer loyalty through interaction, motivation, professionalism, knowledge, exemplifying a healthy lifestyle and to possess an adequate emotional intelligence to make their clients feel comfortable while communicating with them. Also, face-to-face contact will provide the clients with confidence and better explanation for correct execution. Additionally, Trainer 4 and Trainer 7 from Austria suggested that training a customer with another one, will keep the motivation high and help to achieve both goals together. Moreover, Trainer 9 of Lebanon added that by providing a lower cost training sessions or packages can help in competing against the online services. Opposing the following point of views from both countries' trainers, 3 Lebanese trainers (42.86%) believes that on-site trainers cannot compete with the online ones, as online trainers have many more benefits, such as time efficiency, location distance that on-site clients face, versus the online training, where you just need a good internet connection. Also, online trainers get the full price amount of the sessions for themselves, while as for the on-site trainers, they are getting a certain commission from the club they are working for, or they are required to pay a specific fee for each training session conducted for the gym's owners, in case they don't possess their private fitness studios.

3.2.1.3 COVID-19 impact

The responses from the Austrian and Lebanese trainers regarding the impact of COVID-19 on their career and their clientele choices reveal both similarities and differences across the 3 analyzed aspects in this section, as the pandemic had a challenging impact on the fitness industry worldwide, nevertheless, on the on-site trainers' daily sessions and financial earnings. In terms of the first aspect, regarding the impact on their services and their clientele habits, 4 of the Austrian trainers (57.14%) were affected badly after the close of gyms and fitness studios, which led to an unmotivated number of clients, and therefore, a big loss in their number. On the other hand, 3 of the trainers' (42.86%) adapted to the situation, and started to provide online training sessions to their clientele to keep them motivated and not to lose the track. Trainer 7 from Austria mentioned that the fearmongering and propaganda of the government measures, made the people paranoid. Comparably, 7 of the Lebanese trainers (100%), who work either as a freelancer or have their own fitness studios, were affected badly by the COVID-19, as their clientele were fearful of being in a gym/fitness studio full of people, or leaving their homes. In addition, the country had lockdowns for a period of time, and during this period, Lebanon was facing a big economic crisis which compounded this impact. Trainer 12 from Lebanon, explained how tough the situation was:

– "I was exhausted, exhausted from the clients, from the concept that I am sick, or I might get infected and from the country's crisis".

In examining how the trainers' adapted their services after COVID in the second aspect, Trainer 3 from Austria (14.29%) remained giving online services with the on-site one and gave bigger importance to social media. While the others (85.71%) refused to adopt or include any online services in their sessions. Similarly in Lebanon, after the pandemic, everything went back to normal, but 3 of the trainers (42.86%) kept doing online sessions, and 2 out of those 3 also provided online programs, additionally to their on-site services. Yet, Trainer 11 from Lebanon, saw after the pandemic a change within the training peak hours' time (18:00-20:00), as many of his clients continued to work online, so they had a better way to manage their training sessions during the day.

Lastly, concerning the third aspect, related to the impact of COVID on trainees' choices and habits, all the Austrian trainers (100%) think that the pandemic had a long-term impact on trainees' choices and habits, especially for the online services, as it gives them the opportunity to pay affordable fees, instead of having a gym membership and an on-site trainer fee. In addition, the online services canceled the core idea of driving to reach the gym or the trainer. Similarly, 3 of the Lebanese trainers (42.86%) saw that the pandemic had a long-term impact, especially for the online personal training concept, as it wasn't popular before, as it is now. While the 4 others (57.14%) think that it didn't affect much, as trainees prefer an interactive session, face-to-face with a trainer, instead of talking to a monitor.

3.2.1.4 Adjusting to changes

The responses from the Austrian and Lebanese trainers regarding the adjustment of their services in response to the transformations occurring and to the growth of technology in the fitness sector reveal both similarities and differences across the 2 analyzed aspects in this section. In terms of the first aspect, related to the business model adjustment, Trainer 3 from Austria (14.29%) and Trainers 8, 10 and 13 from Lebanon (42.86%) kept providing online sessions, alongside their on-site career, in order to improve and grow their services with the changes around, whereas the other trainers had a total rejection for the idea. Trainers 1, 6 and 7 (42.86%) from Austria and Trainers 13 and 14 (28.57%) from Lebanon expressed similar views regarding the integration of technology in their services to enhance efficiency and record their clientele progress.

As reflected in the trainers' responses regarding the second aspect, switching from on-site trainers to focus only on online services, due to expenses reduction, only Trainers 3 and 6 from Austria expressed their will to do it, as both of them prefer to work from home. Notably, all the other trainers had a total rejection of this idea, as for them, on-site training is more productive, interactive, and as they encounter numerous clienteles with special cases, their one-on-one presence is required.

3.2.1.5 On-site trainers' future

The responses from the Austrian and Lebanese trainers regarding the on-site trainers' future in light of recent changes reveal both similarities and differences across the 3 analyzed aspects in this section. In terms of the first aspect, linked to the on-site trainers' career future, there was a notable divergence between the respondents of each group, with some were skeptical about it, while others showed neutral perspectives and some expressed an optimistic outlook. 3 of the Austrian trainers (42.86%) and 1 Lebanese (14.29%) believes that the demand for on-site personal trainers will decrease in the future, as people are more engaged into the fitness field, and they are becoming a self-private tutor, especially the young generation, with the large online usage and widespread of social media, furthermore, the ongoing trends toward AI. In addition, 3 of the Austrian trainers (42.86%) and 3 Lebanese (42.86%) reveal predominant views, as they mentioned that things will remain stable because the demand is always there and the online services have only added a different option to the personal training sector. Opposing those views, 1 Austrian trainer (14.29%) and 3 Lebanese (42.86%) believe that the demand will increase, but not at a rapid pace, because of the population's lifestyle, and preferences toward the on-site services, furthermore, the benefits that it provides.

In examining in the second aspect, about the factors that could establish the future success of on-site trainers in the face of online alternatives, both countries acknowledge the needs of several factors that trainers should be empowered with, to face the challenges ahead. For the Austrian trainers, on-site trainers should be supplied by discipline, commitment, strong

personality, to demonstrate a high standard of work, building trust and to possess more education. Likewise, for the Lebanese trainers, on-site trainers should be equipped with high motivation, gym spirit, proficiency and quality of services. In addition, trainer 4 from Lebanon proposed to include digital programs and apps that follow up with the clientele, to access their progress and body measurements.

Lastly, as it relates to implementing a hybrid model in personal training services, there was a noticeable agreement between the majority of the trainers from both countries. 12 trainers in total, 6 from each country, see that things in the future will lead to a hybrid model, connecting the on-site services with the online ones, as they will be forced to move with it with the market demand. However, they consider that having a few on-site sessions in the beginning, is necessary to collect data of the clients, technique adaptation and exercises loading. Opposing this view, 2 trainers, each from one country, rejected the idea of a hybrid model.

3.2.1.6 Organizational insights: The CEO interview

The CEO started by outlining the academy history, as it is a Lebanese vocational school, founded in 2011, offering vocational programs for personal trainers along with continuing education, with the mission to provide the highest quality of education to the learners and to support them in their journey. The academy operates in Lebanon and Dubai, and the CEO is planning to expand to Saudi Arabia in the near future. Then, the CEO moved on by describing the academy educational programs, as it offers personal training and fitness facility management certifications, with other continuous courses, such as pre- and post-Natal, ACL injury prevention, sports nutrition, sports injuries, special population, cancer and autism, provided in Arabic and English languages, and accredited from different parties and organizations.

Following this, the CEO discussed the academy members and academical instructors. The academy has received around 3500 students since 2011, but not all of them graduate. The number of active members who are renewing their certifications is less than 250. Many of them left the industry because they thought they were going to make a lot of money, but unfortunately, they were surprised at how demanding the job is. And on the other side, some are still working in the field, but they did not renew their certification, because of laws absence that requires the trainers to do that, especially in many countries, such as in Lebanon, Saudi Arabia, Bahrain, Kuwait, Qatar. Until now, many of them are working on a standard. The academy comprises several types of instructors, such as medical doctor, licensed dietitians, exercise physiologists, exercise scientists, physical therapists, physical education teachers, and researchers in the fitness field.

The CEO then explained about the academical programs the academy provides. The normal time to finish the personal training certification is between 3 and 6 months, depending on the expertise and knowledge of the learner. The curriculum of the personal training

certification provides learners with knowledge about nutrition, coaching behavioral change, evidence-based practice coaching, physiology, anatomy, biomechanics, practical exercises, techniques, methods, flexibility, agility, fitness testing and program design, injuries, special population strength and conditioning and business. To receive the personal training certification, the learners have a theoretical and a practical exam, 80 hours of internship to complete, and to possess a first aid certification. In addition, in order to accommodate the rise of the online sector, the academy provides a workshop called online delivery of personal training sessions, that helps trainers to understand what they can do to assess an exercise from different directions, and how to use a videographer properly to correct exercises. Additionally, the workshop teaches the learners about mobile apps and how they can monitor and track their clients' results.

The conversation next moved to the COVID-19 period, where there was a rise in demand for personal training certification globally. In 2020, the number of fitness organizations in the UAE increased from 11 to 25 in one year. Many people wanted to become personal trainers because they started having in mind the thought that I can work anywhere and still make a lot of money. Unfortunately, when people chase a job just for the sake of financial profit, most of the time they will not succeed, as they don't pay enough attention to the demand of the job or if they're passionate about it. So, that's why there was a rise in demand, but then this demand dropped dramatically, especially in the last year or two. Also, during the COVID period, the academy started to provide hybrid options, while abiding in the classrooms by the global guideline's precautions.

Next, the CEO emphasized positively the rise of online training, as he sees in it a more option for the people, and an expansion to the market. As for the online programs, in his opinion, they provide ideas for trainers, to learn from others, their methodology. But on the opposite side, it does more harm to the clients than good. For people who want to improve health, fitness, to lose weight or gain muscles, a program is not enough. They need mentorship and someone to push them beyond their limitations. People need the human interaction and connection that the on-site trainers provide, and on the contrary, sometimes the online training can be a nightmare, especially when there are connection issues. For him, the academy will not be threatened by the uprising of technology, as he sees in it a support for the academy, in terms of language, programming ideas, business planning, marketing and management.

Lastly, as advice from him to the on-site trainers, they need not fear the rise of online services, but to take it as an advantage for them, as it helps them in their career. There will always be a demand for personal training, as people want results, and seek care and attention (the full interview is provided in the Appendix 4).

3.2.2 Trainees' perspective

In order to identify the recurring themes in a structured manner for the 8 core topics, the responses of the Austrian and Lebanese were analyzed, and then compared. The following subchapters are split into 8 sections, each one focusing on the central topics of the survey discussion.

3.2.2.1 Fitness background

The response from the Austrian and Lebanese trainees regarding their fitness background and usage of fitness technology reveal both similarities and differences across the 2 analyzed aspects in this section. In terms of their fitness readiness, ranging from beginner to advanced level, summarized in Figure 1, the choice's distribution concerning the fitness level between Austrian and Lebanese trainees, share a similarity between both countries gender, where the larger proportion of Austrian (80%) and Lebanese (72.2%) female's trainees revealed an intermediate level of training. Whereas, for the male's trainees, both of the country's larger proportions are in the intermediate level with 80% for Austria and 53.3% for Lebanon. Conversely, we see more advanced trainees from Lebanon in comparison with the Austrian ones.

Figure 1: Assessment of fitness level

Figure 1a: Austrian females

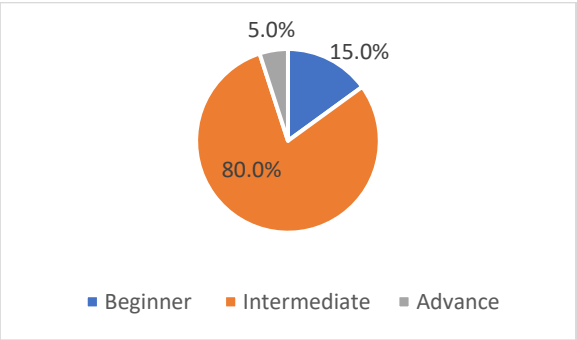


Figure 1b: Lebanese females

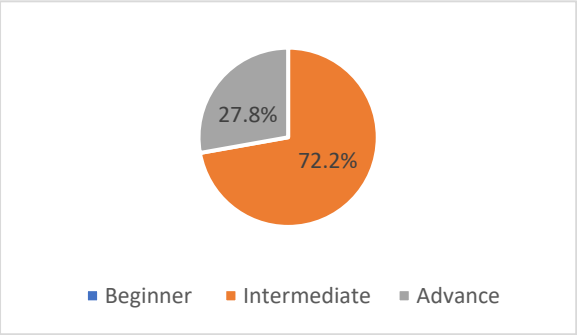


Figure 1c: Austrian males

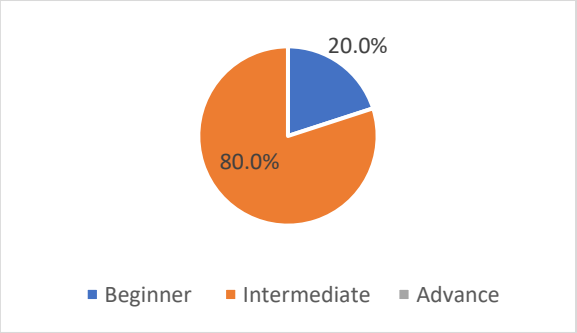
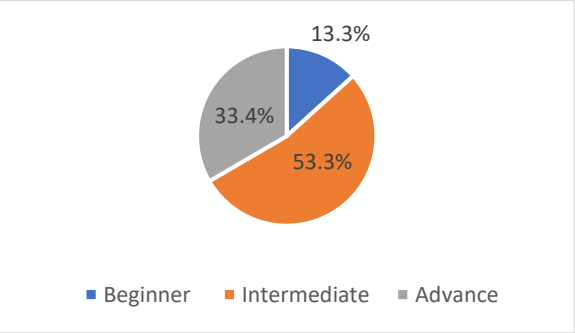


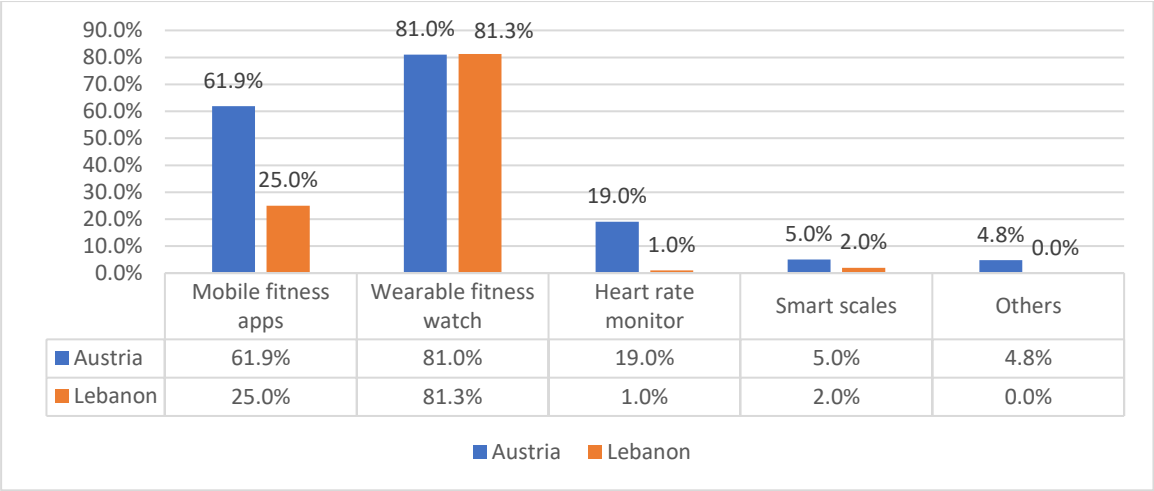
Figure 1d: Lebanese males



Source: Own work

As for the second aspect, related to the results of technology usage, indicates that 70.0% of Austrian and 48.5% of Lebanese trainees, are using technology during their fitness training. As trainees were allowed to select multiple options summarized in Figure 2, providing a comparative overview of the preferences' overall distribution between the following tech options. Wearable fitness watches, such the Apple Watch and Fitbit, emerged as the most desired choice, with 81.0% of Austrian and 81.3% of Lebanese trainees selecting this option. Conversely, Austrian trainees expressed a higher preference for the mobile fitness apps, the heart rate monitor and the smart scales. Additionally, one Austrian trainee added the usage of a bike computer to the training, with the high-tech it provides. Notably, 30% of the Austrian and 51.5% of the Lebanese trainees showed a deficiency in using fitness tech.

Figure 2: Fitness technology usage



Source: Own work

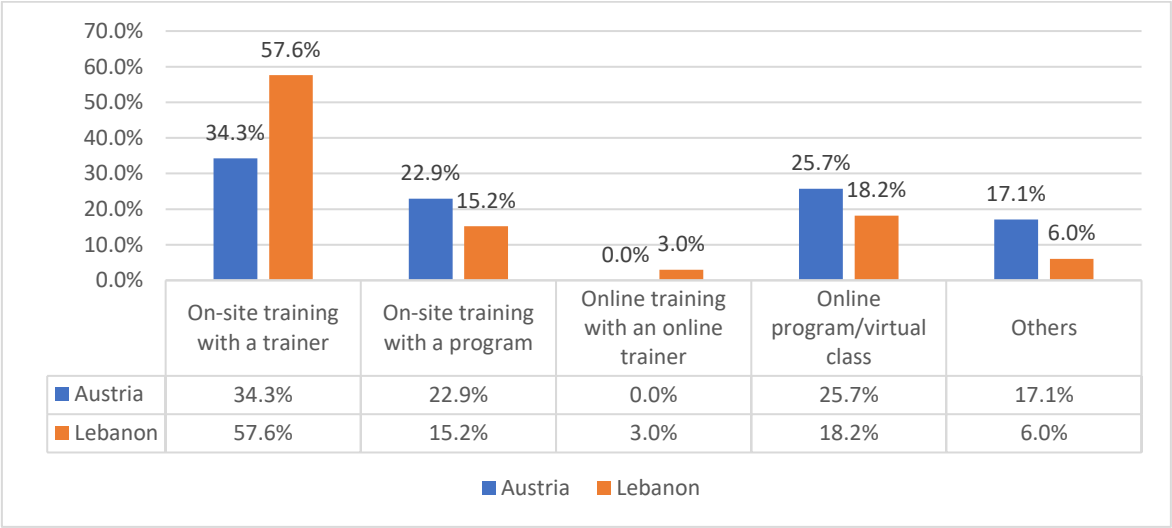
3.2.2.2 Current training habits

The response from the Austrian and Lebanese trainees regarding their fitness current training habits reveal both similarities and differences across the 3 analyzed aspects in this section, which helps us to understand what type of fitness training they are engaging in, and if their fitness routine consist of training independently, or with a personal trainer, or any online services.

The first aspect examined, summarized in Figure 3, provides an analysis of the results associated to their training habits, as trainees were allowed to select multiple options. The most prominent choice from both countries trainees was the on-site training method, with 34.3% from Austria and 57.6% from Lebanon. This indicates a strong preference toward the traditional style of personal training system. Conversely, the on-site training with a program, a less interactive system approach, was preferred more in Austria (22.9%) than in Lebanon (15.2%), suggesting a small difference in preference in training style within the physical training environments.

However, a particular difference appears in the online training options. Online training with an online trainer was selected by 3% of Lebanese trainees, while this option was totally unselected in Austria (0%). This absence could reflect an Austrian cultural rejection for live remote personal training sessions. On the other hand, online program/virtual class were slightly more popular among the Austrian (25.7%) than the Lebanese (18.2%) reflecting more preference for flexible training system or asynchronous. 17.1% of Austrian and 6.0% of Lebanese trainees had more options in their training routines, such as outdoor sport, group training and home workouts.

Figure 3: Training habits



Source: Own work

In the second aspect, summarized in Figure 4, it provides an analysis of the results associated with their fitness training preferences, as trainees were allowed to select multiple options.

In Lebanon, weight lifting emerged as the most preferred fitness activity, selected by 74.2% of trainees. This aligns with Lebanon culture about fitness training, where a big part of the society emphasizes a high value to this type of exercising. In contrast, Austria showed a high preference for cardio training, with 63.3% selecting this option, compared to 58.1% in Lebanon. As both countries' trainees showed a close proportion related to either the indoor or outdoor cardio training, it is worth noting that Austria features flatter geography and parks suitable for cardio training than Lebanon.

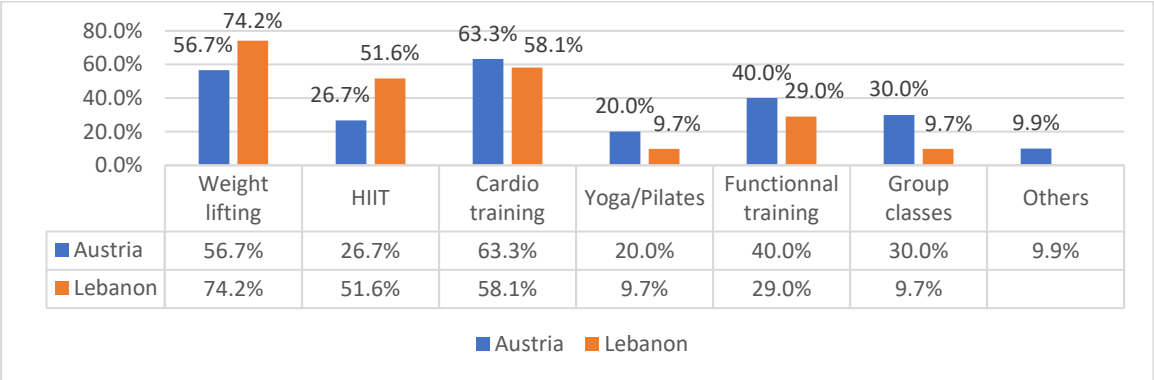
As for the HIIT training, it is far more popular in Lebanon (51.6%) than Austria (26.7%), which could reflect the gym/fitness studios' promotions to this type of training in Lebanon more than Austria.

Yoga/Pilates and group classes reported low interest within the Lebanese trainees with 9.7%, whereas a higher proportion of Austrians selected the following options, with 20.0% for the Yoga/Pilates and 30.0% for the group classes. It is important to mention that even

thoughgroup classes have lower interest within the Lebanese trainees, most of the big gyms in Lebanon, provides big areas in their facilities for indoor classes, that can accommodate between 35–40 participants in one class, which it is difficult to be found in Austria due to the high renting cost, especially in the big cities, such as Vienna or Salzburg.

Lastly, 9.9% of Austrian trainees have more engagement in a slightly wider range of other physical training, especially for the outdoor ones, such as mountain activities and team sports.

Figure 4: Fitness training preferences



Source: Own work

The final aspect examines trainees' answers regarding the use of an online training program while working out, as summarized in Figure 5, trainees were asked to select a single option from the following provided list. Most of the Austrian and Lebanese trainees (80.0% vs 75.8%) reflected a shared trend toward the rejection for this type of training. Additionally, 24.3% of Lebanese trainees use online programs in different situations, versus 20% of Austrian ones, as this service provides a huge variation of training programs for all types of levels.

Figure 5: Following an online program

Figure 5a: Austria

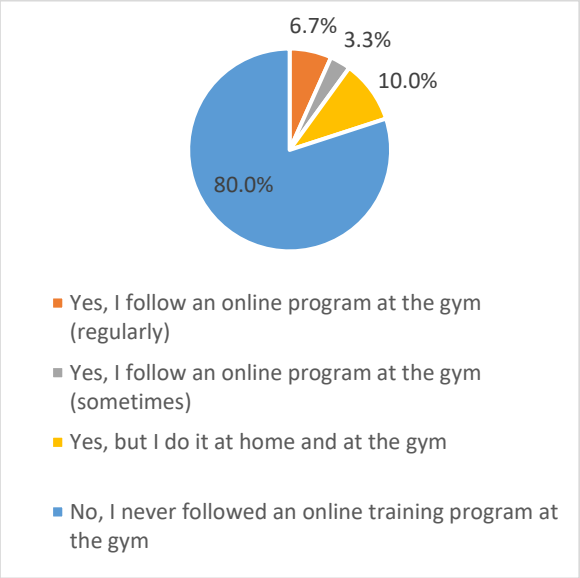
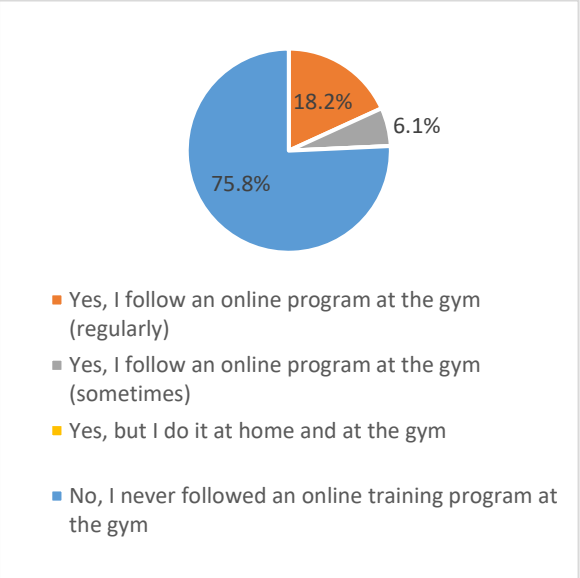


Figure 5b: Lebanon



Source: Own work

3.2.2.3 Training preferences and satisfaction

The response from the Austrian and Lebanese trainees regarding their training preferences between the on-site training (on-site trainer, gym or fitness studio) and the online training (online trainer, virtual class, fitness training apps or online program at home), reveal both similarities and differences across the analyzed aspects in the following sections, leading to understand the primary reasons for their choices.

Figure 6 provides an analysis of the results associated with the factors that motivated the trainees from Austria and Lebanon for the on-site training, as they were allowed to select multiple options.

Motivation and accountability emerged as the most preferred chosen factor in both countries, with 56.7% of Austrian and 60.6% of Lebanese trainees choosing it. This shows that this factor is an essential universal element in fitness training, to achieve the desired goals.

A noticeable difference was observed in the "access to equipment" category, selected by 54.6% Austrian trainees compared to 45.5% in Lebanon. This factor also plays an essential role, with the big variation of equipment's access that the gym/fitness studio provides.

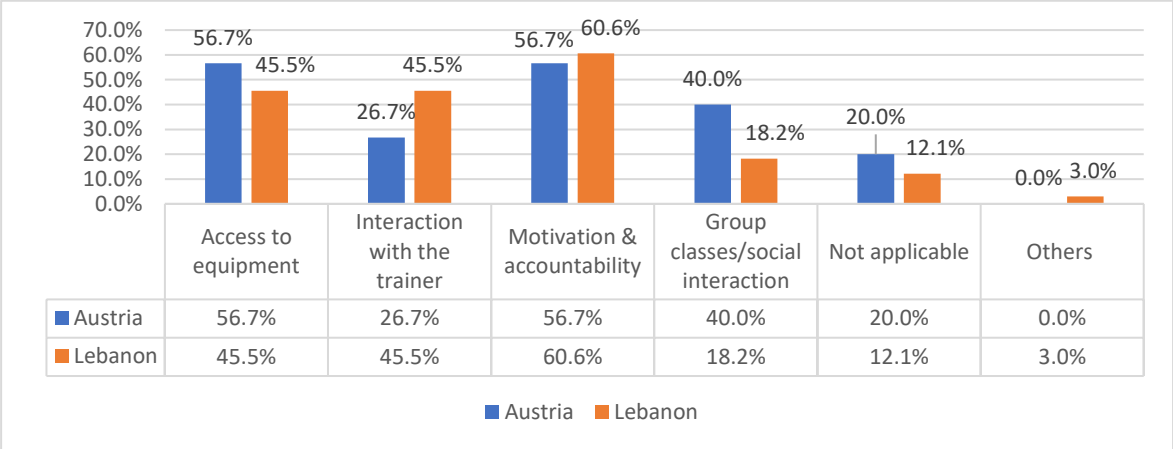
Conversely, interaction with a trainer was remarkably more valued in Lebanon (45.5%) than in Austria (26.7%). This could indicate that Lebanese trainees emphasize the importance of guided training, moreover, a social environment, where social connection is rooted in the Lebanese society.

As for the “group classes” option, Austrian trainees showed a strong preference with 40.0% compared to the Lebanese with 18.2%, suggesting a greater desire for what those classes provide from instructor guidance, fitness group motivation and synchronized movements.

The “not applicable” option was more present in Austria (20.0%) than in Lebanon (12.1%), this could possibly reflect that the trainees have a different type of motivation not listed in the following options, either contextual or personal.

Interestingly, 3% of the Lebanese trainees specified a preference to the on-site training for medical reasons, providing an additional point of view.

Figure 6: Motivational factors for choosing on-site training



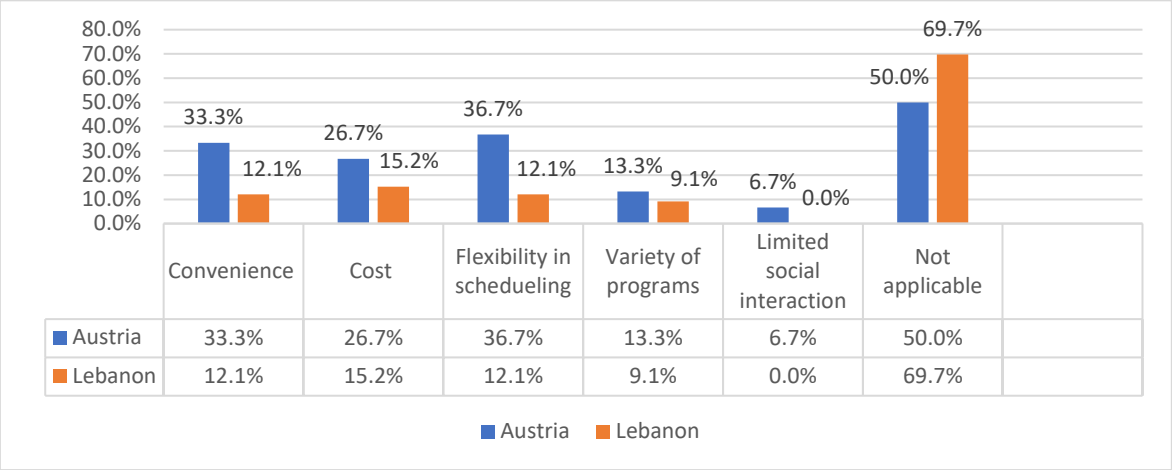
	Access to equipment	Interaction with the trainer	Motivation & accountability	Group classes/social interaction	Not applicable	Others
Austria	56.7%	26.7%	56.7%	40.0%	20.0%	0.0%
Lebanon	45.5%	45.5%	60.6%	18.2%	12.1%	3.0%

Source: Own work

Figure 7 provides an analysis of the results associated with the factors that motivated the trainees from Austria and Lebanon for the online training, as they were allowed to select multiple options. The option “not applicable” was the most selected answer, which suggests that a big portion of trainees from both countries are not engaged in online training, with 69.7% from Lebanon and 50.0% from Austria.

By contrast, the trainees from Austria consistently selected the 5 remaining options provided at a higher rate than those from Lebanon. This leads to a more favorable perception for online training in Austria than Lebanon, as it provides convenience in training at home (33.3% vs 12.1%), a lower cost than the on-site training, with the lower trainer fee, elimination of transportation expenses and gym membership (26.7% vs 15.2%), flexibility in appointments scheduling (36.7% vs 12.1%), and the limited social interaction that the on-site training cannot provide (6% vs 0%).

Figure 7: Motivational factors for choosing online training



Source: Own work

3.2.2.4 Motivation and effectiveness

The responses from the Austrian and Lebanese trainees across the 3 analyzed aspects in this section, related to the motivation and effectiveness between on-site training and online one, reveal both similarities and differences.

To begin with, in terms of what services model motivates them, summarized in Figure 8, the trainees were asked to select a single training method between the provided options. Noticeably, both countries' trainees reported a high interest for on-site training, with 73.4% for the Austrian and 81.8% for the Lebanese. This indicates a dominant and consistent preference for the traditional training across both countries. Nevertheless, a subtle difference in the other options distribution was seen.

In Austria, a slightly higher proportion in “both” option (13.3%) compared to 12.2% in Lebanon, reflecting a mild tendency toward a blended type of training. In addition, both countries' trainees showed a lower interest in remote training with 3.3% in Austria and 3.0% in Lebanon.

A notable difference was shown in the “neither/not sure” option, with a high proportion of Austrian (10.0%) chose it, while 3.0% selected it in Lebanon. This presents a high level of uncertainty among the Austrian trainees, which could be related to the different levels of confidence and experience.

Figure 8: Motivation by training model

Figure 8a: Austria

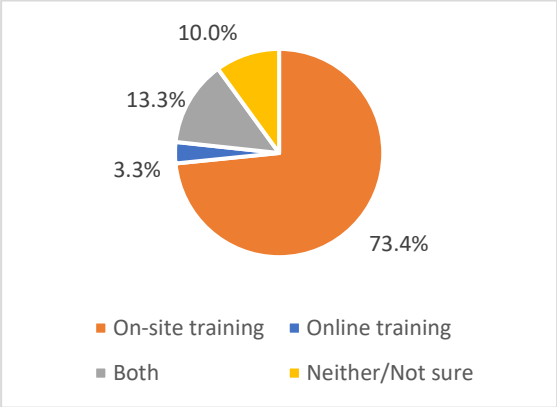
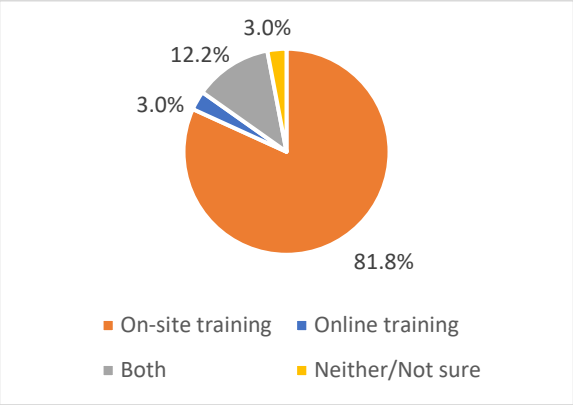


Figure 8b: Lebanon



Source: Own work

Moving on to the next aspect, in terms of what services model provides better effectiveness for them, summarized in Figure 9, the trainees were asked to select a single training method between the provided options. In Lebanon, on-site training was the dominant preference, selected by 84.4% of the trainees, a slightly higher proportion than Austria with 73.3%. This indicates that traditional training provides a better pathway to achieve trainees' fitness goals. The difference appears clearly for the other provided options. In Austria, 20% of the trainees showed a preference for the option "both", compared to 9.2% in Lebanon, which indicates a considerable confidence in hybrid training. In addition, online training was only selected in Lebanon, with 3%, which reflects the doubt of this type of training system efficiency. As for the option "neither/not sure", it is also more prominent in Austria with 6.7% than in Lebanon with 3.0%, which could reflect a hesitation or uncertainty in adopting any of the provided options.

Figure 9: Effective training model

Figure 9a: Austria

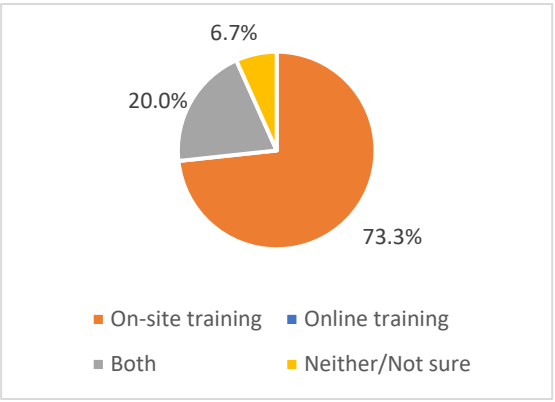
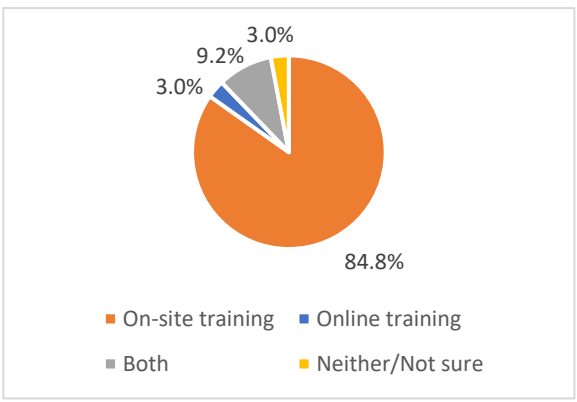


Figure 9b: Lebanon



Source: Own work

Figure 10 examines the data collected from both countries' trainees, toward shifting from on-site services to online one, or vice versa, and what were the reasons behind it. A close similarity was seen, where both countries' trainees showed no transition in their training routine, with 73% in Austria and 85% in Lebanon. In the same way, a close proportion between both countries, connected to altering from on-site training to online ones, with 20% for Austria and 15% for Lebanon.

Nevertheless, switching from online training to the on-site one, was notable only in Austria with 7%, whereas in Lebanon, this option was not selected by any trainee.

Figure 10: Shifting perceptions between training models

Figure 10a: Austria

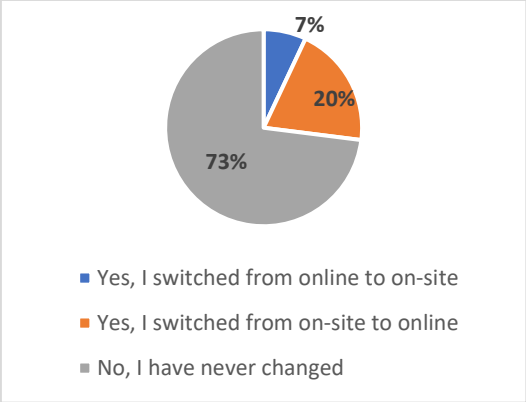
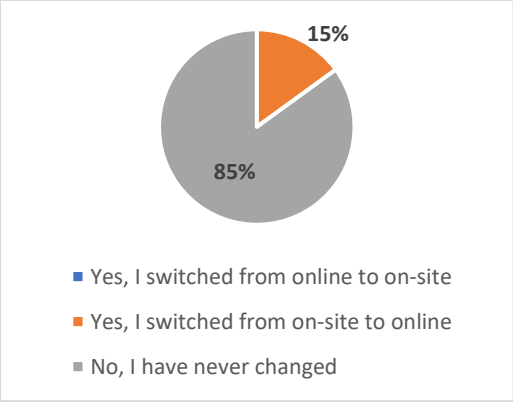


Figure 10b: Lebanon



Source: Own work

Table 6 examines the collected linear data of both countries' trainees, providing an overview of the reasons for switching from one service to another. To compare the responses between the Austrian and the Lebanese trainees, independent t-tests were conducted for the following five reasons of switching.

Regarding the **"convenience"** option, both Austrian (M = 3.88, SD = 1.05) and Lebanese (M = 4.00, SD = 1.26) trainees provided high agreement, with no significant difference between both countries' responses, with t = -0.41 and p = .682 (p > .05). A close pattern was observed for the **"time constraints"**, where Austrian trainees (M = 3.87, SD = 0.73) and Lebanese (M = 4.00, SD = 1.41) again showed a non-significant difference between both countries' responses, with t = -0.46, and p = .645 (p > .05). As for the **"cost"** option, with Austrian trainees showed a high sensitivity to this option (M = 3.62, SD = 1.30) compared to the Lebanese (M = 3.00, SD = 1.41), reveals a no significant difference between both countries' responses, but the results show a trend toward a significant one, that may be valid with a larger sample, with t = 1.83, and p = .074 (p > .05).

The **"preference for in-person interaction"** option, uncovered a difference between countries trainees' responses, with the Austrian trainees (M = 3.37, SD = 0.91) rating it

greatly more than the Lebanese (M = 2.60, SD = 1.14), with t = 2.99 and p = .004, and therefore, rejecting the null hypothesis for this option (p < .05).

Finally, regarding the **"previous method's demotivation"** option, Austrian trainees scored a bit higher (M = 2.37, SD = 1.30) than the Lebanese (M = 2.00, SD = 0.70), and therefore, there was no significant difference between both countries' responses, with t = 1.40 and p = .170 (p > .05).

However, we can see that the trainees' strong agreements with the options provided are more for the convenience and time constraints in both countries as they have a high response to the central tendency, providing an overview on how essential and valuable are those 2 options. Unlikely, the option that has the lowest agreement in both countries' responses, is the demotivation one, which indicates that this is not the main reason for switching from one type of training to another.

Table 6: Reasons for switching

Options	**Austria Mean**	**Lebanon Mean**	**Austria SD**	**Lebanon SD**	**T-statistic**	**P-value**
Convenience	3.88	4.00	1.05	1.26	-0.41	.682
Time constraints	3.87	4.00	0.73	1.41	-0.46	.645
Cost	3.62	3.00	1.30	1.41	1.83	.074
Preference for in-person interaction	3.37	2.60	0.91	1.14	2.99	.004
Previous methods demotivation	2.37	2.00	1.30	0.70	1.40	.170

Source: Own work

3.2.2.5 Social interaction and convenience

To compare the responses of the Austrians and Lebanese trainees across the analyzed 5-point Likert scale, concerning the **importance of social interaction** in their fitness training experience, an independent sample t-test was conducted, as summarized in Table 7.

Austrian trainees' answers revealed a lower mean score (M = 3.00, SD = 1.31) compared to the Lebanese trainees (M = 3.97, SD = 1.16). This uncovers a difference between the two countries trainees' responses, with t = -3.10 and p = .003, indicating that Lebanese trainees rated the "social interaction and convenience" higher than the Austrian counterparts, and therefore, rejecting the null hypothesis for this option (p < .05).

Table 7: Importance of social interaction

Country	Means	Standard deviation
Austria	3.00	1.31
Lebanon	3.97	1.16
t-statistic		-3.10
p-values		.003

Source: Own source

3.2.2.6 Cost relative to training quality

Trainees' preferences in accordance to the quality of training services relative to the cost, were examined in Austria and Lebanon as summarized in Figure 11. In Austria, trainees' responses were highly divided, with 46.7% preferring online training and another 46.7% for the uncertainty, while only 6.6% provided a preference for both types. A key distinction is that no trainees chose the on-site training. This selection suggests a strong inclination toward the indecision or online training, most likely affected by economical or practical factors.

In contrast, Lebanese trainees provided a more even distribution pattern of their preferences. 33.3% chose the on-site training, 24.2% for online training, 15.2% valued both types, and 27.3% were unsure. As the higher preference goes for the on-site training, despite its higher price cost, this could reflect a low sensitivity level for the price among the Lebanese trainees.

The following findings indicate that while Austrian trainees may prioritize the affordable type of training, Lebanese trainees appear to put an important value on the face-to-face training experience, even with the high cost of it.

Figure 11: Cost versus quality of training

Figure 11a: Austria

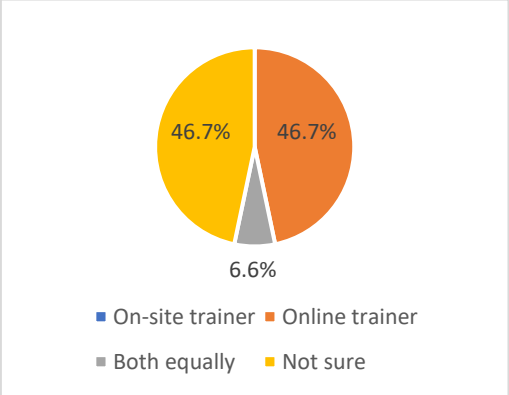
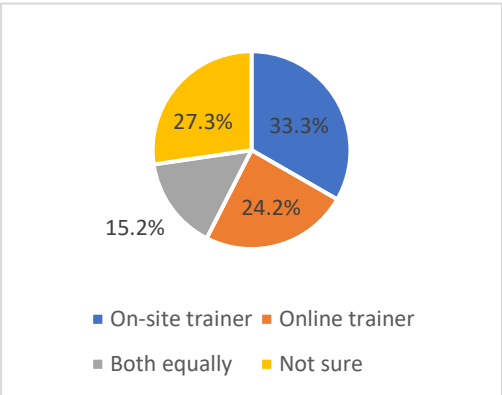


Figure 11b: Lebanon



Source: Own source

3.2.2.7 Options influencing trainees' preference

The response from the Austrian and Lebanese trainees regarding their training details reveal both similarities and differences across the 3 analyzed aspects in this section.

For the first analyzed aspect, in order to compare the responses of the Austrians and Lebanese trainees across the analyzed 5-point Likert scale, for the importance of **"accessing gym equipment"** during their fitness training experience, an independent sample t-test was conducted summarized in table 8.

The Lebanese answers revealed a slightly higher mean score (M = 4.36, SD = 1.06) compared to the Austrian trainees (M = 4.10, SD = 1.35), and therefore, there was no significant difference between both countries' responses, with t = -0.86 and p = .394, indicating that both countries overall rating was similar (p > .05). A key distinction is that most of the trainees, from both countries, rated this section highly, which shows the high importance of gym equipment for their training routine, with the big variation that gyms provide.

Table 8: Importance of gym equipment's

Country	**Means**	**Standard deviation**
Austria	4.10	1.35
Lebanon	4.36	1.06
t-statistic		-0.86
p-values		.394

Source: Own source

As for the second aspect, to compare the responses of the Austrians and Lebanese trainees across the 4 analyzed factors that may influence them to use online training more: improved technology, affordable options, access to better trainers and greater flexibility in programs, rated each on a 5-point Likert scale, an independent sample t-test was conducted summarized in table 9.

In the **"improved technology"** option, Austrian trainees answers revealed a mean score (M = 2.83, SD = 1.15) lower than the Lebanese trainees (M = 3.30, SD = 1.33), and therefore, there was no significant difference between both countries' responses, with t = -1.50 and p = 0.138.

For the **"affordable options"**, the Austrian trainees revealed a slightly higher mean score (M = 3.40, SD = 1.28) compared to the Lebanese trainees (M = 3.21, SD = 1.19). There was no significant difference between both countries' responses, with t = 0.60 and p = .549.

As for the third option, the **"access to better trainers"**, Austrian trainees revealed also, a slightly higher mean score (M = 3.53, SD = 1.14) compared to the Lebanese trainees (M =

3.12, SD = 1.34). There was no significant difference between both countries' responses, with t = 1.32 and p = .192.

Concerning the last option, the **"greater flexibility in programs"**, the Austrian trainees revealed a slightly higher mean score (M = 3.40, SD = 1.25) compared to the Lebanese trainees (M = 3.52, SD = 1.18). There was no significant difference between both countries' responses, with t = -0.38 and p = .708.

As p > .05 across the four options, Austrian and Lebanese trainees had an overall similar rating. However, Austrian trainees higher mean was for "access to a better trainer" option, with the capability to reach any trainer from all over the world, while on the opposite side, the Lebanese trainees higher mean goes for the "greater flexibility in programs", as the online services provides a wide variation of training programs, especially from top niche trainers.

Table 9: Options that motivate trainees for online training

Options	**Austria Mean**	**Lebanon Mean**	**Austria SD**	**Lebanon SD**	**T-statistic**	**P-value**
Improved technology	2.83	3.3	1.15	1.33	-1.50	.138
Affordable options	3.40	3.21	1.28	1.19	0.60	.549
Access to better trainers	3.53	3.12	1.14	1.34	1.32	.192
Greater flexibility in programs	3.40	3.52	1.25	1.18	-0.38	.708

Source: Own work

As for the third aspect, to compare the responses of the Austrians and Lebanese trainees across the 4 analyzed factors that may encourage them to use on-site training more: closer location or better facilities, affordable options, access to better equipment or classes and lastly, personalized attention from a trainer, rated each on a 5-point Likert scale, an independent sample t-test was conducted summarized in table 10.

In the **"closer location or better facilities"** option, the Austrian trainees revealed a slightly lower mean score (M = 3.70, SD = 1.24) compared to the Lebanese trainees (M = 4.00, SD = 1.21). There was no significant difference between both countries' responses, with t = -0.96 and p = .342.

For the **"affordable options"**, the Austrian trainees revealed a close similar mean (M = 3.63, SD = 1.30) compared to the Lebanese trainees (M = 3.67, SD = 1.24). There was no significant difference between both countries' responses, with t = -0.10 and p = .918.

As for the third option, the **"access to better equipment or classes"**, the Austrian trainees revealed a lower mean (M = 3.50, SD = 1.22) than the Lebanese trainees (M = 3.94, SD =

1.20). There was no significant difference between both countries' responses, with t = -1.44 and p = .156.

Lastly, for the **"personalized attention from a trainer"**, the Austrian trainees revealed a lower mean (M = 3.47, SD = 1.30), compared to the Lebanese trainees (M = 3.94, SD = 1.30). There was no significant difference between both countries' responses, with t = -1.42 and p = .160.

As p > .05 across the four options, Austrian and Lebanese trainees had an overall similar rating. However, Austrian trainees' higher mean was for the "closer location or better facilities", especially that there is in every part of Austrian cities, fitness facilities, in which, it is easy to reach by walking. Although Lebanese trainees had a high rating for this option too, it is worth highlighting that Lebanon's topography consists mainly of hills and mountains, which makes it difficult to reach fitness facilities by foot, and therefore, a car is needed. On the other hand, the Lebanese trainees' high preference goes for the "personalized attention from a trainer", which reflect how important it is for them to have someone to supervise their exercises, techniques and performance, furthermore, it could be an indicative for the trainees age, as there is a higher older one from the Austrian trainees.

Table 10: Options that motivate trainees for on-site training

Options	**Austria Mean**	**Lebanon Mean**	**Austria SD**	**Lebanon SD**	**T-statistic**	**P-value**
Closer location or better facilities	3.70	4.00	1.24	1.21	-0.96	.342
Affordable options	3.63	3.67	1.30	1.24	-0.10	.918
Access to better equipment or classes	3.50	3.94	1.22	1.20	-1.44	.156
Personalized attention from a trainer	3.47	3.94	1.33	1.30	-1.42	.160

Source: Own work

3.2.2.8 Future preference and encouragement

The response from the Austrian and Lebanese trainees regarding their future preferences and encouragement reveal both similarities and differences across the 5 analyzed aspects in this section. Starting with the first aspect, in terms of which type of trainer profile they will choose, if granted the opportunity, between on-site trainer, online trainer or a combination of both summarized in Figure 12. In Austria, there was a relative balance between "on-site trainer" option (43.3%) and the "combination of both" (46.7%), indicating that while many trainees value the traditional training, a slightly higher proportion appreciates the hybrid model option, reflecting the accessibility and flexibility the online trainer provide for them, while keeping the face-to-face engagement and interaction with the on-site trainer. In

addition, some trainees preferred the “online trainer” option exclusively (3.3%), and the rest of the group expressed no preference to any types of trainers. On the other hand, Lebanese trainees showed a strong tendency toward the on-site trainer (69.7%). This choice may be influenced by the higher average age of the Lebanese trainees, or could also reflect the importance of face-face social interaction. The “combination of both” option was (21.2%), while the remaining trainees favored the online trainer exclusively, with a particularly lower proportion (9.1%).

Figure 12: Trainees preferences between trainer type

Figure 12a: Austria

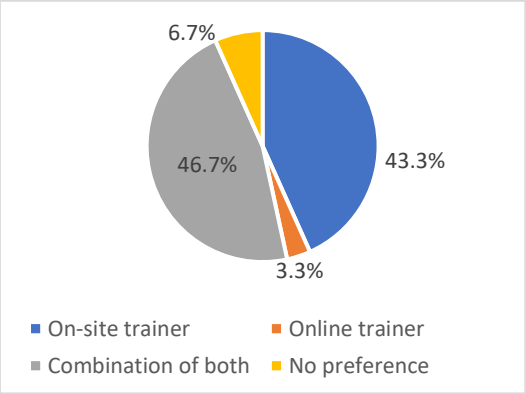
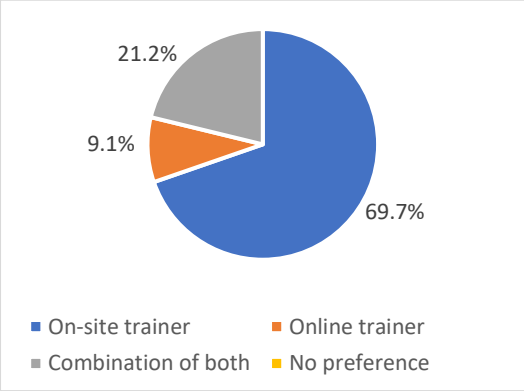


Figure 12b: Lebanon



Source: Own work

Moving on to the second aspect, on which type of trainer they feel a stronger sense of engagement with. There was a clear consensus from the trainees of both countries, as summarized in Figure 13, favoring the on-site trainer option, with 80% for Austria and 81.8% for Lebanon. This could reflect the value of the face-to-face interaction, the feel for a more responsive and attentive trainer, and perhaps the motivation and discipline the on-site trainer can provide. Additionally, in Austria, 13.3% of the trainees showed preferences for both the types, while few trainees choses the online trainer (3.3%) and the uncertainty (3.3%). In contrast, 12.1% of Lebanese trainees chose the online trainer exclusively, suggesting a more engagement to this type of service than the Austrian. Meanwhile, 6.1% in Lebanon showed preferences for both the types of option.

Figure 13: Trainees-trainers engagement

Figure 13a: Austria

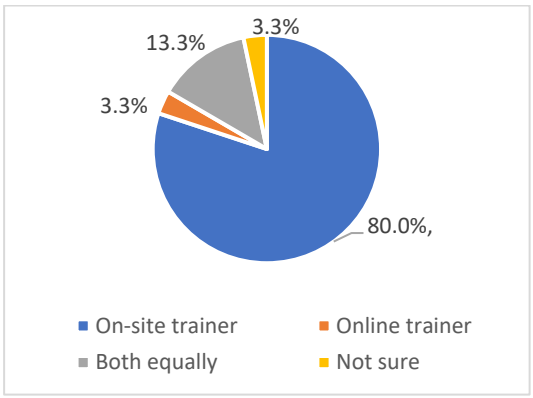
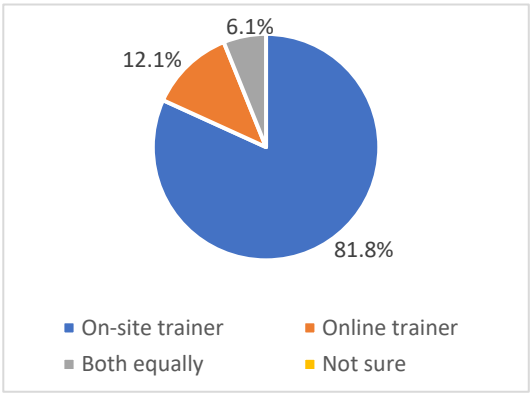


Figure 13b: Lebanon



Source: Own work

The third aspect investigates trainees' opinion about the type of trainer who provides more guidance and personalized feedback during the training session, summarized in Figure 14. Both countries' trainees gave high values to the on-site trainer option, with 80% for Austria and 78.8% for Lebanon. Similarly, in both countries', there was a rejection of the idea that an online trainer can provide the proper guidance and feedback during the training sessions. Additionally, there was a considerable level of uncertainty in both countries, with 16.70% in Austria and 15.20% in Lebanon.

Figure 14: Evaluation of trainers' feedback and guidance

Figure 14a: Austria

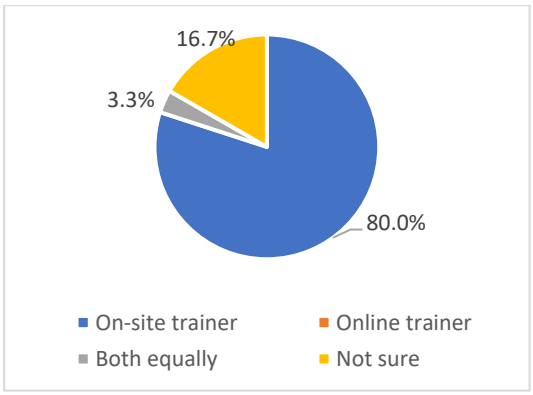
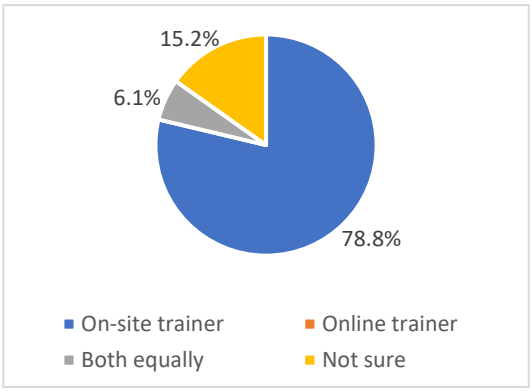


Figure 14b: Lebanon



Source: Own work

The analysis continues with the fourth aspect, regarding trainees' opinion about which type of trainer provides better value versus the cost, summarized in Figure 15. For the Austrian trainees, a high proportion of uncertainty dominates among the answers (56.7%), this could indicate a mixed experience between the trainees, preventing them from having a clear answer. While conversely, most of the Lebanese trainees (66.7%) consider that the on-site

trainer provides better service value. Similarly, a good number of trainees, 20% from Austria and 18.2% from Lebanon believe that an online trainer is a great price option, as the services costs are cheaper than the on-site trainer.

Figure 15: Value versus cost

Figure 15a: Austria

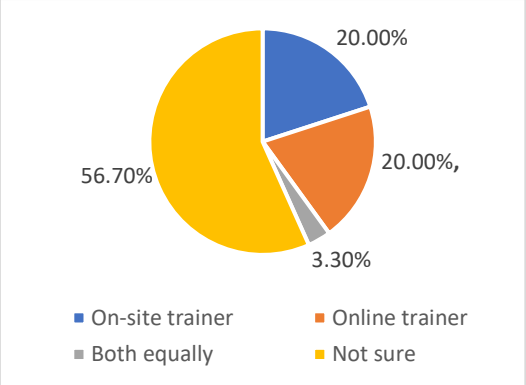
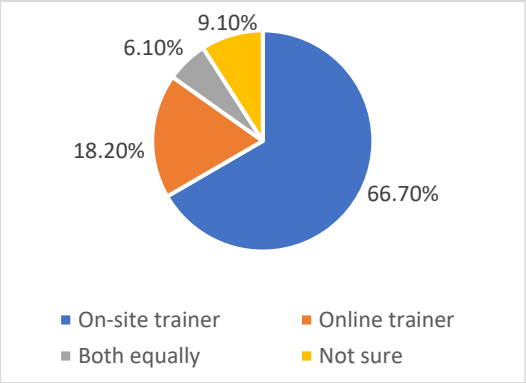


Figure 15b: Lebanon



Source: Own work

Finally, the last aspect addressed the qualities that trainees would consider when choosing a personal trainer. In order to compare the responses of the Austrians and Lebanese trainees across the 8 analyzed qualities: listener, supportive, respectful, trustworthy, enthusiastic, patient, sensitive and demonstrator, rated each on a 5-point Likert scale, an independent sample t-test was conducted summarized in table 11.

For the **"listener"** option, the Austrian trainees revealed a very close mean score (M = 4.07, SD = 1.08) compared to the Lebanese trainees (M = 4.06, SD = 1.17). There was no significant difference between both countries' responses, with t = 0.04 and p = .968.

As for the **"supportive"** option, the Austrian trainees revealed a slightly lower mean (M = 4.43, SD = 1.07) compared to the Lebanese trainees (M = 4.48, SD = 1.00). Again, there was no significant difference between both countries' responses, with t = -0.21 and p = .834.

Moving on to the **"respectful"** option, the Austrian trainees revealed a very close mean score (M = 4.52, SD = 0.77) compared to the Lebanese trainees (M = 4.55, SD = 0.75). There was no significant difference between both countries' responses, with t = -0.15 and p = .878.

Concerning the **"trustworthy"** option, the Austrian trainees revealed a slightly lower mean (M = 4.30, SD = 1.12) compared to the Lebanese trainees (M = 4.48, SD = 0.97). There was no significant difference between both countries' responses, with t = -0.70 and p = .489.

Regarding the **"enthusiastic"** option, the Austrian trainees revealed a slightly higher mean (M = 4.43, SD = 1.17) compared to the Lebanese trainees (M = 4.39, SD = 1.00). There was no significant difference between both countries' responses, with t = 0.14 and p = .886.

For the **"patient"** option, a close similarity in the mean score between Austrian trainees (M = 4.27, SD = 1.22) and Lebanese trainees (M = 4.33, SD = 1.13). There was no significant difference between both countries' responses, with t = -0.22 and p = .828.

In regard of the **"sensitive"** option, the Austrian trainees revealed a slightly lower mean (M = 3.93, SD = 1.27) compared to the Lebanese trainees (M = 4.00, SD = 1.17). There was no significant difference between both countries' responses, with t = -0.23 and p = .818.

Lastly, regarding the **"demonstrator"** option, the Austrian trainees revealed a higher mean (M = 4.13, SD = 1.30) compared to the Lebanese trainees (M = 4.00, SD = 1.30). There was no significant difference between both countries' responses, with t = 0.41 and p = .684.

As p > .05 across the eight options, Austrian and Lebanese trainees had an overall similar rating. As most of the trainees provided a high proportion for all the following qualities, it is worth mentioning that those qualities can lead a personal trainer to excel in his/her career, and build a strong client-trainer relationship.

Table 11: Personal trainer qualities

Options	Austria Mean	Lebanon Mean	Austria SD	Lebanon SD	T-statistic	P-value
Listener	4.07	4.06	1.08	1.17	0.04	.968
Supportive	4.43	4.48	1.07	1.00	-0.21	.834
Respectful	4.52	4.55	0.77	0.75	-0.15	.878
Trustworthy	4.3	4.48	1.12	0.97	-0.7	.489
Enthusiastic	4.43	4.39	1.17	1.00	0.14	.886
Patient	4.3	4.3	1.26	1.21	-0.01	.992
Sensitive	3.93	4.03	1.41	1.22	-0.3	.769
Demonstrator	4.1	3.94	1.35	1.39	0.47	.639

Source: Own work

4 DISCUSSION

4.1 Summary of the main findings and discussion

To address the research question, and to see if this era is marking the end of the on-site personal trainers' career, with the impact of the online services, I have analyzed the findings from the personal trainers' questionnaires, the CEO academy interview and the findings from the trainees' survey. There is no doubt, the on-site personal trainers' career is one of the hardest jobs in the world. For most people, it is a job where you can mix between the fun

and work, build connections and earn a good amount of money. But on the other side, it is a job that carries numerous drawbacks, such as long working hours, time-consuming during the day between the customers' appointments, no social security, unstable salary, no indemnity during sickness, dealing with different customers attitudes, emotions and behaviors. In addition, trainers need to pay proper attention to their clients to prevent injuries because if one client got a severe one, this could lead to a total destruction of the trainers' career. Moreover, the job frustration that the trainer lives in, where he/she needs to provide proper customer relation services, despite the struggles and difficulties the trainer has outside his/her job.

The on-site personal trainers' career goes decades ago, rooted through multiple generations, with different strategies and programs, and where the advanced technology we have today did not exist. This led to the creation of associations, academies and universities degrees, specialized in graduating skilled personal trainers, with extensive knowledge of their field. Over the years, the on-site trainers were able to provide better coherence and quality services to their clients during the sessions, proper program customization and to build a closer trainer-customer relation. From another perspective, online services also existed from a long time ago, but we saw the peak of it during the COVID pandemic, where people had to search for training alternatives in order to stay fit. This for sure, impacted the on-site services, faced by a booming trend, which brought significant challenges and caused disruption with the on-site trainer clientele numbers and salaries.

Therefore, through the personal trainers' questionnaires from Austria and Lebanon, most of the trainers saw by the online services (online trainers, fitness applications and online programs) presences a threat to their career, if it is not nowadays, but it will be for sure in the future. These services made people more knowledgeable about fitness training, with the widespread use of online programs, online worldwide trainers, social media fitness gurus, fitness diet plans, at a low pricing compared to the ones provided by the on-site trainers. In addition, on-site trainers, think that their services demand might decrease over the years, while already they are putting plenty of efforts to grow their business and to keep their client's retention, faced by an easy market of selling online services. Despite these facts, and the rejection of the online services ideas from a significant number of trainers, however, some of them saw in the online services an opportunity to expand their on-site career with an additional service to their clientele.

As for the CEO of Inspire academy, the rise of online services, in his opinion, does not create a threat to the on-site trainers' career. But instead, he sees it as an opportunity for the trainers to expand their career services. Additionally, the academy has adjusted the services provided to the students in accordance with the rise of fitness technologies and services.

In addition, as for the surveys provided for the Austrian and Lebanese trainees', the results' analysis proves that a lot of them do not use technology during their training, and for those who does, it is limited to some wearable tech and mobile fitness apps. Also, it shows that

most of the trainees are using on-site trainers while having their fitness training, while some are using online programs. This gives us a valuable insight about the trainees' preference, between the different types of training services. Although the online services provide convenience, cost, flexibility, big variation of programs and worldwide trainers services, but this can't eliminate the fact that the gym/fitness studio can provide diversity in equipment's and training options, furthermore, the interaction, feedback, motivation and attention that the on-site trainer provides. In addition, most of the trainees gave a great emphasis on the social interaction importance during their training, and this interaction can be only provided at the gym/fitness studio with other clientele and face-to-face trainers. Moreover, trainees' value trainers' qualities such as listener, supportive, trustworthy, enthusiastic, patient, sensitive and demonstrator, in order to choose a proper one to provide them with his/her services. Which creates a competitive environment in the market between the trainers, to retain their clients and attract additional ones.

According to the deep findings from the following data collected, a solution is proposed to address the rise of online services that the on-site trainers are facing. It was clear that the on-site trainers feel the threat of the rise of those services, even though most of the fitness participants showed preferences to the on-site services more than the online ones, and it was clear that some trainers began to use those online services for their benefits to expand. There is no doubt that the next step in the fitness training industry will focus increasingly on technology and online services. Therefore, the solution proposed targets those points mainly, and it is expected to improve the on-site trainers' profitability, by the increase in clientele number and income. The next step for the on-site trainers' career should be a hybrid model, a combination between face-to-face sessions and online ones. In addition, on-site trainers should include technology during their sessions, to provide better and rich services. No matter how much the on-site trainers see that the online services are insufficient and lacking in quality, this is the future, if they need to stay competitive in the market.

From my opinion in the fitness field, and over 14 years of experience in the fitness training, from a personal trainer to a fitness manager, I got the chance to guide and lead more than 50 on-site trainers' employees in one of the biggest fitness gyms chains in Lebanon. I totally understand the fear of the on-site trainers from this big change in the fitness industry, and I know how hard it is to get a new clientele and to retain the existing one, with all the big competition in the market, where we can see in every corner now, a gym, fitness studio, or any fitness trending class that is booming in the market. But I always told my employees, that if they need to be special and to make a significant impact on clients, they need to make things differently from other competitors.

4.2 Implications

The findings of this research study showed various implications for both on-site fitness trainer/gym/fitness studio and future research. There is a necessity for implementing a hybrid

training model and technology usage during the personal training sessions of the on-site trainers to provide better services and achieve better income.

On the practical implication, the results can be applied through different scenarios. Firstly, the on-site trainers should adapt within their services, the hybrid model, as most of the clients, have tendency to skip their training sessions at the gym/fitness studio due to personal reasons, such as familial, work, travel and country stability or the opposite situation, and accordingly, the on-site trainer can manage to give the online session from his home or from the gym, as he/she does not need to be present at a specific location. Despite that, the online session is not similar to the gym one, where there are significant variations in fitness equipment, still, the trainer can manage to provide different types of functional exercises online in case of equipment's absence. Therefore, the on-site trainer can provide alternatively an online session, and it will be a win-win situation, for both, trainer-client. Additionally, the on-site trainer needs to apply during the training sessions, fitness applications or technology to provide a richer service, such as wearable tech to monitor their client's heart rate, fitness level and provide tailored suggestions and feedback. Also, the usage of fitness program applications, where they can install all the data for each client session, in order to monitor the progression of the clients and motivate them. Moreover, they can use the AI to provide patterns for the training progression of their clients. Secondly, gyms and fitness studios can benefit from the findings of this research, by providing for their customers a hybrid training model, such as virtual reality classes, or hybrid ones, for clientele unable to attend the class on a specific day. Also, they can provide for their on-site trainers, a small location at the gym, equipped by a good internet service and technological equipment, to provide for their clientele an online session for those unable to attend, or they can offer a recorded training one for those desiring to train at home. Moreover, gyms/fitness studios can create a fitness app for their clientele, which can help them to book classes, give them a reminder for their personal training session or provide them with a reward system to give them motivation. Furthermore, on-site trainers/gym/fitness studios should work properly on their social media accounts, in order to promote their services and interact also with the online followers, as word spread is the best way to get new subscriber clienteles.

As for the theoretical implication, fitness institutions and academies can also benefit from the findings and re-evaluate their curriculum. Although they started already providing courses about the online training sessions and technology services, this part is still immature, and they need to nurture it properly, such as how to use the online and technological services to expand more in the market.

As for the societal implication, the findings of this research highlight the importance of the hybrid fitness training and technological services as an effective way for improving the on-site personal training/gyms/fitness studios services, especially with this fast technological evolution, and applying those findings can have a positive impact on the society. Firstly, the hybrid fitness training and technological services can provide better services for the customers who have problems reaching the gym/fitness studio on a specific day, or for the

customers who prefer to train privately. Secondly, it helps to promote environmental sustainability as the need for transportation usage is reduced. Thirdly, this finding can influence institutions and academies to develop special programs in their curriculum to meet the demand of the society.

As for the future research, it is better to expand the scope of this research, with a larger number of on-site fitness trainers and survey participants, from several countries, especially those who are from different continents, which will help to understand if the following findings can be applied worldwide.

In summary, the results of this study emphasize the role of using a hybrid training method and technological services to enhance the profitability and expansion of the on-site trainers/gyms/fitness studios services.

4.3 Suggested improvements

Research findings highlight the effectiveness of hybrid training method and technological services usage for the on-site trainers/gyms/fitness studios. However, there are challenges facing this research finding and limiting it, such as the on-site trainers and gym/fitness studios rejection and resistance to those ideas. To improve the acceptance of those ideas in the fitness industry, some actions are recommended:

- Provide seminars for the gyms/fitness studios, personal trainers and managers, about the online services for their business growth and how to use it properly.
- Provide more mature courses about the online services in the fitness academies and institutions for the new personal trainer's undergraduate.
- Design apps for the on-site trainers which will help them to manage their customers schedules, follow up on their clientele progression, provide feedback and allow the customers to reserve their training sessions.
- Provide different types of services for the clientele, which allows them to choose between on-site or online training, and that gives a great flexibility for them.
- Usage of AI to provide accurate analysis on the clientele performance, while suggesting program modifications, based on their fitness level progression.

The expected results from those improvements will result in a better cooperation between the on-site and online training services, by that, a cooperation between the traditional personal training and the digital one. In addition, it will increase the clientele satisfaction by providing flexible services. Moreover, it will increase the on-site trainers' skills in technological usage, which will help them to be more competitive in the market. Also, it will attract more clientele by providing a different and innovative training type.

5 CONCLUSION

This thesis explored deeply the impact of the online services on the on-site personal trainers' career and examined its implications on this type of service. The findings revealed that providing hybrid personal training sessions, combined with technological services, will deliver a better income for the on-site trainers, gyms and fitness studios. From the conducted analysis, it became clear the need for a hybrid method in the personal training sector, to keep up with the fast-growing of technology and market demand. The results present a notable suggestion for the fitness industry, particularly for the on-site trainers, with this fast-growing technological market, combined with the GenZ generation, who grew up in a technological world, and relies much on it. Practitioners can use the following findings to implement them in their daily job, in order to increase their profits and stay competitive in the market. Also, the contribution of this research to the academic sector is highly important, as it provides an insight about the market demand and growth, and how those academic institutions and universities adjust their curriculum in accordance with this demand. this research highlighted some particular limitations and areas for the study in the future. The sample size of both trainers and survey participants was low due to specific circumstances that unable this study to be done on a large scale. Further research studies could expand deeper this research, by providing larger and diverged samples or by using different methods, and build on the findings provided here. In conclusion, this research points out the importance of hybrid methods in personal training sessions, combined them with technology. This study has the potential to make a bridge between the traditional training and the modern one.

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APPENDICES

Appendix 1: Trainers' information sheet

Introduction

Thank you for your participation in this interview, your contribution and expertise will bring valuable insight to this research study, as part of my Master degree at the University of Ljubljana, Slovenia, School of Economics and Business. This study focuses on the impact of online fitness services on the on-site personal training career, and how the escalation of those services affected the client preferences in their fitness training.

Purpose of the research

This research seeks to examine the dynamic evolving in the personal training industry and to explore the impact of online training services on the traditional one and client preferences.

Interview structure

The interview is divided into 7 main sections. We will discuss in the first 2 sections, general information, which will provide a foundational insight of your general and fitness background. Next, we will examine the impact of online services in the fitness industry. Then, we will explore the difference between your services and the online ones. Afterwards, we will analyze the impact of COVID-19 on your career and clientele. Thereafter, we will explore how you adjusted your services to the changes happening in the fitness sector. Finally, we will delve into your anticipation for the type of services you provide for the upcoming years.

Interview details

The interview will take between 20-30 minutes, with 24 short and open questions in total, meaning that there is no restriction in your way of answering. Your participation is totally voluntary, and you can skip a question or stop at any time. Your personal information will not be revealed, and all the answers provided in this interview will be used exclusively for this research purpose.

Contact information

If you have any concerns or questions, please contact me at "moussa.ghazaly.com".

Your contribution and time are highly appreciated.

Thank you.

Appendix 2: Questions for the interviews

INTERVIEW STRUCTURE

PART 1

BACKGROUND INFORMATION

1. How long you have been working as a personal trainer?
2. What type of training, university degree or certification did you complete to access the personal training field?

DEMOGRAPHICS AND PRICING RANGE

3. What is your gender?
4. What is your age?
5. What is your average number of clients during on a month?
6. What is your average number of sessions conducted each month?
7. Can you share the average pricing range for you training sessions?
    - Between 10-20 €
    - Between 21-30 €
    - Between 31-50 €
    - Above 50 €

PART 2

IMPACT OF ONLINE FITNESS PROGRAMS AND ONLINE TRAINERS

8. Do you think the rising of online training programs, fitness apps and online personal trainers is affecting the fitness industry? If so, how?
9. Do you think the online trainers had a direct impact on your day-to-day work and clientele?
10. Do you think the increase in popularity of online training programs, fitness app and online personal trainers presents a threat to your career? Why or why not?

COMPARISON BETWEEN ONLINE VS ON-SITE TRAINING

11. What do you think are the main advantages of on-site personal training (gym/fitness studio) compared to the fitness apps, online programs and trainers? And disadvantages?

12. Do you think that particular type of clients benefits more from the on-site personal training than from the online ones? If so, which types?
13. How do you think on-site trainers (gym) can compete with what offers online trainers, such as the convenience (training at any time, or at any location) and accessibility (from various devices)?

COVID-19 IMPACT

14. How did the pandemic affect your job as an on-site personal trainer (gym)?
15. Did you see a major shift within your clients switching to virtual training or online trainers during the pandemic? If so, how did that affect your business?
16. During and after the pandemic, how have you adjusted your services? Have any changes become fixed?
17. Did you adopt or explore online training methods due to the pandemic? If so, how did that affect your on-site services?
18. Do you think the pandemic had a long-term impact on people choices and habits, especially in their preference for online programs and trainers instead of the on-site ones?

ADJUSTING TO CHANGES

19. Did you adapt your business model or training methods in response to the fitness programs and online personal training growth? If so, how?
20. Do you include any online features into your training sessions, such as digital tracking, fitness apps to enhance your services?
21. Have you considered switching from on-site trainer to focus only on online training, due to expenses reduction (e.g., facility and transportation costs)? Why or why not?

ON-SITE TRAINERS FUTURE

22. Do you think that the demand for on-site personal trainers will keep growing, remain stable or decline in the upcoming 5-10 years? Why?
23. In your opinion, what factors will establish the future success of on-site in the face of online alternatives?
24. Do you think the growth of virtual programs and personal trainers could possibly lead to a hybrid model, where both online services and on-site training are integrated? How do you see yourself adapting to such a model?

Appendix 3: Trainers' Interviews

Trainer 1: Questionnaire with trainer 14 from Austria

Trainer 2: Questionnaire with trainer 4 from Lebanon

1. How long have you been working as a personal trainer?

T1: 16 years

T2: 17 years

2. What type of training, university degree or certification did you complete to access the personal training field?

T1: Many qualifications. The highest was state-certified trainer at the BSPA in Linz. Trade license equivalent to sports scientist.

T2: Bachelor's degree in physical and sport education, and a master degree in obesity management.

3. What is your gender?

T1: Male

T2: Male

4. What is your age?

T1: 44 years old

T2: 39 years old

5. What is the average number of clients during a month?

T1: 6

T2: 30

6. What is the average number of sessions conducted each month?

T1: 10-20

T2: 120

7. Can you share the average pricing range for your training sessions?

T1: Above 50 €

T2: Between 31-50 €

8. Do you think the rising of online training programs, fitness apps and online personal trainers is affecting the fitness industry? If so, how?

T1: In my opinion, it lowers the quality of the personal trainers. That does not mean that there are not good online trainers, but they are more suitable for experienced athletes in my opinion.

T2: Yes. It is making it easier for trainees, customers, to have access to correct exercise, especially for those who access the gym for the first time, or people who don't know how to train.

9. Do you think the online trainers had a direct impact on your day-to-day work and clientele?

T1: No. My clientele would never use online training.

T2: They had a minor impact on my clientele, because most of the people who train with me prefer to have a live training session, not an online one. But after COVID, it was an easy access. I don't think the coherence was long. Many of them went back to train with a trainer at the gym, so the effect was minor.

10. Do you think the increase in popularity of online training programs, fitness apps and online personal trainers presents a threat to your career? Why or why not?

T1: Yes, because it makes it less common for personal training to be carried out on site. Fewer young people don't want to do this job at all, because it takes more effort to get clients in studios, or even with a good network of therapists, when on the opposite side, you can get clients with a few Instagram videos.

T2: For the time being, it does not present a threat for my career. But in the long run, with the artificial intelligence, it will present a threat.

11. What do you think are the main advantages of on-site personal training (gym/fitness studio) compared to the fitness apps, online programs and trainers? And disadvantages?

T1: Personal support offers many advantages. A person at your side can never be replaced by a video call. Conversation and coaching can be much more targeted because multiple physical signals are interpreted from both sides. hands-on guidance during exercises makes it possible to learn new movements and improve body awareness. You can use methods such as assisted stretching or massages to quickly eliminate any pain that occurs. Spotting is essential for dangerous exercises such as bench presses, but intensity methods such as forced repetitions cannot be performed alone.

T2: As for the advantages, you have better coherence in the program when training with an on-site trainer compared to programs done at home, and as for the disadvantage, it is the accessibility. With the online training session, you can manage your own time better, versus, the on-site training, you need to see the availability of the on-site personal trainer. Also, the cost is higher compared to the online trainers and programs.

12. Do you think that particular type of clients benefits more from the on-site personal training than from the online ones? If so, which types?

T1: There are of course many people who prefer personal contact for social reasons. Company is healthy. Beginners get additional motivation from the physical presence of a sporty, body-conscious person. Advanced learners can copy difficult movement patterns better. Many movements are easier to learn through automatic imitation. People can adopt movements from others nonverbally. This is how our ancestors were able to coordinate silent movements for hunting and war, and children learn from their parents in this way.

T2: On-site training presents a better way to correct the client's exercises, especially that you can see the form, you can see the exercise from different angles, and you have a better perception for the actual exercise that is given, versus the online training, where you can only see what the camera is making you see, so you don't have a full rotational view for the client, and that's a disadvantage. In my opinion, on-site training sessions are more beneficial for the clients.

13. How do you think on-site trainers (gyms/fitness studio) can compete with what offers online trainers, such as the convenience (training at any time, or at any location) and accessibility (from various devices)?

T1: Through high-quality work, knowledge, personal discipline and exemplifying a healthy lifestyle. A well-equipped and high-quality boutique studio where more than one customer can train at the same time, or as a mobile trainer who greets customers at their front door and makes it impossible to resist the urge to be lazy with his presence.

T2: They cannot compete with the accessibility and the convenience, because at the end of the day, it is one trainer that is training one or 2 persons at a certain time, and he's fully booked for that hour, and the location where it might be far for the client or difficult to reach, versus the online training, where you just need a good internet connection. I think the on-site cannot compete with the online training, it is a different game.

14. How did the pandemic affect your job as an on-site personal trainer (gym)?

T1: Catastrophic. Not only did many customers lose motivation, but some customers also gave up. After that, a clear social change was noticeable. There was much less communication than before.

T2: It did affect me, because I wasn't able to access my clients, and the money was affected also.

15. Did you see a major shift within your clients switching to virtual training or online trainers during the pandemic? If so, how did that affect your business?

T1: None of my clients switched to online training.

T2: Some of my clients switched to online training. It did affect my business 10-15%, but once I'm back to the on-site training, and everything was open, maybe 5% preferred to stay online as a convenience training for them, instead of the on-site.

16. During and after the pandemic, how have you adjusted your services? Have any changes become fixed?

T1: I only worked with people who remained sensible and fearless.

T2: During the pandemic, I switched to online training, though few of my clients were interested in the online sessions. But after the pandemic, things went back to normal, but what was different after the pandemic is that the training hours were different. Meaning, the peak hours were different, because many of my clients continued to work online, so they had better ways to manage their time. The peak time was before 6-8pm, is no longer a peak time now, as the clients are able now to come at noon, in the morning, whenever they have free time, because they are able to continue working online, and some of my clients were able to work remotely from my gym after finishing or before their sessions.

17. Did you adopt or explore online training methods due to the pandemic? If so, how did that affect your on-site services?

T1: No

T2: During the pandemic, 20% of my clients tried the online training, it was efficient but not durable. It was efficient for a couple of months, but they really wanted to go back to on-site sessions.

18. Do you think the pandemic had a long-term impact on people's choices and habits, especially in their preference for online programs and trainers instead of the on-site ones?

T1: Yes

T2: In my opinion, no, it didn't have an impact. Because after, things went back to normal, and people decided to go back to the gym. People like more interactive sessions where they actually feel better about the session, instead of talking to a monitor.

19. Did you adapt your business model or training methods in response to the fitness programs and online personal training growth? If so, how?

T1: No, however, I have now stopped working as a personal trainer, with the exception of a few clients, and am now working as an employee for an international fitness company as a consultant and in training.

T2: No, I didn't, maybe I should. It is a weak spot in my business, maybe I should develop this part. I've always talked about doing a digital app, to monitor the clients, if they had to skip for some reasons, or traveling, to continue training. but still, I didn't adapt to changes.

20. Do you include any online features into your training sessions, such as digital tracking, fitness apps to enhance your services?

T1: Yes. But tracking and apps to record progress were already standard even before COVID.

T2: That's my wish to do the next step. So far, no.

21. Have you considered switching from on-site trainer to focus only on online training, due to expenses reduction (e.g., facility and transportation costs)? Why or why not?

T1: No. Personal training on the screen doesn't make sense to me. I wouldn't be my client, so I can't imagine it. There are so many good free videos. Why keep reinventing everything when you can make a high-quality contribution with other work.

T2: I'm sure it is better, and maybe you can reach more people. But no, I did not change.

22. Do you think that the demand for on-site personal trainers will keep growing, remain stable or decline in the upcoming 5-10 years? Why?

T1: I hope that demand will increase again.

T2: I think it will decline in the next 5-10 years, because of artificial intelligence, the demands for on-site personal trainers will decrease.

23. In your opinion, what factors will establish the future success of on-site in the face of online alternatives?

T1: A strong personality and a solid education, as well as a diverse range of opportunities.

T2: What will help the on-site trainer is to include digital programs, applications that digitally follow up with the clients, access their progress, their body measurements, and what will be more efficient.

24. Do you think the growth of virtual programs and personal trainers could possibly lead to a hybrid model, where both online services and on-site training are integrated? How do you see yourself adapting to such a model

T1: Yes, sure.

T2: Yes, for sure, by creating an application.

Appendix 4: Interview with "Inspire Academy" CEO

1. Can you provide an overview about your fitness academy: "Inspire"?

Basically, Inspire started the 12th of august 2011, and that was where we started the organization. It was registered in Lebanon as a vocational school, offering vocational programs for fitness trainers, personal trainers along with continuing education. The concept was for the first of all divisions, was to improve the fitness industry overall in Lebanon, targeting 3 areas: Fitness trainers, health clubs and health and fitness facilities, and the members that are actually training. So, our vision was to provide a supportive and a friendly environment for the ones that are going to train, to be able to train safely and effectively. To do that, we need to train candidates that are well qualified to do the job and we need as well to support gyms, provide them with the tools they need to be able to support trainers and support their members. So that's our vision. So, we envision something that's not there yet. We envision something that is in the future. We're not sure if in 100 years we can achieve it, but we're going in that direction. We envision a fitness field with qualified trainers who can collaborate with medical doctors, with the health sector and they support their candidates and their clients. Now, our mission from day one was to provide the highest quality of education to our learners and second to support them throughout their journey. But how you translate it, that's the key thing, how we translate our mission. So, number 1, providing our learners with the best quality of education. When we started, we called the move as starting in the wrong direction. We started getting curriculums well already prepared from different organizations. Whether American, British or Australian and delivering this curriculum to our members. Then when I started diving into the field of fitness and doing my master's degree in exercise science, when I took the research course, research and methodology, and we had a really good instructor where we actually used to critically appraise research papers, I've noticed a huge gap in the fitness industry and the education part. An example in 2014- 2015, we noticed that most of the personal training books from top organizations, well reputable organizations

in the industry still use things like the maximum heart rate of Fox, 220 minus the age, which was actually outdated a long time ago. We've noticed that they are capitalized on postural correction, although there is no data that back up these theories. They preach that hypertrophy is a short range of repetition of eight to 12, where actually we know it's 5 to 30 repetitions. So bottom line is we noticed a huge gap between the books that are offered for personal trainers and this gap still exists till now. The reason why we've noticed that organizations tried to provide a simplified curriculum for personal trainers, is for them to pass the exam and to purchase other continuing education, as well as refer people to their organization. We decided to do things differently, to go the hard way and what it means to go the hard way, meaning to create our own content. We decided that we will never use external content ever again. We gathered brains in the Middle East. Now why in the Middle East? Because this is where we operate. We're more than happy to get brains that can support us from different countries. That's not the issue. We also tried to put together this content that is evidence based, meaning that the researchers started getting research papers, critically appraising the research papers and using all these papers to create updated chapters. Now from there we also added a chapter that we're teaching for personal trainers. it is about research. What's the difference, what are the different categories of research? What's the evidence-based practice model, how it starts from research to practice, to Client expertise or client preference and how they can find their own research, like couple of small tutorials just for them to understand what's a journal, what's a database where they can start if they're still new in this process. So once in this direction, this is the hard way, because obviously it reflected negatively on our revenues. This is how we fulfill the first part of our mission. Now the second part supports them throughout their journey. How we're doing this so. Usually, I'm sure you're familiar with other organizations. You get your course, you get certified. You have to renew your certification every year or two or three years now. The way to renew your certification. It makes sense that you need continuing education most of the time, the organizations ask you to pay for extra workshops and courses and the renewal fees. Now I totally understand, this is a dynamic field, where you need to see continuing education to renew your certification. However, the support we provide for our learners is that on a monthly basis, we provide them with a mini course. It's for one hour with updates on the latest research. So, we choose one topic, we get a couple of studies, our researchers will discuss the breakdown of these studies and provide them with an outcome. Let's say something about supplements, something about creatine, its effect on a certain topic, let's say length and partials. Any hot topic in the industry that is backed up by science, so this is called must monthly updates on science of training. They get it for free as long as they are our members and they get one point to renew their certificate. We also organize educational days every three months. This is where they get to attend these educational days and earn 3 conditioning education credits (CEC's), meaning our CEC are provided for free. If the members choose to pursue this direction, we provide them with mentorship. We have one

online session for them to ask any question whether they did graduate or even post after graduation or before graduation. This is how we tailor made our program. This is about Inspire Fitness Academy; this is about our mission. And finally, our slogan is if you want, yes you can. If you want to be part of the best trainers, you want to put in the hard work, you want to choose to put in the hard work, commit and sacrifice and you will be there.

2. I would like to know more about which countries you provide your services, how many trainers have you graduated so far and how many academic instructors work with you?

We started in Lebanon and the first model we used at the beginning, was having partners and representatives in countries like the United Arab Emirates, Saudi Arabia, Qatar, Bahrain, Egypt, even Nigeria, Pakistan, Greece and Netherlands. We had people that represent us there. That was our early start, but then we noticed that not actually everyone is representing our mission properly. We started, especially with COVID, to stop working with these partners. When we reassessed our operations post COVID, we decided that the way we operate is we're going to be super selective with partners, either someone well established and they represent a similar mission, that we can collaborate with them or we will start our own branches. We maintained our branch in Lebanon that is an educational organization. And we started a second branch in the UAE, specifically in Dubai that's been there for four years almost. And now our next expansion plan is through Saudi Arabia. Truthfully, we are still working business to business with a couple of organizations in Kuwait, Qatar, Bahrain, Saudi Arabia. And in Egypt, however, physical locations are only in Lebanon and the UAE, and we made sure to put a lot of effort on an online platform. So now we have courses in Arabic and in English. Most of them are recognized or accredited from different parties and organizations and this is open for everyone around the world. They can simply sign up, get a course after a course, complete the program and get certified online. Now for the personal training program, since this is a certification, we only offer the "EuropeActive" Online accreditation, so this is just specifically for online courses, online education. We don't offer other accreditation that requires a physical presence. Now for the number of graduates since we started since 2011, we almost received around 3500 students all in all. However, not all of them did graduate. The number of active members, active members, people that are maintaining their certification active, they renewed it and they're still working with us. it is a number that is less than 250. So many of them probably left the industry because as you know, some of them got into the field thinking that they're going to make a lot of money. Then they were surprised at how demanding the job is. And some of them didn't like it through us because, you know, they wanted something much easier, much more straightforward, so they probably left and went somewhere else. And some of them they're working and they didn't renew their certification because there is no law that requires them to do that, especially in many countries, like in Lebanon, Saudi Arabia, Bahrain, Kuwait, Qatar. Until now, many of them are working on a standard. Regarding the faculty members,

yeah, we have on board a medical doctor, licensed dietitian, exercise physiologist, exercise scientists, physical therapists, physical education teachers. These are our tutors, the ones that teach on a regular basis. Also, we work and collaborate with researchers, people that are in the field and some of them, they're not directly in the field. But simply, they are passionate and studied fitness. However, they are mostly into medical labs. They've spent a lot of years in clinical research because we want them to understand how to critically appraise the research.

3. Can you tell us more about what type of certifications your Academy provides for people?

Since we started the Inspire Fitness Academy, we decided to have a specialty that is called fitness, and not to start offering lots of courses. Because, if you want to do things the right way, what you need to do is to get qualified people to teach these courses. And if you want to start teaching basketball, football, tennis or whatsoever, you're not going to have the energy to be able to monitor all these forces, if they are delivering the proper quality for your students. This is why we decided to narrow down our scope, to narrow down our menu and simply offer everything related to fitness. So, the way we do it is that we have what we call our certification programs, that offer a job title of personal fitness coaching, or what's known as personal fitness training and fitness facility management. Besides that, all other courses are considered more or less as continuing education, such those that supports the fitness instructor pre and post Natal, ACL injury prevention, things related to sports nutrition, sports injuries, special population, cancer, autism, all these kinds of certification or certificates that helps basically the fitness instructor in their career.

4. How long does it take to complete a specific personal training certification?

In general, well, normal timing that we usually suggest people to take, especially if they're beginners, not less than six to nine months. In case they are completely new, they have never trained before, we always recommend that they go start training at the gym, get familiar with the gym, making sure this is their passion before joining us. Now some people, they already have what it takes. They probably have a different background. They probably coach somewhere. It might take them around three months, but not less than that.

5. What do you do to stay up to date with the curriculum

When we designed our curriculum, we did a whole job analysis survey, we did whole research about another curriculum. We tried to understand, we observed personal trainers because we wanted to provide them with something useful. We also tried to understand their career growth because your curriculum is not just for what you're going to do today, it is for what you're going to study tomorrow as well. We decided to start by revamping

the anatomy and Physiology section and including parts such as hormones. This is something they will widely use in the future. We also added a section on the anatomy and Physiology of the female reproductive track and menstrual cycle. Because if you're going to train females, you're supposed to understand them, otherwise you're not supposed to train them. Physiology, bio-mechanics, that's a big chapter. We added an understanding about how to calculate the torque, the forces, the use of chains, barbells, dumbbells, elastic and so on, and different forms and positions and exercises. Domain one is the intro to the fitness industry. It talks about the industry, the past, present, future, the importance of physical activity, why now. The World Health Organization is prioritizing on helping people, being more physically active and exercising more. Domain 2 is about nutrition. Domain 3 is about coaching and contains 2 chapters, 1 on exercise, on the coaching behavioral change and one on evidence-based practice coaching. So, one that teaches research and one that talks about the psychology of training. Domain 4 is the practical domain, practical exercises, exercise techniques and methods, flexibility, and a chapter related to other components of fitness. So, a little bit on agility, speed, just for them to have an understanding because you don't want the trainer to finish the program. And then they're like, all I've learned is strength training and cardio. They need to know that there are things beyond that. Domain 5, which is fitness testing and program design. it is an updated chapter where they understand how to design a program for beginners, intermediate, advanced people that want to lose their fat and gain weight, and strengthen their muscles. And finally, the domain 6, it is extracurricular. It contains things that help them enrich their information, such as injuries, special population strength and conditioning, and business. So, these are like extracurricular domains. This is the program. To complete the program, they have to sit for a theoretical exam, a practical exam, and in the practical exam, there's a section that we've added where they have to perform the exercises on camera. They have to send us a video performing 8 exercises, squats, deadlift with minimum weights, to show that they actually can perform the exercise, and to show what they preach, and they need to train someone for a whole personal training session. Besides that, they will be needing first aid, CPR, AED certificate and to complete an internship of 80 hours. So that's why. We're not the most preferred organization when it comes to the program, but this is our mission. Eventually. We're a mission driven organization and we always choose our mission on top of everything else.

6. With the rise of online personal training, how has your Academy adapted the program of its certification to accommodate this rise? Did you modify or create specific ones?

it is true we started delivering our programs online, but the thing is that we are just providing a workshop called online delivery of personal training sessions, that teaches basic stuff. Number one, it helps trainers to understand what they can do to assess an exercise from different directions, because for personal trainers, they're just like thinking,

run your camera and I will see you doing the workout, and I'll provide you with feedback. Here, we try to teach them that using a videographer, someone expert in filming, showing them how 2 dimensions can do lots of errors and can trick you so. To help them understand that they need to ask them to do the exercise from different directions or to place the camera each time in different angles to provide feedback. Second thing we teach them is what mobile apps, that they can use to make their life easier and their client's life easier. 3rd, we teach them how they can communicate with their clients and how they can provide the best, like weekly check in, how they can communicate the program, how they can have the follow up sessions together, and how they can monitor and track results. There are so many things that can be added, but unfortunately until now we don't have enough understanding globally about the insurance, medical insurance, if you know trainers can have liability insurance that can cover them online. Each country is different. it is still not something we understand legally speaking, in case the client got injured, if you're at risk or not. For the personal training sessions that we use, the in person personal training sessions. So, for now at our Academy, we provide the basic program, but this is an extra workshop that they can cover if they want to learn more about online personal training. It might not be enough, it is not the whole program, but it is just something to support them.

7. What about the impact of COVID-19, did you see a rise in demand for personal training certification at your academy, during and after the pandemic, especially that we saw a rise of online trainers, virtual classes during that?

Sure, there was a rise in demand for personal training certification globally. Even you notice that some educational providers were actually increasing their prices, were actually introducing new products, online stuff, even accreditation bodies kept on operating online, doing their conferences and doing everything virtually. And this helped us also, to have an additional line of work which is the online category of courses, workshops, webinars and so on. However, since demand increased, this will also trigger a reaction in the market where supply will increase eventually. So probably 2020, there was an increase in demand and we've noticed that, with the increase in revenues. 2021-2022 this slope started to drop. The reason why is very simple, because there were several organizations that started from 2019-2020 until 20/22. In the UAE, the number of organizations increased from 11 to 25 within a year, which are recognized by REPS UAE. When we penetrated the market in the UAE, we were like 11 competitors. Now we're more than 30 and you can see all the listed organizations at UAE REPS website. So, the supply increased, as well and this affected our demand again. So that's what happened in the COVID. Lots of people started doing online training. Lots of people wanted to become personal trainers because they started having in mind the thought that I can work anywhere and still make a lot of money. Unfortunately, people when they chase a job just for the sake of financial freedom, that's the main goal. Most of the time they will not

succeed because they don't pay enough attention to the demand of the job or if they're passionate about the job or not. So that's why there was a rise in demand, but then this demand dropped dramatically, especially the last year or two.

8. Did you have any permanent trends that changed the way your programs are delivered or structured?

First of all, for our courses, whenever we started having our students back to the academy, we couldn't force anyone back to class. We started offering the hybrid option for people that are still worried about their families, themselves, that they can attend online. In the classroom, we had to abide by the global guidelines which is 2.2 meters between students, between chairs, and wearing face masks. If they want to practice, they need to keep their distance and hands gel everywhere. All these precautions were at their location and imagine in our location where we used to have 3 classrooms and three classes running at the same time, we used to do one class at the same time, that's it. Other classes were online. We added a section to help the trainer understand the use of masks while training a client, understand hygiene and how to implement all these guidelines as well when training their clients, whether they're training at home or in another facility. However, there is something we never change no matter what happens, is our exams, assessments and curriculum. So, we kept the same standards proctored exam. The only difference is that we offer the option to do it online. Proctored online is a nightmare for some students because if a minor thing happens in your system, Internet connection, automatically the system will take this as suspicious behavior, and we'll shut down the exam to protect our exams. In addition, you need to have your camera and your mic open all the time. Otherwise, you need to do it at our location. These are the main changes that we get basically.

9. In your opinion, do you think the rise of online training is affecting the on-site personal training career? If so, how?

To be honest, I don't see it as being negative. I see that it is actually providing more options for people. The ones that used to leave our training program, now they still have the option to train with us online. So, I see that it provided an expansion to the market, and did not take part of the market, because observing clubs in the UAE, observing clubs in Lebanon and how personal trainers are doing, the clients that want to train face to face in person, they're training in person. The ones that train online, they train online. There is no way to convince someone that trains in person to train online to save money, they would like to have this person supporting them. However the difference is that for some people that are going on a vacation now, they can still have their workout with their trainers. For some people who don't have the time to train for 5 days or drive to a gym,

that's an option. So, it is like it helped clients. Some people do face to face and online sessions. I would say that it provided more opportunities. It didn't take anything away from on-site personal trainers, because personal trainers they're still doing fine. Online coaches are still doing fine and the people that work hybrid are still doing fine. I can see more people training and that's the main reason why more people wanted to get certified as personal training.

10. Do you think the online training programs are affecting negatively or complementing the onsite trainers?

The only benefits I see are the pre designed exercise programs, things that they sell people online, the only benefit I would say is to provide some probable ideas to trainers, to learn a little bit from others, their methodology. But besides that, for our clients, I see that it does more harm than good. For someone that wants results, for someone that wants to improve their health, their fitness or lose weight, gain muscles, whatever they need, it is much more than a program. Programming is an essential pillar, but the start, it is more of the psychology, it is more of the behavioral change, it is more of these people understanding like if today I was supposed to do 20 minutes card you and I did 5 minutes and I'm still at the beginning, that's totally fine. If I was supposed to squat and I couldn't squat today, I did leg extension like curling instead or leg press, that's still fine. You know, these kinds of customizations, they're not just the exercise program and they don't happen just from an online program, they happen from a trainer and looking at this, the research for example. For hypertrophy, do you want to bulk up? You want to have bigger muscles? Based on so many papers tackling exercise selection and exercise order, we've noticed that machines can get you there, free weights can get you there, cables can get you there. What matters is pushing yourself to failure or close to failure and the recovery process. So, they do the amount of volume you're doing under the recovery process. This exercise program is actually targeting the sets, the repetitions and the exercise selection. It might not help me if I'm not pushing towards failure and eating enough protein. So that's for hypertrophy. For strength, it might help a little bit further, especially from experienced coaches to make me understand how I'm going to choose my main lists throughout the week, but still, sometimes you reach central nervous system fatigue, the online program will not help you understand how to get over the central nervous system fatigue. So, this is why I consider them like, if you know how to use them, the reason why you're purchasing an online program from. it is just because you want to understand, you know, like our new way, a new method to help your client or help yourself. But if you don't have mentorship along with that, this is doing more harm than good in the fitness industry. So many people pay their money, invest their money thinking that that's the solution, especially if we're talking about these fitness influencers, that they have no clue what they're doing. They're just advertising anything to make money and they think they have a good number of followers. If they sell a program for 1000 followers for $10, they

still make a lot of money. When you pay your money for this exercise program, then you feel like you didn't get anything. You get demotivated. People start having the impression, especially beginners, that there's something wrong with their bodies. it is not the exercise program, oh, this guy is an expert, this guy is a fitness model, I got his program and it didn't work. Apparently, my body is not responsive. This is why it needs mentorship. It needs someone to support them. That's why these programs are totally not enough, if they are not combined with a sort of a mentorship or coaching program.

11. How do you think on site trainers can compete with what online trainers offer such as the convenience, training at any time, at any location, accessibility?

If we're going to take it as absolute face value, as in person or on-site trainer, they're not able to do online and online they're not able to do because you know, any in person trainer can still offer online services to their clients as well. So, let's say they're just doing online, they're just doing face to face. The on-site trainer, first of all, this human interaction and I always quote this research and this incident that happened, it is true it happened to the psychotherapy field, so they did research on ChatGPT, they compared questions related to mental health. I think they gathered 93 questions from Reddit in the field of mental health and they got each question on a conversation box at ChatGPT and they got the answers and then they asked the same questions to mental health specialists, psychotherapist. They got another group of experts to compare the quality of the answers and to write them on a scale from zero to 10 and then they noticed that, 78.5% approximately, ChatGPT's answers were better. Looking at this, it might make us think that online AI, all these things are going to be a threat, but hold on a second. What happened is that the next day an organization in the states, called Coco, started offering mental health services and it was really affordable for everyone and everyone was happy, until the day they learned that it is backed up by AI. They're chatting with a robot; they're not chatting with a human being. They started automatically shutting down their accounts. So that's one example. It tackles more AI, but still people don't like it. We're not designed to interact with a laptop or we're to interact with each other with a laptop. I would have preferred so much to do this interview, for example, face to face because of the human connection and interaction, and especially if you're teaching me something. Especially if you want to teach me something, and especially if something related to my practice. I would love to have my trainer looking at the angle providing me with this mental support, even if technology is going to make it a 360-degree approach one day, I still see human interaction, it still is, until now, something we need. So how can the on-site trainer compete? First of all, there's this human interaction where they can get to connect with their client. And there's also another funny paper that showed there's a correlation between a basketball player touching each other and winning a game. The more fist bumps, hugs, the high fives they give, they notice that the teams that do more of this, they tend to win more games, that's a correlation and it is not a causation. But eventually,

many things can show you there's a correlation between how successful a human interaction can be on a collaboration, on adventure. So, this is one thing. Another thing is, you know, like with competition, you don't know the online trainer you're working with, you're not sure if they're good, they're not. When you meet someone face to face, you get to ask around, you get to see how they interact with others. In online, you cannot see them, how they interact with others. When you see them at the gym, when they see them, how they train others, this is something that could be as well interesting. And you know, there's also the nightmare of the connection, the Internet connection, the zoom, the clarity and all these kinds of things, that is not always the best in an online. On-site sessions you're never going to face this problem.

12. What's your plan to continue growing your Academy programs in the upcoming five years, especially with the evolving of the fitness apps and online trainers?

Now it is getting super easy for anyone to start an educational organization. Some awarding bodies or accreditation bodies, they're simply providing you with a package regardless of your degrees and certification, you can just purchase the right of using their curriculum, their exams, and you can start your own educational organization anytime. Well, at the moment, we're capitalizing on what we already have. So, presenting it in a better way. taking this example of how websites evolved for the last 15 years. A website 15 years ago had lots of buttons, lots of things that you can explore. Now any website is recommended to have 1 to 3 buttons where you can click. And if you want more, you can explore more, simplifying things for people. We're trying to present our program in a simplified way, offering a workbook, offering more videos, more interactive sessions. However, we're also focusing on the online platform, on the fitness facility management program because we see the competition is really heavy on the personal training, we are still in in in the process of designing a new delivery method for our personal fitness coaching program, that we consider it is going to be disruptive in the industry. We believe in the fitness education industry, we need something disruptive similar to Duolingo, Apple or these kinds of models. To do that. It requires a lot of time and it is lots of innovation and we have this in process, but for now. in general, just making the program represented in a much smoother way, trying to have more supporting tools and supporting elements for our students and learners. That's how we're looking to move forward in the competition for the next, I would say three years.

13. Do you feel threatened, by the rise of technology, that this could affect the future of your Academy.

Looking at how things are moving and we try to look at where AI is now in terms of technology. As you can see websites likeexamine.com, websites that do lots of research and critical appraisal for research papers, don't use AI. I tried to use AI in my critical

appraisal process; it still requires a lot of work because unfortunately it just relies on previous experience and lots of training. It needs a lot of time to be able to critically appraise a research paper or a study. At the same time, we still have lots of limitations of people accepting the work of AI. A lot of people there still don't appreciate looking at vocabs coming from ChatGPT, such as Dive, Dells, things like that. So, people are now sensitive to AI. But Speaking of the coming five years, I'm not threatened. I can see it as something that is supporting us big time. In terms of language, in terms of programming, in terms of ideas, in terms of business planning and management and marketing, it provides lots of ideas and scenarios that help us design our curriculum. So instead of spending one whole day to create one case study, with AI, you can generate 15 case studies and spend your day editing these case studies. But moving forward after five years, I'm not sure, because I always ask myself this question. Pre-COVID. Many people didn't accept the fact of studying online. Most online colleges weren't accredited. COVID taught us to sit and attend lectures and discuss things over zoom or online. So now we're ok with it. True, some people still prefer it in person, but many people they're ok with it. I always ask myself, what if something pushed us, trained the human race to rely more on AI and especially the Gen. Z, the new generation, that they were born and raised using mobile phones, using social media, using Tik Tok and using AI. For me as a Millennial, it might be a bit challenging to train me, but for the Gen. Z that they are already trained since they're young probably, they might accept it and AI tutor. Probably they might accept learning through virtual reality and augmented reality. So, for the coming five years, I'm sure it is not a threat. But after that? I don't know.

14. What's your advice for the onsite trainers, especially those who feel that they are threatened by the rise of fitness apps, online trainers and online programs?

Use it to your own advantage. Use it, because it will provide you lots of advantages, like for example, it will help you design your documents. It will provide you with several pieces of advice that you might incorporate or not, but always you need to be the filter. There is nothing filtering the advice if it is right or wrong when it comes to AI and does not say it commits lots of error when it comes to the fitness industry. Use it for your marketing strategy, marketing plan. Let it design your documents; let it help you do lots of follow-ups and support your clients. But the key thing in training is this famous coach, I think it was Roosevelt who said that, "People will not remember what you know, they remember how you made them feel". So personal training, it is about how you make your customer feel. If you make your customer feels confident, they can achieve their goals, you believe in them and you coach them, no AI or mobile app can do that. Sometimes I remember when I used to train my clients, it wasn't about the exercise program or the exercise or anything. They used to say like it's about this connection we have, it's about this motivation they get, it's about me believing in them that pushes them hard. Same as for my students. This is why I'll tell them to just not overthink it. Use it to your own

advantage. But most importantly, like you know this, this is something really interesting. In an interview with Jeff Bezos, the Co-founder of Amazon, he asked why people always ask what's going to change in the next 10 years, and what's something that should be concerned about. Why not focus on what's not going to change? So, what's not going to change? People are still going to get what results. it is not like you're going to ever have a client saying I want to gain more fat. I don't want the results. I just want to train with you, pay you, my money. This will never happen. People want results, People want care and attention. People want something to care for them. People want something to be on time while training them. So, look at things that are basics, inside the box, not outside the box that you can do the minimum. Until now, I see lots of trainers, they don't hold the clipboard, they don't hold an iPad to get the information and summarize the information for people. Well, start from there. I never saw a trainer that explained the program before giving the program. Your clients have the right to understand your strategy or plan. Start there and then let's worry about AI and other things that at least for five years, you might not need to worry about.

Appendix 5: Survey questionnaire

INTRODUCTION

Thank you for participating in this survey!

As part of my master's thesis, I am researching the evolving dynamics in the personal training industry, specifically focusing on the impact of online trainers/fitness apps/ online programs on on-site trainers' careers and understanding client preferences between on-site and online training options. Your responses will provide valuable information for this thesis and contribute to a deeper understanding of the industry trends.

Survey Details:

Estimated Time: 5-10minutes

Confidentiality: All responses will be kept confidential and used solely for the purposes of this research. Personal identifiers will not be shared or published.

Voluntary Participation: Participation is entirely voluntary. Your input is greatly valued and will help inform the findings of this thesis.

Consent: By proceeding with this survey, you consent to the use of your responses in this research. If you have any questions or concerns, please contact me at moussa.ghazaly@gmail.com

Thank you for your time and valuable contributions to this research!

SECTION 1: DEMOGRAPHICS

1. What is your age?
    - 15-24
    - 25-34
    - 35-44
    - 45-54
    - 55 and above

2. What is your gender?
    - Female
    - Male
    - Prefer not to say

SECTION 2: FITNESS BACKGROUND

3. What is your fitness level?
    - Beginner
    - Intermediate
    - Advanced
4. How often do you exercise?
    - Daily
    - 3-4 times a week
    - 1-2 times a week
    - 1-2 times per month
5. Are you using any fitness technology (e.g., wearable watches, fitness tracker, mobile apps, etc.) to monitor or boost your training?
    - Yes, regularly
    - Yes, sometime
    - No, never

YES, APPLICABLE

6. If yes, which fitness technology are you using? (select all that apply)
    - Mobile fitness apps
    - Wearable fitness Watch (e.g., Apple watch, Fitbit)
    - Heart rate monitor
    - Smart scales

- Others

SECTION 3: CURRENT TRAINING HABITS

7. Which type(s) of fitness training are you currently using? (select all that apply)
    - On-site training (personal trainer in person at the gym/fitness studio)
    - On-site training (online fitness program at the gym)
    - Online training (personal trainer)
    - Online Training (virtual class, fitness training apps, online program at home)
    - Others
8. What type(s) of fitness training are you engaging in? (select all that apply)
    - Weight Lifting
    - High Intensity Interval Training (HIIT)
    - Cardio (e.g., running, cycling)
    - Yoga/Pilates
    - Functional Training
    - Group classes
    - Others
9. Do you follow an online training program while working out at the gym?
    - Yes, I follow an online program at the gym (regularly)
    - Yes, I follow an online program at the gym (sometimes)
    - Yes, but I do it at home and at the gym
    - No, I never followed an online training program at the gym

SECTION 4: TRAINING PREFERENCES AND SATISFACTION

10. What was your primary reason(s) for choosing on-site training (gym/fitness studio or personal trainer in person)? (if applicable)
    - Access to equipment
    - Personal interaction with the trainer
    - Motivation and accountability
    - Group classes
    - Not applicable
11. What was your primary reason(s) for choosing online training (online trainer, virtual class, fitness training apps or online program at home)? (if applicable)
    - Convenience (training from home)
    - Cost (lower trainer fee, no transportation expenses, no gym membership)
    - Flexibility in scheduling
    - Access to a wider variety of programs
    - Limited social interaction

- Not applicable

12. How satisfied are you with your current training method?
    - Very satisfied
    - Satisfied
    - Neutral
    - Unsatisfied
    - Very unsatisfied

SECTION 5: MOTIVATION AND EFFECTIVENESS

13. Which of the following do you find more motivating?
    - On-site training (gym/fitness studio, trainer in person or classes)
    - Online training (online trainer, fitness apps or virtual classes)
    - Both equally
    - Neither
14. Which method do you feel is more effective for achieving your fitness goals?
    - On-site training (gym/fitness studio, trainer in person or classes)
    - Online training (online trainer, fitness apps or virtual classes)
    - Both equally
    - Neither
15. Have you ever switched from on-site (gym/fitness studio, trainer in person or classes) training to online training (online trainer, fitness apps or virtual classes) or vice versa?
    - Yes, I switched from online to on-site
    - Yes, I switched from on-site to online
    - No, I have never changed

If you switched, what was your primary reasons for the switch?

- Convenience



- Time constraints



– Cost



– Preference for in-person interaction



– Lack of motivation with the previous method



– Others

SECTION 6: SOCIAL INTERACTION AND CONVENIENCE

16. How important is social interaction in your fitness training experience?



SECTION 7: COST AND ACCOUNTABILITY

17. In terms of cost, which do you find more affordable?

– On-site training
– Online training
– Both equally
– Not sure

SECTION 8: TRAINING DETAILS

18. For on-site training, how important is the access to gym equipment?



19. What would encourage you to use online training more?

- Improved technology or user experience



- More affordable options



- Access to better trainers



- Greater flexibility in program offerings



- Nothing would encourage me

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Others (please specify)

20. What would encourage you to use on-site training more?

– Closer location or better facilities

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– More affordable options

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Access to better equipment or classes

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Personalized attention from a trainer

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Nothing would encourage me



- Others (please specify)

SECTION 9: FUTURE PREFERENCES AND ENCOURAGEMENT

21. If given the choice, which would you prefer going forward?
    - On-site trainer only
    - Online trainer only
    - A combination of both
    - No preference
22. Do you feel more engaged with an on-site trainer or online trainer?
- On-site trainer
- Online trainer
- Both equally
- Not sure

23. Which type of trainers provide more guidance and personalized feedback during the training sessions?
- On-site trainer
- Online trainer
- Not sure
- Both provide equal input

24. Which type of trainers provide better value for the cost?
    - On-site trainer
    - Online trainer
    - Not sure
    - Both provide equal input
25. What are the most important factors you consider when choosing a personal trainer?
    - Listener

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Supportive

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Respectful

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Trustworthy

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Enthusiastic

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Patient

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

– Sensitive



– Demonstrator



Thank you for your input.

Thank you for participating in the survey. Your insights are crucial to understanding the evolving landscape of fitness training and whether on-site training will continue to play a significant role.

This survey is part of the thesis research, and your responses will greatly contribute to evaluating current trends and future directions in the industry. Your perspective is essential in shaping a comprehensive understanding of this shift.

Your contribution is greatly appreciated!

Best regards,

Moussa Ghazaly

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