



# Role of Personal Training Services in Peoples' Health Habits After COVID-19

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BACHELOR'S THESIS May 2022

Bachelor's Degree in International Business

#### **ABSTRACT**

Tampereen ammattikorkeakoulu Tampere University of Applied Sciences Degree Program in International Business Marketing

VILLE-VALTTERI VARJORANTA AND EDGAR PODKOLIN Role of Personal Training Services in Peoples' Health Habits After COVID-19

Bachelor's thesis 52 pages, appendices 5 pages May 2022

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#### **Abstract**

This thesis focuses on changes in exercise and dietary habits pre-COVID-19 as well as during COVID-19. Individuals are more aware of the importance of their own health but still are not able to achieve the needed changes and goals. The objective of the thesis is to understand the changed behaviour and needs of people towards personal training services. The purpose was to study individuals changed exercise and dietary habits and understand why they have changed, so the researchers can provide recommendations for the commissionaire.

The commissioner of this thesis is a company providing fitness services in Finland. Their main objective is to provide individuals with tailored solutions that will create an environment that allows the individual to make a change for healthier exercise and eating habits as well as bring new and relevant services to the market.

The research findings showed that the main two factors that affect the motivation and ability to sustain healthy habits consist of external motivation usually provided by a personal trainer, as well as individuals' internal motivation towards a health-ier lifestyle change.

The recommendation regarding how personal training services can be used as a tool post-COVID-19 to enhance an individual's exercise and dietary habits consists of more personalized programs and services as well as improvement in communication between the client and service provider. The data suggest including two distinct price ranges for the service catalogue. Suggested channels to reach the target audience based on the research are gyms and Instagram.

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## **ABBREVIATIONS**

COVID-19 A infectious disease that has been caused by the coro-

navirus 2019-nCoV.

SDT Self-determination theory

TEMPA Theory of effort minimization in physical activity

PT Personal training

#### 1 INTRODUCTION

Exercising is present in everyone's daily life in one way or another, for some people exercising means pushing your athletic capabilities to the edge and for some exercise might mean a nice walk to breathe some fresh air. It doesn't matter what one classifies as exercising for yourself, as there is no right or wrong answer here. Exercise habits have always evolved and will be involved in the future as well, but one fact cannot be unseen COVID-19 had an enormous impact on most people's dietary and exercising habits, as people were forced to lockdown, sports facilities were mandated to shut down and overall, most exercising facilities faced huge restrictions. Even basic exercises like having a walk were heavily restricted as some countries mandated laws that did not allow people to go out after 9 pm as well as restricted the distance one was allowed to move from their house unless they had a good reason like visiting a doctor or going to work.

After all, this pandemic was something most people have never faced and did not know how to cope with it and how long could the pandemic last. Most businesses and people that worked in the health and fitness industry had to face the harsh truth that the whole industry was forced to adapt and make changes quickly or get left behind.

Because of this, the health and fitness industry started combining traditional exercising habits with the rapidly advancing technology, to provide consumers with a possibility to maintain their exercising habits even if it means changing the traditional forms of it to suit the new normal. For example, Apple watch made exercising and health habits feel more like a game as the watch was able to track your progress and you were able to compare yourself to your family and/or friends.

The commissioner of this thesis is a small business that operates in the health and fitness industry. The main products and services provided by the commissioner are one-on-one personal training and instructions services, providing clients with individual meal/exercise plans and offering ready-to-go online meal/exercise plans.

#### 1.1 Structure of the thesis

This chapter will provide the reader with needed information about the thesis itself. The reader will be provided with the main problem, goal, and additional questions to gain deeper knowledge on the subject. Keywords for the research are needed for personal training, fitness services, exercise and dietary habits. The process of the thesis steps is illustrated in Figure 1 below.

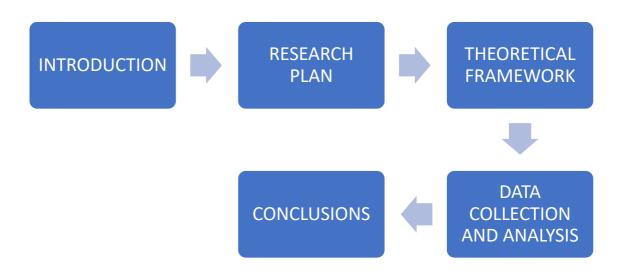


FIGURE 1. Process of the thesis

### 1.2 Goal of thesis

The goal of the thesis is to understand the changed habits of consumers, how their exercising and dietary habits have changed following COVID-19 and what kind of habits would they like to sustain post-COVID-19. By understanding the consumers' needs, the commissioner will be able to provide their customers with relevant PT services and products which are presented in the recommendations chapter.

#### 1.3 Question of the thesis

The main research question the thesis intends to answer is: How has COVID-19 affected the needs for Personal Training/ Fitness services. There is also a subquestion that is aimed to support the main research question:

1. How has COVID-19 impacted exercise and dietary habit routines?

These questions will be answered by conducting an online survey and by oneon-one interviews with the commissioner's clients. The information acquired from the survey and the interviews will be verified with the theoretical framework.

# 1.4 JV Personal Training Oy

The commissioner of this thesis is JV Personal Training Oy, a company that provides people with different personal training services. These personal training services consist of tailored meal plans, tailored workout plans as well as coaching. The main objective of the company is to provide individuals with tailored solutions that will create an environment that allows the individual to make a change for healthier exercise and eating habits.

The roots for the motivation behind why the company was established lie in the fact that the entrepreneurs could practice a profession that they truly enjoy are motivated to develop, can work with people, and have a sector with like-minded people to work with. The profession perfectly combines constant self-development as well as helping other people. The most valuable asset in the field of personal training is the coach's own competence, which is highly motivating from the entrepreneur's perspective. Since the personal training industry does not require a huge amount of starting capital, the coaching sector enables smaller businesses to thrive through creative ways and provides everyone with the possibility for success.

It is a common saying in the industry that one can only coach a person as far as he has gone himself. The saying implies that a coach needs to have an extended experience within the field of exercise and nutrition as well as constantly selfdevelop while the industry moves forward at an increasingly fast pace.

The coaching industry enables an entrepreneur to work in multiple creative ways. When looking at the Finnish sector, amongst the top coaches, the coaching styles differ drastically. There are multiple different coaching platforms for businesses, and some prefer more traditional tools such as excel, google forms and word for example. Some coaches opt for solely an online-based business model, whereas some prefer to utilize more in-person coaching. There are multiple routes for success within the coaching business.

JV Personal Training focuses on offering individualized one-on-one coaching for the everyday person as well as to more goal-oriented athletes. The one-on-one coaching includes one-on-one workouts with a coach, personalized workout- and nutrition plans as well as tracking of the athlete's progressions on a weekly basis. JV Personal training also offers purely remote coaching.

On top of the one-on-one coaching JV Personal Training has online courses available through a platform called Syke Tribe. The online courses include a ready-made workout plan, nutrition plan as well as educational articles and healthy recipes. JV Personal training also co-operates with two different coaching companies called Prehealth and Erimover. The company offers coaching services for Prehealth and Erimover as a subcontractor.

The mission behind JV Personal Training is to encourage as many people as possible to adopt healthy lifestyle choices and exercise routines in their everyday lives. In the future, the company will shift towards a more online-based business model where the one-on-one client base is going to be smaller to be able to help as many people as possible within their wellness journey.

Within the more online-based model the emphasis will be on one-on-one online coaching as well as constructing larger scale online courses that suit a large target audience. The online store for the company will also be expanded to offer many different ready-made workout plans for the people who do not want to commit to a real coaching plan. Although the emphasis will be on the online content

and online services provided for a larger audience, the shift will make one-on-one coaching services more individualized.

Passive income from ready-made online services enables more time to focus on personal clients and keep track of their progress more intensively. It's a win-win situation for both parties, clients get more out of what they pay for, and the business owners and entrepreneurs have more time to focus on what is really important.

The one-on-one coaching side will shift from people just starting their fitness journey to more advanced athletes and competitive fitness athletes. Coaching everyday people one-on-one can be challenging at times due to their volatile motivation and adherence to following a set plan whereas more advanced athletes are more internally driven and committed.

The change in the core target client base will shift the coaching from motivating and cheering for clients to be more of a problem-solver and mentor in terms of solving advanced programming puzzles and difficulties. The long-term vision for the company is to scale the business to become an employer for trainers and hire a bigger team of coaches and marketing specialists to help grow the business and the brand.

#### 2 LITERATURE REVIEW

## 2.1 Change in exercise habits and need for fitness service

According to the studies, the initial phase of lockdown marked the time where the exercising habits and need for personal training services were affected adversely, as people were having a negative perception of the situation along with a negative motivation for fitness exercises. Moreover, the need for fitness services is also affected because of increased concern for psychological health. Though with time a gradual improvement in the perception of people and their motivation for fitness exercise has been observed, because of health concerns and lockdown, people were motivated to overcome dependence on gyms, and they continued to start fitness exercise at home. (Ahmed et al. 2020.)

COVID-19 and the resultant lockdown have brought a sudden change in the lifestyle of people, and one of the noteworthy impacts is observed in the physical activities and exercise of the people. According to Ahmed and colleagues (2020), home confinement because of COVID-19 consequently reduced people's physical activities. Limited physical activities also demonstrate the changing habits of people and their reduced need for fitness services.

## 2.2 Change in exercising habits

COVID-19 has influenced the exercise routines of people. Routine replicates the sequence of actions that are performed by the individuals recurrently. The exercise habit routine of an individual before the pandemic embraces going for walk, engaging in fitness exercises, visiting gyms, and spending time outside. The emergence of COVID-19 and the imposition of lockdown and social distancing measures has adversely impacted the exercise habit routine of people, especially fitness freaks. The ultimate impact of a shattered fitness routine is observed in the health of the individual where multiple fitness and health issues alongside psychological issues are likely to occur because of disturbance in routine fitness activities. (Arya, Kaur, Mittal & Singh, 2020)

According to researchers, the COVID-19 pandemic has not merely reduced the physical activities of an individual, rather it has also impacted the exercise habit routine of people where almost 28 per cent amplification in the daily sitting time is observed, in addition to this, consumption of unhealthy food is also witnessed to increase. Even though these unforeseen changes affected every individual, the intense effect is posed on the individuals who were fitness freaks, and fitness activities either in gyms or grounds were part of their routine. (Arya et al. 2020.)

Routines are generated by prioritizing what is important for an individual and during the COVID-19 pandemic, the priority of people was to protect themselves from catching the disease, therefore reducing physical activity, and staying at home became part of their routine.

# 2.3 Change in demand for online fitness services

Online fitness services replicate the scenario whereby the individual receives fitness coaching by the coach or the trainer online usually through videos, virtual classes, or online dashboards (Stover 2017). After the pandemic one of the optimistic changes in the fitness service centres was the changing demand for online fitness services. Although, the primary stages of the pandemic and lockdown resulted in restricted gym capacity while closing many gyms entirely. But with time, during 2021, the memberships of gyms start increasing, this is tied to the online classes offered by the fitness centres. According to Davalos, (2021), the demand for online fitness services and virtual classes was turbocharged because of the COVID-19 epidemic. Online classes and virtual workouts increased with the new year after the outbreak of the pandemic. (Davalos 2021.)

The adoption of a hybrid model of in-person or online workouts has been accelerated because of COVID-19. As per the fitness research Club Intel, the percentage of live streaming of workouts has amplified from the year 2019 to 2021, where currently almost 72% of fitness club owners offered on-demand and live-stream group workouts which were 25% in 2019 according to Davalos. (2021.)

Virtual fitness and online fitness services have been the key for those who continued their exercise routine. Although home workouts and online fitness services

were gaining attraction even before the pandemic since the emergence of the pandemic 80 per cent of the consumers shifted to live stream workouts, however, the ratio was 7 per cent in the year 2019. (Davalos 2021.)

The emergence of COVID-19 has tremendously influenced the need for fitness services, however, with time the trend for fitness escalated again, and the people who were having fitness routines were inclined towards the health benefits associated with fitness. People now started to get virtual classes for fitness because of which the demand for online fitness services increased. Although online or virtual classes have been in practice for the last few years, the trend has intensified after the emergence of the COVID-19 pandemic.

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# 2.4 Consumer needs for online coaching

Early 2020 had a massive impact on peoples exercising and dietary habits as a large part of the global population was forced to isolate themselves from their household members and their devices. This shifted from traditional exercise routines such as gyms and other sports classes to personalized at-home workouts, thus making people more interested in their overall wellness. (Falardeau, Glynn & Ostromencka 2021)

The pandemic made consumers more interested as well as more aware of their overall health and wellness, a questionnaire was made regarding health habits and 68 per cent of answers implied that they prioritized their health more after the pandemic started. This turbocharged the share of consumers who used mobile apps to fulfil health and fitness goals from about 50 per cent pre-COVID-19 up to 75 per cent in June 2020. (Falardeau, et al. 2021.)

A survey by Falardeau et al. (2021) showed that the COVID-19 pandemic has resulted in a change in consumers' purchasing behaviour towards spending more money on connected fitness equipment which saw an increase of 5 per cent as well as an increase in spending on paid apps by around 10 per cent. Not only are consumers ready to spend more money on online fitness products and gadgets but 70 per cent of the exercisers have an intention of maintaining or increasing their use of online fitness services even after COVID-19.

## 2.5 Fitness industry after COVID-19

According to an article by Gough (2021) published on Statista.com the global market size of the health club industry was 96.7 billion in 2019 and has steadily been increasing until COVID-19.

After the outbreak of the pandemic, most of the fitness industry was affected due to severe lockdowns and restrictions, thus forcing the industry to adapt and overcome the new challenges set by the pandemic.

The year 2020 was a real nightmare for the industry as in the U.S alone the physical activity levels fall as much as 48 per cent, according to research from Evidation (2020) which is a platform that provides health data analytics. The downside was seen not only in the physical activity levels but in the performance of U.S based fitness companies. The fitness lobby group International Health, Racquet, and Sports club Association (IHRSA) estimated that as of Sept. 30, 2021, around 15 per cent of gyms closed their doors permanently as well as the industry had lost more than 15 billion dollars in revenue and was forced to lay off 480 000 jobs. (Rodriguez 2020.)

According to an article by Davalos (2021) published on the major global provider of financial news and information Bloomberg.com, the fitness industries online shift to how the 32 billion U.S fitness industry work will face a permanent change as even though 75 per cent of the consumers that participated in a survey said they most likely will eventually return to their old habits, routines and going to an actual gym. Many of the participants still indicated that they would retain a hybrid

model and keep participating in virtually provided classes, thus having broad implications for the whole sector. COVID-19 forced the consumers to reevaluate their values and notice the importance not only of physical well-being, but also the emotional, mental, and spiritual fitness that has gained priority in people's lives.

## 2.6 Changed health habits

Obesity increases during the pandemic: According to Diabetes.co.uk Obesity is believed to increase the likeliness of type two diabetes by 80-85%. The change in people's health habits can be seen when looking at data relating to increases in type two diabetes within the population.

Research conducted by (Estrada et al. 2021) studied the increases in diagnosis and severity of presentation Pediatric diabetes type 1 and 2 during the COVID-19 Pandemic. The research results indicate a 182 per cent increase in type 2 diabetes cases. The diabetes statistic alone should make it very clear that the pandemic has already in the short term caused a huge shift in people's health habits.

Even though we can see drastic and worrying short-term changes as huge spikes in type 2 diabetes cases, that is explained by a combination of poor diet and low levels of exercise. A study conducted in Germany by the international sociology of sport association shows a drastic decrease in German's leisure time sport and exercise activities at the start of the COVID-19 pandemic. Study shows that overall, 31 per cent of German people reduced their exercise habits, 27 per cent were able to maintain their exercise levels the same and 6 per cent of people were even able to intensify their exercise habits. The rest 36 per cent that did not engage in exercising did not make any changes. The study also provides valuable information showing that people who were able to maintain or even increase their exercising habits tend to be younger, which can be explained by being more technology orientated and able to adapt to online classes and as well as gain the needed guidance and information to increase home-based workouts and outdoor endurance sports. (Gerke & Mutz 2020.)

The existing research suggests that physical activity and overall health are in a decline, especially among the people who didn't practice healthy lifestyle choices pre-pandemic. The people who did not exercise a lot previously, now move even less due to COVID-19 and the lockdowns.

About the subject, a systematic review was done by Barnett et al. (2021). The review looked at 64 studies showcasing changes in physical activity. According to the paper "the majority of studies reporting decreases in physical activity and increases in sedentary behaviours during their respective lockdowns across several populations, including children and patients with a variety of medical conditions."

In general, physical activity and a sedentary lifestyle are trending in a negative direction. Although it is positive to see that the interest and efforts towards healthy lifestyle choices have been trending upwards.

For example, an Australian study under the title "Pandemic fitness assemblages: The sociomaterialities and affective dimensions of exercising at home during the COVID-19 crisis" gathered data on how people adapted their exercising habits during pandemic lockdowns. The paper talked about google trends data showcasing a huge jump in google searches relating to home exercise routines and another statistic indicated a 46% increase in downloads among fitness apps during the lockdowns. (Strava 2021.)

As it stands, people seem to be aware and generally interested in pursuing exercise and healthy lifestyle choices during the pandemic lockdowns. Although, even if the data would suggest aspiration and motivation toward healthy lifestyle changes, as can be seen from the drastic increase in type two diabetes cases the reality seems to be that people have failed to follow through with the implementation of these healthy habits.

#### 3 THEORETICAL FRAMEWORK

COVID-19 epidemic carried a massive impact on the business industry, where the imposition of lockdown resulted in the closure of public places, business activities, fitness, and activity centres, which has hampered multiple aspects of the life of people including their routine fitness activities, and their dependence on fitness services, sports facilities, and gyms. Increasing concern towards the health and fitness of the people during the COVID-19 pandemic has been the focus of studies, where research identified that pandemic has affected the routine and exercise habits of the individuals, moreover it has also shifted the trend towards digital and hybrid model characterized by online fitness services. The research under study also explores the effect of COVID-19 on the exercise habits of an individual, the health habit routines of individuals, and changes in online fitness services. (Davalos 2021.)

To visualize the cause-and-effect relationship in the research, the researchers need to define dependent and independent variables. Independent variables imitate the factors that influence other dependent variables, and they are regarded as the cause. In the current study, the independent variables are COVID-19 and mandatory Lockdown. Dependent variables are those which are affected by the independent variables. The dependent variables which are affected by COVID-19 and Lockdown are: exercising habits, need for personal training or fitness services, health habit routine of individual, and online fitness services.

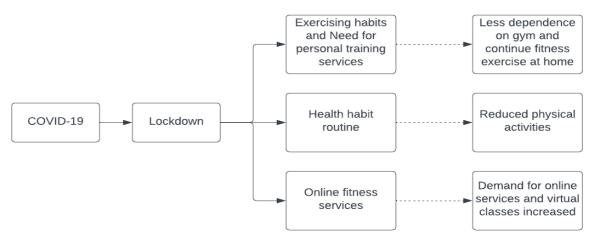


FIGURE 2. Theoretical Framework

#### 3.1 Motivational theories

#### 3.1.1 Motivation

According to (Quinn 2020.) motivation by itself can have a simple definition, even though human motivation is more complex and harder to define. A simple definition of motivation usually consists of three characteristics, direction, determination, and the ability to maintain the behaviour toward any goal. It is important to not forget that motivation is individual. A person is unique and tends to be motivated by different reasons, which can include intrinsic, extrinsic goals or a mix of both. (Quinn 2020.)

# 3.1.2 Maslow's Hierarchy of needs

The reduced need for fitness services during COVID-19 is also elucidated through Maslow's Hierarchy of needs which show the five basic needs of human (Figure 3). Where Maslow states that human beings are motivated when their needs are met, moreover, the needs of an individual are ordered in such a way that if basic needs are not met then the individual will not be being motivated for the next order of needs. Maslow defined five stages of needs that are (1) physiological, (2) safety needs, (3) social needs, (4) esteem needs, and (5) self-actualization needs. In the prevailing state of the world, people are more motivated by physiological needs, and meeting these needs is the priority of people in this world characterized by the pandemic. In addition to this, people are prioritizing staying at home during the pandemic, therefore, the option to go to the gym and get fitness services is not a priority need for people. Finding creative ways to keep oneself healthy is the focus of people during pandemics. (Quinn 2020.)

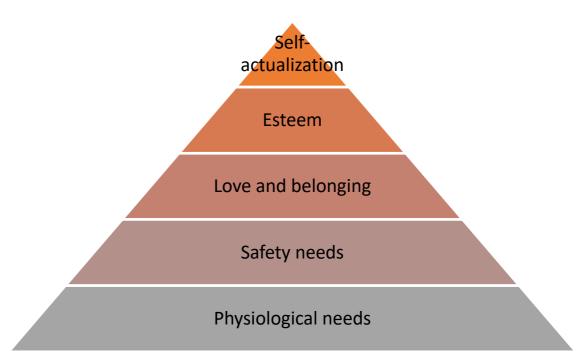


FIGURE 3. Maslow's Hierarchy of Needs (Hopper 2020)

To sum up, Maslow's hierarchy of needs shows the growth a person must go through to improve their motivation and become the best they can be. Motivation is affected by the person, as well as by all the external factors. A person's motivation will not be able to increase to its maximal potential without the external help which helps to fulfil the needs and reach the top of the hierarchy thus gaining the level of self-actualization

## 3.1.3 Self-Determination Theory

Self-determination theory is a theory that aims to understand and explain humans' goal-directed behaviour which consists of motivation, development of their personality and well-being. Motivation itself resides along the whole continuum of the theory by divided into three sub-motivations: Intrinsic motivation, extrinsic motivation, and amotivation. Ideal motivation behaviour is intrinsic as it means people are engaged because of internal factors and thus are more likely to sustain it. Extrinsic motivation on the other hand is driven by external forces that lower people's interest in sustaining it. Amotivation is a complete absence of motivation. (Teixeira et al 2012.)

A critical component of the SDT is the concept of basic psychological needs which people must fulfil, causing their behaviour to be more self-determined and

sustainable. The three basic psychological needs are autonomy, competence, and relatedness. Needs described prior are seen as crucial and common nutrients to one's psychological growth and development of motivation. By achieving autonomy people get the feeling of control of their performance and goals, thus resulting in the sense of having the ability to take action that will result in change. Competence is achieved when an individual can master tasks and gain new skills, he is comforted with a feeling of having the skills for success. With this additional confidence, an individual is more likely to take action to achieve their goals. Relatedness is achieved when an individual has the feeling of belonging as well as being accepted by his peers. (Teixeira et al 2012.)

To conclude, an individual will achieve the highest level of motivation when the behaviour is caused by intrinsic motivation, the individual has the needed competence as well as a feeling of connection to peers. This will result in the highest level of motivation that is easy to sustain and achieve the individual's peak exercising performance.

# 3.1.4 Theory of Effort Minimization

The theory of effort minimization in physical activity aims to describe why an individual's body is trying on a cognitive level to drive one's effort to the lowest levels of energy consumption. According to TEMPA, an individual's body will automatically adapt to effort minimization during physical activity, such as adjusting your step length when the individual is walking to maximize energy efficiency. Although TEMPA suggests that the brain is constantly supporting the effort minimization process, does the theory also argue that the processes can be manipulated by physical and psychological factors. (Cheval & Boisgontier 2021.)

TEMPA debates that an individual has a natural tendency to minimize effort if a chance for it arises. Accordingly, the individual's environmental factors play a key role in shaping the behaviour. When the individual's activity levels start to drop the body starts to adapt and reassign a new base level for activity. When an individual's base activity level has decreased and effort minimization takes place, can a task that once was easy, requires now a lot more effort regarding the new base level of activity according to Cheval and Boisgontier. (2021.)

To compete with the natural tendency of minimizing effort an individual must create an environment that triggers the person into spontaneous behaviour that is associated with higher rather than lower energy consumption activities. The ability to remove or reduce the attention allocated to physical effort can also be used to reduce effort minimization effects. The easiest way to oppose effort minimization is to add external stimuli, thereby reducing the perception of effort and improving the experience during physical activity. (Cheval & Boisgontier 2021.)

In conclusion, our body and mind tend to be as efficient as possible even regarding our physical activity amount. This should be countered by creating an environment that encourages physical activity. An individual also needs to find external and internal stimuli to counter the effect of effort minimization.

## 3.1.5 Summary of Theories

Theories trying to explain human needs and motivation vary in characteristics and have different observations, yet they still share some similarities. Even though the theories have been evolving for the past century. The theories mentioned above explain that an individual's motivation is a combination of internal and external factors, if the motivators are not in place will it have a great effect on the individuals' motivation.

The research theories presented above explain a phenomenon where individuals may aspire towards a certain goal, yet do not manage to achieve the desired outcome.

Maslow's Hierarchy of Needs, Self-Determination Theory and Theory of Effort Minimization will be used as the main theories for the study basis, as all the theories complement the research topic. When Maslow's hierarchy of needs and self-determination theory concentrate to understand and explain human behaviour from a psychological perspective, the theory of effort minimization contemplates the physiological assessment.

The internal motivation factors are generally observed as the strongest incentive to achieve the set goals, but the theory of effort minimization can explain why an individual might not be able to achieve the set goal. This can be explained on a physiological level as the human body has a natural tendency toward minimizing physical effort. At this stage, the individual will need strong internal motivations as well as external motivations to overcome the body's physiological tendencies to be as efficient as possible. The objective of this thesis is to understand the changed health habits of individuals following COVID-19 and how personal training services can be utilized in the situation. Maslow's hierarchy of needs and self-determination theory will be used to research and examine the different factors that influence the individual's motivation toward their health habits. On the other hand, the theory of effort minimization will be used to understand more of the external stimuli that have influenced an individual's health habits as well as search for internal stimuli to counter the physiological effect of the body to maximize its efficiency.

#### 4 RESEARCH METHODS

As the thesis aims to better understand the purchasing behaviour of the consumers, the research will be conducted mainly using quantitative research methods as it will provide the research with diverse insight information. Qualitative research methods will also be used in the thesis as it provides valuable data to the study by gaining topic-related information and understanding the different needs between age groups as well as pricing points. This research will have both research methods as it is seen as a powerful tool when quantitative and qualitative research methods are used together. As quantitative is seen as an effective method for studying large data pools, whereas qualitative methods are seen as effective in studying deep and detailed information provided by the respondents. (Holton III & Swanson 2005, 30)

The research will be conducted as a survey with mostly quantitative close-ended questions as well as a few qualitative open-ended questions. The main goal of the survey is to better understand the exercise and dietary changes that have happened in the lives of Finnish people. In addition to the survey, there will be a face-to-face interview arranged with five participants that are already clients of the thesis mandator JV Personal Training Oy. Interview aims to connect the theoretical framework, results gained from the survey and the commissioner's personal input together, thus providing extensive knowledge on what role can personal training services play in people's health habits in the future.

On top of the questionnaires and interviews, the theoretical framework will include research reviews, articles and studies relating to the subject. Research reviews, articles and studies in the thesis will be researched from various sources. The theoretical framework connects the researchers to existing knowledge. Guided by a relevant theory, the researchers are given a basis for their hypothesis and choice of research methods.

## 4.1 Research problem

The problem the research is solving relates to understanding the changing customer needs regarding Personal Training/ Fitness services post COVID-19 pandemic. As the pandemic has made a big impact on the daily habits of the working class, by forcing people into remote work as well as closing exercise facilities. The thesis will research how customers used to exercise before the pandemic, how they coped with the changes they had to face and what kind of exercise habits are they interested in future?

## 4.2 Research objective

The thesis has been conducted by two researchers specializing in marketing and finance. The thesis researches changes in people's health habits during the post-COVID-19 pandemic and how Personal Training services could be a part of the solution in bettering people's declined physical condition.

In the case of this research, the term post-COVID-19 implicates a timeline where COVID restrictions have been largely removed and societies have adapted to a new norm.

#### 5 DATA COLLECTION

The survey research method enables the collection of information through various sources such as interviews or questionnaires. Information acquired can be gathered by using qualitative-, and quantitative research methods or by combining using both strategies. Conducting an online questionnaire provides the researchers with data that is directly entered into a database, thus lowering the amount of manual labour needed for data analysis. (Ponto 2015)

The authors of the research saw that the most effective way of gathering large amounts of information in a short time period would be by conducting an online survey. To gain a deeper understanding of the subject separate interviews were conducted with the commissionaires' personal training clients.

The authors saw that around 100 respondents would be a suitable sample size for the research topic. This kind of sample size would provide enough information, data and perspective on the topic. Authors felt that the ability to stay anonymous while answering the survey would provide more transparent answers to the questions. The survey consisted mostly of quantitative research methods as well as a few qualitative research methods. The online survey (Appendix 1) consisted of 21 questions; 7 open-ended and 14 closed-ended questions. The questions in the survey were in English and Finnish languages.

The survey was published online for respondents from 09.04.2022 till 27.04.2022. Distribution of the survey was conducted on Instagram on three different profiles with a combined follower amount of 9 000 people, as the platform had the correct audience to reach the target groups. The survey was able to obtain 87 responses in the 18 days of being online, which matched the expected sample size of around 100 responses.

#### **6 RESEARCH RESULTS**

Data acquired from the online questionnaire was transferred to Microsoft Excel in which the data was transformed into diagrams by the authors. Qualitative questions from the survey were analyzed for similarities in answers by the respondents and categorized appropriately by the found similarities for the ability to transform the information into diagrams.

## 6.1 Demographic of the respondents

The survey conducted gathered information and data from 87 respondents in total, which was 10% lower than the expected 100 responses sample size that the authors felt would be adequate for the survey. Most of the respondents' main exercise form was either active gym workouts or home workouts, which makes all the respondents relevant for the research conducted. Most (69%) of the respondents prefer to exercise alone while the rest (31%) would like to exercise with a partner. The survey received 67 responses from females and 20 responses from males as seen in Figure 4.

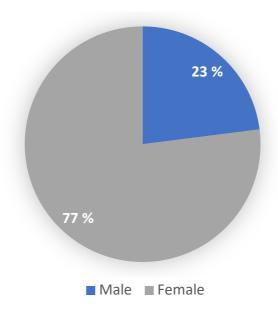


FIGURE 4. Gender of the respondents

The conducted survey did not aim at any specific age demographic, but the majority (65%) of the respondents are 21 to 30 years old (Figure 5). The high respondent rate in the age group of 21 to 30 years old might be affected by the channels used (Instagram and TikTok) to publish the survey as well as the following of the people (Fitness influencers) who published the survey for the public.

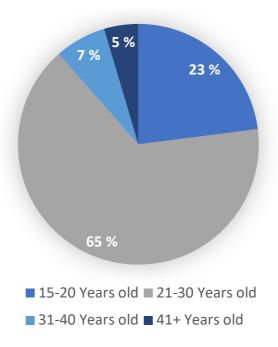


FIGURE 5. Age of the respondents

The social class of the respondents was divided relatively equally among employees (44%) and students (43%), there were also a few supervisors as well as entrepreneurs amongst the respondents as seen in Figure 6.

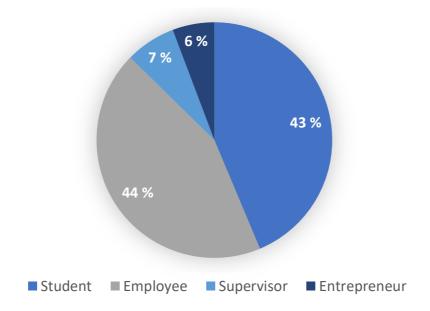


FIGURE 6. Social class

## 6.2 Change in exercising amounts

The survey asked respondents for information about their exercise behaviour before COVID-19, and during COVID-19 as well as what is their target amount of exercise. By looking at Figure 7 one can notice that over two thirds (68%) of people used to exercise between 4 to 9 hours per week. By comparing the times spent on exercising before COVID-19 and during COVID-19 one can also notice a slight increase in time spent on exercise. Even though the data shows an increase in time spent on exercising respondents have not been able to achieve their target amount of time spent on exercise which is also visible in Figure 7.

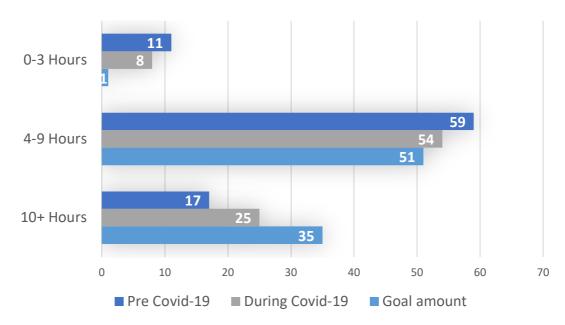


FIGURE 7. Change in time spent on exercising

Respondents were also asked how they feel COVID-19 has affected their exercise amounts to get a deeper understanding of the changed exercise habits. Even though we can see a trend of increased time spent on exercise by looking at Figure 7. At the same time by looking at Figure 8 one can notice that over half (60%) of the respondents noticed a change in their exercise amounts. An increase was noticed in 34% of the respondents while a decrease was noticed in 26% of the cases. At the same time, 40% of people did not increase nor decrease their exercise amount.

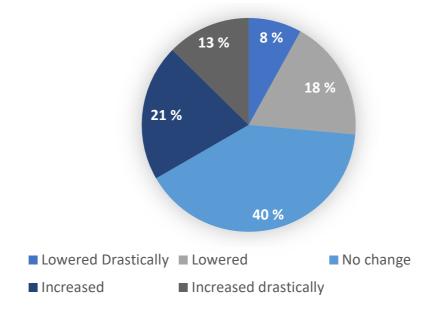


FIGURE 8. Change in exercise amounts

By comparing Figure 7 and Figure 8 one can identify that the slight increase in exercise amounts between pre-COVID-19 and during COVID-19 can be explained by a small group of respondents (21%) that increased their exercise amounts drastically. Analyzing the Figure 7 information about the goal exercise amount after COVID-19 and Figure 8, notifies the reader that most respondents are still not satisfied with their exercise amounts and need a solution that will help them reach their goals.

## 6.3 Change in dietary habits

Respondents of the survey were asked about their dietary habits pre-COVID-19 with an open-ended question. The majority (75%) of the respondents replied that they follow a healthy diet (Figure 9). The last one-fourth of the respondents were divided almost equally between having an unhealthy diet (13%) and a mix of healthy and unhealthy diets (12%). The responses consisted mostly of answers such as homemade meals, ready-made meals and eating out. If the respondents mentioned that over half of their diet consisted of homemade meals it was categorized as a healthy diet. On the other hand, if the respondents mentioned that they eat a significant number of ready-made meals or eating out it was categorized as an unhealthy diet or a mix of both depending on the answer that was provided.

Even though readymade meals should not be directly associated with an unhealthy diet, in the research, ready-made meals were categorized as an unhealthy variant. The basis for this categorization arises from the fact that high consumption of ready-made meals strongly correlates with individuals not being able to comply with national nutrient recommendations. The research relating to the topic suggests that individuals with high ready-made meal consumption compared with low consumption fail to comply with the guidelines of most of the nutrients, including carbohydrates, total fat intake and saturated fat. High ready-made meal consumption also correlates with low fruit and nutrient-dense vegetable intake. (Alkerwi, Crichton & Hébert 2014)

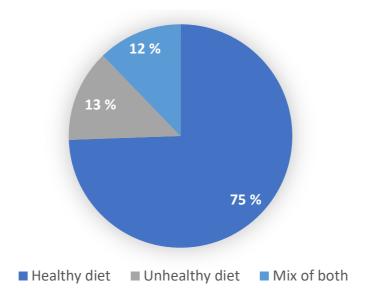


FIGURE 9. Dietary habits pre-COVID-19

According to the results of the survey, the majority (64%) of the respondents' dietary habits did not face any change because of COVID-19 (see Figure 10). The respondents that faced a change in their dietary habits mostly saw a negative impact as 29% of people felt like COVID-19 had a negative impact on their diet and it became unhealthier. Only a small (7%) portion of the respondents had a positive change in their dietary habits whilst COVID-19. The same categorization methods apply as in the figure above.

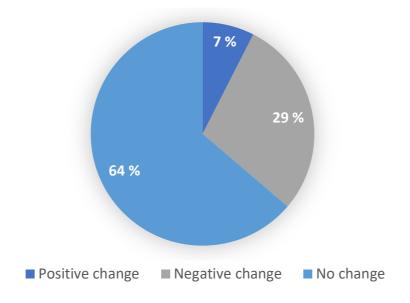


FIGURE 10. Change in dietary habits while COVID-19

By comparing data from Figure 9 and Figure 10 as well as looking at the information provided from the open-ended question, we can see a decline in people's healthy dietary habits. According to the survey around one out of three people is struggling with unhealthy dietary habits.

# 6.4 Knowledge of personal training services

All of the respondents were familiar with personal training or training programs the survey involved a question regarding platforms that are able to target the people most effectively. The survey gave respondents the ability to choose one or more answers regarding the platforms that reach the target audience the best. According to the survey (Figure 11), the two best channels to achieve your target audience in the personal training sector are by using Instagram as a marketing channel as well as having traditional flyers spread around gyms. Two channels mentioned previously achieved a reach of over 80 respondents on their own in the respondents. YouTube at the same time was able to gain the attention of 60 respondents, which made it the third-best channel for reaching the target audience. The last four channels had a reach of 41 up to 47 respondents, except outdoor banners which had the lowest reach of only 26 respondents.

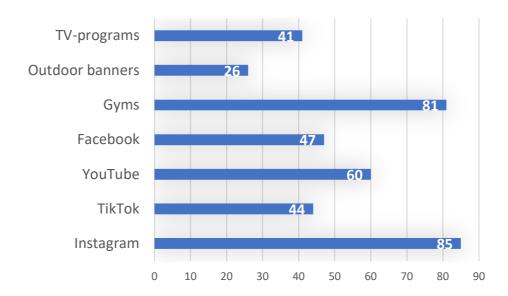


FIGURE 11. Reach the target audience

## 6.5 Purchase of personal training services

As seen in Figure 12, over half (62%) answered that they would consider purchasing personal training services to help them reach their goals either for exercise or diet. Only 14% of the respondents answered that they would not even consider the purchase of personal training services while 24% answered that they would consider a purchase.

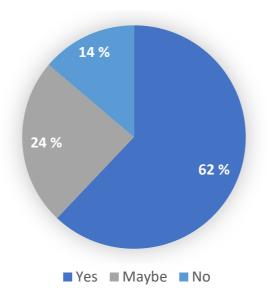


FIGURE 12. Would you consider purchasing personal training services

Respondents had the ability to choose one or more applicable price ranges for personal training services if they would buy or consider buying such services. Most responses for an applicable price for personal training services achieved three price ranges, the first being the range of 31€ up to 60€ with 30% of the votes, the second most popular price range was from 91€ up to 120€ with a response of 27% and the third price range from 61€ up to 90€ gained a response rate of 26% (see Figure 13). The three least attractive price ranges varied from 0€ up to 30€ as well as 121€ up to 160€+ with a vote rate from 12% up to 17%.

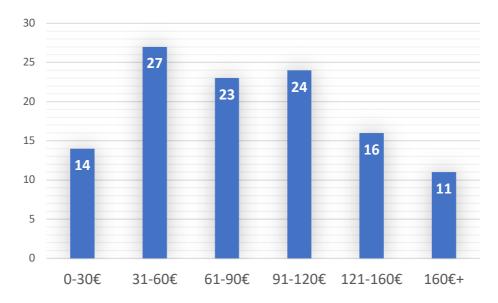


FIGURE 13. The price range for personal training services

The respondents of the survey were asked if they have ever spent money on personal training services. The majority (66%) of respondents that they indeed have made a purchase of personal training services before, while the rest (34%) said that they have never used their money towards personal training services as seen in Figure 14.

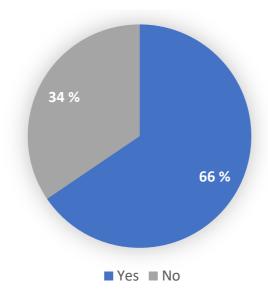


FIGURE 14. Have you ever purchased personal training services

To gain a better understanding of why respondents have bought personal training services and what kind of needs need to be filled, the survey gave the respondents an ability to inform what kind of personal training services they have bought in the past. The majority (52%) of respondents have purchased personal training programs that consist of a training program, dietary program, and guidance for the whole journey (Figure 15). People who made the purchase of purely online programs was 36%, which consist of either premade training programs or a dietary program. The rest (12%) of respondents have purchased a personal training program tailored to people interested in competing at an amateur or a professional level.

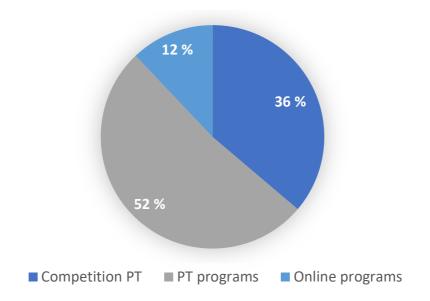


FIGURE 15. Type of program purchased

To determine the most effective sales channels, the respondents who have purchased personal training services were asked through what platform they made the purchase. The most effective sales channel for personal training services is the traditional gym with a total response amount of 34. A strong contender amongst the traditional channels was the social media platform Instagram with a response rate of 25 The last three social media platforms gained a small response rate varying from 1 to 4 respondents.

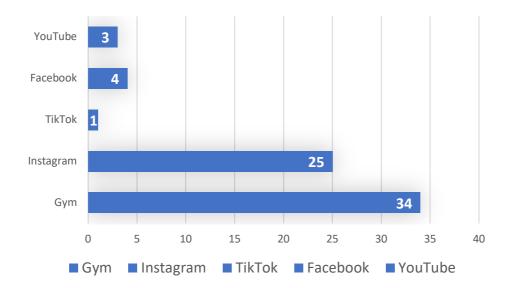


FIGURE 16. Purchase place of personal training services (n=67 Respondents)

This survey gave the ability to the respondents to answer an open-ended question about how their needs have been fulfilled with the previous programs they have purchased. Most (63%) of the respondents were satisfied and their needs were fulfilled with the previous personal training programs. By analyzing the information provided in the open-ended question there was a common reason for this satisfaction. The reacquiring reason was effective communication with the trainer, individual programs, and an authentic interest in the client from the trainer's side. The rest 37% of respondents who were dissatisfied had a common reason as well. The most common reasons were bad communication, programs not being tailored towards the client's needs, and lack of motivation.

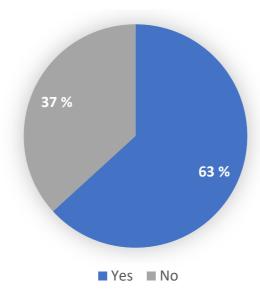


FIGURE 17. Have the previous programs fulfilled your needs

One of the most important aspects of personal training is the communication between the two parties. For this reason, the survey had a question regarding what communication methods do the respondents prefer? The majority (75) of responses, wanted to be in touch with their trainer via text messages. The second biggest group of 50 responses was in favour of communication via a traditional phone call. The last two communication options were email with a response amount of 20 and social media platforms with a response amount of 24.

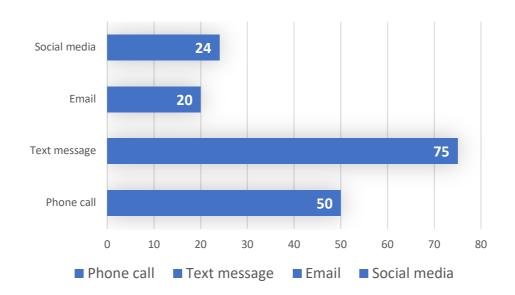


FIGURE 18. Channels for communication

## 6.6 Personal Training as a tool post-COVID-19

The respondents were asked if they feel that personal training services can be used as a tool after COVID-19 to enhance the overall health of people. All most all the respondents answered yes or maybe, only 4% of respondents were in the belief that personal training services cannot be used as a tool to enhance overall health post-COVID-19

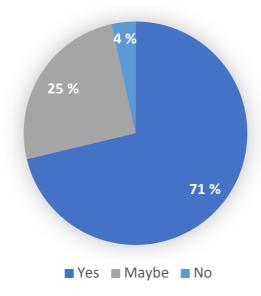


FIGURE 19. Can PT services be helpful post-COVID-19

The researchers conducted five one-on-one interviews with the clientele of JV Personal Training to find affirmation and to be able to elaborate on the findings from the survey. Interviews were conducted during two separate weeks, week 13 and 16 in the spring of 2022. The interview was comprised of a set of eleven questions (Appendix 2) and the immediate duration of the interview was 30 minutes. One of the questions concerned the topic of could Personal Training Services play a part in bettering people's overall health post-Covid- 19. All the interviewees optimistically answered yes to the question, thus supporting the results gathered from the survey.

There was a common theme amongst the answers from the interviews regarding motivation. The interviewees highlighted the fact that individuals in poor physical condition do have the motivation to make a change in their lives and learn to implement healthier lifestyle choices but often do not exceed in the endeavour without the help of a professional like a Personal Trainer.

The individuals either continuously postpone the starting of a healthier lifestyle or they will begin by introducing excess amounts of changes in their daily routines and the motivation tails off after a short time period of a new healthier lifestyle.

The interview answers supported the theories about strong motivation needing both the internal and external factors to be in place for an individual to have sustainable motivation. The interviewees talked about people wanting to change their behaviour yet not exceeding without professional help such as Personal Trainer. The answers highlight the fact that individuals often do have the internal motivation in place but lack the external motivation which will result in a failure regarding their goal.

One of the interview questions asked the question of 'What kind of needs does a modern-day personal trainer need to fulfil?". The interviewees unanimously answered that it is of the utmost importance for a Personal Trainer to offer individualized service. The coaching needs to consider individual needs and to be tailored for the customer.

The survey answers revealed that most individuals having dissatisfied with purchasing personal training services complained about the lack of communication and the lack of individualized service. Seems that both the survey as well as the interviews brought up the importance of individualized and tailored coaching services to meet the customer needs of today.

#### 7 ANALYSIS OF RESULTS AND RECOMMENDATIONS

## 7.1 Analysis of the survey

This research focused on changes in people's dietary and exercise habits and how COVID-19 affected them. The main objective was to find out how COVID-19 affected the need for personal training services. To gain a better understanding the bachelor's thesis had a sub-objective to understand how COVID-19 changed people's dietary and exercise habits, how can they motivate themselves to fulfil their goals, as well as understand the reason behind the changes. The data collected by the researchers by publishing a survey helped them to gain more knowledge and insight on the topic.

The study concentrated on three key aspects that need to be taken into consideration when offering personal training services and programs. These three key aspects are people's exercise habits, dietary habits, and what would they value in personal training services.

The survey started by collecting data and information about respondents' exercise habits. Despite the negative effect COVID-19 had on exercise facilities and forced them to shut down, most respondents were able to maintain or even grow their exercise amounts. According to the question regarding the ideal exercise amount, respondents are still dissatisfied with their current exercise amount and would like to increase it. The slight increase in exercise amounts during COVID-19 might be a consequence of additional free time following the increased remote work possibilities. The interviews conducted gave researchers the ability to ask how the commissioners' clients achieved the upkeep of their exercise amounts (Appendix 2). All the interviewed clients had a similar answer about adding light exercise forms such as walking to offset the change caused by the lockdowns of exercise facilities. The online survey did not ask to specify the forms of exercise, for example, was it an increase in just walking outside or lifting heavyweights.

The most important part of a healthy life is the dietary habits of a person, 75% of the survey respondents had healthy dietary habits and the rest 25% divided equally between bad dietary habits and a mix of both. This means that most respondents still did have healthy or somewhat healthy dietary habits. After the start of COVID-19 people experienced bigger negative changes in the way they eat almost 30% of respondents noticed that their dietary habits took a turn for the worse. This means that at this point only around 50% of the respondents have a healthy dietary habit, which is an alarmingly small amount. The interviewed clients at the same time mentioned that having a coach made it easier to stay on track as they had the extra external motivation to keep up the old habits when the world around them had to adapt fast to the new disease.

The self-determination theory is a concept of basic psychological needs which people must fulfil. As people have lost the feeling of autonomy, because of external factors such as COVID-19 restrictions, they lost the feeling of control and losing the sense of having the ability to take action that will result in change. This would explain why respondents of the online survey are not satisfied with their slightly increased exercise amounts and would like to achieve an even higher amount.

The survey also showed that respondents that have purchased personal training services before had a common occurrence that was communication. If respondents were unsatisfied with the services, it was either due to bad communication or the lack of individuality in the service. On the other hand, if respondents were satisfied with the services it was caused by good communication and the individuality in the service. This was also confirmed by the interviews conducted, as the clients emphasized the importance of good communication between the client and the service provider. These findings support Maslow's hierarchy of needs as individualized services and good communication makes it easier and more sustainable to fulfil the consumers' different levels of needs.

As stated by Maslow's hierarchy of needs, self-determination theory and theory of effort minimization a person's basic needs, external and internal motivation as well as external influences must be fulfilled and met. This will make the process of setting and achieving goals more sustainable. It will also create an environment that feeds itself and prompts the individual to strive for new goals and achievements.

#### 7.2 Recommendation

The recommendations for the commissioner company JV Personal Training are given based on analyzed information acquired from a survey as well as interviews. Recommendations given to the commissioner are meant to help understand the changes in people's dietary and exercise habits and provide a personal training solution to help people achieve their goals. By understanding what people value in personal training services and what helps to keep motivated.

In terms of marketing channels, the data provided by the research shows that the best way for a personal training company to reach its target audience is to concentrate on two channels that stood up from the rest. By focusing on marketing in gyms and on Instagram, the company will achieve the best reach, engagement levels and sales. This can be achieved by having a physical presence in gyms as well as flyers, posters and business cards placed in a visible place, such as the reception area. The survey also showed that amongst the target audience the most popular social media channel was Instagram. Because of this, the commissioner should have a regular posting schedule with information that provides value to the audience to grow their following and engagement levels. The researchers were not able to conduct a paid advertisement to research its effectiveness but would suggest trying it out, as Instagram has great tools for paid advertisement and targeting your preferred audience.

In terms of the services, the research found emerging importance towards individualized personal training services. Within the last few years, the Personal Training industry has seen a massive increase in popularity. Now in the social media age, the customers are regularly having public conversations and posting their journeys regarding different coaching services on the most popular platforms. This phenomenon has resulted in increased awareness regarding the average quality of service. The raised awareness amongst the target audience highlights the importance for JV Personal Training to be able to offer individualized coaching services to stand out from the crowded market.

The survey found two price ranges that stood out from the research in terms of how much money customers are willing to spend on Personal Training services. The lower price ranges from 31€ to 60€ and the higher price range from 91€ and above attracted the most popularity. Based on the survey results JV Personal Training should focus on offering one lower-end service category within the 31€ to 60€ range and one higher-end service category in the 91€ and above.

The target audience for Personal Training needs individualized service. The lower price category should be divided to offer two main services, ready-made training programs from the online store as well as online courses. The online store should offer a wide variety of different ready-made training programs for a variety of different client needs. For the online store, it is highly important to have detailed product descriptions and to clearly express for whom the product is intended. Even though the programs are not tailor-made for the individual customer if the customer has an extensive variety of options with clear descriptions for whom the product will suit them best, the customer is going to find to have made the best possible decision for their specific need and for an affordable price.

For the lower price category, the more individualized service offering will be online courses. The online courses include both a ready-made training program, as well a variety of ready-made templates for nutrition. What makes the online courses more individualized is adding a chat tool which the client can use for direct communication with the coaches. Direct communication with the coaches ensures that the service shapes into a more individualized experience as the online course progresses since the coaches can make individual changes to the programs during the course for the clients.

The higher price category from 91€ and above includes the more traditional one-on-one coaching services. One-on-one coaching offers fully individualized training and nutrition programs, based on an initial interview as well as background information form. It is highly important to clearly distinguish the benefits of the one-on-one coaching experience from the online courses. The main differences lie in the individualized tailor-made workout and nutrition programs, together with regular communication between the client and the coach. The communication

occurs through a weekly report from the coach, video calls and open messaging platforms such as WhatsApp messaging.

The survey respondents were asked how they would like to communicate with the personal training services provided, the preferred communication methods were traditional phone calls and WhatsApp. This should be taken into consideration and provided for the customer to fit their daily needs and schedule. This will also provide the customer with a feeling of larger engagement and a more personal connection that was valued by the respondents and seen as one of the most important aspects.

#### 8 CONCLUSIONS

The research aimed to understand and acquire relevant information on how the COVID-19 pandemic affected individuals' dietary and exercise habits. By identifying the new situation, the authors can present the commissioners with recommendations regarding solutions for the problem. The quantitative surveys and qualitative interviews conducted by the researchers were able to acquire a deep understanding of the consumer needs as well as theories applicable to the researched topic. The data collected gave inclusive information about the consumer's past, present and future needs.

By analyzing the data and information obtained from the survey and interviews, the researchers were able to find trends and commonalities that affected an individual's exercise and dietary habits. According to the research results people are still dissatisfied with their exercise amount, and dietary habits have taken a change towards an unhealthier direction. A common occurrence was that individuals without a personal trainer lacked additional external motivation which led to an unhealthier diet and higher dissatisfaction with their exercise habits. At the same time, individuals with a personal trainer received additional external motivation which led to upkeeping the healthy dietary habits and satisfaction with exercise levels.

The recommendations for the commissioner were based on the survey as well as the interviews and backed up by the theoretical framework. The research provided three main suggestions. The first recommendation relating to marketing found the most effective channels to reach the target audience are gyms and the social media platform Instagram.

The last two recommendations were about the products and services, based on the popular price ranges from the survey data as well as the reoccurring answers towards the need for more individualized programs and services. The second suggestion was made for products and services in the price range of 31€ to 60€. The third suggestion was made for services starting from 91€ and above.

The limitations that may have affected the research outcome need to be taken into attention. Firstly, the possibility of misunderstanding of open-ended questions and the lack of appropriate choices in the provided closed-ended question. Secondly, the truthfulness of the respondents has a crucial effect on the data and information that was used to create assumptions and suggestions. Thirdly, it is a possibility that the interviewees have a personal bias when answering the interview question as they were a JV Personal Training Oy clients. Lastly, there is a possibility that the researchers misinterpreted the gathered data and information which would lead to an incorrect analysis of the results. In addition, the conducted research was not funded which creates financial restrictions and the limitation of collected data. All of this affects the reliability and requires additional investigation on the subject.

To conclude the research, the authors were able to provide the commissioner with relevant information about the changed habits in the changing market land-scape. The recommendation and the thesis can be used as a tool for fitness service providers, who aim to adapt to the new normal and bring relevant services and products to the market.

#### **REFERENCES**

Ahmed, M. Ammar, A. Bentlage, E. Bouaziz, B. Boukheis, O. Brach, M. Chtourou, H. How, D. Masmoudi, L. Müller, P. and Trabelsi, K. 2020. Effects of COVID-19 home confinement on eating behaviour and physical activity: results of the ECLB-COVID19 international online survey. Nutrients, 12 (6), 1583.

Alkerwi, A. Crichton, G. and Hébert, J. 2014: Consumption of ready-made meals and increased risk of obesity: findings from the Observation of Cardio-vascular Risk Factors in Luxembourg (ORISCAV-LUX) study. Published on December 9, 2014. Read on May 26, 2022. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302389/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302389/</a>

Archived: Evidation.com. 2020. Study: COVID-19 Pulse: Delivering regular insights on the pandemic from a 150,000+ person connected cohort. Evidation. Read on December 11, 2021 <a href="https://evidation.com/news/covid-19-pulse-first-data-evidation">https://evidation.com/news/covid-19-pulse-first-data-evidation</a>

Arya, Y. Kaur, H. Mittal, S. and Singh, T. 2020. Physical fitness and exercise during the COVID-19 pandemic: A qualitative inquiry. Frontiers in psychology, 11, 2943.

Barnett, Y. Butler, L. McDermott, D. Schuch, F. Shin, J. Smith, L. Stockwell, S. Trott, M. and Tully, M. 2021. Changes in physical activity and sedentary behaviours from before to during the COVID-19 pandemic lockdown: a systematic review. Read on March 10, 2022 <a href="https://bmjopensem.bmj.com/content/7/1/e000960">https://bmjopensem.bmj.com/content/7/1/e000960</a>

Cheval, B. and Boisgontier, M.P. 2021. The Theory of Effort Minimization in Physical Activity. Exercise and Sport Sciences Reviews, 49(3), pp.168–178.

Davalos, J. 2021. How Covid-19 Has Permanently Changed the Fitness Industry. Bloomberg. Published on January 19, 2021. Read on December 10, 2021 <a href="https://www.bloomberg.com/news/articles/2021-01-19/fitness-industry-may-never-return-to-its-old-ways-after-covid-19">https://www.bloomberg.com/news/articles/2021-01-19/fitness-industry-may-never-return-to-its-old-ways-after-covid-19</a>

Diabetes and Obesity. Diabetes.co.uk. Published on January 15, 2019. Read on March 11, 2022 <a href="https://www.diabetes.co.uk/diabetes-and-obesity.html">https://www.diabetes.co.uk/diabetes-and-obesity.html</a>

Estrada, E. Flokas, M.E. Gai, J. Khilnani, A. Marks, B.E. Meyers, A. Monaghan, M. Streisand, R. 2021. Increase in the Diagnosis and Severity of Presentation of Pediatric Type 1 and Type 2 Diabetes during the COVID-19 Pandemic. Karger. Published on September 21, 2021. Read on March 11, 2022 <a href="https://www.karger.com/Article/FullText/519797">https://www.karger.com/Article/FullText/519797</a>

Falardeau, E. Glynn, J. and Ostromecka, O. 2021. Sweating for the fitness consumer. McKinsey & Company. Published on June 21, 2021. Read on December 10, 2021. <a href="https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/sweating-for-the-fitness-consumer">https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/sweating-for-the-fitness-consumer</a>

Gerke, M. Mutz, M. 2020. Sport and exercise in times of self-quarantine: How Germans changed their behaviour at the beginning of the Covid-19 pandemic.

Sage Journals. Published on June 22, 2020. Read on March 12, 2022 <a href="https://journals.sagepub.com/doi/10.1177/1012690220934335">https://journals.sagepub.com/doi/10.1177/1012690220934335</a>

Gough, C. 2021 Health & Fitness Clubs – Statistics & Facts. Statista. Published March 10, 2021. Read on December 11, 2021 <a href="https://www.statista.com/top-ics/1141/health-and-fitness-clubs/#topicHeader">https://www.statista.com/top-ics/1141/health-and-fitness-clubs/#topicHeader</a> wrapper

Holton III, E. & Swanson, R. 2005. Research in Organizations: Foundations and Methods in Inquiry. First Edition. Berrett-Koehler Publishers.

Hopper, E. 2020. Maslow's Hierarchy of Needs Explained. ThoughtCo. Published on February 24, 2020. Read on April 2, 2022 https://www.thoughtco.com/maslows-hierarchy-of-needs-4582571

Ponto, J. (2015) Understanding and Evaluating Survey Research. Journal of the advanced practitioner in oncology. [Online] 6 (2), 168–171

Quinn, A. 2020. COVID-19 and Maslow's Hierarchy of Needs: How Is Our Motivation Changing? GoodTherapy. Published on April 20, 2020. Read on March 23, 2022 <a href="https://www.goodtherapy.org/blog/covid19-maslows-hierarchy-of-needs-how-is-our-motivation-changing-0420204">https://www.goodtherapy.org/blog/covid19-maslows-hierarchy-of-needs-how-is-our-motivation-changing-0420204</a>

Rodriguez, M. 2020. One in Four Health & Fitness Clubs Could Close by Year-End. IHRSA. Read on December 11, 2021 <a href="https://www.ihrsa.org/about/media-center/press-releases/15-of-health-fitness-clubs-in-the-u-s-permanently-closed/#">https://www.ihrsa.org/about/media-center/press-releases/15-of-health-fitness-clubs-in-the-u-s-permanently-closed/#</a>

Stover, B. 2022. ONLINE FITNESS TRAINING EXPLAINED. Nongenderedfitness. Published on July 31, 2017. Read on March 21, 2022 <a href="https://nongenderedfitness.com/online-training/online-fitness-coaching-explained/">https://nongenderedfitness.com/online-training/online-fitness-coaching-explained/</a>

Strava. 2020. Strava releases 2020 Year In Sports Data Report. Published on December 16, 2020. Read April 2, 2022 <a href="https://blog.strava.com/press/yis2020/">https://blog.strava.com/press/yis2020/</a>

Teixeira, P.J. Carraça, E.V. Markland, D. Silva, M.N. and Ryan, R.M. 2012. Exercise, physical activity, and self-determination theory: A systematic review. International Journal of Behavioral Nutrition and Physical Activity. Published on June 22, 2012. Read on April 3, 2022 <a href="https://doi.org/10.1186/1479-5868-9-78">https://doi.org/10.1186/1479-5868-9-78</a>

## **APPENDICES**

# Appendix 1. Questions from survey

1. How many hours per week did you spend exercising before Covid-19? / Kuinka monta tuntia viikossa käytit urheilemiseen ennen Covid-19?	*
Oma vastauksesi	
2. How has Covid-19 affected your exercise amounts? / Miten Covid-19 on vaikuttanut sinun liikunnan määrään?	*
O Lowered drastically my exercise amounts. / liikunta määrät ovat laskeneet suuresti.	
O Lowered my exercise amounts. / Liikunta määrät ovat laskeneet jonkin verran.	
Has not affected my exercise amounts. / Ei ole vaikuttanut minun liikunta määriin.	
O Increased my exercise amounts. / Liikunnan määrät ovat kasvaneet jonkin verran.	
Increased drastically my exercise amounts. / Liikunnan määrät ovat kasvaneet suuresti.	
3. What kind of dietary habits did you have before Covid-19? (Eating out, readymeals etc.) / Millaiset ruokailutottumukset sinulla oli ennen Covid-19? (ulkona syöminen, valmisateriat jne.)	*
Oma vastauksesi	
4. How has Covid-19 affected your dietary habits? (Eating out, readymeals etc.) / Miten Covid-19 on vaikuttanut sinun ruokailutottumuksiin? (ulkona syöminen, valmisateriat jne.)	) <b>*</b>
Oma vastauksesi	
5. How many hours per week do you spend exercising? / Kuinka monta tuntia viikossa käytät urheilemiseen?	*
Oma vastauksesi	

6. How many hours per week would you like to exercise? / Montako tuntia * viikossa haluaisit urheilla?
Oma vastauksesi
7. What kind of exercise do you prefer? / Millaisia liikuntamuotoja suosit? *
Home workouts / Kotitreenit
Gym workouts / Salitreenit
Group exercise classes/ Ryhmäliikunta
Muu:
8. Would you rather train? / Treenaatko mielummin? *
Alone / Yksin
With a friend / Kaverin kanssa
With a friend / Kaverin kanssa
9. Have you heard about personal training or training programs? / Oletko kuullut * personal training palveluista tai treeniohjelmista?
Yes / Kyllä
○ No / En
10. If you answered "Yes / Kyllä" in the previous question, in which channels? / Jos
vastasit "Yes / Kyllä" aiemmassa kysymyksessä, niin missä kanavissa olet törmännyt edellä mainittuihin palveluihin ?
☐ Instagram
☐ Tiktok ☐ Youtube
Facebook
Gyms / Liikuntasalit
Outdoor banners / Ulkomainokset
TV-programs / TV-ohielmat

11. Would you consider purchasing personal training services? / Voisitko harkita * personal training palveluiden ostamista?
Yes / Kyllä
○ No / En
Maybe / Ehkä
12. How much are you willing to spend on personal training services per month? / Paljonko olisit valmis käyttämään rahaa personal training palveluihin kuukaudessa?
0-30€
31-60€
☐ 61-90€
91-120€
121-160€
160€+
<ul><li>✓ Yes / Kyllä</li><li>✓ No / En</li></ul>
14. If you answered "Yes / Kyllä" in the previous question, what kind of personal training services have you purchased? / Jos vastasit "Yes / Kyllä" aiemmassa kysymyksessä, niin millaisia personal training palveluita olet ostanut?
Oma vastauksesi
15. From where did you make the purchase of the services? / Missä olit tehnyt kyseisten palveluiden oston?
Gyms / Liikuntapaikat
Tiktok
Instagram
Facebook
Yuotube

16. If you have previous experience from personal training services, have they fulfilled your need, if not, why? / Jos sinulla on aiempaa kokemusta personal training palveluista ovatko ne täyttäneet kaikki tarpeesi, jos ei, miksi? Oma vastauksesi 17. Through what channel would you like to be in contact with your trainer? / \* Mitä kanavaa pitkin haluaisit olla yhteydessä omaan valmentajaan? over the phone or video call/ puhelimitse tai videopuhelu text message or whatsApp/ tekstiviesti tai whatsapp email/ sähköposti over social media/ sosiaalisen median kautta 18. Do you think that personal training services could be a solution post Covid-19 to enhance the overall health of people? / Voisko sinun mielestä personal training palvelut olla osa ratkaisua Covid-19 jälkeen ihmisten yleisen terveyden parantamiseen? Yes / Kyllä Maybe / Ehkä No / Ei 19. Gender / Sukupuoli \* Male / Mies Female / Nainen 20. Age / Ikä \* Oma vastauksesi 21. Social class / Sosiaaliluokka \* ) Student / Opiskelija Employee / Työntekijä Supervisor / Esimies Entrepreneur / Yrittäjä Pensioner / Eläkeläinen

### Appendix 2. List of questions for one-on-one interviews.

- 1. Where did you find us?
- 2. How long have you exercised?
- 3. What are the pros and cons you have faced in training unsupervised?
- 4. How long have you been with us?
- 5. Why did you decide to get a personal trainer?
- 6. What is your goal in the realm of exercising?
- 7. Do you think Personal Training services could be helpful in bettering people's well-being post-COVID-19?
- 8. What are the pros and cons you have faced in personal training?
- 9. How has COVID-19 affected your eating habits?
- 10. How has COVID-19 affected your exercise habits?
- 11. What kind of needs does a modern-day personal trainer need to fulfil?