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**Original Article Research** 

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# **Investigation of Attitudes Towards Exercise Behavior Changes of** Adults Registered with Fitness and Activity Centers under the COVID-19 Lockdown

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### Abstract

In this article, the authors aim to examine the attitudes towards exercise behavior changes of adults who are registered to Fitness and Activity Centers under the COVID-19 Quarantine and cannot routinely go to gyms due to quarantine. Method; It consisted of a total of 120 individuals, 40 women and 80 men, between the ages of 18-55, registered to fitness and activity centers. The participants were selected from those who went to the gym for at least 45 minutes a day, 3 days a week for at least 6 months, and did fitness exercises for at least 6 months before the quarantine. The experiential and behavioral attitudes of the participants regarding the benefits of exercise were determined by the Exercise Change Processes Scale (EDSS). The components of experiential and behavioral processes are determined with a 5-point Likert-type scale consisting of 28 questions. According to the findings; There was no significant difference between men and women in the experiential subdimension and the behavioral sub-dimension, which includes helping relationships and empowering management processes (P>0.05). On the other hand, it was determined that there was a significant difference between the behavioral subdimension components of opposite and opposite situation, self-liberation and stimulus control, and total awareness levels between men and women (P<0.05, P<0.01). As a result, it can be argued that unlike the months-long quarantine effectively controlling the spread of the COVID-19 pandemic, it does not have a positive contribution to the exercise behavior change process.

Keywords: COVID-19, Fitness, Exercise Behavior, lockdown

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### 1. INTRODUCTION

The COVID-19 pandemic is a major global health crisis and a rapidly spreading epidemic recently. Compared to previous pandemics the world has witnessed, the current COVID-19 pandemic now tops the list in terms of worldwide coverage (Kaur et al., 2020; Bentlage et al., 2020). Initially, the death rate due to COVID-19 was around 2%, but now it has increased to 4-6%, and the total number of cases and their incidence are increasing day by day, making the situation worrying (Demirci, 2020; WHO, 2020). The restrictions during COVID-19 had a dramatic effect on people's lifestyle behaviors such as diet, sleep, substance use, inactivity, and physical activity. In particular, the closure of public places and the prohibition of social gatherings have reduced the possibility of participating in outdoor physical activity (Martínez-de-Quel et al, 2021). During the transition between childhood and adulthood, adolescence is an important stage for the development of physical activity as it can potentially reduce the risks of chronic diseases later in life. However, even during the non-epidemic period, 80% or more adolescents and adults in many countries do not meet the current physical activity recommendations of the World Health Organization (Zhou et al., 2022; Fühner et al., 2021).

The World Health Organization (WHO) has described this outbreak as a pandemic and advised national governments to take preventive measures to slow the spread of the virus. 'Social distancing' is considered an important factor for slowing related epidemics (Burhaein et al., 2021: Demirci & Phytanza, 2021). Therefore, within the scope of Kovid-19 mitigation policies, measures for spatial distancing and self-quarantine have been implemented in many European countries (Mutz and Gerke, 2021). According to Ammar et al. (2020a) reported that COVID-19 house arrest resulted in reductions in all physical activity levels and an approximately 28% increase in daily sitting time, as well as an increase in the pattern of unhealthy food consumption. Similar results have been reported by other researchers. While these sudden changes affected every individual, many who regularly followed fitness activities in gyms, on the ground or elsewhere before the lockdown were heavily affected. The closure of fitness centers and public parks has forced people to stay at home, disrupting their daily routines and hindering their fitness activities (Neto et al. 2020).

The International Association of Health, Racquet and Sports Club estimates that 151 million people exercise in 187,000 sports and fitness centers worldwide. Exercising in a fitness room exhibits three different forms of behavior on the individual: participation behaviors (when a person enters facility), continuation (an individual participates in a particular program), and eventual exercise (individual time, intensity, true) (Demirci and Toptaș Demirci, 2018; Middelkamp et al., 2016). It is important to note that physical activities (PA) and exercise not only maintain physical and psychological health, but also help our bodies respond to the negative consequences of various diseases such as diabetes, hypertension, cardiovascular diseases and respiratory diseases. In a recent review of 31 published studies, Bentlage et al. (2020) concluded that physical inactivity due to current pandemic restrictions is a

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major public health issue, with reduced life expectancy and a leading risk factor for many physical health problems. Exercise and physical activities also have important functions for the psychological well-being of individuals. In the event of pandemic, when health promotion activities such as sports and regular gym exercises are not available, it is very difficult for individuals to meet the general WHO guidelines (150 minutes of moderate to mild PA per week or 75 minutes of intense PA or a combination thereof). Amid this pandemic-related restriction (house pills and indoor gyms, parks and fitness centres), how people cope and find ways to stay in shape remains an important question (Bentlage et al., 2020).

Sports clubs, community gyms, fitness centers, swimming pools, and other sports and recreational facilities have been closed, although authorities have announced that exercise in public places (alone, with a companion, or with members of a household) is still allowed. Although this pandemic situation has led to the unexpected cessation of almost all external routine activities of all individuals, it has profoundly hampered the physical activity of fitness freaks (those who regularly go to the gym for their physical fitness) such as gyms and other gyms. It would be interesting to explore how and to what extent people are able to follow and benefit from home exercise advice with the problems arising from the COVID-19 pandemic and subsequent quarantine. Therefore, the present research aims to examine the Attitudes Towards Exercise Behavior Changes of Adults Registered with Fitness and Activity Centers under the COVID-19 Quarantine.

### 2. METHOD

### 2.1 Participants

The purpose and importance of the study were explained to the participants and their informed consent was obtained for their participation. All participants were assured of the confidentiality of their answers and identities. Data collection took place between 01 January - 01 June 2021. The participants consisted of 120 regular gym members, 40 women and 80 men, who went to the gym for at least 45 minutes a day, 3 days a week for at least 6 months, and did fitness exercises for at least 6 months before the quarantine. Strict regulations regarding social distancing and self-quarantine have been enforced by the government, so data collection continued in the second and third months after the covid-19 process worsened. Participants were invited to participate in the survey via e-mail and were able to answer the survey from their computer, tablet or mobile phone. All participants gave written consent to be contacted for online surveys, were informed about the subject of this survey, and answered questions voluntarily. The surveys obtained from the participants were made ready and attention was paid to the protection of all personal data.

## 2.2 Research Design

The study was based on a literature review to determine the attitudes of sedentary individuals towards exercise change processes (Marcus, 1992). General features include age, gender, height, weight, and body mass index (BMI). Height and body weight measurements of the participants were taken according to their self-reports. Body weight and height measurements were added to the personal information forms and formulated. BMI = Body Weight (kg) / Male<sup>2</sup> (m). BMI values were obtained by taking body length and dividing body length by body weight.

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### 2.3 Instruments

The instrument used in this study is the exercise change processes scale. This scale, which was developed by Marcus et al., consists of 28 items (Marcus, 1992). In the scale, the individuals' agreement with each statement is determined by using a 5-point Likert scale. How often the individual does the exercise in the condition specified in each item in the scale is determined by a rating score ranging from 1-5. The interviewee is asked to read the items of this scale, choose the most appropriate one among the options "never", "rarely", "occasionally", "often", "repeatedly" for each item and mark it. The scale is evaluated according to the mean score obtained from the item score averages of all subscales.

### 2.4 Procedures

Prosedur penelitian ini secara total terdiri dari 10 processes in two groups in change. These processes are summarized below:

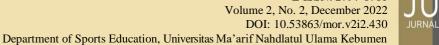
## **Group I- Experiential Processes**

- 1. Increase in Consciousness; It is an increase in the individual's awareness of causes and effects. The individual searches for new information about exercise (1, 2, 3).
- 2. Dramatic Assistance/Emotional Uplift; it is the activation of the individual's feelings about the results of sedentary life through the use of dramatic messages (for example, by media campaigns or announcing research results) (4, 5, 6).
- 3. Environmental Re-evaluation; It is the evaluation of how the individual's behavior is affected by the social environment in which he lives (items 7 and 8).
- 4. Self-reevaluation; it is the individual's evaluation of his/her self-image while continuing an unhealthy habit and without this habit (items 9, 10, 11).
- 5. Social freedom/liberty; refers to the increase in opportunities and alternatives in social environments. Motivation studies have shown that a large number of choices can increase one's power. For example; Places where smoking is free, cafes, restaurants increase the individual's resistance to unhealthy behavior (items 12, 13, 14 of the scale).

### **II. Group- Behavioral Processes**

- 6. Opposite/Contrasting Situation; it is the individual's learning of a healthy behavior that can replace the problematic behavior (items 15, 16, 17).
- 7. Helpful Relationships; helping relationships in behavior change; trust, openness, acceptance and support (Articles 18, 19).
- 8. Empowerment Management; the individual prepares the consequences for a particular behavior in advance. For this, he can use the method of reward and punishment. The individual rewards physical activity behavior. TM emphasizes that rewarding is more effective than punishment while the individual experiences personal change (items 20,21,22).
- 9. Self-Liberation; it is the individual's belief in change as much as possible, his beliefs and goals regarding physical activity, making his own choice, making a decision and taking action in this direction (items 23, 24, 25).
- 10. Stimulus Control; The individual's removal of stimuli that trigger unhealthy behaviors and instead those that lead to healthy behaviors; Items 26, 27 and 28 (Transtheoretical Model, 2006)

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### 2.5 Data Analysis

Participant characteristics were described using means and standard deviations. Differences in body height and weight, BMI, and each physical fitness indicator between baseline and follow-up were examined using a paired t-test. BMI = Body Weight (kg) / Male2 (m). In this study, the T test, one of the parametric variables, was used to examine the differences between the exercise change processes scale between men and women. P value less than 0.05 was considered significant.

#### 3. RESULTS

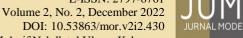
A total of 120 adult (age: 26,29 7,06 years old) were included in this study, with a higher number of Male adult (n = 80; 66,7%) than that of girls (n = 40; 33,3%). Average age, height and body weight excluding BMI differ between men and women. The participant characteristics are presented in Table 1.

Table 1. General Descriptive Characteristics of Adults Registered with Fitness and Activity Centers under the COVID-19 Lockdown

Variables	Gender	N	AO	SS	Min.	Maks.	t	sd	Sig.
	Male	80	25,33	6,59	18	42		· ·	
Age (year)	Female	40	28,09	7,62	19	53	-2,143	127	,034*
	Total	120	26,29	7,06	18	53			
Height (am)	Male	80	179,17	8,72	132	198			
Height (cm)	Female	40	165,87	6,65	155	185	8,931	127	,000**
	Total	120	174,53	10,25	132	198			
Waight (kg)	Male	80	77,18	11,59	52	106			
Weight (kg)	Female	40	63,53	11,54	42	95	6,384	127	,000**
	Total	120	72,42	13,25	42	106			
	Male	80	24,05	3,24	16,98	36,33			
BMI	Female	40	23,07	3,75	16,71	32,42	1,549	127	,124
	Total	120	23,71	3,45	16,71	36,33			

Increase in consciousness, dramatic help or emotional rejuvenation, re-evaluation of the environment; There was no significant difference between men and women in the experiential sub-dimension, which includes the processes of self-reappraisal, social release or freedom, and the behavioral sub-dimension, which includes the processes of helping relationships and empowerment management (P>0.05). On the other hand, it was determined that there was a

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<0.01) (Table 2).

significant difference between the behavioral sub-dimension components of opposite and opposite situation, self-liberation and stimulus control between males and females (P <0.05, P

Table 2. Attitudes of the participants towards exercise change processes in terms of experiential and behavioral sub-dimensions

Variables	Gender	N	X	S.S.	Min.	Maks.	t	sd	Sig.
1. Increase in the level of	Male	80	3,34	1,13	1,00	5,00	1,805	127	,073
consciousness	Female	40	2,96	1,12	1,00	5,00			
	Total	120	3,21	1,13	1,00	5,00			
2.Dramatic assistance/emotional stimulation	Male	80	3,67	1,04	1,00	5,00	1,347	127	,180
stimulation	Female	40	3,39	1,21	1,00	5,00			
	Total	120	3,57	1,10	1,00	5,00			
3. Re-evaluation of the	Male	80	3,94	1,02	1,00	5,00	,491	127	,624
environment;	Female	40	3,84	1,12	1,00	5,00			
	Total	120	3,91	1,05	1,00	5,00			
	Male	80	4,54	0,65	2,33	5,00	1,825	127	,070
4. Self-reassessment	Female	40	4,30	0,84	2,00	5,00			
	Total	120	4,45	0,73	2,00	5,00			
	Male	80	3,86	0,84	1,00	5,00	,423	127	,673
5. Social liberty/liberty;	Female	40	3,79	0,94	1,33	5,00			
	Total	120	3,84	0,87	1,00	5,00			
	Male	80	3,87	0,63	2,43	5,00	1,722	127	,087
<b>Experiential Processes</b>	Female	40	3,66	0,72	1,87	5,00			
	Total	120	3,80	0,67	1,87	5,00			
6. Opposite situation;	Male	80	3,64	0,98	1,00	5,00	2,031	127	,044*
	Female	40	3,24	1,22	1,00	5,00			
	Total	120	3,50	1,08	1,00	5,00			
	Male	80	3,27	1,34	1,00	5,00	,862	127	,390
7. Helpful relationships;	Female	40	3,06	1,42	1,00	5,00			
	Total	120	3,20	1,37	1,00	5,00			

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	Male	80	4,28	0,77	2,00	5,00	,127	127	,899
8. Empowerment management;	Female	40	4,26	0,89	1,67	5,00			
	Total	120	4,27	0,81	1,67	5,00			
	Male	80	4,25	0,83	1,67	5,00	2,012	127	,046*
9. Self-liberation;	Female	40	3,91	1,02	1,67	5,00			
	Total	120	4,13	0,91	1,67	5,00			
	Male	80	4,25	0,77	1,67	5,00	2,452	127	,016*
10. Stimulus control;	Female	40	3,84	1,12	1,00	5,00			
	Total	120	4,10	0,92	1,00	5,00			
	Male	80	3,94	0,60	2,60	5,00	2,091	127	,039*
<b>Behavioral Processes</b>	Female	40	3,66	0,89	2,10	5,00	-		
	Total	120	3,84	0,73	2,10	5,00			
D 40.05 D 40.01									

P < 0.05, P < 0.01

With the problems arising from the COVID-19 pandemic and subsequent quarantine, participants; It was determined that they researched new methods about exercise, they knew that exercise was beneficial for them, they exercised even though they felt tired, they felt good with exercise, they made sacrifices to exercise, and they used their daily program to plan exercise time (P <0.05). A significant difference was found in the total awareness levels of Adults Registered to Fitness and Activity Centers under the COVID-19 Quarantine regarding exercise change processes (P <0.05) (Table 3). But, the covid-19 quarantine process has been observed to profoundly hinder the physical activity of those who regularly go to the gym for their physical fitness, leading to the unexpected interruption of almost all external routine activities of all adults. Therefore, it was found that the COVID-19 quarantine of the members of the fitness centers who spend a significant amount of time to maintain their physical form, health and appearance and to exercise regularly makes it difficult for individuals to maintain their normal exercise and physical activity patterns adequately and they do not have the opportunity (P>0.05), (Table 3).

Table 2. Awareness levels of participants registered to Fitness and Activity Centers for Exercise Change **Processes** 

Variables	Gender	N	AO	SS	Min.	Maks.	t	Sd	Sig.
1. I read articles about exercise to learn more.	Male	80	3,42	1,18	1,00	5,00	1,544	127	.125
	Female	40	3,07	1,30	1,00	5,00	1,544	127	,123
	Total	120	3,29	1,23	1,00	5,00	•		
2. I search for information about exercise	Male	80	3,40	1,24	1,00	5,00	1,085	127	,280

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Total   120   3,64   1,30   1,00   5,00										
Male   80   3.19   1.30   1.00   5.00		Female	40	3,16	1,24	1,00	5,00			
Female   40   2,67   1,19   1,00   5,00   1,342   127   ,027		Total	120	3,32	1,24	1,00	5,00			
Female   40   2,67   1,19   1,00   5,00	3. I research and find new methods of exercise.	Male	80	3,19	1,30	1,00	5,00			0.0-1
A. I feel sad when I see that people who will benefit from exercise do not exercise.   Female   40   3.04   1.49   1.00   5.00   1.342   127   182   127   182   128		Female	40	2,67	1,19	1,00	5,00	- 2,243	127	,027*
Female   40   3.04   1.49   1.00   5.00   1.342   127   1.82   1.82   1.83   1.84   1.84   1.85		Total	120	3,01	1,28	1,00	5,00	=		
Female   40   3,04   1,49   1,00   5,00		Male	80	3,40	1,43	1,00	5,00	1 2 4 2	105	102
S. When I don't exercise, I fear the harmful Male consequences for my health.   Female   40   3,56   1,29   1,00   5,00   5,00   127   612		Female	40	3,04	1,49	1,00	5,00	_ 1,342	127	,182
consequences for my health.         Female         40         3,56         1,29         1,00         5,00         5,00         2,01         6,12         6,12         1,00         5,00         5,00         1,20         3,61         1,20         1,00         5,00         1,20         5,00         1,20         5,00         1,20         5,00         1,20         5,00         1,20         5,00         1,20         5,00         1,21         1,00         5,00         1,518         1,27         1,31           7. I am aware that if I do not exercise regularly, may become sick and become a burden to others.         Total         120         3,80         1,21         1,00         5,00         1,667         127         5,00           8. I think that regular exercise can be effective in reducing health expenditures.         Male         80         4,01         1,07         1,00         5,00         1,687         127         ,867           9. I feel more confident when I exercise regularly.         Male         80         4,43         0,96         1,00         5,00         1,681         127         ,867           9. I feel more confident when I exercise regularly.         Female         40         4,90         1,00         5,00         1,844         <		Total	120	3,28	1,46	1,00	5,00	-		
Female 40 3,56 1,29 1,00 5,00 5,00 127 ,612		Male	80	3,68	1,32	1,00	5,00			<del>.</del>
6. I feel sad when I realize that the people I love will be healthier if they exercise.    Female	consequences for my nearm.	Female	40	3,56	1,29	1,00	5,00	,509	127	,612
Female   40   3,58   1,34   1,00   5,00   1,518   127   1,31   1,32   1,00   5,00   1,518   127   1,31   1,32   1,00   5,00   1,518   127   1,31   1,32   1,00   5,00   1,00		Total	120	3,64	1,30	1,00	5,00	_		
Female   40   3,58   1,34   1,00   5,00   1,518   127   1,31		Male	80	3,92	1,13	1,00	5,00	•	•	
7. I am aware that if I do not exercise regularly, I may become sick and become a burden to others.    Female   40   3,71   1,32   1,00   5,00   .667   127   .500     R. I think that regular exercise can be effective in reducing health expenditures.   Male   80   4,01   1,07   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   3,98   1,16   1,00   5,00   .667   127   .500     Female   40   4,43   0,96   1,00   5,00   .667   127   .500     Female   40   4,43   0,96   1,00   5,00   .667   127   .500     Female   40   4,44   0,96   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,31   1,01   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Total   120   4,53   0,81   1,00   5,00   .667   127   .500     Tota	·	Female	40	3,58	1,34	1,00	5,00	1,518	127	,131
7. I am aware that if I do not exercise regularly, I may become sick and become a burden to others.    Female		Total	120	3,80	1,21	1,00	5,00	_		
Total   120   3,81   1,28   1,00   5,00   127   350		Male	80	3,87	1,26	1,00	5,00			
8. I think that regular exercise can be effective in reducing health expenditures.    Male   80   4,01   1,07   1,00   5,00		Female	40	3,71	1,32	1,00	5,00	,667	127	,506
Female   40   3,98   1,16   1,00   5,00   1,68   127   ,867		Total	120	3,81	1,28	1,00	5,00	-		
Female 40 3,98 1,16 1,00 5,00 ,168 127 ,867.  Total 120 4,00 1,10 1,00 5,00  9. I feel more confident when I exercise regularly.  Male 80 4,43 0,96 1,00 5,00	_	Male	80	4,01	1,07	1,00	5,00			
Male   80   4,43   0,96   1,00   5,00   1,844   127   ,067	in reducing health expenditures.	Female	40	3,98	1,16	1,00	5,00	,168	127	,867
9. I feel more confident when I exercise regularly.  Female 40 4,09 1,06 2,00 5,00  Total 120 4,31 1,01 1,00 5,00  Male 80 5,15 5,55 2,00 55,00  Female 40 4,44 0,94 1,00 5,00  Total 120 4,91 4,52 1,00 55,00  Male 80 4,63 0,69 2,00 5,00  Male 80 4,63 0,69 2,00 5,00  Total 120 4,36 0,98 1,00 5,00  Total 120 4,53 0,81 1,00 5,00  Total 120 4,53 0,81 1,00 5,00		Total	120	4,00	1,10	1,00	5,00	-		
Female 40 4,09 1,06 2,00 5,00  Total 120 4,31 1,01 1,00 5,00  Male 80 5,15 5,55 2,00 55,00  Female 40 4,44 0,94 1,00 5,00  Total 120 4,91 4,52 1,00 55,00  Male 80 4,63 0,69 2,00 5,00  Male 80 4,63 0,69 2,00 5,00  Total 120 4,36 0,98 1,00 5,00  Total 120 4,53 0,81 1,00 5,00  Total 120 4,53 0,81 1,00 5,00	-	Male	80	4,43	0,96	1,00	5,00	1.044	107	0.67
Male 80 5,15 5,55 2,00 55,00  10. I believe that regular exercise will make me a Female 40 4,44 0,94 1,00 5,00  Total 120 4,91 4,52 1,00 55,00  Male 80 4,63 0,69 2,00 5,00  Total 120 4,36 0,98 1,00 5,00 1,857 127 ,066  Total 120 4,53 0,81 1,00 5,00		Female	40	4,09	1,06	2,00	5,00	- 1,844	127	,067
10. I believe that regular exercise will make me a Female 40 4,44 0,94 1,00 5,00 healthier, happier person.  Total 120 4,91 4,52 1,00 55,00  Male 80 4,63 0,69 2,00 5,00  Total 120 4,36 0,98 1,00 5,00 1,857 127 ,066  Total 120 4,53 0,81 1,00 5,00		Total	120	4,31	1,01	1,00	5,00	-		
Total 120 4,91 4,52 1,00 55,00  Male 80 4,63 0,69 2,00 5,00  Female 40 4,36 0,98 1,00 5,00 1,857 127 ,066  Total 120 4,53 0,81 1,00 5,00	-		80	5,15	5,55	2,00	55,00	0.50	105	205
Male 80 4,63 0,69 2,00 5,00  Female 40 4,36 0,98 1,00 5,00 1,857 127 ,066  Total 120 4,53 0,81 1,00 5,00	10. I believe that regular exercise will make me a healthier, happier person.	Female	40	4,44	0,94	1,00	5,00	- ,850	127	,397
11. I feel better when I exercise.  Female 40 4,36 0,98 1,00 5,00 1,857 127 ,066  Total 120 4,53 0,81 1,00 5,00		Total	120	4,91	4,52	1,00	55,00	_		
Total 120 4,53 0,81 1,00 5,00		Male	80	4,63	0,69	2,00	5,00			
	11. I feel better when I exercise.	Female	40	4,36	0,98	1,00	5,00	1,857	127	,066
12. I've noticed that many people know that Male 80 4,02 1,08 1,00 5,00 2,027 127 ,045		Total	120	4,53	0,81	1,00	5,00	-		
m on y kork of the first of th	12. I've noticed that many people know that	Male	80	4,02	1,08	1,00	5,00	2,027	127	,045*

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exercise is beneficial for them.	Female	40	3,60	1,23	1,00	5,00			
	Total	120	3,88	1,15	1,00	5,00	=		
	Male	80	3,76	1,12	1,00	5,00			
13. I've noticed that more and more people make exercise a part of their lives.	Female	40	3,64	1,17	1,00	5,00	,560	127	,576
	Total	120	3,72	1,13	1,00	5,00	=		
14. I noticed that famous people often advertise	Male	80	3,80	1,22	1,00	5,00			
that they exercise regularly.	Female	40	4,13	1,12	1,00	5,00	-1,532	127	,128
	Total	120	3,91	1,19	1,00	5,00	=		
	Male	80	3,89	1,17	1,00	5,00	2 204	107	022*
15. I exercise even when I feel tired. Because I know that I will feel good afterwards.	Female	40	3,36	1,42	1,00	5,00	- 2,304	127	,023*
	Total	120	3,71	1,28	1,00	5,00	_		
16. I exercise instead of resting after work.	Male	80	3,52	1,36	1,00	5,00	_ 1,846	127	067
	Female	40	3,04	1,49	1,00	5,00		127	,067
	Total	120	3,36	1,42	1,00	5,00	=		
17. Instead of relaxing by eating or watching TV, I go for a walk or exercise.	Male	80	3,50	1,27	1,00	5,00			
TV, Tgo for a wark of exercise.	Female	40	3,31	1,29	1,00	5,00	,802	127	,424
	Total	120	3,43	1,27	1,00	5,00	=		
18. I have a friend who encourages me to	Male	80	3,35	1,56	1,00	5,00			
exercise when I don't want to exercise. There is someone who will encourage me to exercise.	Female	40	3,07	1,57	1,00	5,00	,962	127	,338
someone who will encourage me to exercise.	Total	120	3,25	1,57	1,00	5,00	=		
	Male	80	3,20	1,45	1,00	5,00	590	127	562
19. My friends encourage me to exercise.	Female	40	3,04	1,51	1,00	5,00	- ,580	127	,563
	Total	120	3,15	1,47	1,00	5,00	=		
20. One reward of regular exercise is that it makes me feel better.	Male	80	4,27	0,84	2,00	5,00	•	•	•
makes me reer better.	Female	40	4,22	1,02	1,00	5,00	308	127	,759
	Total	120	4,26	0,90	1,00	5,00	=		
	Male	80	4,25	0,90	2,00	5,00			
21. I think of exercise as both a physical exercise for my body and a time period that clears my mind.	Lamala	40	4,31	1,04	1,00	5,00	-,347	127	,729
	Total	120	4,27	0,95	1,00	5,00	_		
22. I realized that if I exercise regularly, I will	Male	80	4,31	0,96	1,00	5,00		127	

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provide more energy.	Female	40	4,24	1,00	1,00	5,00	,362		,718
	Total	120	4,29	0,97	1,00	5,00	•		
23. I can say that I can continue to exercise if I try hard enough.	Male	80	4,25	1,00	1,00	5,00			
ny hard chough.	Female	40	4,07	1,01	2,00	5,00	,986	127	,326
	Total	120	4,19	1,01	1,00	5,00	-		
	Male	80	4,15	1,07	1,00	5,00	2,424	127	017*
24. I make sacrifices to exercise.	Female	40	3,62	1,39	1,00	5,00	- 2,424	127	,017
	Total	120	3,97	1,21	1,00	5,00	<b>-</b> '		
	Male	80	4,33	0,84	1,00	5,00	1,723	127	,087
25. I believe that I can exercise regularly.	Female	40	4,04	1,02	2,00	5,00	- 1,723	127	,007
	Total	120	4,23	0,91	1,00	5,00	-		
26. I keep my clothes ready in a suitable place so that I can exercise when I have the	Male	80	4,23	1,07	1,00	5,00	•	•	
opportunity.	Female	40	3,91	1,24	1,00	5,00	1,509	127	,134
	Total	120	4,12	1,14	1,00	5,00	-		
	Male	80	3,95	1,14	1,00	5,00			
27. I use my daily schedule to plan exercise time	Female	40	3,38	1,39	1,00	5,00	2,527	127	,013*
	Total	120	3,75	1,26	1,00	5,00	•		
	Male	80	4,56	0,78	2,00	5,00	1.022	107	057
28. I always make sure I have clean workout clothes.	Female	40	4,22	1,20	1,00	5,00	1,923	127	,057
	Total	120	4,44	0,96	1,00	5,00	-		
	Male	80	110,46	16,74	69,00	165,00	•	•	•
Total awareness score	Female	40	102,87	20,62	64,00	140,00	2,262	127	,025*
	Total	120	107,81	18,47	64,00	165,00	-		

P < 0.05, P < 0.01

## 4. DISCUSSIONS

As can be seen, the exercise behavior change process consists of cognitive and behavioral stages. The individual progresses in the process of behavior change by evaluating himself and the environment. The progress of the individual in the behavior change process is not always in the right direction. It is a situation where regressions and extinction of behavior are experienced in the process of behavior change. The COVID-19 pandemic has created a great upheaval in the life of every individual in the world. It has hindered the daily activities of almost all individuals, including those who depend on gyms for their physical fitness routines (Ammar et al., 2020). Multiple recent studies have revealed that COVID-19 has restricted activity and an

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overall decline in exercise levels for many as they face a variety of barriers, including the closure of gyms and leisure centres, mental health issues, and increased sedentary time as more time is spent (Caputo and Reichert, 2020; Ammar et al., 2020; Folk et al., 2021). This study aims to examine the attitudes towards exercise behavior changes of adults who are registered to Fitness and Activity Centers under the COVID-19 Quarantine and cannot routinely go to gyms due to quarantine.

According to the findings of this study, it is seen that there are not only problems in the experiential and behavioral processes of exercise due to the COVID-19 pandemic and the ensuing quarantine, but also that individuals have difficulties in learning to adapt to situations in a healthy life. They reported that participants differed significantly between men and women in the experiential sub-dimension and the behavioral sub-dimension, which included the processes of helping relationships and managing empowerment due to quarantine, which affected their motivation to find alternative ways to continue their fitness exercises. During exercise change processes, it is evaluated that men believe in change more, tend towards healthy behaviors, and generally exhibit more positive behaviors towards exercise than women. The lack of this sense of commitment that people are accustomed to experiencing in the gym environment was probably one of the reasons for the lack of motivation to exercise at home. But, it is seen that there is a significant difference between the behavioral sub-dimension components of opposite and opposite situation, self-liberation and stimulus control between men and women. Rauthmann et al. (2015) reported that if the environment and behavior are different from normal, it leads to a negative perception of the situation. However, with the increase in the time that a person can spare for himself, perceptions change in a positive way. Such a change in perception is likely to foster a process of self-affirmation and find effective ways of dealing with the current situation.

The restrictions during COVID-19 had a dramatic effect on people's lifestyle behaviors such as diet, sleep, substance use, inactivity, and physical activity. In particular, the closure of public places and the prohibition of social gatherings have reduced the possibility of participating in outdoor physical activity. It is an important stage in the development of physical activity, as it can potentially reduce the risks of chronic diseases during adulthood and later in life (Burhaein, 2022; Tison et al., 2020; Kemper and Monyeki, 2019). In a study, it has been shown that educational programming including mindfulness-based exercise and physical activity interventions improves body image, reduces body dissatisfaction and thinness desire, and contributes to eating disorder.

According to our findings; Participants concerned with the problems arising from the COVID-19 pandemic and subsequent quarantine; It was determined that they researched new exercise methods, exercised even though they were tired, and used their daily programs to plan their exercise time. Within the scope of the COVID-19 Quarantine, a significant difference was found in the total awareness levels of Adults Registered with Fitness and Activity Centers regarding their exercise change processes. However, it has been observed that the covid-19 quarantine process has deeply hindered the physical activities of those who regularly go to the gym for their physical fitness, leading to the unexpected interruption of almost all outdoor routine activities of all adults. For this reason, it has been determined that the COVID-19 quarantine of fitness center members who spend a significant amount of time to maintain their physical form, health and appearance and to do regular exercise makes it difficult for individuals to maintain their normal exercise and physical activities.

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Research suggests that people are affected very differently by the Covid-19 quarantine, some have more free time due to reduced working hours, or manage to integrate sports and exercise into their remote work ('home office') routines, while others are challenged by longer working hours. Thus, it was observed that the Covid-19 quarantine severely restricted participants' movements and time spent in the community, thus indirectly or explicitly referring to concerns of being infected with Covid-19, fears of not being able to maintain the recommended physical distance with others in public spaces, or self-evaluation (Mutz and Gerke, 2021).

### 5. CONCLUSIONS

The findings of the study found a significant difference in the exercise change processes in the total awareness levels of Adults Registered with Fitness and Activity Centers under the COVID-19 Quarantine. In addition, the attitudes of individuals who go to fitness centers towards exercise behavior changes show that they are greatly affected by the COVID-19 pandemic in terms of their cognitive and behavioral habits. In summary, decline in fitness performance can be caused by a lack of physical activity due to outside restrictions and space limitations for exercise. Although months of quarantine effectively controlled the spread of the COVID-19 pandemic, it could also be argued that it indirectly led to decreased fitness.

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