

The Elderly's Participation in Exercise and its Meanings in the Daily Life of COVID-19 Pandemic

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By applying a case study approach, the present study conducted an in-depth inquiry and analysis to understand the meanings of exercise for the elderly in a situation of limited participation in exercise and discontinued exchanges amid the COVID-19 pandemic and examine the ways that they maintained their health in the pandemic situation. For the participants in old age, exercise meant "Life Energy," "I Realize My Life in Old Age for Myself," and "Self-Management." Being unable to continue their exercise at the center amid the pandemic, the elderly lived a limited daily life with nothing to do and had such emotions and sentiments as "fear and discontinuance" and "lethargy and depression." Refusing to remain lethargic in the situation of fear and anxiety, however, they searched for ways to break through the situation. They began to walk a dog, take a walk, and find ways to exercise by themselves based on YouTube. In addition, they resumed their discontinued social exchanges by doing outdoor activities with their friends and tried to find ways to live a new life again in old age amid the pandemic situation. Living in the pandemic situation combined with rapid aging, the elderly changed their old ways of living. Before the pandemic, they were establishing their old age identity by participating in exercise, having social exchanges, and keeping their health.

Key words: pandemic, elderly, exercise, daily life

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Introduction

South Korea is moving toward a super-aging society at an alarming rate, but its reactions to the aging of population cannot be slower. In this situation, over 40% of the rural population is the elderly already, which is affecting the reduction of productive population and the increase of supporting expenses(Statistics Korea, 2019). In urban areas, the division of space among generations is severing communication among them and intensifying conflicts among them. Despite this, however, policy moves reacting to a super-aging society have always missed the right timing and face a greater need to prepare practical measures for more flexible reactions. There is a special need to develop related policies reflecting the needs of the elderly that face a super-aging society as their own issue. Previous studies on successful old age mainly focused on "keeping physical and mental functions at a high level," "having no disabilities related to physical diseases," and "living an active life." Many of previous studies reported that leisure sports activities had positive impacts on the mental and social functions of the elderly as well as their physical health, highlighting the importance of leisure sports for the elderly(Cho, Kim, Kim, Kwak & Back, 2017; Sa, Lee & Kim, 2017; Shin, 2017). Findings of National Sports Participation Survey reported that physical activities were helpful for saving medical expenses for the elderly in their sixties or older and that 89% of community leisure facilities used by the elderly once a week or more in Seoul were physical training facilities(Seoul Welfare Foundation Policy Research Office, 2018). The elderly had a high degree of satisfaction in exercise and leisure of many different leisure activities, which indicates that leisure sports activities are significant for the elderly. When these results are put together, it is clear that the sports area of leisure can have positive impacts on the elderly, being differentiated from other areas. The elderly's participation in leisure sports can be an alternative to solve elderly issues, being an important topic for future discussions and foothold for various future researches on their leisure sports.

The entire world is still suffering the pandemic for over a year since COVID-19 broke out in January, 2020. Social activities have been suspended around the world due to its strong contagiousness, and sports are not an exception. Sports-related industries including sports teams are receiving huge economic blows due to the cancellation of scheduled games or the resumption of leagues with no spectators. The pandemic has caused a series of economic damage and loss, but some leagues including KBO made a breakthrough by selling its broadcasting rights to American ESPN. Sports-related industries capable of making a breakthrough based on national policies or supports are seeking a counterplan and way out, but people's participation in life sports directly connected to their health is still confusing with the resumption and suspension of participation depending on COVID-19 situations and preventive measures. There are no solid countermeasures, either. It is the elderly that faced changes in many aspects of daily life as their participation in sports activities was suspended.

Unlike students and workers that maintain their lives in schools and workplaces, respectively, the elderly have relatively more leisure time (Park, 2021; Kaplan, 2020). Limitations to their participation in leisure activities bring a big part of their daily life to a halt. This reality might increase the incidence rates of diseases among the old population. When they are unable to maintain their activities due to limited participation, they might even develop psychological depression. This study thus set out to investigate the difficulties of the elderly due to their limited participation in exercise and the ways they resumed exercise and leisure life amid the COVID-19 pandemic. Based on results, the study would provide basic data for methods and policies to promote the physical and mental health of the elderly through their continuous participation in exercise in a rapidly changing society and environment.

Methods

1. Participants

In the study, participants were selected through purposive sampling, one of non-probability sampling methods. A total of 13 participants were selected at A and B Centers in Seoul. These centers were not in operation in September, 2020~January, 2021 when data was collected for the study. They were introduced to the investigator by their instructors at the centers and gave consent to participate in the study. They were in their sixties or seventies and participated in exercise three times per week or more at least for two years. They had the following general characteristics. <Table 1> shows the individual characteristics of the subjects.

2. Methods of Data Collection

Data was collected with an in-depth interview. They were asked to give four or five interviews over three months or so since it was important to trace changes to their daily lives amid the COVID-19 pandemic. An interview was conducted at a place that was convenient for the participants for about 30~60 minutes. The participants gave a one-on-one interview, which moved from a narrative interview to an in-depth interview according to the ethnographic interview procedure of Spradely(1979). Data was collected with an interview notebook and recorder.

Table 1. Demographic characteristics

Number	Name	Gender	Age	Type of Exercise	Engagement (per week)
1	SHI	female	63	yoga	5
2	KHR	male	63	badminton	3
3	PSK	female	65	swimming	3
4	OHJ	female	65	swimming	4
5	LIN	male	66	badminton	3
6	HEU	female	68	yoga	3
7	KOH	male	68	yoga	3
8	BHS	female	69	swimming	4
9	LKI	female	70	line dancing	3
10	PSK	female	70	line dancing	4
11	MGH	female	72	yoga	4
12	GKI	female	73	swimming	5
13	NAK	male	75	yoga, swimming	5

3. Methods of Data Analysis

Collected data was transcribed and underwent two stages of domain and taxonomic analysis under inductive categorical analysis (Patton, 1990). The meanings of the subjects' participation in exercise were categorized based on their experiences and thoughts about the suspension of exercise amid the COVID-19 pandemic. They were rearranged and systemized in a meaningful way. Topics were discovered or created to create topics and meanings with their subordinate concepts reclassified.

4. Research Validity and Reliability

The investigator ensured the validity and reliability of data collection and analysis through triangulation, peer discussion, and evaluation based on the trustworthiness criteria of Denzin and Lincoln (1994). Before data collection, the investigator introduced the research goals to the participants, made it clear that their in-depth interviews would be used only for the research purposes, and received their consent forms. In addition, they were reassured about a promise to use assumed names to protect their personal information.

Results

1. Meanings of Participation in Exercise

1) Life Energy

Participation in exercise does not simply mean getting healthy for the elderly. As life expectancy has prolonged thanks to the development of medical technologies, the important meaning of longevity for them is a healthy life without illness. As people are getting old, their bodies become weaker. They are, however, still able to give out their wisdom and ideas based on their life experiences, which means that it is important to have health in old age.

As you get old, you have a lot of time on your hand. At the center, I can do exercise with my peers with the same hobbies. As we are of about the same age, it is easy for us to get along. We develop friendship. We would travel and have a restaurant tour together as friends in addition to exercise.

<S. H. I>

You have vigor in your life by doing exercise. I hate watching TV at home all the time because I am old. It will make me get old faster. I believed that it was important to do exercise and get old happy. That's why I exercise harder.

<K. H. R>

The participants recognized exercise as a very important element of their daily life to live an energetic life in old age. They found joy in spending their leisure in exercise and having a meaningful time in old age. As the scope of social activities was limited unlike their younger days, they maintained their social activities through their mutual exchanges and interactions with their peers during exercise and recognized it as an important meaning of their participation in exercise.

2) I Realize My Life in Old Age for Myself

The participants shared implicit fear for having to depend on their children in old age. They were worried about the possibilities of causing damage to the daily lives of their children when they were sick and being unable to do anything on their own. Having these thoughts, they took active part in exercise to make their bodies healthy and realize a hope that they would be able to lead their life in old age for themselves.

I am worried about the possibilities of getting ill. When I am ill, I can cause damage to my children, who have to take me to the hospital and pay a lot of attention to many things. I exercise harder not to get sick.

<O. H. J>

When I am alone home, doing nothing, it gets lonely. I like my days busy. It is important to make my life in old age on my own, not just waiting for my children's visit and depending on them. It is critical to exercise every day for this.

<P. S. K>

For the elderly, active participation in exercise meant leading an independent life as well as realizing a life in old age for themselves(Rasika, Choi, 2019). In old age characterized by a narrow scope of social relations and an increase of leisure time, participation in regular exercise as part of daily life increases the density of life in old age. It also makes their daily life busy, inspiring them to believe in the value of their own life.

3) Self-Management

Most old people experience physical deterioration and take it naturally to step back from social activities as they get old. Under the surface of accepting aging naturally, however, they have the same desire for looking healthier(Lee, Shin, 2020) as young people. Regardless of their desire, however, they get depressed with their deteriorated physical functions and have fear for challenging themselves for something new. For them, it is a meaningful process to set a goal themselves and improve their exercise skills through concentration and immersion.

As you get old, self-management is not easy. Your energy level is lower, and your strength is weaker. Staying in such a condition and doing nothing will make your life in old age even poorer. I would like to look like a cool old lady. I hope that young people look at me and admire, "What a cool old lady!" Your heart will never get old. That's why I exercise hard to gain muscle strength. I manage myself, trying to keep my posture straight.

<H. E. U>

The participants took active part in exercise, training themselves both in and outside and making efforts to get better. These efforts have impacts on their new identity in old age. In the past, the

elderly simply accepted natural aging. Today the elderly living in a modern society manage themselves like when they were young and try to shape themselves in old age for themselves.

2. Suspended Daily Life due to COVID-19

1) Fear and Discontinuance

Old people have fear when their daily lives are disrupted by sudden changes. When this happens, they experience things that they have never experienced before and try to endure day after day in a situation whose ending seems far away. They take pride in their own health based on many years of exercise, but their energetic daily life was brought to a halt immediately after an infectious disease broke out with no prior information. The participants spoke their minds, saying that their fear for suspended daily life grew bigger and bigger over the news coverage by the press as there was nothing they could do.

I was very scared. I had to wait in a long line to buy a face mask. My children told me not to go outside, warning me that getting contact with others was dangerous. I was trapped inside my home. My children bought and brought things I needed. They would not come inside but just leave things at the doorstep. Everything was so scary when I watched news.

<L. I. N>

Children had to continue their economic activities for a living, but they asked their old parents to stay away from any activities outside home. Bombarded with information about the infectious disease, specific measures to prevent it, growing numbers of cases, and difficult access to face masks and disinfectants, some participants felt like it was a war situation.

2) Lethargy and Depression

The lives of the participants changed completely in the pandemic situation whose end was not in a near future, which made the old participants lethargic. The participants participated in exercise, taking pride in the fact that they led a more meaningful and healthier life than their peers. They were also establishing a new identity in old age based on their social interactions. After the pandemic broke out, however, their daily lives stopped. Amid the pandemic, their daily routine included only staying inside and watching TV. The participants were fearful for their growing lethargy in daily life.

At first, I was not allowed to do anything except for watching TV at home all day

long. I am a very active person. Before the pandemic, I used to exercise at the center every day and visit my Catholic church four times a week for my senior choir. I would enjoy food and drink with my friends after church activities and exercise, but all this was suspended all of a sudden. It was very hard for me. I am now very tired, just waiting for the pandemic to end.

<K. O. H>

Before the pandemic, I had very busy schedules every day. These days, I have no answers to "What am I going to do tomorrow?" before sleep at night and "What am I going to do today" after sleep in the morning. It was not living a life. I felt depressed. I was worried about the possibility of getting depression.

<H. E. U>

Some participants felt like they just endured day after day after their daily lives were turned upside down and even said that they felt depressed due to their changed daily lives. People faced a changed daily life regardless of their will in the pandemic situation. Unlike their children and grandchildren that maintained their work and study, respectively, in various forms, the senior participants had nothing to bind them. They had a sense of loss in their reality of doing nothing in the pandemic situation.

3) Change of Thoughts

The participants started to believe that changing their thoughts would be more helpful than just waiting for the pandemic to end. They knew that it was not possible to resume their old diverse activities now in their severed social relations, but they thought that it was time to shed off their lethargy and depression in daily life. By changing their thoughts, they made efforts to explore their lives in their own ways amid the current difficulties just like they used to take active part in leisure activities and lead a second life in old age.

Once the COVID-19 pandemic started, my children told me not to eat out and take off a face mask outside because of my weak immunity...I followed their warning and made no appointments with my friends at first. As this continued, I felt like I would get even older so fast. So I decided to think of and find what I could do amid the never-ending pandemic.

<L. K. I>

The participants made efforts to live a different daily life amid the pandemic because of their worries and concerns about the potential loss of their health as well as their wish to escape from a lethargic daily life.

3. Efforts to Overcome the Pandemic Situation

1) Starting Exercise That I Can Do By Myself

In a situation where no places were available for social exchanges as well as health promotion, the participants made an attempt at getting back their old daily lives before COVID-19 in their own ways. Participant A decided to walk every day as part of her own routine, believing that "walking" was a way of promoting and keeping her health without receiving help from others. Not being able to meet her old level of activity with "walking" alone, she started to take care of her child's dog voluntarily. The case of Participant A and her attempts highlights the huge importance of an attitude of looking at, accepting, and recognizing a situation. When the elderly have lethargy and depression due to the abrupt changes to daily life, it is very important to have a change of thoughts and internal energy to break through the situation(Lee, Yoon & Sung, 2017). The ability of changing thoughts determines whether the elderly have will to restore health or not in case of a sudden health crisis, thus having impacts on the formation of energy to prepare for the remaining days in old age themselves.

Since exercise at the center was no longer an option for me, I thought of other things to get back my old daily life. I take a walk around the neighborhood in the morning for about one and a half hours. My daughter lives nearby. After she leaves home for work in the morning, her dog is left alone. I bring the dog to my home every day and have a 30-minute walk with it. I know that the dog is not human, but I like my new companion to walk with.

<M. G. H>

My son bought me a squat machine. These days, I do 100 squats every day. I also walk up steps slowly for about 20 minutes. I began to subscribe a newspaper, being afraid that my brain was idle. Once a week, I take the subway and read or purchase a book at the Gyobo Bookstore. When I feel like, I travel further to the Cheonggyecheon and Gyeongbok Palace. In the beginning, I was worried about doing things by myself. Today I enjoy doing things by myself.

<N. A. K>

As seen in these interviews, the participants explored ways to keep and promote their health according to their respective situations and environments and tried to return to their old energetic selves before COVID-19.

2) Exercising with YouTube

Thanks to the growth of platforms for information exchange along with the development of all kinds of media, people obtain and learn new information and knowledge with a computer and smartphone any time and any place. YouTube, one of representative platforms, offers a myriad of content to learn various kinds of knowledge. "Home training" as part of this kind of content allows many people to promote their health and train their bodies in various ways. After the popularization of smartphones, the elderly use one to watch YouTube and make use of their leisure. Although the COVID-19 pandemic has isolated people within a limited space, the development of media enables exchanges with others and the acquisition of information even in isolation. The elderly are no exception to effort and interest for exercise participation and health management with YouTube.

My daughter introduced me to the world of YouTube. I follow Yoga moves on YouTube on my yoga mat at home. I have no yoga instructors watching my moves, thus having no idea about whether I am doing right. I do yoga for 30 minutes every day, and it is really nice. I cannot exercise at the center, and I try to find other ways to exercise.

<G. K. I>

I watched YouTube, but I did not use it for exercise. There are a lot of exercise videos on YouTube, but most of them target young people rather than old people. I hope that there are more videos for exercise in old age in this aging society.

<M.G.H>

Most of the participants started and continued exercise with YouTube with variations in frequency. Without YouTube, they must have faced limitations with the kinds of exercise available to them. Watching and following various kinds of exercise on YouTube was of huge help for the management of the elderly's health. Like Participant B mentioned in his interview, however, most exercise videos on YouTube target young people. There should be exercise content fit for the elderly, as well. They also had concerns about potential injuries as they followed the exercise routine for young people despite their will to participate in it.

3) Efforts to Return to Old Daily Life

Even though the COVID-19 pandemic is not over, the participants resumed exercise in various methods and forms and made efforts to live a healthy life in old age. However, their daily lives could not be as busy and active in social exchanges as before the pandemic. They tried to live a life positively in the post-COVID era by resuming their social exchanges as well as their exercise.

I cannot stay in this rut forever. I talked on the phone with my friends. We decided to meet outdoors instead of restaurants, bringing food and a mat and gathering at the Olympics Park. We sat on the lawn and had food. I felt remarkably refreshed. Since the first outing, we meet at the park regularly. It is important to be careful all the time even outdoors. We use respective dishes instead of sharing one. After a meal, we would walk around the park slowly twice. This activity made me feel like my old daily life was back. I really like it.

<P. S. K>

My gym resumed last month. The COVID-19 situation has lasted over a year. We are now accustomed to wearing a face mask and disinfecting hands thoroughly. After exercise, we would say good-bye and part from each other instead of getting alone together. I used to place greater significance on getting along with people before. Today I find it more important to exercise for my health. Getting along with people is not as important as my health.

<K. O. H>

The participants accepted that they had to overcome the COVID-19 situation positively instead of having fear for it. While accepting the situation, they tried to build a new daily life themselves. They resumed exchanges with their friends by observing the safety and hygiene rules. They resumed exercise by wearing a face mask. Instead of blaming the stubborn situation and worrying about it, they had a change of viewpoints and decided to live a new life in the situation. To the question about their thoughts about accepting the stubborn situation, the participants said as follows:

I expect more changes than those in my past. Just because you are old, it does not mean that you remain afraid of a changed situation. It is important for the elderly to find ways of adjusting to a changed situation. It is a way of getting old in an energetic and cool manner instead of being lethargic.

<M. G. H>

Like Participant C said in this interview, the elderly can live a more energetic and healthier life in old age by making efforts to accept a given situation, change their thoughts, and adjust themselves to it(Yoon, Kim, 2019).

Conclusions and Discussions

By applying a case study approach, the present study conducted an in-depth inquiry and analysis to understand the meanings of exercise for the elderly in a situation of limited participation in exercise and discontinued exchanges amid the COVID-19 pandemic and examine the ways that they maintained their health in the pandemic situation. For the participants in old age, exercise meant "Life Energy," "I Realize My Life in Old Age for Myself," and "Self-Management." Being unable to continue their exercise at the center amid the pandemic, the elderly lived a limited daily life with nothing to do and had such emotions and sentiments as "fear and discontinuance" and "lethargy and depression." Refusing to remain lethargic in the situation of fear and anxiety, however, they searched for ways to break through the situation. They began to walk a dog, take a walk, and find ways to exercise by themselves based on YouTube. In addition, they resumed their discontinued social exchanges by doing outdoor activities with their friends and tried to find ways to live a new life again in old age amid the pandemic situation. Living in the pandemic situation combined with rapid aging, the elderly changed their old ways of living. Before the pandemic, they were establishing their old age identity by participating in exercise, having social exchanges, and keeping their health. After COVID-19 broke out, sudden changes to the situation put their lives in confusion. They try to keep their life through various efforts in the limited situation, but there is a shortage of policies and environments for the elderly. It is urgent to develop programs promoting the participation of the elderly and also methods of implementing a program in the pandemic situation whose end is not anticipated soon. There is a special need to develop content to help them exercise at home without getting an injury based on media including YouTube and going outside to learn exercise. It is also urgent to provide policies and environments to help the elderly keep their daily lives and lead a healthy life in old age despite the pandemic situation.

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