

A Preliminary Study of the Effectiveness of Information Technology in Promoting Healthcare Learning among Aging Learners in COVID-19 pandemic: Use the Ape-like On-the-spot Super Slow Jogging as an Example

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Abstract: *The global outbreak of the COVID-19 pandemic in 2020 has turned a new exercise Ape-like On-the-spot Super Slow Jogging that was originally taking place in the physical world into an online mode. In order to understand the characteristics, and steps and effectiveness of the Jogging, this study adopts a mixed-method methodology to analyze the effectiveness of MOOCs like course on YouTube and the two-way Line based community to assist online practice learning. The research subjects are 33 participants who completed the 100-day foundation building program within six months. The results of both the quantitative and qualitative cross-comparison analysis show that this group of participants could achieve physical and mental improvement through technology-mediated blended learning in the midst of the pandemic. The researcher hopes the emerging blended learning method will reduce the burden of long-term health care in an aging society in Taiwan and improve the quality of life as well in the future.*

Keywords: MOOCs, covid-19, aging society, exercise, ape-like on-the-spot super slow jogging

1. Introduction

In recent years, Taiwan's elderly population has continued to increase. According to the World Health Organization (WHO), societies in which people aged 65 and over representing over 7% of the population are considered aging societies. It is projected that by 2025, Taiwan's elderly population will exceed 20%, making it an ultra-aged society (National Development Council, 2023). Aging societies bring unprecedented challenges to nations and communities, including pressures on the medical and elder-care financial systems, labor force shrinkage, among other issues. In its 2023 report on aging health, "Leaving No One Behind in an Aging World," the United Nations calls on countries to establish new policies to mitigate the negative impacts of aging societies (United Nations, 2023). Improving the health care, well-being, and quality of life for the elderly has become an increasingly important global issue, and maintaining health is the primary goal for the elderly.

For a long time, a common scene in Taiwan has been observed. In the early morning, groups of elderly people are practicing leisure activities, such as Tai Chi, Qigong, Yuanji dance, and fan dance at parks, school playgrounds, or community centers. These leisure activities help to increase cardiorespiratory functions, reduce anxiety and stress, contribute to physical and mental health, delay aging, prevent the occurrence of geriatric diseases, and promote interpersonal relationships and emotional communication. They also serve the purposes of lifelong learning and informal learning (Kligman, & Pepin, 1992; Lan et al., 2000).

However, since the global outbreak of COVID-19 pandemic in 2020, which rapidly impacted people's physical lives, Taiwan

has been in semi-lockdown since 2021. This situation has forced many elders to stop their routine morning exercises, interrupting their regular health routines. Notably, as people's physical activities have been forced to move online due to the pandemic, health activities have also shifted towards online. A new health care exercise, "Ape-like On-the-spot Super Slow Jogging" (hereinafter referred to as "Super Slow Jogging"), began to spread on the Internet after the semi-lockdown in Taiwan in 2021. The movements of this exercise seem simple and repetitive, even monotonous. The instructor demonstrates the movements and lectures them throughout the process, which is unconventional in physical training. Due to the open nature of the Internet, some courses with similar names have sparked misinterpretations and discussions. However, it has gradually become a daily, free, open online fitness activity for middle-aged and elderly people during the COVID-19 pandemic. Considering its novelty, it is worth investigating whether this new physical and mental health exercise, in the wake of the pandemic, can contribute to health and well-being as traditional exercises like Tai Chi and Yuanji Dance do. Therefore, this study aimed to explore this new, mainly online (with physical supplement) Super Slow Jogging activity, understand its instructional rationale, features, functions, and the effectiveness of its technology-mediated teaching. It is hoped that this will benefit the general public or groups with health needs in their pursuit of fitness. Thus the research questions of this study are as follows:

1. What is Ape-like On-the-spot Super Slow Jogging, and what are its implementation steps and characteristics?

2. How is Ape-like On-the-spot Super Slow Jogging applying digital technology to online course mode during the COVID-19 pandemic?

3. What are the learning outcomes or effects of the Ape-like On-the-spot Super Slow Jogging on learners? Who would be committed in this jogging practices and why?

2. Literature Review

2.1. Fitness Exercise and Digital Technology-Mediated Learning

Advances in the Internet and digital technologies have led to various new learning modes, such as MOOCs/massive open online courses, mobile learning, flipped classrooms, and the integration of AR and VR into teaching. These tech-assisted teaching methods have brought about unique learning developments in fitness exercises. However, sports instruction has its peculiarities compared to other subjects. Fitts & Posner (1967) and Zhuang et al. (2017) have pointed out that the sports learning process includes: (1) Verbal-cognitive stage, (2) Associative stage, and (3) Autonomous stage.

The demonstration and explanation of movements and physical skills are indispensable learning elements in sports skill learning, providing learners with experiences of observation, imitation, and practice (Xia & Lin, 2018; Zhuang et al., 2017). In traditional sports instruction, students can't preview the movements nor understand the technical essentials beforehand. Therefore, students can only learn through on-site teaching and feedback (Zhuang et al., 2017). When practicing alone afterward, they can't receive immediate feedback for skill and movement corrections and have to wait until the next class (Xia & Lin, 2018).

2.2. Characteristics of Exercise in the Middle-aged and Elderly

Generally, exercising is relatively

straightforward for young adults. However, for the middle-aged and elderly, it's necessary to consider not only the individual's physical condition and form of exercise skills but also potential exercise injuries, the accessibility of venues, financial expenses, and maintaining continuity. Due to the effects of aging, the elderly may experience declines in muscle strength, muscular endurance, joint mobility, balance, agility, etc., all of which could directly impact their activities of daily living (ADL), potentially leading to a lack of independence. If they lack regular physical and health-maintaining activities over a long period, the elderly might require additional medical care, possibly reaching a state of disability (Adelman et al., 2011).

2.3. Digital Technology Application in Fitness Exercise Courses

In recent decades, the application of digital technology in fitness exercise courses allows learners to observe and imitate repeatedly, and with the help of digital technology, enhance learning feedback and accumulate experiences to improve sports skills (Lin & Zhang, 2012). In addition, because sports involve many complex spatial and time coordination abstract knowledge that is difficult to explain with text or language, digital image teaching can make up for the abstract knowledge that text or language cannot express (Lan et al., 2010).

Research related to the digitization of sports courses mediated by digital technology has increased in recent years. There are also studies exploring the effectiveness of 3D animation for university students learning Tai Chi (Lan et al., 2010). Hung et al. (2015) explored the use of Facebook to assist in the learning process and teaching strategy of Tai Chi, capturing teacher and student actions via mobile phone videos, and uploading them to Facebook. The results found that social

networking sites do help in assisting traditional Tai Chi teaching and learning, filling the gap where students cannot ask questions in real time, and assisting teachers in keeping up with learning progress and understanding and solving difficulties promptly. Lin et al. (2013) used a blended learning model in Tai Chi teaching, digitizing teaching materials and building them on a learning platform, providing students with face-to-face and asynchronous learning through traditional teaching and blending learning designs.

2.4. Fitness Exercise During the COVID-19 Pandemic

During the COVID-19 pandemic, global learners could only take online remote courses for health and life safety, lacking opportunities for physical face-to-face exercise. However, online exercise courses have sprung up during the pandemic. For instance, some researchers analyzed the experiences and difficulties of physical education students during the pandemic, such as weight gain, depression, and anxiety (Laar et al., 2021). Learners attending online courses at home almost didn't have the required equipment, leading to the shift of attention from competition to poor performance, weight gain, and bad psychological conditions. Nevertheless, the study found that digital sports were very effective against the COVID-19 pandemic, with students' attention to instructors reaching 96%, the level of understanding of learning materials was 88%, the proportion of students' participation in online learning was 77%, and the proportion of student learning outcomes was 88%, showing that the use of digital learning during the COVID-19 pandemic is quite effective (Satyawan et al., 2021). However, other researchers analyzed 75 college students and found that learners were not enthusiastic about participating, only submitting assignments (Yu & Jee, 2021).

To sum up the above research, it can be seen that during the COVID-19 pandemic, although online teaching has been widely used due to health factors, the quality of courses and teaching strategies have not been strengthened, and there is a lack of timely and high-quality feedback, resulting in low student participation. This research focuses on elderly learners who are usually less familiar with the use of information technology but are willing to learn through Internet technology to maintain their physical and mental health during the dangerous period of the COVID-19 pandemic, which is very worth paying attention to and exploring.

3. Research Design and Implementation

3.1. Research Method

3.1.1. Research subjects

The subjects of this study were 33 elder participants and the instructor who completed the 100-day foundation building from August 11, 2021 to January 2022 during the severe COVID-19 pandemic. The participants were expected to observe their physical changes after practicing Ape-like On-the-spot Super Slow Jogging and record their thoughts and progress or medical examination records before and after their jog in the social media, Line community, where they would also share their experiences and reflections. Their ages ranged from 50 to 85, with a gender ratio of 1 (Male): 9 (Female). The instructor was a middle-aged male in his fifties. This study divided the progression based on practice time into half a month, one month, two months, and three months, with the research subjects encoded as A. B. C. D for anonymization and de-identification to maintain privacy.

3.1.2. Online courses and teaching scenario implementation

The instructor uploaded lecture videos to the YouTube site exactly at 5:45 every morning for group practices. Participants interacted and exchanged learning experiences through a Line group, using the group to record their daily and irregular learning conditions. The instructor also provided feedback through simultaneous explanations during daily group practice times, thereby adjusting their learning status. Meanwhile, as the epidemic eased, the instructor combined on-the-site tours to conduct physical teaching activities and on-site face-to-face communication and guidance for improvement and discussion of various chronic diseases and data collection analysis.

3.1.3. Research instruments

This study used a mixed-method to observe lecture video online and transcribe the online videos and course reflection notes collected within the group Line community. During the research period, the participants' journal data from the 100-day foundation-building exercises, hospital examination reports, and semi-open question data from interviewing the instructor were collected, allowing for quantitative and qualitative data analysis.

3.1.4. Data collection and analysis

Quantitative records include: Medical evidence-based examination data, where the instructor learned about from the hospital examinations shared by the participants. Qualitative data include: observations from the online learning community, reflective case analysis of the situations encountered by individual learners, and analysis of the teaching philosophy and personal data gained from the instructor's interview and the daily uploaded translated video scripts, with

triangulation applied for verification.

4. Research Data Analysis and Results

Both quantitative and qualitative data were analyzed in response to the three research questions as follows:

4.1. RQ1: What is Ape-like On-the-spot Super Slow Jogging, and what are its implementation steps and characteristics?

4.1.1. Ape-like on-the-spot super slow jogging

Based on the interviews with the instructor and the analysis of online teaching videos' transcripts, it could be concluded Ape-like On-the-spot Super Slow Jogging is a progressive on-the-spot slow running exercise designed for all age groups. It is synchronized with the 12 meridians health care chart (Figure 1), which is a new fitness training method developed by the instructor based on his twenty years of physical exercises (Marathon at night) and teaching experience as a mental lecturer. This method combines traditional Chinese medicine as the main and western medicine as the auxiliary, incorporating traditional Chinese medicine adjustment, meridian circulation, western medicine, and so on, to extract the essence of physical fitness. It focuses on the balance of mind and body, also known as "Dynamic Zen". The movements are simple and repetitive, like a kind of meditation in sitting, but not static Zen. The body needs to move, keep the mind calm, relax outwardly, and focus inwardly, which requires mindfulness and contemplation in coordination with movements. It is also combined with the consumption of simple food of its original flavors to establish good daily habits.



Figure 1

Ape-like On-the-spot Super Slow Jogging synchronized with the 12 Meridian Health Chart

4.1.2. Implementation Steps of the Ape-like On-the-spot Super Slow Jogging

This daily course practice lasts approximately 40 to 50 minutes each time, including the following four main steps:

(1) Warm up: including A. keeping a smile/pulling up apple muscle: Muscle relaxation, mood relaxation, combining traditional Chinese medicine's yin-yang five elements theory and the rheumatism theory from Huangdi Neijing; B. Turning the head left and right with calf stretching (2 minutes): Raising left and right feet, pushing the rear foot, semi-squatting, pushing the buttocks forward; C. Carrying a baby/lower back (3 minutes): Pushing the ground, knee bouncing, hip raising, belly retracting, leaning forward, and turning the head left and right.

(2) Ape-like On-the-spot Super Slow

Jogging (The major exercise of the course) (30 minutes): Feet apart at shoulder width, toes aligned, weight forward, knees slightly bent, shoulders open, elbows pulled back, hands swinging like running, repeating Ape-like On-the-spot Super Slow Jogging for thirty minutes. It can promote the pressure of the whole body's meridians, such as the Yongquan acupoint, and the circulation of Qi and blood, detoxification, etc.

(3) Ending movements (3 minutes): Three types, including: A. for Normal people: balance breathing, feet shoulder-width apart, body upright. B. for sick and weak people: only inhale five to seven tenths of the breath, Qi sinks to Dantian; similarly, focus on Dantian, imagining Dantian as a yellow sun. Hold your breath for three seconds after exhaling, lift the anus. C. Small circulation: weight forward, lift the anus, inhale for 3 seconds, Qi sinks to Dantian, imagine Dantian as a yellow sun;

exhale while retracting the lower abdomen, concentrate on Dantian, combine mindfulness with Qi and blood circulation.

(4) Laugh Yoga/Laugh Gong (3 minutes): Inhale, laugh hard three times, combined with laughing yoga, balance the sympathetic and parasympathetic nerves. There are two best practice times per day (Mao time/5:00-7:00, Shen time/15:00-17:00). Since Mao time/5:00-7:00 is the detoxification time for the large intestine meridian, practicing at this time can help bowel movements and accelerate the body's detoxification function; Shen time/15:00-17:00 and You time/17:00-19:00 are the bladder meridian and kidney meridian detoxification time, practicing at this time can also help the body detoxify and enhance the benefits of Ape-like On-the-spot Super Slow Jogging. However, do not practice during Wu time (11:00-13:00) as it's the heart repair time. Before exercising, you need to drink 300 to 500 cc of warm water first, and then drink water again within 15 to 20 minutes after the exercise. The effect of exercise is not achieved in one day, so is Ape-like On-the-spot Super Slow Jogging, beginners need to exercise continuously every day.

4.1.3. Characteristics of the ape-like on-the-spot super slow jogging

After constant observations, the characteristics of implementing Ape-like On-the-spot Super Slow Jogging can be summarized as: (1) The course is comprehensive, combining meridian Qi and blood circulation and detoxification. (2) The movements are simple, repeating the same movement of Ape-like On-the-spot Super Slow Jogging for 30 minutes. (3) Teaching is straightforward and easy to understand, simplifying complex concepts. (4) Learning channels are convenient (anyone, anywhere can do it), no prior knowledge is required. (5) Participants simply need to exercise daily,

at least once or twice a day, one in the early morning (Mao time/5:00-7:00) and the other one in the late afternoon (Shen time/15:00-17:00, or You time/17:00-19:00). (6) Online courses are free of charge.

4.2. RQ2: How is Super Slow Jogging applying digital technology to conduct online courses during the pandemic?

4.2.1. Application of online digital technology for ape-like on-the-spot super slow jogging during the pandemic

Originally, the Ape-like On-the-spot Super Slow Jogging was taught at physical locations such as community gatherings, with class sizes usually ranging from 20-50 people. However, with the outbreak of COVID-19 in 2020, in order to maintain the mental, physical, and social activities of the elderly during the pandemic, the instructor began to adopt a method of teaching similar to MOOCs (Massive Open Online Courses), using digital network technology in combination with daily demonstration teaching with oral lecturing. Starting from June 11, 2021, the courses began to be delivered online.

Eventually it becomes the Hybrid learning mode that combine both technology-mediated one-way (via YouTube) and two-way (via Line media) learning and face-to-face at site learning. The teaching and learning modes are depicted in Figure 2: the instructor produces the Ape-like On-the-spot Super Slow Jogging course, and at precisely 5:45a.m. each morning, the day's course was uploaded to the YouTube platform, allowing learners to practice at home for free through the Internet. In addition, the Line community on social media, was used to allow participants to share personal learning perceptions, reflections and progress in their physical and mental health.

Moreover, the instructor also established

a two-way interactive community on Line, both domestically and internationally, to provide course guidance and feedback based on individual student conditions, along with sporadic physical courses to maintain interpersonal interaction and social activities. This has formed a new Ape-like On-the-spot Super Slow Jogging blended fitness learning method under the pandemic. For most of the elderly participants with limited technology skills or literacy, they were

strongly encouraged to seek help from the younger family members who are living at home during the pandemic and in general very skillful in using the information technology or operating portable devices. The youngers are very helpful to the aging people in terms of dealing with the technological trouble shooting problems. Thus it is easy and convenient for the elderly people to get their access to the Internet for daily group practices at the remote site from home.

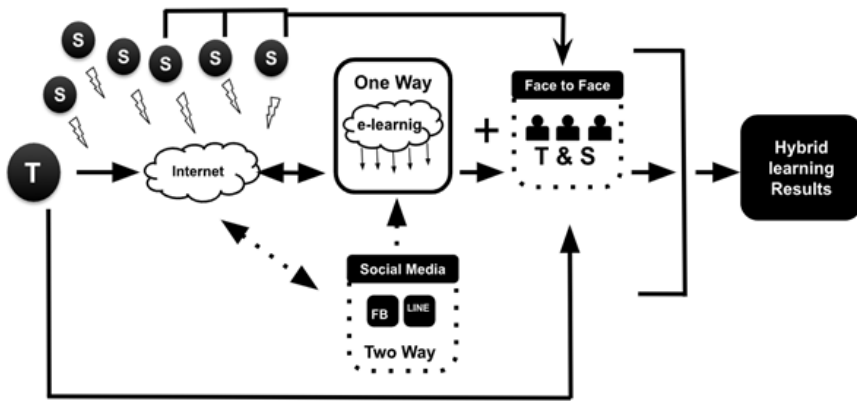


Figure 2

Blended learning methods of Ape-like On-the-spot Super Slow Jogging

4.3. RQ3: What are the learning outcomes or effects of the Ape-like On-the-spot Super Slow Jogging on learners? Who would be committed in this jogging practices and why?

The analysis of learning outcomes can be divided into two major categories of data: one is based on the learners' diary records, which falls under the scope of experiential medicine; the other is science evidence-based medicine, which involves data reports from learners' medical examinations before and after the practice period. The researchers collected feedback from 33 participants who completed a 100-day exercise regimen in the

Line group, all of whom provided learning feedback records, giving insights into their personal physical health observations. Additionally, 18 participants had undergone medical examinations before and after their practice and provided their medical reports for outcome analysis, verifying the effects of Super Slow Jogging.

4.3.1. Common physical responses or effects after practicing the ape-like on-the-spot super slow jogging

The common physical responses after completing a 100-day Ape-like On-the-spot

Super Slow Jogging regimen are as follows: the body will start to respond in about a week. After practicing for 5-10 minutes each day, the body would start to heat up and sweat profusely, indicating the blood circulation was becoming more active. In addition, the participants might also experience sensations like sourness, pain, swelling, numbness, or feeling like wanting to sleep, which were natural phenomena of body detoxification after Super Slow Jogging. With continuous practice, the pain will disappear.

After practicing for about a month, participants might notice a stagnation in their physical progress and less obvious effects of the exercise. However, if participants continue practicing for about 3 months or 100 days (the 100-day foundation period), the physical constitution will change. The participants would see improvements in sleep, complexion, and visible changes in physical appearance, such as lighter skin tone, disappearance of floaters and dry eye syndrome, disappearance of hemorrhoids, and improvement in prolapsed lumbar vertebrae.

Consequently, practicing Super Slow

Jogging for 40-50 minutes every day helps older adults with chronic diseases maintain their daily exercise habits, and it can help those with severe illnesses slow the progression of their chronic diseases.

4.3.2. Reasons of their commitment on Jogging and cases

The following Table 1 summarizes the participants committed in daily jogging in this study. It shows that most participants who actively participated in the daily online courses usually have chronic diseases or serious illnesses such as cancer. In order to maintain their health or slow down their diseases, they are highly motivated to continue actively learning. The following are the statistics of the participant diseases (some participants have multiple diseases): among the 33 participants, 10 have limb joint and lumbar spine diseases, 6 have cancer(s), 6 have sleep disorders, 5 have kidney failure, 5 have constipation, 4 have eye diseases, 3 have frequent urination, 3 have skin allergies and other diseases, and there are also cases of Alzheimer's disease, lupus erythematosus, gum bleeding, stroke, sleep apnea, varicose veins, etc.

Table 1

Analysis of Text Content of Medical Observation Records on Learner's Symptoms and Improvements After doing the Ape-like On-the-spot Super Slow Jogging

A. Evidence-based Medical Data
1. Due to damage to the autonomic nerves from treatments like chemotherapy, sleeping pills were necessary every night. Now not only have they stopped taking them, but the quality of sleep is also improving. The slow movement has also noticeably improved (A2).
2. The learner was in three car accidents, during two of which they broke 2-3 ribs. At that time, they also injured their cervical and lumbar spine. The ankle was crushed in a car accident and was almost lost due to cellulite. The knee was also affected by sequelae, leading to degenerative arthritis. They used to take psychiatric medication and sleeping pills before bedtime. In the past two weeks, they stopped taking antidepressants for mood regulation. They are very happy about this. The traditional Chinese medicine they used to take for lumbar pain four times a day has now been reduced to 1-2 packs a day (A3).

3. The intraocular pressure of their glaucoma was originally 12/13, but has now been reduced to 10/11. In addition, I can fall asleep without taking sleeping pills, and I no longer need medication for frequent urination before bed (A4).
4. I was going to have surgery for adhesive capsulitis (“frozen shoulder”), but after 20 days of Ape-like On-the-spot Super Slow Jogging, the surgery was no longer needed. The frozen shoulder and shoulder tendons have loosened, and I can lift my arms high and straight without any tension or pain (A5).
5. Psoriasis, which had been bothering me for 20 years, have been improved by 90% (A6).
6. Due to year-round allergies, my eyes and nose were red and itchy. After just 18 days, I have finally stopped itching after exercising twice a day (A7).
7. Originally my eye disease of the right eye (choroiditis) required nine corticosteroids to control inflammation and swelling. The results of a fundus photography examination showed no signs of inflammation or swelling, and my vision has improved to 0.7 (A10).
8. I was physically weak and experienced after-effects such as inefficient breathing after diagnosis and early-onset Alzheimer’s disease. I was able to maintain my Alzheimer’s disease, and even have showed improvement. I unexpectedly managed to recite the Heart Sutra completely, which I was unable to do it in the past three years (A11).
9. My cancer, white blood cell count 6400, I feel my physical strength and appetite have improved. The subsequent white blood cell count was 9000 (A12).
10. Originally I had sleep apnea, didn’t sleep well, and had dampness syndrome. The inflammation of dampness syndrome has shrunk from 6 cm to about 3 to 4 cm (A13).
11. Originally, my glomerular filtration rate went from 12 to 81.4, the bad cholesterol, and triglycerides have all returned to normal (B5).
12. Originally had rheumatoid arthritis and kidney inflammation, lost weight, gained 1 kg after one month of slow jogging, and 1.8 kg after two months. All blood test results have returned to normal, only creatinine and urea nitrogen need to continue to strive (the index is currently decreasing). Now I have dialysis every two days, not every day (C2).
13. Originally, my breast cancer had spread to the lymph nodes and clavicle, which was the third stage of triple-negative (the cancer cells in the chest were three centimeters). Now the cancer cells in the chest have shrunk to 1.1 centimeters, and the cancer cells in the clavicle and lymph nodes have disappeared (C3).
14. Stage one tongue cancer, floaters, severe constipation, blood pressure soared to 160-210, the glomerular filtration rate was originally 51, the test result after two months of jogging, it was 70.2 (C4).
15. Lupus erythematosus sister disease (antiphospholipid syndrome), the glycated hemoglobin has always been over 6.5. After jogging, now my glycated hemoglobin has returned to normal, and all the high indicators have returned to normal (D1).
16. Kidney failure, the glomerular filtration rate increased from 7.7 to 28.6 after my practicing Ape-like On-the-spot Super Slow Jogging (D5).
17. I had chronic arthritis and sleep disorders (took 4 sleeping pills at night and 1.5 during the day), and after jogging exercising, the dose of sleeping pills at night was reduced to 2.5 (D7).

18. Originally I had stage 4A lung adenocarcinoma. After 100 days of Ape-like On-the-spot Super Slow Jogging, Ca125 was 121.4 in October and Ca153 was 68.6 in October, and in December it was 38.6 (D9).

B. Empirical Medical Related Data

1. Tonsil stones are gone, otitis media is gone, thigh acne that has been present for 20 years is gone (A1).
2. Originally I suffered from anemia, ankle edema, and pleural effusion. Now my body feels very comfortable, with warm chest, ample energy, no more waking up to darkness and weakness. Urine output increased from 200cc to 500cc. Felt the body heat up from the back to the front. Uncomfortable symptoms stopped. Forgotten about pleural effusion, edema, and anemia fatigue (A9).
3. The spirit has improved, and no need to drink coffee for vitality. The teeth no longer bleed or shake, the cervical spine protrusion has been eliminated, and the bowel movements are smooth (A8).
4. Practiced with the teacher's group every day before 7 a.m., and my body started to react on about the 7th day, continuously detoxing: 1. Hands, feet, chest, and back all developed red rashes, which were unbearably itchy. 2. Multiple bruises on the inner thighs. 3. Numbness on the inner side of the left big toe (A10).
5. Physical strength has improved, and the sequelae of Covid-19 diagnosis (dysventilation) are slowly improving (A11).
6. Originally I had sleep apnea, sleeplessness, and damp syndrome. My body really feels full of energy now after slow jogging! (A13).
7. Originally I had lumbar spondylolisthesis that was already pressing on the nerves of the foot. After more than two months of slow jogging, the lumbar spondylolisthesis has improved about 80-90%. Dizziness has been persistent for over a decade and the doctor arranged an examination and found a cervical blockage. After taking medicine for two months, the dizziness reoccurred due to not being able to see a doctor during the Covid-19 pandemic. However, after practicing Ape-like On-the-spot Super Slow Jogging for over a month, the dizziness disappeared! (B1).
8. Originally had fractures in hands, feet, and lumbar vertebrae, serious cervical contusion, rupture of the posterior cruciate ligament of the knee. "Traumatic muscle tension insufficiency", sleep disorder. After practicing slow jogging, the dose of sleeping pills was gradually reduced (B2).
9. Originally I had a urinary tract infection, then later, the frequency of urination decreased (B3).
10. Originally had constipation, nocturia, insomnia, later after jogging, I found it improved bowel movements, nocturia also reduced. My sleep became deeper, lost four kilograms in weight. I look younger (B4).
11. Originally I had to do knee joint replacement, one month later after jogging, my knee gradually reduced swelling (C1).

12. Originally I had rheumatoid arthritis and nephritis. At the beginning of the jogging practice, my body was soaked in sweat, expelling the damp cold air, and the person became very relaxed and comfortable. Sometimes my waist is sour and sometimes the hot blood passes through the kidneys. My deformed hands improved, my knee swelling disappeared, and the pain was gone. The skin of my face and hands has returned to its original color. My skin has improved, with more color and texture. The nails have become harder and have more colors, not pale, and there are 6 crescents. My hands and feet are no longer cold, now they are warm. I often have migraines and many pimples are discharged from the areas above both ears (C2).
13. Originally I had stage III triple-negative breast cancer (cancer cells in the chest were three centimeters). I started to have skin eczema and buttock pimples on August 15, which were very severe, knowing it was detoxing. My skin was completely healthy by September 5! When I was walking home after chemotherapy, my legs would shake, I would take a bath at home, definitely do ultra-Super Slow Jogging, 30 minutes of essence, energy, and spirit all came back (C3).
14. Lupus erythematosus (Antiphospholipid Syndrome), the disease started to improve when started practicing, but continued practice for hot blood repair may cause the disease to relapse. Now the huge pain in various joints has also disappeared after keeping practicing jogging (D1).
15. Originally I had varicose veins swelling in left leg, sciatica, dizziness and tinnitus. My whole body's function declined, feared cold in winter, dull skin, lack of spirit. After practicing jogging, walking became lighter. Occasionally when the left foot felt it was going to start to tighten and hurt, found that my gait was incorrect. My body's spirit, physical strength, and complexion have improved a lot (D2).
16. Originally I had pains in the back of the head, frequent urination at night, bloating, small bumps in private parts. After practicing jogging, the pain in the back of the head disappeared, 2. Nighttime frequent urination has also improved, 3. Intestinal toxins were also excreted as feces, no longer often bloated, 4. The crescent moon has grown but will also shrink back, 5. The happiest thing is that the few small bumps in the private parts disappeared inadvertently, 6. Cataracts faded, 7. And the lumps in the breasts that did not grow up also softened. 8. More happily, I influenced my husband and daughter to jog with me, and we have common topics to talk about, and my husband's personality has also improved (D4).
17. After practicing jogging, my dry mouth and tongue improved. The smell in the mouth was not so heavy. My feet were lighter when walking, the bowel movements were smooth. My appetite was good and my sleep was good. My weight did not decrease. I felt my body was lighter and healthier! The frequency of my foot cramps decreased. The time was shortened, and it was not so painful. The hot and painful swelling of the calf muscles was relieved and improved, and I felt the lumbar spine stronger (D6).
18. Originally I had eczema and allergies. However, I did not take medicine for three months after jogging. Rather, I was full of energy and in high spirits (D8).

5. Conclusion and Future Study

This study investigated the emergence of Ape-like On-the-spot Super Slow Jogging online after COVID-19, as well as its learning effects. Through social technology websites like YouTube and Line, instructor could facilitate the learning process and assess its effects and impact. The practice and teaching method of the Ape-like On-the-spot Super Slow Jogging can potentially bring about a novel online fitness revolution. Preliminary results indicate that middle-aged and elderly learners can improve their physical and mental health through technology-mediated teaching during the pandemic.

Compared to the related exercises and studies reviewed in this paper, the contribution of this study lies in the following two aspects. 1) This is the first study focusing on the middle-aged and elderly people's exercise and healthcare involved uses of the multiple information technologies during the Covid-19 pandemic and gained significant results; and 2) This study systematically observed the instructional rationale, features, functions, and the effectiveness of the technology-mediated teaching and documented the rationale of the new exercise called, Ape-like On-the-spot Super Slow Jogging, that impressively combines traditional Chinese medicine as the main and western medicine as the auxiliary, incorporating traditional Chinese medicine adjustment, meridian circulation, western medicine, and so on, to extract the essence of physical fitness. Unlike the other exercises, the Ape-like On-the-spot Super Slow Jogging is not simply an exercise. Rather, it focuses on the balance of mind and body, also called Dynamic Zen, requiring simple repetitive movements and mindfulness. Eventually the results of the preliminary study shed light on its potentials post the pandemic.

However, the sample size of this study is limited, with only 33 participants who have successfully completed the 100-day foundational training. This is still the exploratory phase. In the future, we hope to extend the research duration, include more subjects, collect more samples, and conduct more in-depth, long-term studies and furthermore investigate the causes of their health improvements. We hope to provide more opportunities through free online learning methods for older people to take charge of their own health. This can help maintain their wellness, foster interpersonal interaction, and even enhance physical and mental enrichment. We aim to improve the quality of healthy living, alleviate the problems and expenses of health care as Taiwan gradually transitions into an aging society. Hope this daily jogging for free co help facilitate the policy of Leaving No One Behind In An Ageing World to mitigate the negative impacts of aging societies in the future.

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