

The Case of Operation of a Well-Aging Nomade's Five Sensory Experience Pilot Program*

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ABSTRACT

The Case of the Interdisciplinary Pilot Program for the Five Sensory Experience of a Well-Aging Nomade for the Elderly

The purpose of this study is to search the way to utilize the concept of nomade for the interdisciplinary research for the healthy and happy aging of the elderly and introduce the case of operation of a well-aging nomade's five sensory experience pilot program. In Korea, which is expected to become a super-aged society in 2025, it is urgent to prepare for changes in the socioeconomic structure. In particular, as the elderly population increases, it is urgent to find solutions for the aging problems such as multi-dimensional diseases and the old-age related depression due to the declining immunity due to aging. Hence, in this study, the theory of nomade systematized by Deleuze and Guattari was applied as the theory of interdisciplinary research to help the elderly lead a healthy and happy life. Deleuze and Guattari systematized nomade, which originally meant a life of moving geographically for farming livestock, as a philosophical concept that meant a way of life that was not confined to a fixed idea, yet which embraced other ideas with a free and open attitude and constantly innovated. This study sought to develop a well-aging program by applying the concept of nomade to a method of linking various disciplines such as humanities, food, music, biology, and physical education, while the contents of the City C's elderly welfare center nomade pilot program implemented at the beginning stage were introduced. In the nomade pilot program, the researchers of humanities, food, music, biology, and physical education provided the elderly with the well-aging program that utilizes the five sensory experience based on the humanities reflection, to ensure that the program participants can restore a healthy self and age with dignity, thereby providing them with an opportunity to reflect on their values. Moving forward, this joint research seeks to contribute to proposing meaningful solutions for improving the quality of life for the elderly and addressing the problems of old age facing the Korean society through the interdisciplinary nomade program.

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1. Introduction

The purpose of this study is to introduce the case of a pilot operation for the interdisciplinary program for the elderly welfare center, which was implemented as part of a study on the development of experiential educational contents for the healthy aging of the elderly in the Korean society, which is about to enter a super-aging society. A society where the population aged 65 years or older is 7% or more of the total population is called “aging society,” aged society for 14% or more of the population, and a super-aging society for 20% or more of them, each respectively. Korea has turned into an aging society with 7.2% of the total population aged 65 and over in 2000, entered into the phase of aged society in 2017, and is expected to enter into the phase of super-aging society in 2025 with 20.3% of the population aged 65 and over. Furthermore, Korea has the world’s fastest rate of aging, while it has taken for France 115 years, for the United States 73 years, for Germany 40 years, and for Japan 24 years to reach the point of aged society from aging society. It took merely 17 years for Korea to do so, which practically means that the preparation period for the relevant social changes has been extremely short (Chosun Ilbo, September 4, 2017).

Korea has made significant efforts to respond to the changes in the social structure caused by such a rapid aging, yet there exist numerous areas that need to be continuously improved in many ways. A multi-directional approach is needed to address the problem of the elderly. The exposure to multi-contextual diseases and depression in the elderly are also serious problems due to the weakening of immunity due to aging. According to the analysis data on the treatment status of depression and anxiety disorders in Korea from 2017 to 2021, which were published on the website of the Health Insurance Review & Assessment Service on June 24, 2022, the number of depressed patients in 2021 was 933,481, or a 35.1% increase compared to that of 2017. In 2021, 148,031 patients in their 60s, 118,611 patients in their 70s, and 66,570 patients in their 80s or older, yielded a total of over 330,000. Depressive symptoms in the old age often do not manifest typical patterns, and hence, it may be quite difficult to detect, and the elderly do not complain about emotional problems much nor visit hospital even when they are depressed, giving rises to the expectation that there would be far more patients of depression among the elderly.

The sudden outbreak and spread of COVID-19 virus, which was first discovered at the end of 2019 and spread worldwide in 2020, has re-spread as a sub-variant to date, and the sense of crisis has not completely disappeared. In serious situations, not only the risk of COVID-19 virus transmission, but also psychological atrophy, heightened anxiety, and mental and physical weakness, emotional healing and care are requested along with physical healing. The elderly, who are vulnerable to the virus, have a higher risk of being exposed to feelings of isolation and depression as direct contact and communication between people increasingly became difficult.

Depression is a type of mental illness, and like any other mental illness, treatment in a neuro-psychiatrist is the primary. However, treatment after the onset of depression is not easy to handle, and requires much more cost and physical effort, and hence, social efforts to prevent and reduce depression through various efforts before depression develops into a disease are as important as the disease treatment. In this background and for this need that it is intended to develop the interdisciplinary content that helps the elderly overcome depression and strengthen their immunity.

Meanwhile, the studies on the elderly have been conducted in individual studies in many cases. It is difficult to find solutions for many problems in the modern society in a single area, and it is necessary to come up with a solution through collaboration of several disciplines. The content which helps the elderly to live a healthy and happy life, and a valuable and dignified life, if limited to one academic discipline, may provide the partial and unbiased support. In view of the lack of interdisciplinary exchange and convergence in finding solutions for the old age related problem in the fragmented academic research climate, this study will provide interdisciplinary content that crosses various academic fields of humanities, food, music, biology, and physical education in the future, and based on their development, it is intended to seek new solutions to help improve the quality of life of the elderly, a major member of their society. In this study, it is intended to introduce the reason for nomade, which was used as the theoretical basis for the development of interdisciplinary content for the elderly, and introduce the case of the implementation of the elderly welfare center pilot program in 2021.

2. Discussion

2.1 Academic linkage of nomade and the introduction of the fundamental values of truth-good-beauty humanities

In this study, the concept of 'nomade' is introduced to connect various studies targeting the elderly. Nomade refers to a life or a people who live "periodically wandering in search of water and grass for livestock to eat" or a people who live such a life. With the innovative development of physical and telecommunications movement in the 20th century, the concept of nomadism, which means a nomadic lifestyle, newly emerged. With the innovative development of information and communication technology and the development of media and devices such as computers and smartphones, humans are not confined to the limits of physical space, yet are enjoy a borderless life by crossing the boundaries of virtual and reality. The scope of nomade has expanded from the meaning of fluidity in the physical space, and it means fluidity, flexibility, and transboundary in the virtual space of the digital age. Nomade as a philosophical concept was coined by the French philosopher Gilles Deleuze (1925-1995) in his book entitled *Différence et répétition* (1968), referring to the term 'nomadisme' introduced by Rittre as a neologism.

Afterwards, Deleuze and Guattari co-authored *Mille plateaux* (1980), systematizing nomade as a philosophical concept. The concept of nomade has been introduced as an expanded concept in various ways by various scholars. In particular, Jacques Attali interprets nomade as a more active and independent way of life in *L'homme nomade* (2005), claiming that it as "a universal value of mankind who has constantly explored and created life without clinging to a specific way of life," and in defining it, he claimed that nomade is not simply a wandering, nomadic life, yet it is an act of "turning an abandoned wasteland into a land of new creation". Nomadism, which used to mean geographical movement, has expanded its meaning and is used as a concept to include "creative actions that constantly change oneself without being bound by fixed values and way of

life” (Jang & Um, 2013, p. 68). From a modern perspective, nomade is, as it has been claimed to be “the ability to overcome deficiency, the power to focus on the essence, the skill to take advantage of the wealth of experience, and a way to strike a balance between the dynamic and the static” (Choi & Kan, 2003, p. 133), an attempt to apply useful things from the past nomadic temperaments to life.

That is, it may be said that nomade is an attitude of freely pioneering one’s own life without choosing to live a restful life without being constrained by any one value, method, or domain (Cho, 2017, p. 4-5, 69). It is to voluntarily break the bondage and stereotypes of self and to experience the expansion and liberation of the self and to gain creative energy by introducing nomade wandering and primal aspirations into daily life. Nomade is not necessarily required to physically mobile. Rather, while staying in one place, paradoxically, one can exert infinite creative dynamism with an autonomous thinking and an open attitude. Conversely, even if one continue to move physically, one may live a confined life even in movement if the frame of thought is not opened. In a sense, nomade refers to an attempt to break away from a chronic vice in order to stay wiser in one’s position or situation (Deleuze, 2007, p. 277). Beyond all, this study seeks to make this self-innovative and creative attitude towards life of the concept of nomade an essential value for the interdisciplinary content development for the elderly.

Furthermore, this study seeks to apply the characteristics of the concept of nomade systematized by Deleuze to the method for interdisciplinary linkage. Deleuze explained the characteristics of nomade and introduced it as a complex movement between points and lines. If the state of an object is a point, the object is created by intersecting and overlapping lines by numerous flows. The nomade consists of a dynamic relationship between points and lines as a ‘movement of becoming’ that which forms a line while moving from one point to another. A line connects the point of start and the point of end and is dependent on the two points, yet lines also have their own characteristics. Furthermore, as soon as one moves from a point, the point is no longer a point. Settlement and nomadism are not limited to the simple dichotomy of stationary and migration, but also go back and forth between settlement and migration. Like the movement of nomade in the creation of dots and lines, this study seeks to create a multidisciplinary, integrated program through the intersection and overlap between different academic contents.

Rhizome, a metaphorical image which Deleuze proposed as a characteristic of nomade, is characterized by forming a ‘random network.’ Rhizome is constantly connected to and disconnected from other stems, creating a system of continuous and discontinuous networks. Rhizome is contrary to hierarchical and power centric values, and carries with it individuality, identity, and plurality. Unlike the roots of trees that extend vertically, the structure or system of rhizome is, like the connection of the conjunction of “And, And, And (Deleuze & Guattari, 1980, 2001, p. 54),” fine roots are connected and differentiated without a central root, then disconnected and connected. Leading to “And, And, And,” crossing the threshold between points and flowing like a wave, nomade is not static thought confined to a specific domain, idea, or value, but is constantly changing dynamically. It may be said that it is an open thought that moves and creates (Jeong & Choo, 2015, p. 7). In that sense, rhizome may be said to be an image that symbolizes an open attitude that accepts the differences between different individuals.

In this study, the concept of nomade, which contains the values of flexibility, transboundary, and dynamic change, was intended to be applied for the interdisciplinary linkage of intersection and overlap between various academic fields. The horizontally and transversely expanding rhizome is primarily contrasted with the vertically growing tree root. In the case of trees, the spreading of small roots around the central root expresses the way in which various branching disciplines are united in a unified way around one central study. Meanwhile, nomade academic linkage, which may be compared to a network of union and separation of horizontally extending rhizomes, does not have any central point, yet forms a dynamic network which creates a continuous intersection of stillness and movement, creating a unity as a solid network. Unlike the method of delving deeply into a single discipline, the nomade interdisciplinary linkage pursues a method of experiencing transversal-mediated open learning while crossing various contents of different disciplines. Starting with the development of this pilot program, nomade academic convergence and academic linkage that Deleuze intends to build in the future attempts to apply the open thinking and dynamic and fluid connection and access of the concept of nomade systematized by Deleuze.

In developing nomade styled five-sensory experience content that crosses various disciplines, this study seeks to help the elderly look inside themselves and savor the meaning and value of life, live the rest of their lives worthily, and leave a beautiful trace, while providing an opportunity for humanistic reflection on their selves and lives. Humanities begins with reflection on life and self, such as “Who am I?”, “What is the meaning of life?”, “What is a worthwhile life?”, and “What is my calling?” Humanities literacy is the culture that mature human beings ought to have, and it is also a practical tool necessary to understand the life ahead of them and cope with the various problems encountered in life. Beyond the differences of the East and the West, since the ancient times in the humanities, excellence has been pursued in order to live a life of truth, good, and beauty, or “Jin-seon-mi.” “The world of truth pursued by the wise men of the Greek era, the ethical and good life pursued by the leaders of the Roman era, including Cicero, and the pursuit of the beauty of the Renaissance era, when the excellence of the old era was reborn” (Kim, 2013) is an example of Jin-seon-mi. Humanities reflection is a series of processes in pursuit of excellence in living the true beauty of life. When one reaches the old age, it is necessary to reflect deeply on who one is, reflect on one’s past life, and prepare to live the rest of one’s life worthy and wrap it up beautifully. In this study, in developing the nomade interdisciplinary program for the elderly, the purpose of this study is to present a compass that guides the elderly participants to restore a healthy self, pursue the true value of life, love their own destiny, and make the rest of their lives worthwhile, thereby linking the humanistic self-reflection, such as “Who am I?” for the individual disciplines.

2.2 Case of implementation of the interdisciplinary pilot program for the elderly's nomade five sensory experience

In this study, as a pilot program for interdisciplinary research on nomade for the elderly, an interdisciplinary program for nomade through the sequential implementation of individual academic contents was first provided to participants of City C’s old age welfare center members. This pilot

program was conducted on November 1, 8, and 15, 2021 for a total of 3 weeks, once a week, and once a week for 2 sessions (up to 10 participants in each class, and alternating lectures in two classes). In this pilot project, in humanities, biology, music, food, and physical education, the humanities activities for the elderly to reflect on their self and the meaning of life, ecological activities to get closer to the body and nature, music activities such as listening to music and singing, and strengthening immunity and beverage tasting to help overcome depression, and healing physical activities for beautiful old age were developed. Each class was structured to offer an experiential activity using some of the five senses of sight, hearing, touch, smell, and taste. This pilot program guided the participants to experience each academic content in a chain like nomade by linking the independent contents of each discipline.

Table 1. Nomade’s five Sensory experience pilot program: class specific themes and the linkage of five senses

Class	Topic	Linkage of five senses
1 st class of humanities	Put down the oar for a while.	sight, hearing
2 nd class of biology	The present is the time to enjoy body and the nature.	sight, hearing, touch, smell
3 rd class of music	Fall picnic with music.	hearing, sight
4 th class of physical education	Healing body and mind for a beautiful old age.	touch, sight, smell
5 th class of food	Healthy food to strengthen the immunity and overcome depression.	sight, smell, taste
6 th class of liberal arts	Mindful humanities.	sight, hearing, smell

2.2.1 Humanities lecture program

During the first week, humanities and biology, during the second week, music and physical education, and during the third week, food and humanities lectures were held. For the two-part class, the elderly students took two lectures a day for two hours while crossing the two classrooms. Below are the photos of each class and experience.

In a total of 6 sessions of the pilot program, the lecture began with the humanities reflection during the 1st session, and the program ended with the humanities reflection in the 6th session. During the 1st humanities class, they spent time thinking about who they are while resting at a moment of invaluable life, what is important to themselves, and where they should be headed as if they are laying down their oar of life’s voyage for a while and looking at the stars in the night sky. They listened to the recitation of Erin Hanson’s poem “Not,” and broke away from the notion of defining others or one’s self by external and numerical standards such as age, appearance, and title, and escape from the notion that each person has only himself or herself based on their reflection for rediscovering values. John Kabat-Zinn said, “Mindfulness is just being able to exist in and of the moment, focusing on breathing, which is only a slightest breath, paying attention

to everything around one's self, and looking at the world as it is." (Ryu, 2020, p. 156). Mindfulness is not about getting something, but about turning their gaze inwardly from what breaks their serenity and returning to the whole of their selves. It is a well-known story that the native Americans move non-stop or stop walking and wait for their slow soul, who has been lagging behind because they are walking too fast, to catch up with them. Mindfulness is about slowing down one's life a little, looking around and marveling at the big and small forms of life, gazing at the waves of one's mind as they rise and fall within one's self, which is not laziness or waste, but waiting until 'what is me' grows the further step.

During the 2nd humanities class, they sought to, like the Portuguese sculpting tile Azulejo, which makes beautiful patterns with sculptural tiles, wrote down pieces of memory and experienced writing azulejos, looked back on the traces of one's life and found meaning and value from small pieces of memory, while discovering it, and they had time to re-orient their thoughts about aging and establish a vision for well-aging that they age beautifully and meaningfully while savoring the power of paradigm shift. During the pilot program, the visual, tactile, and auditory senses were stimulated in the recitation, and the five senses of synesthesia were used for the azulejo writing, and they sought to look back on the traces of their past lives and reflected on their future well-aging.

2.2.2 Biology lecture program

During the biology lecture program, in line with the theme of 'Who am I', it was intended to provide the elderly with an opportunity to understand what kind of subject they are from the point of view of biology. Towards this end, the human body was examined from a microscopic point of view of biology, and from a macro point of view, which provided an opportunity for them to think about the position man occupies in the natural ecosystem.

During the 1st program examining their body from the point of view of biology, they spent time on visually examining the brain, which is the center of human consciousness, emotion, and memory, and understood its functions. First, while having time to experience various optical illusions, they thought about the incompleteness and importance of the brain, which functions to give meaning to and interpret sensory information perceived from the outside. Next, the basic structure of the human brain such as the cerebellum, which consists of the frontal, temporal, parietal, and occipital lobes, as well as the cerebellum, diencephalon, and medulla oblongata were examined. Among which, they examined the 'homunculus somatosensory brain map', which demonstrates the sensory maps of the sensory and motor cortex in the parietal lobe, which is related to consciousness, is similar to a kind of computer central processing unit that receives and processes responses from the outside in their brain. Furthermore, they examined the connection between such body stimuli and brain responses, as well as the process in which their consciousness and emotions arise from signal transmission between 100 billion nerve cells and neurons that comprise the brain. By explaining the fact that a neuron consists of a branch-like dendrite that receives signals, a cell body at the base of the dendrite, and an axon, a neurite extending from the cell body, and there is a gap called a synapse between the neurite end of one neuron and the dendrite of the next neuron, and that it also plays an important role in inducing higher-order conscious activity, it is possible to

understand the way the brain works.

Various neural networks consisted of numerous synapses, which are the gaps between nerve cells, are formed in the brain like a complex network. While these neural network patterns create special brain functions, which guided them to realize that the new learning leads to a change in the synapse, and that the very neural network that processes information is the place where memories are stored. Furthermore, by explaining ‘synaptic plasticity’ that changes in the density of synapses occur with age and certain changes can occur in synapses even through learning made it possible, and through the lifelong experiences and learning, it allowed them to think about the attitude to actively coping with changes in the brain. The contents were also provided such that, in contrast to a healthy brain, a sticky water-soluble protein called beta-amyloid peptide accumulates in the space between brain cells, and the brain with Alzheimer’s disease is presumed to be onset, and they understood the importance of the brain for a healthy old age by examining the brain disease called cerebral infarction, which is caused by cerebral hemorrhage and blood clots blocking blood vessels in the brain. Lastly, by using the virtual reality (VR) technology, they were able to see themselves objectively through the activities that allow us to see the detailed structures of their bodies indirectly and realistically.

The second program, which was designed to make people think about the meaning of humans as living things in the ecosystem, examined the relationship and influence between humans and other living things in the natural environment, while examining the ecological status of humans. First, from the familiar example of the decline of swallows that came in spring, the rapid decline of today’s biodiversity and its causes were investigated. Biodiversity refers to the entirety of diversity at the genetic, species and ecosystem level. Habitat destruction and fragmentation as first mentioned as the most important factors for biodiversity loss. Ecosystem disrupting aliens, represented by bullfrogs, are also indiscriminate, and their introduction can cause a significant decrease in the biodiversity of native ecosystems. By examining the concept of the ecological footprint, which represents the human load on the global ecosystem, it was attempted to understand that population growth and human overconsumption are also major causes of biodiversity declines. Furthermore, the people’s greed for certain organisms as food also causes overfishing and genocide levels, making it a serious threat to biodiversity. They were also made to understand that the movement to eradicate single-use plastics, triggered by the sea turtle plastic straw incident, was used as a material to understand that pollution also poses a great threat to biodiversity.

They were reminded that climate change, which has been a major problem recently, not only causes changes in food production areas, but also threatens the survival of living things due to rapid changes in the natural environment, such as slowly killing corals, a repository of marine biodiversity. Given the failure of scientific attempts to imitate the earth’s ecosystem and reflection on the appearance of the earth as seen from space, it gave them an opportunity to reconsider the importance of the earth they live in from a biological point of view. They were encouraged to realize that the pristine nature is the basis for quenching human thirst for green and leading a happy life with a healthy body and mind, and towards this end, they were encouraged to realize that it is necessary to shift to an ecological perspective of living together with other living things. In the last phase of the activity, the elderly who have difficulty experiencing the real nature due

to the recent social restrictions and seasonal limitations due to the COVID-19 virus were provided with the opportunity to indirectly feel the vivid nature through the virtual reality (VR) technology.

During the Nomade Five Senses Experience Festival, which was held from the point of view of biology, experiential activities were primarily conducted through the visual and auditory senses. The 3-dimensional (3D) images and photos of the human body provided the elderly participants with an opportunity to visually and vividly feel the realistic shape of their body. In particular, the human body exploration using virtual reality technology provided an opportunity for them to examine their body three-dimensionally one after another, and it was a time of experience to visually objectify and understand the body that was only superficially approached. In particular, the natural ecosystem experience using virtual reality technology provided an opportunity to experience the beautiful natural scenery visually as well as aurally through the sound of wind and water. Almost all the elderly who participated in the experience exclaimed, demonstrating the fact that they were experiencing visual and auditory experiences as if they were there in nature.

2.2.3 Music lecture program

In the music class, the most basic program composition in music was introduced and applied for the pilot program under the theme of 'Fall picnic with music' in order to achieve the goals of 'I have a sound', 'I am a composer', and 'I am a musician too.' Under the topic of 'Who am I?' in the next class, 'Listening to music.', 'Singing.' and 'Instrument playing' were used as themes to conduct the class. In particular, they examined 'the sound I have' through the learning of 'singing.' German sociologist T. W. Adorno (1903-1969) claimed that, "The act of singing is one of the basic human behaviors and existential behaviors, and is absolutely necessary because it is a tool for self-discovery" (Adorno & Horkheimer, 1947). Singing is a musical activity that anyone can easily access and experience. In particular, singing activities for the elderly may be divided into 'how to listen and sing along' and 'how to sing together.' In this class, the elderly selected the song they wanted to sing and sang them together.

The elderly said that each of them had different preferred songs, such as songs, trots, and songs, but it was the most healing time because it felt like they were singing the songs they sang as they were young together, reminiscing about those days. In this activity, they sang using sound source accompaniment, and at this time, the participants tended to find it difficult to express high and low notes, fast accompaniment rhythm, pitch, and accurate lyrics. Instead, they reacted that the participants were able to sing much more comfortably when singing together without accompaniment. Furthermore, through this music class, the participants wanted to learn vocalization, pitch, rhythm, how to make sound, and how to read sheet music through the professional music education. Among the music activities, 'singing' is the most basic and simple activity, yet it may be said that it can bring joy and richness to the lives of the elderly, and that it is an activity that can offer comfort for the lives of the old age. Following singing, in this music class, they tried to create music in which everyone became a 'composer' through the activity of 'playing an instrument'.

In this music demonstration class, they tried to play an instrument to the beat of music for 2, 3, and 4 nights using simple rhythm instruments such as tambourines, castanets, and triangles, which

are easily accessible to the elderly, in addition to singing. Since the ‘playing an instrument’ activity is an activity that expresses music only with an instrument, it requires the understanding of the basic concepts and elements of music (rhythm, melody, harmony, form, stamina, and tempo, etc.). However, instead, a musical experience using a rhythm instrument gave the participants a sense of accomplishment that is different from just listening to music, and provided an opportunity for all participants to cooperate and communicate by participating in the performance. Through the ‘playing an instrument’, this music class evoked the interest in musical instruments and provided an opportunity for them to play music directly to ensure that they could feel the vitality and richness of life.

As such, in this music demonstration program, music was used as a medium to provide an opportunity for them to properly view themselves, such as their emotions, cognition, body, language, and sociality, and think about who they are. Musical activity not only plays such a role in lifting the boredom of life into a lively routine for all people, but it can also improve the quality of life, help positive thinking, change, and emotional stability. It is expected that the music activities conducted for the elderly participating in this class will enjoy a positive effect in terms of deterioration of health due to physical aging, feelings of helplessness due to loss of role mentally, and feelings of alienation due to psychological conflicts in society (Jang, 2020, p. 109-132).

2.2.4 Physical Education class

Under the theme of ‘Healing the body and mind for a beautiful old age’, the physical education class sought to discover the imbalances in the body through waltz to strengthen immunity and overcome depression for the healthy, happy and beautiful life of the elderly, while seeking to examine themselves by reminiscing the days of their youth by experiencing it together. During the first phase of the physical education program, the balance of the spine and the center of the body were checked through walking, and the imbalance was found. In the second phase, the correct body posture was found and corrected. In the third phase, they learned the waltz movement to the music edelweiss song, and in the fourth phase, they looked back on themselves and expressed the movement of the dance using his emotions. Dance sports not only has an identity as a physical exercise, but also has the advantage of being able to express one’s self through the combination of music and rhythm, and in the course of activities in harmony with a partner, it is possible to communicate intimately with others and learn about human interaction, and given such advantages, it spread to the public over such a short time. In dance sports, it is fun to feel less bored with exercise and achieve self-fulfillment because it has to perform various dance routine movements continuously in accordance with various genres of music with various steps, various direction changes, and men and women working together, and another advantage is that it is fun and interesting because they can achieve self-fulfillment.

Furthermore, dance sports can control the intensity of exercise appropriately, and hence, the risk of injury due to exercise is minimal, and it is an exercise that has both the aerobic and anaerobic characteristics. With such characteristics, dance sports is positioned as a program that can help relieve human alienation, loneliness, and the depression felt by the elderly in the aging age. The elderly’s participation in dance sports has helped them to lead a healthy life, and the effects of

prevention of various diseases, improvement of physical strength, and maintenance and promotion of health (Ko, 2011) were reported, and based on the result that the quality of life can be improved through healthy leisure activities, (Park, 2019), it was emphasized that it is an important driving force for realizing another value of life for the elderly. Furthermore, the study of Wookyung Kim (2017) reports that it contributed so much to the psychological factors related to various pleasures and happiness and to providing emotional stability. Hence, in this pilot program, they personally recognized their own body and checked if there is any imbalance in order to check who they are through the body movements. First, they closed their eyes, set the original position for 1 minute, walked at the same place, and then opened their eyes and checked where their body is. If one turned to another side at this time, their body is leaning in the direction they turned. If they closed their eyes and stepped forward while walking in the same place, their center of gravity is shifting forward. In this way, it provided an interest to the learners and motivated them to move. In the physical activity class of the pilot program, they developed the sense of touch through the physical activity and converged the sense of hearing in connection with music, while having an experience of learning their senses through the movement of their body and had time to reflect on themselves while thinking of nostalgia while entrusting themselves to music.

2.2.5 Food engineering demonstration lecture

In the food engineering demonstration lecture, the efficacy of food ingredients for the health of the elderly was introduced, and a program was implemented to relieve tension in the body and mind and to taste beverages that help enhance the health. Recently, the interest in the bioregulatory function of health functional food has increased following the change of desire and perception for health. Furthermore, the interest in bioactive substances has recently grown for the purposes of preventing disease, and many studies have been conducted accordingly. Hence, in the food engineering pilot lecture, the efficacy of foods (radish, red ginseng, omija, gujeolcho, and dohwa) for strengthening the immunity and overcoming depression in the elderly were examined in line with the recent trend of aging. Among such foods, in particular, the effects of radish and red ginseng were examined together in detail. Radish (Radish, *Raphanus sativus L.*) is a vegetable of the *Cruciferae* family and has a unique pungent taste given its volatile sulfur content. The unique pungent taste of radish is due to the separation of thioglucoside into thiocyanate and isothiocyanate by an enzyme called glucosidase within itself when thioglucoside contained in radish is cut or cells are destroyed. Radish contains more free amino acids, sugar, calcium and phosphorus than other vegetables.

The sugars contained in the roots are primarily glucose and fructose, and in addition, coumaric acid, caffeic acid, ferulic acid, phenylpyruvic acid, gentidin acid, hydroxybenzoic acid, and various types are contained in the amino acids. In particular, since the content of vitamin C is 20-25 mg, it has played an important role as a vitamin source in winter since ancient times. Radish root called "Nabok" is effective in relieving phlegm, cough, dysentery, etc., and it was recorded in the classics that it is also effective in relieving the poisoning of seafood or noodles. Diastase contained in radish is effective in promoting digestion, food poisoning, and hangover relief, and rapine is known as a component with antibacterial action against bacteria, fungi, and parasites (Han et al.,

1997; Ryu, 1999; Ku et al., 2008).

Following which, they had the time to learn more about the efficacy of the Korean red ginseng. Korean ginseng (*Panax ginseng* C.A. Meyer) is a plant affiliated with the Araliaceae family. Examining its etymology, ‘Pan’ means everything and ‘Axos’ means medicine, meaning that it is a “cure for all diseases.” Korean ginseng has been used as a noble herbal medicine for millennia, and is historically, culturally and industrially, a very important heritage and resource of the Korean people. In particular, Korean ginseng is known to exhibit superior efficacy than ginseng from other countries, and hence, it has been loved by the consumers around the world. Korean ginseng has been used for a long time in the prevention and treatment of diseases primarily in the oriental region since ancient times. In particular, numerous studies have been carried out on ginseng along with the development of modern science since 1960, while Ginseng saponin is a specific component of ginseng and foreign ginseng such as Hwagi ginseng (USA, Canada), Jeonchilsam (China), and Bamboo Jeolsam (Japan). In comparison to foreign ginseng, the scientific research results have uncovered through many papers that the types of saponins are diverse and the content ratios of ppd-based and ppt-based saponins are also different, and hence, that they cannot be homogenized in terms of active ingredients (Park, 1996; Lee et al., 2000; Lee et al., 2015).

Furthermore, during the food class, they were induced to develop their interest in the food which helps to enhance their health by providing an opportunity so that they could experience healthy food with the five senses of sight, smell, taste, touch, and hearing while playing a guessing game while tasting tea made with ingredients that are helpful in strengthening immunity and overcoming depression. In addition, in order to reflect the humanities reflection of ‘Who am I?’, this class, the program was developed and structured so that they could help strengthen immunity and overcome depression by examining and diagnosing their current health and health status of the current aging population and depression from a food perspective, and by examining the health food available, they were provided with an opportunity to manufacture and take health food that can maintain a healthy state that can help strengthen immunity and overcome depression in the future.

Beginning with the formation of nomade styled reason through the continuation of the individual academic content, it was sought to create various levels of contents in the field and develop a series of various types of these contents, and the individual academic content is further developed through the process of mutual monitoring and interaction by and between the researchers, and the process of chain combination and multi-dimensional academic connection, convergence and interference between disciplines. It is expected that the process of experiencing such interdisciplinary contents, in which various disciplines such as humanities, biology, music, physical education, and food are linked from various perspectives, can help create an effect similar to creating a fluid line pattern while moving from one point to another.

3. Conclusion

As such, this study introduced the concept of nomade as a theoretical foundation for the interdisciplinary research for overcoming depression for the elderly and a pilot program for the elderly

welfare center in City C, which was implemented at the beginning of the interdisciplinary program development study for the elderly. As introduced in the introduction of this study, the Korean society is aging at an astronomical speed, and the provision of an old age policy according to the change in the social structure that is expected to enter a super-aging society in 2025 is rising among the important social issues. In particular, as the elderly population accounts for such a large proportion across the total population distribution, the multi-contextual disease exposure and old age depression have increasingly become the very serious old age related problems due to the decrease in immunity due to aging. Hence, the support from various dimensions is urgently needed to ensure that the elderly can lead a healthy and happy life, and this study was launched from this social context.

In this study, the nomade theory systematized by Deleuze and Guattari was used as a theory for interdisciplinary research for the interdisciplinary content development research for overcoming depression in the elderly. The concept of nomade, which originally signified the lives of nomadic people who moved geographically to raise livestock, was systematized by Deleuze as a philosophical concept meaning an innovative value that pioneers one's life with a free and open attitude without being confined to a fixed idea. As a philosophy of life, nomade forms a network of communication and cooperation with a continuous and dynamic attitude of connection and separation between dots and lines, and while embracing other ideas and values with an open attitude like the attribute of rhizome, it is characterized for constantly promoting self-growth as a matter of attitude.

This study attempts to introduce synergies via the open thinking towards the concept of nomade and the free movement between different areas into the interdisciplinary method. Hence, in this study, the City C is the first step to develop the contents that can help the elderly lead a healthy and happy life through the nomade styled interdisciplinary research that crosses the boundaries of various fields such as humanities, food, music, biology, and physical education, and the case of nomade pilot program implemented at an old age welfare center was introduced.

In this pilot program, through an old age friendly program crossing various fields such as humanities, food, music, biology, and physical education, which infuse the five senses of sight, hearing, smell, taste, and touch, it was intended that the participants could reflect on their past lives and reflect on themselves, while providing an opportunity to restore respect and confidence in the elderly and reflect on the value of living a healthy and happy life, ultimately helping the elderly to overcome depression and improving the holistic quality of life through the cross-disciplinary and collaboration across various fields. Moving forward, the nomade interdisciplinary program developed through this joint research is sought to propose that the elderly find various directions to lead their lives confidently as a major member of society, while making contribution to finding solutions for the elderly along with the improvement of the quality of life for the elderly.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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