

A Survey of Dementia Knowledge and Recognition of Dementia Prevention and Practice in Healthy Older Adults

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Keywords

Dementia · Preventive behavior · Healthy older adults

Abstract

Aim: The aim of this study was to investigate the level of dementia knowledge and behaviors recognized as dementia-preventive and the practice thereof among healthy older adults who are highly motivated to engage in activities.

Methods: The participants were older adults registered at the Silver Human Resource Center of city A, and participants anonymously filled questionnaires through the aggregation method in January 2020. **Results:** The analysis included 78 participants (the effective response rate was 49.7%). All participants were aware of at least 4 dementia-preventive behaviors, and about 80% of all participants practiced at least 1 preventive behavior. Approximately 20% of participants were not practicing preventive behaviors at all. The elderly aged 65 to 74 years had more knowledge about dementia and more types of behavior perceived as dementia-preventive than the elderly aged 75 years and older. There was no significant correlation between the level of dementia knowledge and the number of types of dementia-preventive behaviors. **Conclusions:** Healthy older adults were aware of numerous behaviors for dementia prevention, and most older

adults practiced preventive behaviors. In contrast, even with a high amount of knowledge about dementia, a small number of healthy older adults did not translate this knowledge into preventative behavioral practices. High levels of dementia knowledge do not translate into preventive behavioral practices.

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Introduction

Dementia is a common debilitating syndrome that has a tremendous impact on individuals and society. Preventing the onset or progression of dementia will lead to social benefits. The main causative diseases of dementia include Alzheimer's disease and cerebrovascular disease. To date, the development of prophylactic agents for these diseases has not been established; therefore, it is important to investigate methods of preventing dementia. Dementia prevention is more efficient in interventions for healthy older adults than in people with mild cognitive impairment [1], and dementia prevention measures targeting community-dwelling older adults who live healthy lives are critical. Interventional methods aimed at preventing dementia with nonpharmacological therapies including

regular exercise [2, 3] and cognitive training [4, 5], healthy diet [6], social participation [7], and mild predictable stress [8], which have been noted to be efficient in preventing dementia. However, studies examining the effectiveness of interventions have limitations such as the small number of participants recruited, different protocols of exercise across studies, and clinical heterogeneity of dementia syndromes [9]. In addition, no scientific evidence has been provided to confirm significant cognitive improvement in nonpharmacological therapies [10]. Therefore, methods and effects of dementia prevention are not established, and at present, dementia prevention methods are not well known among many healthy adults.

Elwood et al. [11] report that a healthy lifestyle, including controlled alcohol and tobacco consumption, physical constitution, as well as nutritional and exercise habits, is required for the prevention of the dementia onset. For the prevention of dementia, preventive behaviors need to be continued. For older adults to incorporate habitual behaviors into their lives, the awareness and motivation of each individual are critical. Therefore, we believe that it is necessary to know the current state of awareness and preventive behaviors for dementia prevention in healthy older adults as a primary stage of dementia prevention measures.

Decreased physical function, including age-related lower limb muscle weakness [12], decreased walking balance ability [13], and decreased lung capacity [14], has been reported in older adults. This may also indicate characteristics that differ by chronological age in the awareness of dementia prevention and practice frequency of preventive behaviors. For the future development and propagation of dementia prevention measures, it is necessary to know the current state of awareness of dementia prevention and preventive behavior by dividing the population of older adults into 2 groups: an elderly aged 65–74 years group and an elderly aged 75 years and older group. However, so far, there have been no reports examining the features of dementia prevention awareness and behaviors of the aging population by dividing older adults into 2 groups according to their ages.

To provide suggestions on the incorporation of dementia prevention activities, this study surveyed healthy adults in Japan, the country with the most aging population in the world, to clarify their knowledge of dementia, awareness of dementia prevention, and practice of dementia-preventive behaviors. In addition, the age-dependent characteristics of the recognition of dementia prevention and practice (elderly aged 65–74 years and elderly aged 75 years and older) are clarified.

Materials and Methods

Operationally Defined Terms

In this study, healthy older adults and dementia prevention were defined as follows:

- “Healthy older adults” were defined as community-dwelling persons aged 65 years or older who were independent in walking outdoors and willing to independently participate in community activities.
- “Dementia prevention” was defined as “comprehension of dementia at an early stage of dementia onset by the awareness of the individual themselves, including actions and behaviors to forestall onset” [15].

Participants

A total of 157 persons were enrolled in the Silver Human Resource Center in city A (center A) and agreed to the purpose of the study and participated in the helper training session. Silver Human Resource Centers are organizations that contribute to the activation of the community as well as giving purpose to the lives of the older adults through work by comprehensively providing older adults aged 60 years and older seeking temporary, short-term, and simple jobs with opportunities for employment and opportunities for social participation. As of 2019, there are Silver Human Resource Centers in approximately 1,335 municipalities throughout Japan and an approximate 710,000 registered center members nationwide, including 470,000 men and 240,000 women. Activity at center A is mainly based on temporary and short-term activities contracted by general households, companies, public organizations, etc., in city A. Enrolled members are mainly involved in community service activities such as cleaning and school children’s safety patrols in the city. A half-day-long seminar on the content regarding helper training was conducted.

Among the respondents, those aged 65 years or older were selected for this study. The survey was conducted via an anonymous self-administered questionnaire. A total of 157 copies were distributed, and 105 were correctly filled out and returned. Twenty-four individuals with missing data and 3 individuals younger than 65 years were excluded from the analysis; hence, 78 individuals (37 men and 41 women, mean age 75.0 ± 5.5 years) were included in the analysis (Table 1).

Evaluation

A questionnaire was prepared on the following 5 items:

- General information explored gender, age, household composition, number of years of education after primary school graduation, number of diseases being treated, number of types of oral medications, the presence of caregiving experience of persons with dementia, and the existence of contact with relatives suffering from dementia.
- Dementia knowledge was assessed using the Attitude toward Dementia Scale and Dementia Knowledge Scale developed by Kim et al. [16]. The scale consists of general knowledge about dementia as well as responses to behavioral and psychological symptoms of dementia. The answers used a 3-condition format “I think so: 1 point, do not think so: 0 points, I do not know: 0 points,” and the higher the total score (0–15 points), the higher the candidate’s knowledge of dementia.

Table 1. Characteristics of participants

	Total (n = 78)	Elderly aged 65–74 years group (n = 34)	Elderly aged 75 years and older group (n = 44)	p value
Male/female ratio	37/41	12/22	25/19	
Age, years	75.0±5.5	70.1±2.5	78.9±4.0	
Household composition, n (%)				
Living alone	18 (23.1)	7 (20.6)	11 (25.0)	
Spouses-only households	31 (39.7)	14 (41.2)	17 (38.6)	
Households living with children	26 (33.3)	10 (29.4)	16 (36.4)	
Other	3 (3.9)	3 (8.8)	0 (0)	
Education, years	8 (6, 10)	8 (6.3, 10)	7.5 (6, 10)	0.136
Comorbidities, n	1 (0, 2)	0.5 (0, 1)	1 (0, 2)	0.018*
Types of oral medicines, n	1 (0, 2)	0 (0, 1)	1 (0, 3)	0.016*
Caregiving experiences of people with dementia, [†] n (%)				
Present	34 (43.6)	13 (16.7)	21 (26.8)	0.402
Relatives with dementia, [†] n (%)				
Present	26 (33.3)	9 (11.5)	17 (21.8)	0.258
Concern about dementia prevention	5 (4, 5)	5 (4, 5)	5 (4, 5)	0.963
Dementia knowledge score ^a	9 (8, 11)	9.5 (9, 11)	8 (6.8, 10)	0.029*
Recognition regarding dementia prevention, n	25 (17, 38)	30 (25, 41.8)	21 (14.8, 30.3)	0.001**
Information sources, n	3 (2, 5)	4 (2, 5)	2 (1.8, 4)	0.019*
Actual behaviors regarding dementia prevention, n	2 (1, 3)	2 (1, 3)	2 (1, 3)	0.837

Values are presented as mean ± SD or median (interquartile range) unless otherwise stated. Other items: Mann-Whitney U test. * $p < 0.05$. ** $p < 0.01$. [†] Fisher's exact test. ^a Range: 0–15 points; the higher the score, the better the knowledge of the participants.

Regarding concerns about dementia prevention, we asked for answers to the question “I’m interested in dementia prevention” according to the 5 conditions of “I’m very concerned,” “I’m somewhat concerned,” “I’m not sure,” “I’m not very concerned,” or “I’m not concerned at all.” Regarding the degree of concern in dementia prevention, questionnaire responses were scored on a 5-stage scale: “I have no interest at all: 1, I’m not very concerned: 2, I’m not sure: 3, I’m somewhat concerned: 4, and I’m very concerned: 5.”

Regarding awareness of dementia-preventive behaviors, for the question “What behaviors do you think are effective in preventing the onset of dementia,” the preventive behavior options were marked with a circle, or we asked for answers in an open text (multiple choices allowed). The number of responses for recognized preventive behaviors was confirmed. They were also asked about the information sources. The source options were set to the Internet; television; newspapers; books and magazines; municipal and township reports; family members, relatives, and friends; health, medical, and welfare professionals; medical institutions and administrative agencies; and others (multiple responses) with reference to a previous study [15].

Concerning the dementia-preventive behaviors practiced, open-ended answers were given to the question of “What kind of behavior are you practicing to prevent the onset of dementia.” Those who answered that they did not practice any were asked to freely state their reason(s) for not practicing them. Concerning the dementia-preventive behaviors practiced, these were named by aggregating the open responses with similar content, and the number

of behaviors was determined for the elderly aged 65–74 years and the elderly aged 75 years and older, respectively.

Procedure

An anonymous self-administered questionnaire-based survey was conducted through the aggregation method during helper training sessions held in center A. All trainees who participated in the helper training sessions were described during the survey and asked to cooperate verbally and in writing, after which the questionnaire was distributed and administered to those who gave their consent to participate in the study. Responses were entered on site, and the completed informed consent forms and completed questionnaires were either handed over to the study collaborators or sent back to the research director.

Data Analysis

To investigate the differences in levels of dementia knowledge and the practice of dementia-preventive behaviors with increasing age, the study participants were divided into 2 groups: the elderly aged 65–74 years and the elderly aged 75 years and older. Differences between the 2 groups were compared according to attributes and rating scales. As a result, none of the variables followed a normal distribution as confirmed by the Shapiro-Wilk test. Therefore, the χ^2 test (or Fisher's exact test) was conducted on the presence of caregiving experience of dementia patients, the total score of dementia knowledge (total points of the Attitude toward Dementia Scale and Dementia Knowledge Scale), the number of types of be-

Table 2. Behaviors recognized as dementia-preventive and the preventive behaviors practiced

	Total (n = 78)	Elderly aged 65–74 years stage (n = 34)	Elderly aged 75 years and older stage (n = 44)	p value
Recognized preventive behaviors (multiple answers)				
Moving the body	78 (100.0)	34 (100)	44 (100)	–
Having autonomous thoughts	76 (97.4)	33 (97.1)	43 (97.7)	1.000
Trying to interact with people	75 (96.2)	34 (100)	41 (93.2)	0.253
Writing	75 (96.2)	33 (97.1)	42 (95.5)	1.000
Social participation	74 (94.9)	33 (97.1)	41 (93.2)	0.628
Hobby activities	74 (94.9)	33 (97.1)	41 (93.2)	0.628
Brain-based games	73 (93.6)	32 (94.1)	41 (93.2)	1.000
Reading	72 (92.3)	32 (94.1)	40 (90.9)	0.691
Diet and health management	71 (91.0)	32 (94.1)	39 (88.6)	0.460
Moving the fingertips and hands	69 (88.5)	33 (97.1)	36 (81.8)	0.070
Recall	61 (78.2)	28 (82.4)	33 (75.0)	0.435
Doing housework	54 (69.2)	26 (76.5)	28 (63.6)	0.223
Other	2 (2.6)	1 (2.9)	1 (0.2)	1.000
Preventative actions in practice (multiple answers)				
Moving the body	32 (41.0)	16 (47.1)	16 (36.4)	0.341
Social participation	21 (26.9)	7 (20.6)	14 (31.8)	0.268
Trying to interact with people	20 (25.6)	13 (38.2)	7 (15.9)	0.025*
Hobbies	13 (16.7)	5 (14.7)	8 (18.2)	0.683
Having autonomous thoughts	13 (16.7)	6 (17.6)	7 (15.9)	0.838
Readings	11 (14.1)	4 (11.8)	7 (15.9)	0.747
Brain-based games	10 (12.8)	3 (8.8)	7 (15.9)	0.500
Doing housework	8 (10.3)	3 (8.8)	5 (11.4)	1.000
Diet and health management	7 (9.0)	2 (5.9)	5 (11.4)	0.460
Recall	4 (5.1)	2 (5.9)	2 (4.5)	1.000
Writing	3 (3.8)	1 (2.9)	2 (4.5)	1.000
Moving the fingertips and hands	2 (2.6)	0 (0)	2 (4.5)	0.502
Other	6 (7.7)	3 (8.8)	3 (6.8)	1.000

Persons, n (%). χ^2 test or Fisher's exact test. * $p < 0.05$.

aviors they identified as dementia-preventive, and the number of dementia-preventive behaviors. Comparisons were performed using the Mann-Whitney U test.

In addition, in all participants, the associations between the level of dementia knowledge, the number of recognized dementia-preventive behaviors, and the number of dementia-preventive behaviors practiced were investigated using Spearman's rank correlation coefficient. SPSS (Ver.21.0, Chicago, IL, USA) was used for the statistical analysis, and the significance level was set as $p < 5\%$.

Results

Recovery Results of the Questionnaire

The effective recovery rate for the 157 persons who received the questionnaire was 49.7%, and the answers of 78 persons were used for the analysis. The survey lasted from December 2019 to February 2020.

Attributes of Participants

The characteristics of the analyzed participants are presented in Table 1. The survey included a total of 78 participants (37 male and 41 female participants, mean age 75.0 ± 5.5 years), 34 elderly aged 65–74 years (12 male and 22 female participants, mean age 70.1 ± 2.5 years), and 44 elderly aged 75 and older (25 males and 19 female participants, mean age 78.9 ± 4.0 years). The mean number of years of education after primary school graduation for all participants was 8.0 ± 2.2 years. There were 43 (55.1%) participants with medical conditions; 10 (12.8%) with orthopedic diseases, 2 (2.6%) with cerebrovascular diseases, and 9 (11.5%) with other diseases (multiple answers). The participants with medical conditions were undergoing treatment. There were 34 (43.6%) participants with experience in caring for people with dementia, and 26 (33.3%) of 78 participants had contact with a rela-

tive suffering from dementia. Regarding the concern about dementia prevention, 76 (97.4%) of the total 78 participants answered that they were either “somewhat concerned” or “very concerned.”

There were no significant differences between the 2 groups in terms of the number of years of education, experience of caring for a person with dementia, and the presence or absence of a relative with dementia. On the other hand, the elderly aged 75 years and older had significantly more diseases under ongoing treatment ($p = 0.018$) and number of types of oral medications ($p = 0.016$) than the elderly aged 65–74 years.

Awareness of Dementia-Preventive Behaviors and the Practice Thereof

All participants answered 4 or more behavioral items about the behaviors that they recognized as dementia-preventive (behaviors thought to be effective in prevention). More specifically, in descending order of response, they gave moving their bodies (such as walking, jogging, and stretching: $n = 78$, 100.0%), having autonomous thoughts (such as not relying on others, and having a reason to live: $n = 76$, 97.4%), trying to interact with people (such as conversation: $n = 75$, 96.2%), writing (such as keeping a diary, drawing and taking notes: $n = 75$, 96.2%), social participation (such as volunteering and community activities: $n = 74$, 94.9%), and engaging in hobbies (such as listening to music, playing musical instruments, travel, and movies: $n = 74$, 94.9%), games engaging the brain (such as puzzles, brain training, and Go: $n = 73$, 93.6%), reading (such as reading newspapers and books: $n = 72$, 92.3%), diet/health management (such as paying attention to nutritional balance and sodium reduction: $n = 71$, 91.0%), moving fingertips/hands (such as braiding and playing piano: $n = 69$, 88.5%), recall (such as remembering events or evening meals of the previous day: $n = 61$, 78.2%), doing housework (such as cooking, laundry, and shopping: $n = 54$, 62.9%), and others (such as dressing up: $n = 2$, 2.6%) (Table 2).

Of the 78 healthy older adults, 63 (80.8%) stated that they practiced at least 1 behavior aimed at preventing dementia. Specifically, in the descending order of response, they gave moving their bodies (such as walking, gymnastics, and swimming: $n = 32$, 41.0%), social participation (such as volunteer or local activities: $n = 21$, 26.9%), trying to interact with people (such as having conversations with friends: $n = 20$, 25.6%), hobbies (such as travel and choral singing: $n = 13$ people, 16.7%), having autonomous thoughts (such as trying to laugh and not dwelling on things: $n = 13$, 16.7%), reading (such as newspapers and books: $n = 11$ people, 14.1%), using their brains (such as

sudoku and brain training: $n = 10$, 12.8%), doing housework (such as cooking and shopping: $n = 8$, 10.3%), diet/health management (such as paying attention to diet and leading a disciplined life: $n = 7$, 9.0%), recall (such as thinking peoples' names: $n = 4$, 5.1%), writing (such as keeping a diary: $n = 3$, 3.8%), moving the fingertips and hands (such as handicrafts and piano: $n = 2$, 2.6%), and others (such as grooming and making sure I has a plan of action: $n = 6$, 7.7%) (Table 2).

On the other hand, 15 (19.2%) of the 78 respondents stated that they were not practicing even 1 dementia-preventive behavior. Reasons for not doing so included “I think that it is not necessary if I live everyday life normally,” “I think that everyday life itself is preventive,” “I don't have the time,” “awareness of preventive behaviors stresses me,” “I don't feel any urgency regarding dementia,” and “I have no reason.”

Differences in Elderly Aged 65–74 Years and Elderly Aged 75 Years and Older

The 34 (43.6%) elderly aged 65–74 years had significantly greater dementia knowledge ($p = 0.029$) than the 44 (56.4%) elderly aged 75 years and older. There was no significant difference in the degree of concern regarding dementia prevention between the elderly aged 65–74 years and elderly aged 75 years and older.

Compared to late-stage older adults, elderly aged 65–74 years had a significantly higher number of types of behaviors they perceived as preventive of dementia ($p = 0.001$), as well as a significantly higher number of information sources for preventive behaviors ($p = 0.019$). There was no significant difference in specific recognized preventive behaviors between the elderly aged 65–74 years and elderly aged 75 years and older (Table 2).

There were no significant differences in the number of types of dementia preventive behaviors practiced between the elderly aged 65–74 years and elderly aged 75 years and older, although there was a significant difference in the specific behavioral content. More specifically, compared to elderly aged 75 years and older, significantly more elderly aged 65–74 years practiced trying to interact with people as a preventive behavior for dementia ($\chi^2 = 5.014$, $df = 1$, $p = 0.025$) (Table 2).

Relationship between the Level of Dementia Knowledge, the Number of Behaviors Recognized as Dementia-Preventive, and the Number of Types of Preventive Behaviors Practiced

Among all participants ($n = 78$), there was a significant correlation between the amount of knowledge on demen-

tia and the number of types of behaviors recognized as dementia-preventive ($r = 0.365$, $p = 0.001$). On the other hand, there was no significant correlation between the amount of knowledge on dementia and the number of types of preventive behaviors practiced ($r = 0.161$, $p = 0.158$).

Discussion

More than 90% of all participants indicated that they were concerned about preventing dementia, and all responded with at least 4 behaviors that they thought would be effective in preventing dementia. Healthy older adults were therefore very concerned about dementia prevention and were aware of a number of dementia-preventive behaviors. Concerning the specific content of the preventive behavior, activities such as moving the body, having autonomous thoughts, trying to interact with people, and writing were mentioned, and various activities were recognized as preventive behaviors against dementia. Among these, all participants stated aerobic exercises such as walking and jogging as preventive behaviors in their responses. Aerobic exercises, such as walking and jogging, have been reported to be useful for dementia prevention [17], and aerobic exercise was found to be recognized by healthy older adults as a dementia-preventive behavior. In addition, approximately 90% of healthy older adults recognized health management by diet as a dementia-preventive behavior. A healthy diet has been shown to be effective in preventing dementia [6], and this was also well known as a dementia-preventive behavior for healthy older adults.

With regard to dementia-preventive behaviors practiced by healthy older adults, approximately 80% of healthy older adults practiced at least 1 behavior aimed at preventing dementia. Regarding the proportion of people practicing preventive behaviors, a survey of older adults reported that approximately 50% of people practiced them [15], and a survey of middle-aged and older adults reported that they were practiced by approximately 20% [18]. A possible reason for the large number of people practicing preventive behaviors in this study was that the participants surveyed differed from the ones in previous studies. As the participants of this study were Silver Human Resource Center member enrollees, it is speculated that there were older adults with a higher intention to engage in activities on their own. This may lead to a greater number of those who are also actively practicing dementia-preventive behaviors.

None of the healthy older adults responded that they did not have even 1 behavior that they considered as dementia-preventive, whereas approximately 20% said they did not practice even 1 dementia-preventive behavior. In other words, there were about 20% of the elderly who were aware of some dementia-preventive behavior, although did not lead to any practice thereof. This 20% of older adults did not practice preventive behaviors because they did not feel the need to practice dementia-preventive behaviors. Even in healthy older adults who were highly concerned about dementia prevention and living actively, it became clear that there were many persons who did not practice dementia-preventive behaviors. In the future, it will be necessary to further examine social factors, including the environment, in healthy older adults, and also to examine the background in which the dementia-preventive behaviors are not being put into practice.

Approximately 40% of healthy older adults were practicing aerobic exercise as a preventive behavior. This fact demonstrated that aerobic exercise is recognized by healthy older adults as a dementia-preventive behavior and that it is an activity that is easy to adopt in community life.

Compared to elderly aged 75 years and older, elderly aged 65–74 years had a greater knowledge of dementia, perceived a greater number of types of behaviors as dementia-preventive, and had a greater number of information sources for dementia-preventive behaviors. The reasons for these are thought to be that the opportunities for information collection decrease because of the narrowing of the living space due to the decreased mobility of the elderly aged 75 years and older compared with the elderly aged 65–74 years [19]. It has also been pointed out that the frequency of viewing/listening to social and information programs etc., decreases in elderly aged 75 years and older [20]. The small number of sources of information on dementia knowledge and preventive behaviors, as well as the number of types of behaviors they recognize as dementia-preventive, was lower in elderly aged 75 years and older than in elderly aged 65–74 years.

On the other hand, there were no significant differences in the number of types of dementia prevention behaviors practiced in the elderly aged 65–74 years and elderly aged 75 years and older. As for the content being carried out, there were more elderly aged 65–74 years who practiced trying to interact with people as a preventive behavior than late-stage older adults. Shimada et al. [21] reported that older adults with a wide range of outdoor activities conserved their physical functions such as

walking and balance better than those with a narrow range of activities. It is possible that the activity range is wider in the elderly aged 65–74 years in whom the decrease in physical functions due to aging is smaller than in the late-stage older adults, and it may be easier for them to proactively attempt interaction with other people.

There was a significant association between the level of dementia knowledge and the number of types of behaviors perceived as dementia-preventive, with older adults with more knowledge of dementia also having a greater number of types of recognized preventive behaviors. On the other hand, there was no significant association between the amount of knowledge about dementia and the number of types of preventive behaviors practiced. That is, even with a high amount of knowledge about dementia, we found that many older adults did not translate this knowledge into preventive behavioral practices. They may lack the motivation to engage in preventive actions, or environmental factors such as time and location restrictions may be tied to nonpractice. The results suggest that the dissemination of knowledge about dementia is insufficient to ensure the adequate practice of preventive behaviors. Specific steps, including ensuring and providing places to practice preventive behaviors and setting clear action plans and targets for preventive behaviors that translate into behavior change, need to be taken.

Our study has certain limitations. First, since the survey participants in this study were member enrollees of a Silver Human Resource Center living in an urban area, they may be more likely to have a broader range of physical fitness activities than older adults in general, suggesting the possibility of the presence of positive bias. As such, the study findings may capture the characteristics of those who tend to be more willing to be active. Therefore, in the future, it will be necessary to clarify the actual condition of the older adults who do not participate in temporary employment and volunteer activity. Second, it may include those practicing dementia prevention behaviors with a low level of evidence as they do not ask questions by limiting their behavioral content. Therefore, it will be necessary in the future to identify the actual state of dementia-preventive behaviors using objective indicators. Despite having the aforementioned limitations and challenges, this study was able to investigate the current state of dementia-preventive behaviors of healthy older adults with high motivation for activity; so, we believe that it can contribute to dementia support for older adults.

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Statement of Ethics

In the request form for survey cooperation, we specified the purpose of the investigation that participation in the survey was voluntary and that all obtained information would be digitized and handled so that individuals could not be identified. Only those whose signed consent forms were returned along with the completed questionnaires were included in the analysis of this survey. This study was approved by the institutional review board of the Faculty of Health Sciences, Kyorin University (approval number: 2019-52).

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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Author Contributions

N.Y. searched the literature, interpreted the results, and wrote this paper. K.T., M.H., and M.Y. collected the data, searched the literature, and wrote this manuscript. Y.S. designed this study, performed the statistical analysis, interpreted the results, and wrote this manuscript. All the authors approved this manuscript for submission.

Data Availability Statement

The data that support the findings of this study are available upon request from the corresponding author.

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