Table S1. Contents of group cognitive intervention program

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| Cognitive domain | Content |
| Reality orientation, talking, and  Discussion | Introducing oneself; remembering the name, place living, and hometown of the next person; taking about a topic in turn, such as a favorite food and TV program, title and lyrics of a favorite song, usual activities before breakfast, how to go to the hospital, activities on the previous Sunday, address, birthday, a precognitive dream about the birth of a subject, his/her own everyday memory problem, the most pleasant time during one’s life, a memorable place, a place the subject likes to visit, thoughts about former presidents, farming experiences, some differences from the present and past weather, and the funniest one of the group training programs. |
| Verbal memory training | Memorizing how to make kimchi and Korean soy source, proverbs, ten symptoms of stroke, brain food, good lifestyle for preventing dementia, twelve memory strategies, lyrics, today’s plan of some woman, and idioms; remembering the news by giving a title and key words and considering the five Ws and one H. |
| Visual memory Training | Memorizing objects, seasonal healthy food, or household appliances and farming implements of the past shown on photos, location and names of provinces, capitals, and mountains on the map, and famous persons presented with photos or drawings and their achievements and hometowns; reproducing a previously directed coloring of a picture; learning and remembering road signs or useful signs such as for a drinking fountain or an emergency call according to the categorization of color or meaning; remembering the location of hwatu cards. |
| Visuospatial training | Putting together a tangram to form the shapes presented on a screen; making the shapes presented on a screen with wooden blocks; making a box; jigsaw puzzles; matching each of the road signs to an appropriate place in a road picture; drawing a view from above, a profile view, and a front view of the blocks; selecting a figure with a different arrangement of blocks among figures or the same figure with the presented figure among the rotated figures; finding different parts between two similar pictures; talking about how to go to a provincial city using a route map of a high-speed railroad; finding the route on a map or a shortest path with a subway map; making a house in miniature. |
| Executive function training | Selecting a number (or word) of another category among the numerals (words); inferring the correct figure in a blank according to the arrangement of several types of figures; reading consonants of word; Korean traditional game of Yut; origami; Sudoku; playing the twenty questions game; vowel and consonant-symbol task; speaking names of animals and fruits alternatively in turn. |
| Attention training | Word puzzle; clapping or stamping one’s foot whenever the targeted words were heard; raising a blue (white) flag whenever an instructor says “blue (white) flag” during a speech; Paced Auditory Serial Addition Task; coloring a picture according to the auditory direction. |
| Calculation training | Addition or multiplication of the numbers matched previously with the cards presented on a screen; calculating meal price, price of goods, spending money, or travelling expenses; how to make a specific sum of money with several types of coins; calculating time of arrival of a train or a bus by considering driving hours and time of departure; planning a diet considering daily caloric requirements; matching Chinese zodiac signs with the year. |
| Language training | Writing a tristich by making each syllable of a word with three syllables to be the first syllable of each stich; words relay; semantic fluency; speaking a word beginning with the last syllable of the word that the previous person spoke; speaking words in consonant order. |

Table S2. Contents of home-based cognitive intervention program

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| Cognitive domain | Content |
| Verbal memory  training | Remembering news or a story by considering the five Ws and one H, summarizing it, and finding key words, personality according to blood type, plans, words, shopping lists, learning and remembering holidays’ characteristics, foods in a refrigerator, the process of dyeing hair, national holidays and their meaning, fines of the Minor Offenses, and lists of recycling waste. |
| Visual memory  Training | Remembering presented hwatu cards, a figure of Yut, location of objects, famous persons presented with photos and their names, figures, learning and remembering road signs, foods and their location on the table, matching a photo of a singer with his/her song, and national flags and capitals. |
| Visuospatial training | Findings a seat in a bus according to the instruction; drawing mirror images of numerals; drawing a view from above and a front view of the blocks; finding a route on a map; and finding the fastest path with a bus map. |
| Executive function  training | Semantic fluency, phonemic fluency, digit-vowel and consonant task, Sudoku, and arranging things. |
| Attention training | Writing from 1 to 50 in order; word puzzle; and selecting a targeted figure; reality orientation such as writing the date and weather, and clock drawing of the present time. |
| Calculation training | Calculating the price of goods, meal price, pocket money, spending money, caloric intake, fines, and time of sunrise and sunset; addition of the numbers matched previously with the hwatu cards; making a specific sum of money with several types of coins; and matching the Chinese zodiac sign with the year. |
| Language training | Making a word by connecting two characters among Korean characters; writing a letter; crossword puzzle; selecting an odd word or an antonym among the words; and writing a word beginning with the last syllable of the word in front of it. |

Figure S1. Least-squares (LS) means change of modified Alzheimer Disease Assessment Scale-cognitive subscale (ADAS-Cog) from baseline to Week 36 (6-month follow-up after cognitive intervention) in (A) group cognitive intervention (GCI) and (B) home-based cognitive intervention groups (HCI). Error bars represent the standard error (SE) of the least-squares means. By the 6-month follow-up after intervention, the subjects receiving GCI (*p* = 0.03) or HCI (*p* = 0.047) had better scores on the modified ADAS-cog than the control subjects.