Activity Engagement of Aging Retirees in South Korea

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Abstract. [Purpose] The purpose of this study was to analyze the activity engagement of the retiree population in South Korea. [Methods] The Korean-Activity Card Sort (K-ACS) was used to collect research data. A One-way ANOVA and post-hoc comparisons showed significant group effects among three age groups. The independent t-tests was used to analyze the differences in mean retained level of activity (MRA) between men and women. [Results] The one-way ANOVA showed statistically significant differences in MRA among different age groups. Schef-fé’s test revealed a statistically significant decrease in MRA in Group A, aged more than 75 years, as compared to the other two age groups. When participants were divided by gender, MRA of instrumental activities showed a statistically significant difference between the 65–74 years group and the 55–65 years group, but no difference in females of the leisure activities among the age groups. The independent t-tests demonstrated significant gender differences in MRA of activity of the 55–64 years group. [Conclusion] These findings suggest that health professionals should monitor the changes in retained level of activity after age 75, to maintain their engagement, and the importance of age-, gender- and activity-specific analyses in order to identifying patterns of activity engagement.

Key words: Activity engagement, Korean-activity card sort, Older adults

INTRODUCTION

When the baby boomer generation began to retire, they became a topic of interest in South Korea. As the retired population of South Korea ages, the older adults population continues to increase faster than in any other country1). As people age, their activity engagement may decrease or change.

Continued activity engagement has showed positive effects on healthy life, mental health and quality of life. The group based activities in community centres have been associated with improvements in the health and well being of adults who have previously experienced poor health and other forms of social disadvantage2). Continued work involvement or volunteerism provides opportunities for social interaction and engagement, and may be associated with enhanced mental well-being of older adults3). Increases in physical activity has been associated with higher physical self-worth and fewer disability limitations which have been associated with greater life satisfaction4).

For aging and activity engagement studies to be successful, the assessment tool must cover a lot of activities. Ideally, health is a state of adequate physical and mental independence in activities of daily living5). In addition, voluntary work, cultural activities, holiday, sports, reading books, hobbies and shopping are found to be successful predictors of the social connectedness of older people6).

The Activity Card Sort (ACS) is a standardized assessment tool that evaluates the amount and level of involvement in various activities7). The ACS consists of labeled photographs of older people participating in a range of activities and has multiple benefits over existing measures of participation of older adults, including ease of use, lack of dependency on literacy levels, and the inclusion of a broad range of culturally relevant activities8, 9). Originally developed in the USA, the ACS now has versions designed for use in Israel, Hong Kong, Australia, and South Korea10–12).

The present study aimed to gain understanding of activity engagement of aging retirees. K-ACS data was analysed to examine the effect of aging on activity engagement.

SUBJECTS AND METHODS

Data were collected by seven senior university students, who had completed four months of clinical practice and were trained to administer and score the K-ACS.

Eligible participants were individuals over 55 years old who could write and communicate in Korean. Candidates were excluded if they had obvious auditory, visual, or cognitive impairments8). All participants provided their informed consent before participating in this study. The study methods and procedures were approved by the Institutional Review Board of Soonchunhyang University.

The K-ACS has three versions: institutional, recovery,
and community living. This study used the community living version. The community living version requires participants to sort 67 photographs of activities (33 photographs illustrating instrumental activities, activities to support daily life within the home and community; 18 photographs illustrating leisure activities, nonobligatory activities that is intrinsically motivated and engaged in during discretionary time; and 16 photographs illustrating social activities, activities that are characteristic and expected of an individual in a given position within a social system) into 5 categories: “Never done,” “Given up,” “Do now,” “Do less,” or “New activity.” The retained level of activity engagement (%) is calculated as follows:

Level of current activity = values of “Do now” + values of “Do less”

Level of previous activity = values of “Done previously” column (i.e., “Do now”, “Do less” and “Given up”)

Retained level of activity (by percentage) = level of current activity/level of previous activity × 100%

Data were analyzed using SPSS version 20.0. Descriptive statistics were used to describe the participant demographics. Participants were divided into three age groups: ≥75 years (Group A), 65–74 years (Group B), and 55–64 years (Group C). A One-way ANOVA was used to compare the mean retained level of activity (MRA) among the three age groups, and Scheffé’s test was used for post-hoc analyses. The independent t-tests was used to examine the significance of gender differences. 95% CI was used and the results were accepted as significant if p<0.05.

Table 1. General characteristics of the participants (n=386)

| Sex      | Number | Percent (%) |
|----------|--------|-------------|
| Male     | 190    | 49.2        |
| Female   | 196    | 50.8        |
| Age      |        |             |
| 55–64    | 125    | 32.4        |
| 65–74    | 130    | 33.7        |
| 75       | 131    | 33.9        |
| Highest education |        |             |
| No education | 55   | 14.2        |
| Elementary School | 95  | 24.6        |
| Middle School   | 82   | 21.2        |
| High School    | 118   | 30.6        |
| College        | 11    | 2.8         |
| University     | 20    | 5.2         |
| Graduate School| 5    | 1.3         |
| Residence     |        |             |
| Urban        | 279   | 72.3        |
| Rural        | 107   | 27.7        |
| Self-rated health |    |             |
| Excellent   | 28    | 7.3         |
| Good        | 132   | 34.2        |
| Average     | 147   | 38.1        |
| Poor        | 79    | 20.5        |
| Self-rated activities of daily living difficulty |    |             |
| Not at all | 60    | 15.5        |
| Not very    | 143   | 37.1        |
| Neutral     | 93    | 24.1        |
| Somewhat    | 90    | 23.3        |
| Living arrangement |    |             |
| With spouse | 282  | 73.1        |
| Without spouse | 104 | 26.9        |

Table 2. The Comparison of the mean retained level of activities by age

|                      | A(n=131) | B(n=130) | C(n=125) |
|----------------------|---------|---------|---------|
| Instrumental activities | 68.1±20.6 | 81.5±16.5 | 86.6±16.0** |
| Leisure activities | 71.4±20.6 | 83.2±19.5 | 84.4±18.3** |
| Social activities | 66.1±26.3 | 82.3±23.3 | 84.1±20.0** |

*a*: ≥ 75 years old, *b*: 65–74 years old, *c*: 55–64 years old, **: <0.01 compared within activities

Table 3. The Comparison of the mean retained level of activities by age and sex

|                      | A | B | C |
|----------------------|---|---|---|
| Instrumental activities | 66.1±23.67 | 7.0±17.7 | 90.1±12.1**+++ |
| Male (n=41) | (n=77) | (n=72) |
| Female (n=90) | (n=53) | (n=53) |
| Leisure activities | 69.2±20.7 | 85.5±18.2 | 88.5±13.4**+++ |
| Male (n=41) | (n=77) | (n=72) |
| Female (n=90) | (n=53) | (n=53) |
| Social activities | 67.7±23.8 | 82.1±23.1** | 81.2±22.4**+++ |
| Male (n=41) | (n=77) | (n=72) |
| Female (n=90) | (n=53) | (n=53) |

*a*: ≥ 75 years old, *b*: 65–74 years old, *c*: 55–64 years old

**: <0.01 compared within activities, ***: <0.01 compared between male and female
RESULTS

Three hundred eighty-six healthy adults participated in this study. Participants were assigned to the A, B, or C groups to compare the mean levels of activity retained with age. Most participants had completed elementary school (85.75%) and lived in urban communities (72.28%). Participants rated their health status on a five-point scale, ranging from “Excellent” to “Poor.” The same scale was also used to rate each participant’s difficulty with activities of daily living, from “Not at all” to “Somewhat.” Most participants reported living with a spouse (73.06%) (Table 1).

MRA decreased with age (Table 2). There were significant differences in the MRA between Group A and the other age groups (instrumental activities, F=36.81, p<0.01; leisure activities, F=17.71, p<0.01, social activities, F=23.24, p<0.01), but no significant differences were found between Groups B and C (Table 3). When participants were divided by gender, the same results were obtained except for the instrumental activities of males and the leisure activities in females. There were significant differences in MRA of instrumental activities between group B and C for males, but there were no age differences in females of leisure activities. The independent t-tests demonstrated significant gender differences of the MRA in Group C (Table 3).

DISCUSSION

Activity engagement is a natural means of maintaining physical and mental function, and experiencing well being. However, activity limitation is a frequent geriatric physical and mental function, and experiencing well being. The independent t-tests demonstrated significant gender differences of the MRA in Group C (Table 3).

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