Mental fitness in elderly people: a strategy of active aging to promote their self-esteem and quality of life:
The memory stimulation as a psychosocial intervention to improve quality of life and social integration in elderly people

García-Martín, M. A., Baranqueros, B., Delgado, J. & Galinha, I.

(E-mail: magarcia@uma.es)
Department of Social Psychology, Social Work, Social Anthropology and East Asian Studies
University of Málaga (SPAIN)

Abstract

In order to understand the impact of the memory stimulation workshops in elderly people on different variables such as self-esteem, memory self-perception, quality of life and aging negative stereotypes, a psychosocial intervention in this line was implemented in a rural area of Málaga province (Spain). Thirty subjects aged ranged from sixty to ninety years old took part in a memory stimulation workshop. Prior to the workshop an assessment of the variables mentioned above was carried out following a pre-test methodology design. Non-parametric tests Wilcoxon W and Hedges’s g statistical was obtained to calculate the effect sizes were used. Partial correlations and two linear regression analyses were also carried out. The results allow to conclude that memory stimulation workshops exert a positive impact on the elderly participants through an increasing of their cognitive competence, self-esteem and quality of life, as well as a reduction in their negative aging stereotypes. This work must be taken as a research pilot study because of the small sample. In this line, it would be necessary to continue studies with an increasing population in order to get a more extensive confirmation of these results.

Introduction

Longer life expectancy provokes an increasing number of elderly people in our society according to NUI (National institute of statistics) in spain between 1992 and 2012, the life expectancy increased by 79.4 years and the life expectancy by 3.4 from 81.2 to 85.1 years. The world health organization (WHO) advocates an active aging defined as "the process of optimizing health, participation and safety opportunities to improve the quality of life as people age" (2002:79).

Psycho-educational work, cognitive or affective psycho-stimulation, strengthening of social supports, reminiscence, or development of coping strategies are some clear examples of work-based positive approaches specifically more focused on possibilities than in aging deficits (Arko, Sabatini & Silvex, 2011). Active participation in memory workshops, in order to counteract the cognitive decline associated with aging, is a very adequate strategy to deal with the aging process through a competent way to face this process. For Pintado and Sánchez (2005) cognitive training is defined as a set of strategies and techniques that are taught, practiced and applied to optimize the processes and activities that are put in action in order to manage information. Cognitive training programs have been developed with the aim of carrying out a global intervention, designing exercises to stimulate the different mental processes (perception, attention, memory, language), keep them active and strengthen them by promoting neural networks and connections involved.

Participation in these programs influences both the prevention of own cognitive decline and the prevention of cases on the mind among their users (Montejo, Montenegro, Rincón, de Andrés & Dauver, 1999; Pearman, Hartogs & Gardart, 2014, Rey, Canales & Tibbón, 2010). Likewise, the attitude toward the aging process is related to well-being in the elderly. In this way, the attitude toward old age and the aging stereotypes exert a quite large influence on the quality of life in elders. Overcoming negative stereotypes through social and individual changes can help to promote successful aging (Bryant, Beil, Gitson, Komiti, Jackson, & Jud, 2012). Also a positive attitude toward aging can contribute to a better physical and mental performing (Hermosa, Muratorio & Cubas, 2010).

Objective and Hypothesis

The aim of this study is to know if the participation of older people in memory workshops is a good way to enhance the cognitive performance, and whether their participation in these workshops, as well happen with the participation in some other activities, influences their self-esteem and well-being and reduces their negative stereotypes and attitudes.

Hypothesis 1: Participation in memory stimulation workshops will exert a positive effect on participants' memory self-perception.

Hypothesis 2: Participation of elders in memory stimulation workshops will increase their self-esteem.

Hypothesis 3: Participation in Memory stimulation workshops will exert a positive impact on participant’s quality of life.

Hypothesis 4: Cognitive stimulation in older people will produce a change of attitude among participants with respect to their previous age-related negative stereotypes, promoting a more positive view about aging.

Method

Participants: The sample was comprised of 28 women (86.7%) and one man (3.3%). The 30 participants lived in the city of Canillas de Aceituna (Málaga, Spain). All of them were members of the adult school, aged ranged from 60 to 90 years. Mean age of all those who participate in the memory stimulation workshop was 71.13 years old (SD = 5.34).

Instruments:
- LAPP Memory Assessment Scale – Spanish version (Montarroyo, 1997)
- Rosenberg’s Self Esteem Scale – Spanish version (García-Bové and Vázquez-Montorón, 2004)
- EPASE – Análisis de Estudios sobre la Salud de la Personas Mayores (Blanco, Sánchez & Triviños, 2005)
- CUBRECAVI Quality of Life Questionnaire (Fernández-Ballesteros & Zambrano, 2007).

Procedure: A pre-test post test design was applied, carrying out the variables measurement by means of a pre-evaluation. Prior informed consent, participants completed individually each questionnaire, having the possibility to consult any question at any time in necessary. The same procedure was applied once the cognitive stimulation workshop was finish in order to obtain the post-test evaluation.

Data Analysis:
- SPSS Program (Var. 22) was used to get statistical analysis. Post-hoc differences in relation to the following variables: self-perceived memory, self-esteem, well-being and negative stereotypes were analyzed. To verify statistical significance of obtained results nonparametric tests (Wilcoxon W with Monte Carlo wood test) were used due to not normal distribution of the sample and its reduced size. The adjusted Hedges’s g was used as a statistic to analyze the size of the effect. Spearman Partial correlations were also used to control the effect of third variables and a regression analysis to verify the effects of the variables studied on self-esteem and the aging negative stereotypes.

Results

Hypothesis 1: According to the Wilcoxon W statistical value obtained (see Figure 1), H1 can be confirmed (Z = 3.988, p < 0.001, adjusted Hedges’ g = 0.2, p associated = .73). Data indicate that a 73 percent of the participants perceived their memory is better after taking part in the workshop than initially. According to Cohen’s effect size rule (Cohen, 1977), a median effect size was observed.

Hypothesis 2: According to the Wilcoxon W statistical value obtained (Z = -1.781, p = 0.036, adjusted Hedges’ g = 38, p associated = .84) H2 is accepted (see Figure 1). Referring to the size effect, sixty-four percent of the participants improve their self-esteem at the end of the intervention in relation to the self-esteem prior to the workshop. The size effect in this case is medium. The power to increase self-esteem after the intervention in any population but especially at elders, is influenced by negative beliefs and myths related to their inability to be able to face different challenges due to age. This obtained result can be considered as quite satisfactory.

Hypothesis 3: The third hypothesis also, like the previous two, is confirmed (Z = -1.57, p < 0.05, adjusted Hedges’ g = .19, p associated = .81) (see Figure 1). More than ninety-one percent of the people have a positive influence on the quality of life higher than the initial mean, the effect size is considered medium.

Hypothesis 4: The hypothesis was confirmed (Z = -3.181, p < 0.001, adjusted Hedges’ g = 54, p associated = .70) (see Figure 1). Seventy percent of the participants in the workshop reduced their negative stereotypes. The reduction of negative stereotypes results in a more realistic view about aging. What it is remarkable in a population influenced by the environment accustomed to rely on negative aspects or deficiencies and new positive to the old effect is medium. The partial correlation analyzes show a significant relationship between self-perceived memory and self-esteem (r = 68, p = .001). This relationship is also confirmed by the linear regression analysis (stepwise method) applied on the self-esteem variable. So, the only variable statistically significant in this regression equation is self-reported memory in post-test, which would explain 54% of the variance in self-esteem scores (R² = .545, F(1)=54). A second linear regression analysis was performed taking negative aging stereotypes as dependent variable. In this case, the only statistically significant variable was memory (R² = .953) and frequency of activities (R² = .116); explaining both variables almost 53% of the variance of the negative aging stereotypes scores (R² = .53).

Conclusion

Despite its shortcomings, due to the small size of the sample used, the results of the current study support the strategy of memory stimulation with the elderly as a means to increase their cognitive competence, self-esteem and quality of life, as well as a way to reduce their negative aging stereotypes.

References