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Effects of a reminiscence program among institutionalized elderly adults

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Abstract

Background: Institutionalization during old age requires tremendous adaptability. Among the main consequences of the difficulty of adapting to the institutional context are prevalent depressive symptoms and low well-being. Reminiscence therapy has proven to be among the most effective at minimizing these outcomes. **Method:** This study purpose was to investigate the usefulness of reminiscence intervention in an elderly, institutionalized sample. Following a group format, the intervention lasted eight sessions and compared a treatment group and a control group, using pre-post measures and a single-blind design. We predicted that reminiscence intervention would have a positive impact on depressive symptoms, self-esteem, life satisfaction, and psychological well-being. **Results:** Significant results were obtained, including a drop in depressive symptoms and improved self-esteem, satisfaction, and psychological well-being. **Conclusions:** We conclude that reminiscence intervention yielded positive effects in institutionalized, elderly participants.

Keywords: elderly adults, institutionalization, reminiscence.

Resumen

Efectos de un programa de reminiscencia en ancianos institucionalizados. **Antecedentes:** la institucionalización en el envejecimiento requiere una gran capacidad de adaptación. Entre las principales consecuencias producidas por la dificultad para adaptarse a un contexto institucionalizado destacan la prevalencia de síntomas depresivos y la disminución de bienestar, siendo la terapia mediante reminiscencia una de las que ha mostrado mejores efectos en la reducción de estas consecuencias. **Método:** el propósito de este estudio fue investigar la utilidad de la intervención mediante reminiscencia en una muestra de ancianos institucionalizados. La intervención tuvo formato grupal, con una duración de ocho sesiones comparándose un grupo tratamiento con un grupo control, con medidas pre-post mediante un diseño de simple ciego. El objetivo de este trabajo es que la intervención mediante reminiscencia produzca efectos positivos en la sintomatología depresiva así como en autoestima, satisfacción vital y bienestar psicológico. **Resultados:** se obtuvieron resultados significativos observándose una reducción de síntomas depresivos, así como una mejora de la autoestima, satisfacción y bienestar psicológico. **Conclusiones:** la intervención mediante reminiscencia produce efectos positivos en sujetos ancianos institucionalizados.

Palabras clave: ancianos, institucionalización, reminiscencia.

As people get older, they may experience decline in different psychological and social functions that expose them to emotional and physical vulnerability, particularly in cases of institutionalization. Institutionalization during old age is a significant, sometimes traumatic, event that requires tremendous adaptation skills. According to Calkins and Cassella (2007), losing independence and sharing space are just two notable difficulties one must cope with, and they can set off depressive symptoms and chip away at self-esteem and well-being.

Depressive symptom prevalence among elderly adults in the general population is estimated around 10-15% (Steffens, Fisher, Langa, Potter, & Plassman, 2009), which rises to 46.5% for institutionalized elderly adults (Damián, Pastor-Barriuso, & Valderrama-Gama, 2010). Bohlmeijer, Westerhof, and Emmerik-de Jong (2008), and Kraaij and Wilde (2001) argue that this is caused by confronting negative life events like loss, illness, or disability. Meanwhile, being unable to detect opportunities to overcome adversity is an important mediator between negative events and depression (Davis, Wortman, & Lehman, 2000).

With regard to self-esteem, the available evidence suggests this increases throughout young and middle adulthood, peaks at approximately 60 years-old, and then declines (Orth, Trzesniewski, & Robins, 2010; Shaw, Liang, & Krause, 2010). Moreover, Orth, Robins, and Widaman (2012) confirmed the hypothesis that there is a consistent pattern by which self-esteem is more a cause than a consequence of outcomes in life. Therefore, interventions geared toward potentiating self-esteem may also yield positive results by lowering the risk of maladaptive outcomes.

Well-being research has followed two trajectories: subjective and psychological. Subjective well-being is understood as the balance between pleasant and unpleasant situations; it implies making cognitive judgments of life satisfaction, as well as emotional evaluations (Diener & Lucas, 1999). Diener, Lucas, and Scollon (2006) assert that it is stable across the life span. Psychological well-being, on the other hand, according to Ryff

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(1989), is finding purpose in life and undergoing personal growth. The dimensions of these two types of well-being follow distinct developmental trajectories. Keyes, Shmotkin, and Ryff (2002) reported that positive relations and self-acceptance were stable with age; purpose in life and personal growth, on the other hand, lowered between middle-age and elderly adulthood (Meléndez, Tomás, & Navarro, 2008; Meléndez, Tomás, & Navarro, 2011; Ryff & Keyes, 1995).

Within this framework, a key objective of psychological intervention in elderly adults is to maintain or restore life's meaning, even in the face of negative life events. Reminiscence has been recognized for its positive impact and therapeutic merit (Bohlmeijer, Smit, & Cuijpers, 2003; Butler, 1963; Pinquart, Duberstein, & Lyness, 2007) as non-pharmaceutical treatment (Wang, Yen, & OuYang, 2009).

Reminiscence seeks to evoke meaningful memories from the past by relating experiences, facts, or actions associated with certain stimuli. Webster (2003) defined it as presently remembering and interpreting life events that were experienced at some time in the past, usually the distant past.

Research on reminiscence treatment has shown it to have positive effects in elderly adults. One of the most widely studied of such results is the decrease in depressive symptoms (Bohlmeijer et al., 2003; Korte, Bohlmeijer, Westerhof, & Pot, 2011; Serrano, Latorre, Gatz, & Montañés, 2004); this type of therapy is closely linked to mental health (Cappeliez, O'Rourke, & Chaudhury, 2005; Westerhof, Bohlmeijer, & Webster, 2010). Specifically, Karimi, Dolatshahee, Momeni, Khodabakhshi, Rezaei, and Kamrani (2010) reported a drop in depressive symptoms in an institutionalized, elderly population compared to a control group. What is more, Pinquart et al. (2007) found that its effects endure with time. Serrano et al. (2012) even observed improvement among elderly adults who were clinically depressed. Also, Hsieh and Wang (2003) found reminiscence to have an impact on self-esteem, social behavior, integrity, and life satisfaction. In relation to well-being, Bohlmeijer, Roemer, Cuijpers, and Smit (2007) suggested these interventions have a moderate effect on life satisfaction and emotional well-being. Meanwhile, Chiang et al. (2010) found evidence to suggest they are a useful way to boost psychological well-being.

The present study's purpose was to research the usefulness of reminiscence intervention in a sample of institutionalized, elderly adults. The intervention was conducted as a group, lasted eight sessions, and included a control group for comparison using a single-blind design. Its central objective was to improve participants' depressive symptomatology, self-esteem, life satisfaction, and psychological well-being.

Method

Participants

Participants included 34 elderly adults living in two retirement homes in the province of Valencia. A quasi-experimental, single-blind design was applied with pre- and post-treatment measures. The retirement homes were randomized to determine where the intervention program would be administered. Participants ranged in age from 65 to 92 years-old, the average age being 79.78 (SD = 9.34) in the treatment group and 79.75(SD = 8.07) in the control group. With respect to gender, 83.3% of the treatment group was female compared to 56% of the control group. In terms of civil status, 4.2% of the treatment group were married, 50% widowed; in the control group, those percentages were 7.4% and 63%, respectively. As far as level of education, 20.8% of the treatment group had not completed elementary school, 66.7% had completed elementary school, and 12.5% had completed middle or high school or above; in the control group, those percentages were 55.6%, 33.3%, and 11.1%, respectively. Tests for homogeneity revealed no significant differences between groups at pre-treatment.

Instruments

In addition to collecting sociodemographic data, various tests and scales were administered to take pre- and post-intervention measures. To gauge cognitive level and screen for potential issues, the Mini-Mental State Examination (MMSE) (Folstein, Folstein, & Mc Hugh, 1975) was administered; MMSE score (<23) was used as an exclusion criterion in this study. To tap depressive symptomatology, the Mini-GDS 8 was utilized, along with a short-form version of the Geriatric Depression Scale (Yesavage, Brink, Rose, & Lum, 1983) specially adapted to evaluate institutionalized, elderly persons (Buz, 1996). Self-esteem was evaluated using the Rosenberg Self-esteem Scale (Rosenberg, 1965), which aims to assess both positive and negative feelings toward oneself. Life satisfaction was captured using the Philadelphia Geriatric Center Morale Scale (Lawton, 1972), because it is a useful tool in work with the elderly and has adequate psychometric properties. Finally, the Ryff scales (1989) were applied to gauge psychological well-being because they are often used in elderly adults (Meléndez, Tomás, Oliver, & Navarro, 2009; Tomás, Meléndez, & Navarro, 2008) and because their psychometric properties have been amply studied (Tomás, Meléndez, Oliver, Navarro, & Zaragoza, 2010). These assess the dimensions self-acceptance, environmental mastery, positive relations with others, autonomy, personal growth, and purpose in life.

Procedure

Group sessions were conducted by a psychologist, who directed the entire intervention. Eight 60-minute sessions were held, each with a similar structure. They began with a short introduction presenting the task at hand. Activities followed and each session ended with an evaluation of the session itself, and with comments about the next session's main points. Each session was geared toward a specific theme and, as Webster, Bohlmeijer, and Westerhof (2010) suggest, spontaneously and deliberately introduced triggers, all the while utilizing an interpersonal style in which people share their memories with others through story-telling. The sessions themselves each focused on a specific topic: from childhood through old age; remembering where I've lived: my town/city; games from childhood and youth; popular songs; holidays and special days; the movies over time; and remembering my grandmother, which spanned two sessions. While reminiscence sessions were held, the control group continued to participate in the activities normally imparted at their retirement home.

Data analysis

We performed *t*-tests for independent samples and chi-squared tests to determine whether or not the groups were homogenous

prior to treatment. To analyze the intervention's effects, repeated measures analysis of variance was conducted, applying the Bonferroni correction. Simple effects as well as interaction effects (group X time) were examined. The level of statistical significance employed was p<.05. All analyses were carried out using the SPSS 19 statistical package.

Results

Simple effects analysis of the MMSE indicated no significant differences between groups in terms of pre-treatment measures, yet significant differences were observed between the control group's pre- and post- measures, $F(1, 24) = 5.08$, $p<.034$, $\eta^2 = .175$, their scores decreasing slightly ($M_1 = 26.77$, $M_2 = 26.38$). We analyzed differences between groups following intervention using tests of within-subjects effects of the time-group interaction, and applied the Huynh-Feldt correction. This revealed no statistically significant differences, $F = 2.45$, $p = .124$, $\eta^2 = .096$.

Shifting our attention to the depression assessment, simple effects analysis showed no significant differences between groups at pre-treatment, but a significant drop in the treatment group's scores occurred between the two measures, $F(1, 27) = 5.40$, $p = .028$, $\eta^2 = .167$. Last, the time-group interaction was indeed found to be significant, $F = 1.76$, $p = .040$, $\eta^2 = .147$, confirming a decrease in the treatment group's depression scores ($M_1 = 3.46$, $M_2 = 2.46$), and a rise in depressive symptomatology in the control group ($M_1 = 2.37$, $M_2 = 2.62$).

Simple effects analysis of the Rosenberg Self-esteem Scale revealed no significant differences between pre-treatment measures, but a significant increase was observed in the treatment group's scores between the two measures, $F(1, 24) = 76.87$, $p<.000$, $\eta^2 = .403$. Furthermore, the time-group interaction revealed significant differences, $F = 8.08$, $p = .009$, $\eta^2 = .252$, confirming that the control group's scores were stable over time ($M_{1,2} = 32.60$), while the treatment group's scores increased ($M_1 = 34.30$, $M_2 = 35.46$).

With respect to the life satisfaction assessment, simple effects analysis revealed no differences at pre-treatment. However, our analysis of the differences between the two measures revealed a significant increase in the treatment group's scores, $F(1, 27) = 76.87$, $p<.000$, $\eta^2 = .762$. Additionally, within-subjects tests comparing the two points in time suggested the time-group interaction brought about significant differences, $F = 36.14$, $p<.000$, $\eta^2 = .601$; the control group exhibited a slight score increase ($M_1 = 7.91$, $M_2 = 8.07$), while the treatment group experienced a large score increase ($M_1 = 6.61$, $M_2 = 11.69$).

Finally, of the dimensions of psychological well-being, significant simple effects were only found in the case of autonomy. Analysis of the dimensions over time indicated the treatment group's scores differed significantly on self-acceptance, $F(1, 24) = 9.91$, $p = .004$, $\eta^2 = .293$, positive relations with others, $F(1, 24) = 8.37$, $p = .007$, $\eta^2 = .269$, personal growth, $F(1, 24) = 8.15$, $p = .009$, $\eta^2 = .254$, and purpose in life, $F(1, 24) = 28.36$, $p<.000$, $\eta^2 = .542$. The autonomy dimension reflected differences in the treatment group, $F(1, 24) = 9.1$, $p = .006$, $\eta^2 = .275$, as well as the control group, $F(1, 24) = 14.4$, $p = .001$, $\eta^2 = .369$. The control group's environmental mastery scores changed significantly over time, $F(1, 24) = 13.82$, $p = .001$, $\eta^2 = .365$. Last, within-subjects tests showed the time-group interaction (Table 1) to have significant effects on the dimensions self-acceptance, positive relations with others, autonomy, environmental mastery, and purpose in life.

Discussion

Our analysis of reminiscence therapy application in institutionalized people over 65 elucidated significant differences that reflect improvement on the study's variables. We observed that the treatment group's scores on depressive symptomatology, self-esteem, life satisfaction, and psychological well-being all improved, while the control group's scores on the study's variables stayed the same or even decreased

With regard to the specific measures taken, significant differences were not observed on the cognitive impairment assessment, which is in line with the results of Forsman, Schierenbeck, and Wahlbeck (2011) and those of a meta-analysis by Pinquart and Forstmeier (2012). In view of the above, the results indicate that reminiscence can do little to improve cognitive achievement, especially when impairment is involved. This reiterates that this treatment must be differentiated from others whose goal is cognitive stimulation.

Regarding mood state, a significant drop in depressive symptomatology was observed in the treatment group, as in prior studies (Alfonso & Bueno, 2010; Pinquart & Forstmeier, 2012). This reinforces the notion that this type of intervention can be utilized as a mechanism to reduce maladaptive elements. Furthermore, according to Pot, Bohlmeijer, Onrust, Melenhorst, Veerbeek, and De Vries (2010), the results of this type of intervention are maintained long-term. Watt and Cappeliez (2000) reported as much; after conducting an intervention, they found its effects were still maintained three months after treatment had ended. Thus, we have confirmed the therapeutic usefulness of reminiscence in reducing depressive symptomatology. According to Bohlmeijer et al. (2003), our results are comparable to those of antidepressant or cognitive-behavioral treatments.

On another note, Chiang et al. (2010) proposed that reminiscence therapy is also effective at improving comprehension skills and

Table 1
Mean scores on the dimensions in both groups at times 1 and 2, and results of Within-subjects Tests

Dimension	Tr. Gr. T1	Tr. Gr. T2	C. Gr. T1	C. Gr. T2	F	p	η^2
Self-acceptance	5.26	5.55	5.42	5.42	4.98	.035	.172
Environmental mastery	4.96	5.10	4.80	4.18	10.37	.004	.302
Positive relations	4.49	5.06	4.83	4.87	3.73	.050	.135
Autonomy	4.80	5.23	5.39	4.87	22.88	.000	.448
Personal growth	5.40	5.52	5.51	5.55	2.83	.105	.105
Purpose in life	4.78	5.18	5.18	5.10	14.18	.001	.371

Note: Tr. Gr. = Treatment Group; C. Gr. = Control Group; T = time

fomenting self-esteem. That was confirmed by the significant improvement in score observed. Low self-esteem is linked to applying coping strategies such as escapism or avoidance, which are negatively correlated with psychological adjustment and effective coping. Problem-solving, conversely, is a strategy to cope with important life events that reaffirms personal identity and enhances self-esteem (Korte et al., 2011).

Another variable on which significant differences were observed was life satisfaction. According to Cappeliez and O'Rourke (2006), the ability to transform negative events into positive outcomes is one of the most characteristic facets of reminiscence, because it is directly associated with life satisfaction. In addition, these results are consistent with those of Davis (2004), who reported that satisfaction level increased in groups who received therapy, compared to the control group. O'Rourke, Cappeliez, and Claxton (2011) examined that effect longitudinally.

Finally, evaluating treatment effects on the dimensions of psychological well-being, significant differences were observed on five dimensions. As far as environmental mastery, the intervention resulted in improved use of contextual opportunities and adaptation to context. We should bear in mind that an important issue for institutionalized populations is difficulty not only adapting to the residential context, but also the possible development of adapted contexts while one is institutionalized. On the other hand, improved personal development in the form of self-acceptance may help maintain and enhance self-esteem, lend meaning to the present moment and promote acceptance of the past. Moreover, the social nature of reminiscence, which is visualized through autobiographical memory, plays a considerable role in rebuilding the self, thereby moving closer to Erikson's (1968) notion of integrity. As far as positive relations with others, numerous studies have highlighted losing a spouse and not having children or other relatives available to care for you as causes for institutionalization. Both factors involve a lack of social support, which is an essential aspect of coping with stressful situations requiring adaptation, and also something that mitigates the onset of impairment, slows its progression, and even increases recovery rates (Meléndez, Tomás, & Navarro, 2007). Along those lines, improvement in social support of institutionalized people seems to be a determining factor in the development of well-being. We also saw improvement on the autonomy dimension, with more independent attitudes arising from a highly regulated environment, one where thanks to intervention, people became more able to resist social pressure and think and act for themselves. Finally, on the purpose in life dimension, perhaps one of the most definitive of psychological well-being, treatment effects were also observed, enabling participants to set goals and objectives that promote development during this final stage of life. Keep in mind that institutionalized people experience several contextual and environmental difficulties that in many cases impede them from pursuing life goals.

In line with the above, and based on the idea that aging is a life event that can modulate well-being, institutionalization without intervention would seem to diminish well-being due to the inherent loss of control over one's situation in life and ability to manage it (Sáez, Meléndez, & Aleixandre, 1995). Remember that the psychological dimension is closely tied to health management, objectively and subjectively speaking, but there is also evidence that well-being protects health to some extent. Therefore, it seems necessary to support personal skills and give them recognition.

These points all highlight the need to rethink caring for elderly adults, diversify the resources available, and not restrict most actions to closed institutions that entail, among other negative effects, reduced physical activity, feeling useless, and losing control over oneself and one's environment. For all these reasons, top priorities should include keeping elderly people in adaptive environments that are integrated into the community, and developing interventions to boost their well-being and quality of life.

Finally, we point out a series of aspects or limitations to keep in mind. First of all, increased sample size would be one improvement, considering that the number of participants was indeed low. Nevertheless, significant results were obtained on the study's array of variables. Next, one objective to pursue in future studies would be to examine the relationship between number of sessions and results, in other words, whether the treatment group's results improve more when more sessions are held, and to explore whether there is some maximum number, or ceiling, beyond which results stop improving. In future research, it is imperative that longer-term follow-up measures be taken, and that variables linked to autobiographical memory and reminiscence functioning be explored.

As a final conclusion, we report that reminiscence intervention in institutionalized participants had a positive impact on variables linked to aging, like mood state and well-being, with no negative effects associated. Therefore, this type of therapy is recommended for elderly adults.

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