

Effects of a Cinema Therapy-based Group Reminiscence Program on Depression and Ego Integrity of Nursing Home Elders

Kim, Ha Gang

Department of Nursing, Mokpo Catholic University, Mokpo, Korea

Purpose: The purpose of this study was to evaluate effects of a cinema therapy-based group reminiscence program on depression and ego integrity of elderly people in a nursing home. **Methods:** A nonequivalent control group pretest posttest design was conducted. The participants were 45 elderly people from one nursing home, 23 in the experimental group, and 22 in the control group. They were recruited from a nursing home in G city. The cinema therapy program was provided for 90 minutes once a week for 10 sessions. Data were collected from June to August, 2013. Data were analyzed using the SPSS/WIN 20.0. **Results:** After the intervention, the group who participated in the showed increased self-integrity ($t=4.29, p<.001$) and decreased depression ($t=5.01, p<.001$) compared to the control group. **Conclusion:** The findings of this study suggest that the group reminiscence program using the cinema as in this study is effective in increasing ego integrity and decreasing depression of elderly people in nursing homes.

Key Words: Depression, Ego, Elderly, Nursing home

INTRODUCTION

The population of elderly individuals and rates of nuclear families, and women's employment have rapidly increased, and values regarding supporting one's family have changed in Korea. These factors have raised the demand on welfare facilities for elderly individuals. The government introduced the long-term care insurance system for the elderly in 2008. Moreover, supporting the elderly became a joint responsibility with the government. Consequently, the number of long-term care facilities has increased from 1,186 in 2007 to 4,475 facilities in 2013, and the number of elderly residents has increased from 61,406 in 2007 to 131,399 in 2013[1]. For the elderly, a home refers to one's own area and a place to socialize with friends and neighbors where their identity and story are reflected. In this sense, moving one's residence to a nursing home means alienation from the usual life they have long maintained. This could result in

changes physical location of life space, as well as many changes in daily life, social support systems, and psychological factors. Furthermore, because some life crises precede change in residents such as health declines, financial problems, spouse's death, and weakened physical functions, moving from a home to a nursing home often causes stress and fear[2]. As most elderly people do not want to change their residence and consider living with family to be most desirable, facility residences might exacerbate their depression.

The elderly phase is the phase of finishing life leading one to reflect on, measure, and find meaning in life[3]. Erikson explained psychological well-being of a successful elderly period as obtaining ego integrity[4]. To obtain ego integrity is to accept one's life without regret and be satisfied with one's present life. Ultimately, this results in having no anxiety, even for death, with a balanced view of the past, present, and future. However, a failure to obtain ego integrity causes despair, which is preceded by depression and hopelessness. Psychologi-

Corresponding author: Kim, Ha Gang

Department of Nursing, Mokpo Catholic University, 697 Youngsan-ro, Mokpo 530-742, Korea.
Tel: +82-61-280-5129, Fax: +82-61-280-5109, E-mail: havesevendreams@hanmail.net

Received: Oct 15, 2014 | Revised: Nov 25, 2014 | Accepted: Dec 20, 2014

This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

cal factors such as depression and anxiety for death may have a direct effect on ego integrity[5]. In particular, Erikson indicated that depression is the most important factor influencing ego integrity among elderly individuals. Although elderly-related facilities provide a variety of programs, few programs exist to manage individual psychological conflicts, anxiety, separation, or loss[6].

Talking about life stories is therapeutic among elderly people when they are based on their memories. Life reminiscence promotes psychological recomposition and general reaction to crisis including development crisis [3]. Through the process of reminiscence, elderly individuals can recollect their circumstances and role and restore themselves. Reminiscence also plays a bridge role between the present and the past. The elderly can accumulate situational judgement abilities and develop a new and permanent identity. One ways to achieve ego integrity is to reflect on the past and have a positive view of life. With ego integrity, elderly individuals can feel that they have lived the best and most meaningful life they could have and are able to reflect on their life with integrity. They look back at their past life and think of meaningful past experiences. Then, they attempt to measure and put their life in order. Therefore, reminiscence becomes a main means to help achieve ego integrity in the elderly[7].

Reminiscence is to look back over life to reintegrate, reorganize, and ultimately resolve painful problems in the face of changes of experience and individual loss due to aging. The mechanism of reminiscence can only act when there is a listener. Thus, thinking quietly and alone is not enough-a listener is required for its effectiveness. In this sense, interaction comes to the fore. In the process, reminiscence may become a tool to satisfy and maintain one's status and honor. Group reminiscence therapy might provide enhanced sociality and catharsis[3].

Recently, cinema therapy which uses cinema as therapeutic technique has become popular pervasive in the counseling field. Its effectiveness has been demonstrated in participants' self-esteem, emotional expression and understanding, interpersonal relations, depression, and psychiatric patients' rehabilitation. Cinema therapy prescribes a cinema to an interviewee as the healing process. Identification, projection, idealization, modeling, and vicarious learning are suggested as the psychological mechanism of cinema therapy[8]. In cinema therapy, interviewees enjoy watching a movie and their therapeutic motivation becomes high. They move between imagination and reality and can explore emotions associated with their present problems[9]. The advantage of

cinema is that receivers strongly accept a text as a plausible and possible story. As it powerfully influences the receiver's perception by using auditory, visual, and written language, it can be a very accessible medium for interviewees. Even interviewees who feel nameless anxiety about psychological therapy can voluntarily participate in the therapy given the playfulness that characterizes cinema therapy. Recipients watch or make a movie [10] and subsequently feel stability and relief.

Most previous researches found a positive effect of reminiscence therapy on psychological variables in elderly individual. Art therapy-based group reminiscence therapy was found to have an effect on quality of life and ego integrity among elderly individuals in a nursing home[11]. Further, reminiscence therapy applying photography showed a significant effect on memory in elderly individuals with dementia in nursing facilities[12]. However, little research has investigated reminiscence in elderly individuals using an image. Sim et al.,[13] developed a depression intervention program that applied reminiscence therapy using cinema and TV drama for the general elderly population[13].

Therefore, this study sought to evaluate the effect of cinema therapy on depression and ego integrity among elderly individuals in a nursing home.

2. The Purpose and Hypotheses

The purpose of this study was to perform a cinema therapy-based group reminiscence program and verify its effects on depression and ego integrity of the elderly in nursing home. The hypotheses of this study are as follows.

1) Hypothesis 1

The experimental group who participated in the cinema therapy-based group reminiscence program will have lower depression score than the control group who did not participate.

2) Hypothesis 2

The experimental group who participated in the cinema therapy-based group reminiscence program will have higher ego integrity score than the control group who did not participate.

METHODS

1. Study Design

This study used a nonequivalent control group non-

synchronized design, and a non-randomized controlled trial.

2. Participants

Participants were 45 elderly individuals residing in a nursing home in G city from June to August 2013. Participants understood the purpose of the study and agreed to participate. The purpose of the study, questionnaire contents, and their ability to withdraw from the study at any time were explained to the experimental group. The participants fully understood text in order to sign a written consent and complete a the questionnaire. The same cinema therapy program that was provided to the experimental group was provided to the control group after the study was finished.

A total of 24~30 (12~15 for each group) participants are required according to the table suggested by Cohen [14] when significance level α is .05, the number of groups is 2 ($u=1$), effect size is .96, and desired power is .80. Considering potential drop rate, 25 participants were selected for each group. However, 2 participants of the experimental group who did not participate continuously were excluded. In the control group, 3 participants who participated in the pre-test but did not participate in the post-test were excluded. Finally, a total of 45 participants (experimental group=23 and control group=22; drop rate=10%) were selected for the study.

3. A Researcher and a Research Assistant

This researcher works as a training director of the Korea Society for Image-Cinema therapy and a cinema therapy instructor of the Korean Institute of Film Application. This researcher developed cinema therapy programs for adolescents under a probation in a doctoral dissertation and for the elderly's depression intervention. This researcher also give lectures on psychiatric mental health nursing in the college. One research assistant, a psychiatric mental health nurse, who completed a cinema therapy workshop in the Korean Institute of Film Application and works as an alcohol hospital counselor, helped conduct the program.

4. The Construction of the Program

The program of this study applied the family life cycle by Erikson's emotional development theory[15] based on the program developed by Sim et al.,[13]. The program consisted of a total of 10 sessions (warm-up [Session 1], reminiscence [Sessions 2~9], and follow-up [Session 10]).

In each session, participants watched an edited theme image for 20 minutes and reminisced on their life using structured questions.

The movie used for this study was 'My Mother, The Mermaid (Korean).' It is a fantasy movie in which a young woman is transported back in time and sees her parents courtship. She lives with her loud, cynical mother and very good but emotionally non-existent father. One day, her father disappears because he gets ill, and she goes to her parents' hometown to find him. There, she - experiences her parents' pure and beautiful love. The TV drama 'Life Is Beautiful (Korean TV drama)' is a family story spanning several generations in Jeju-do about the harmony and love of remarried family.

Two images were selected because they describe the family members characteristics in detail and deal with human relationships such as parents -child, couples, friend, and siblings, relationships, as well as conflicts with husband's family. They also covered a variety of themes including preciousness of family, reconciliation, forgiveness and love, beautiful memories but ugly reality, sound values, positive way of thinking, and life and death.

The final program was determined after a discussion among one psychiatric mental health nursing professor, one geriatric nursing professor, and one head nurse in a nursing home (Table 1).

1) Warm-up (Session 1)

The warm-up session was intended to form the relationship between the researcher and participants and among participants. The purpose of the study was explained to participants. The researcher and participants developed rapport through self-introduction and program rules were made.

2) Reminiscence (Sessions 2~9)

Reminiscence was intended for rumination on early childhood, pre-school age, adolescence, and adulthood by development stage and a consideration of approaching death. During the session, participants watched an edited theme image for 20 minutes and shared life stories through structured questions. The focus was on positive reminiscence of one's life by human development stage within group dynamics by using an image.

3) Follow-up (Session 10)

The follow-up was intended for participants to express their feelings and thinking after the program and to positively plan the rest of their days.

Table 1. Cinema Therapy based Group Reminiscence Program

Session	Theme	Program contents
1	* Introducing program * Formation of Intimacy	- Introduction of program and rules. - Introduction of moderator and participation
2	[Stage of infant and babyhood] * Reminiscence of parents and babyhood	- Watching edited film (20 minute) and sharing structured questions - Sharing memory about parents and brothers
3	[Stage of infant and childhood] * Recognition of positive experience in same age relationship	- Watching edited film (20 minute) and sharing structured questions - Sharing pleasant memory and friends in childhood
4	[Stage of school age child and adolescence] * Reminiscence of school days * Giving attachment to effort and dream in school days	- Watching edited film (20 minute) and sharing structured questions - Sharing the dream about future - Sharing the success and frustration
5	[Stage of adulthood I] * Self -awareness about process of marriage and the newlywed days * Thought about being parents for the first time	- Watching edited film (20 minute) and sharing structured questions · Sharing the feeling about partner at first meeting · Sharing process of marriage · Sharing the birth of first baby
6, 7	[Stage of adulthood II] * New understanding about parents and recognition of value about oneself - Having pride about solving problem	- Watching edited film (20 minute) and sharing structured questions · Sharing the experience of pleasant and difficulty in process of rearing of children · Sharing about mind to leave on the children · Sharing the most difficult experience · Sharing the successful experience
8	[Stage of senescence] * Successful agedness * Positive recognition about proceed of agedness	- Watching edited film (20 minute) and sharing structured questions · Sharing the experience about grandparents in childhood · Sharing opinion about successful agedness
9	[Death] * Ready for the death * Decreasing fear about the death	- Watching edited film (20 minute) and sharing structured questions · Sharing opinion about the death in mind. · Sharing opinion about an ideal death
10	* Positive reconstruction about the life	- Reminiscence of whole life and sharing wish about the future

5. Measurement Tools

1) Depression

The Korean Form of Geriatric Depression Scale (KGDS) is a Korean version of Geriatric Depression Scale (GDS) developed by Brink and Yesavage et al., [16] and standardized by Kim JS et al [17]. This tool is a dichotomous scale of responding yes or no and consists of 16 negative and 14 positive items. Negative items range 0~30 points by reverse-scored conversion ('Yes'=0, 'No'=1). Given that 14 points are the optimal cut-off score, 14~18 points is classified as subthreshold depression and mild depression; 19~22, as moderate depression; and over 23 points, as severe depression. Higher scores indicate severer depression. While Cronbach's α of the tool is .92 at the time of development, and in this study, it is .82.

2) Ego integrity

The ego integrity is developed by Kim, JS[18] based on the conceptual framework establish by Erikson[19]. This tool consist of a total of 31 items with 15 positive and 16 negative items. Positive items have a five-point scale of agree strongly (1), agree somewhat (2), neutral (3), disagree somewhat (4), and disagree strongly (5). Negative items are reverse-scored and higher scores indicate high ego integrity. The total score of ego integrity is 155, ranged from 31 to 155. Cronbach's α of the tool is .86 at the time of development, in this study, it is .81.

6. Data Collection

Data were collected from June to August, 2013, participants were elderly individuals in a nursing home lo-

cated in G city. Elderly individuals were divided into an experimental and a control group. The pretest was conducted one week before the program and the posttest was conducted one week after the program in the same way as the pre-test.

7. Data Analysis

SPSS/WIN 20.0 program was used to analyze data.

- Participants' general characteristics was analyzed by Chi-square, Fisher's exact test, and t-test.
- Before the program the pre-test for homogeneity for dependent variables was analyzed in the experimental and control groups by Kolmogorov-Smirnov test and t-test.
- After the program the between-groups effect test was analyzed by independent t-test.

RESULTS

1. General Participant Characteristics

The average age of participants was 70~79, in the experimental and control group respectively. 10 males (43.5%) and 13 females (56.5%) comprised the experimental group, while 11 males (5.00%) and 11 females (50.0%) comprised the control group. Elementary school was the most common level of education in the experimental (39.2%) and control (31.9%) groups. Christian was the most common religion in the experimental (39.2%) and control (36.4%) groups. Participants with no religion were 17 (73.9%) and 17 (68.2%), in the experimental and control groups respectively. Those who had friends in the facility were 18 (78.3%) and 13 (59.1%), in the experimental and control groups respectively. Before the educational program, between-groups homogeneity was analyzed for general characteristics using chi-squared, Fisher's exact and t-tests. There was no significant difference between groups ($p > .05$). Homogeneity of variances was confirmed (Table 2).

2. The Homogeneity Test for Dependent Variables

The homogeneity test was conducted for depression and ego integrity in the experimental and control groups before the program. The sample size was small in the experimental and control groups (23 and 22, respectively). Thus, the Kolmogorov-Smirnov test was conducted to test whether the data met the basic assumption for parametric statistics that is that depression and

ego integrity among two groups were a normally distributed. The result showed a normal distribution for both groups.

The average difference in depression and ego integrity between groups was analyzed by t-test. There were no significant difference for any variables ($p > .05$). Homogeneity was confirmed (Table 3).

3. Effect of Cinema Therapy based Group Reminiscence Program

The pre-post difference of depression in the two groups was analyzed. While the experimental group decreased from 15.4 ± 2.56 to mean 11.0 ± 2.03 , the control group decreased from 15.1 ± 2.36 to mean 15.0 ± 2.05 . An analysis of independent t-test showed a significant difference between the two groups ($t=5.01$, $p < .001$).

The pre-post difference of ego integrity in the two groups was analyzed. While the experimental group was increased from 95.3 ± 11.40 to mean 103.8 ± 8.29 , the control group increased from mean 92.7 ± 11.15 to mean 95.5 ± 9.52 . A independent t-test showed a significant difference between groups ($t=4.29$, $p < .001$).

DISCUSSION

This study was conducted to examine the effects of a cinema therapy-based group reminiscence therapy on depression and ego integrity among elderly individuals in a nursing home.

The results suggested that cinema therapy decreased depression in the experimental group as compared to the control group. This program may be effective because participants could 1) empathize with movie characters and talk about their past stories without feeling threatened, 2) find positive life advantages and internal strengths, and 3) have an increased opportunity to experience positive feelings through group support. In particular, group reminiscence was more helpful than individual reminiscence. A greater decrease of depression was reported in group reminiscence as opposed to individual reminiscence[20]. When people reminisce about their life and experience the pain of unsolved conflicts about negative emotions such as anger, helplessness, and grief, group support can provide an opportunity for expression through self acceptance and opening. It can thereby influence a decrease in depression. Further, group art therapy using reminiscence showed a positive effect on cognitive functions and depression in a nursing home elderly individuals with dementia[21]. A

Table 2. Homogeneity Test for Characteristics between Experimental and Control Group

(N=45)

Characteristics	Categories	Exp. (n=23)	Cont. (n=22)	χ^2	<i>p</i>
		n (%) or M±SD	n (%) or M±SD		
Age [†] (year)	≤ 59	1 (4.5)	0 (0.0)	3.56	.469
	60~69	5 (21.7)	2 (18.2)		
	70~79	12 (52.1)	13 (59.1)		
	≥ 80	5 (21.7)	5 (22.7)		
Gender	Male	10 (43.5)	11 (50.0)	0.19	.661
	Female	13 (56.5)	11 (50.0)		
Education [†]	Elementary	9 (39.2)	7 (31.9)	0.63	.960
	Middle school	3 (13.0)	4 (18.2)		
	High school	4 (17.4)	5 (22.7)		
	≥ University	3 (13.0)	3 (13.6)		
	None	4 (17.4)	3 (13.6)		
Religion [†]	Catholic	2 (8.7)	3 (13.6)	1.25	.840
	Christian	9 (39.2)	8 (36.4)		
	Buddhism	5 (21.7)	4 (18.2)		
	None	7 (30.4)	7 (31.8)		
Health condition [†]	Very good	1 (4.3)	1 (4.5)	2.81	.589
	Good	1 (4.3)	3 (13.6)		
	Normal	6 (26.1)	7 (31.8)		
	Bad	10 (43.5)	5 (22.7)		
	Very bad	5 (21.8)	6 (27.4)		
Supporter economic [†]	Very dissatisfaction	1 (4.4)	1 (4.5)	0.85	.932
	Dissatisfaction	3 (13.0)	3 (13.6)		
	Normal	13 (56.6)	11 (50.0)		
	Satisfaction	3 (13.0)	5 (22.8)		
	Very satisfaction	3 (13.0)	2 (9.1)		
Family, friends visiting [†]	Once a six months	4 (17.4)	6 (27.3)	10.63	.101
	Once a three months	1 (4.3)	0 (0.0)		
	Once a month	4 (17.4)	5 (22.7)		
	Twice or three times a month	3 (13.1)	7 (31.8)		
	Once more a week	11 (47.8)	4 (18.2)		
Friend in nursing home	Yes	18 (78.3)	13 (59.1)	1.93	.165
	None	5 (21.7)	9 (40.9)		

Exp. =Experimental group; Cont. =Control group; [†] Fisher's exact test.**Table 3.** Homogeneity Test for Depression and Self-integrity

(N=45)

Variables	Exp. (n=23)	Cont. (n=22)	<i>t</i>	<i>p</i>
	M±SD	M±SD		
Depression	15.4±2.56	15.1±2.36	0.34	.732
Self-integrity	95.3±11.40	92.6±11.15	0.79	.432

Exp. =Experimental group; Cont. =Control group.

group reminiscence program using music improved interpersonal relationships and self-esteem and decreased depression in elderly inpatients[22].

Depression is the most common and frequent psychological problem in elderly individuals. Elderly in-

dividuals with depression often focus on the negative aspects of their life. They are not concerned with about positive elements because of life regrets and unsolved tasks. They regard themselves as losers, and they lose life values because they perceive their reality more neg-

Table 4. Effect of Cinema Therapy based Group Reminiscence Program on Depression and Self-integrity between Experimental and Control Group (N=45)

Variables	Groups	Pretest	Posttest	Difference	t	p
		M±SD	M±SD	M±SD		
Depression	Exp. (n=23)	15,4±2,56	11,1±2,03	-4,3±1,31	5,01	< .001
	Cont. (n=22)	15,2±2,36	15,0±2,05	-0,2±0,70		
Self-integrity	Exp. (n=23)	95,4±11,40	103,8±8,29	8,5±11,74	4,29	< .001
	Cont. (n=22)	92,7±11,15	95,5±9,52	2,8±7,94		

Exp. =Experimental group ; Cont. =Control group.

actively[23]. Reminiscence on achievements and success is helpful toward building confidence and restoring positivity. Finally, it can decrease depression. In this study, elderly individuals in a nursing home shared negative feelings on their life with several people, which showed an ability to decrease depression. A movie is more effective on the emotional level than it is on an intellectual level. It is helpful in reducing suppression and other defense[24]. It is also effective for helping elderly individuals with verbal difficulties express their feelings and solve conflicts and problems.

The results also indicated that ego integrity was increased in the experimental group compared with the control group. The program of this study improved participants' ego integrity because they could share their negative feelings on life with honesty, be aware of their biases, and ruminate and understand their life from different angles. The function of reminiscence is closely associated with ego integrity[24]. With regard to reminiscence, ego integrity is positively correlated with finding the meaning of life, understanding self, and reviewing one's past life. A reminiscence-based group counseling program positively affected ego integrity[25], and reminiscence-focused play with a sand box showed improved ego integrity[26] among elderly individuals in a nursing home.

Reminiscence in the elderly can facilitate solution for negative emotions such as anger, grief, and helplessness and improve psychological adaptation. As psychological counseling using reminiscence can bring new insights and passion in the elderly, it can be used as a means to maintain and improve mental health in the elderly. Therefore, depression and ego integrity should be simultaneously addressed in counseling and therapy programs for elderly individuals to improve ego integrity, which is a developmental task in later life[5].

Sessions of the reminiscence program are organized to look back over one's life and explore wisdom they have obtained or grown to understand during their life.

This may contribute to the improvement of the elderly's ego integrity.

This study used a movie that was edited for a session theme to increase the effect of the group reminiscence program. The therapeutic mechanism of a movie is the virtual world that fosters judgement of a variety of elements that can occur in a real situation. Participants have broad opportunities to exchange thoughts, plan and compromise their behaviors, and reflect upon their works through cinema therapy[10]. Participants first hesitated to share their lives when expressing individual experience after watching a movie. However they understood that movie characters and other group members had experienced similar troubles as their own. Some even suggested solutions to other members based on their experiences. We also think that participants generally responded to structured questions with positive feelings and impression after watching a movie. Although it was difficult to express their thoughts and feelings at the beginning of the program, they identified themselves with movie contents and characters and actively reacted over time. Therefore, if such an intervention is offered regularly rather than temporarily, it might be extremely helpful for positive life integration among elderly individuals in nursing homes.

A visual image created in the mind of people watching a movie is fluid and changing. It influences personal painful experiences and has a cathartic function. A movie can enrich the lives of modern people who feel alienated across realms of life, rather than only in an art genre. It functions as a means of building social relationships. A movie has therapeutic potential because those watching a movie can recognize their own problems, match their reality to problems from the movie, and find solutions for themselves[9]. Participants responded as follows after watching a movie: "I understand the main character but he (she) is too harsh. Then he (she) would regret like me and his (her). Family would get hurt," "We do not express well between family members, and many

misunderstandings have grown. But I led a busy life and could not think like that," and "Here, sometimes, I become uncomfortable, as many things come back to my mind. I thought it was so late but I have the courage to talk with my children when they come."

Therefore, it is necessary to develop systematic programs and provides policy programs suitable for the characteristics of elderly individuals in a nursing home. It has been reported that programs are more effective if their contents are accompanied by artistic experience [27]. Thus, this study introduced the advantages of cinema therapy to maximize the effects of a group reminiscence program. It is noteworthy that this study is the first to utilize group reminiscence using cinema to address depression and ego integrity among elderly individuals in a nursing home. The results of this study be used to improve the quality of life of this population.

Based on the conclusions, the following suggestions can be made. First, as this study was conducted with the elderly in a nursing home located in one area, the study area should be expanded and resulting the effect should be examined. Second, an in-depth interview should be conducted to identify aspects of the program that have significant effects and whether these effects differ by gender. Third, in the development of a program, sufficient sessions should be included and separates by gender.

CONCLUSION

This study was a non-equivalent control group pre-post test quasi-experimental study to examine the effects of the cinema therapy-based group reminiscence program on depression and ego integrity of the elderly residing in a nursing home. The results showed the decrease in a depression score and the increase in an ego integrity score in a nursing home elderly after the program, indicating the positive effect of the program. Therefore, the program of this study can reduce depression and increase ego integrity in the elderly of the nursing home elderly who are increasingly growing. Based on this, much more programs for the nursing home elderly should be developed, applied, and activated continuously.

REFERENCES

1. Statistics Korea. 2013 Statistics for the aged in Korea [Internet]. [cited 2014 November 1]. Available from: http://kostat.go.kr/portal/korea/kor_nw/2/6/1/index.board?bmode=read&aSeq=308688
2. Brandburg GL. Making the transition to nursing home life: a frame work to help older adult adapt to the long-term care environment. *J Gerontol Nurs*. 2007;33(6):50-6.
3. Bulter RN. Successful aging and the role of the life review. *J Am Geriatr Soc*. 1974;22(12):529-35.
4. Erikson EH. Identity and the life cycle. New York: Norton; 1980.
5. Yeo IS, Kim CK. Effects of socio-demographic variables and reminiscence function on ego-integrity in the elderly. *J Korean Gerontol*. 2006;26(1):63-75.
6. Jeong YJ. Healing picture. Hakjisa; 2006.
7. Webster JD. Construction and validation of the reminiscence function scale. *J Gerontol*. 1993;48(5):256-62.
8. Kim SS. Comparative study of the therapeutic factors of self-help and interactive cinema therapy. *J Korean Cinema Study*. 2013;55:83-126.
9. Wedding D, Niemiec RM. The clinical use of films in psychotherapy. *J Clin Psychol*. 2003;59(2):207-15. <http://dx.doi.org/10.1002/jclp.10142>
10. Nicols MP, Schwartz RC. Family therapy: concepts and methods. Boston: Allyn and Bacon; 1998. 586 p.
11. Park HC. The effects of group art therapy using reminiscence method on ego integrity, and quality of life in nursing home elderly[dissertation]. [Iksan]: Wonkwang University; 2011. 54 p.
12. Lee SY. A case study on photo therapy to recollect memory in senior dementia center. *J Korean Arts Psychotherapy Assoc*. 2009;9(1):103-32.
13. Sim CS, Park MH, Kim YM, Kim HA. The development of interactive cinema therapy program for old people's depression. *J Korean Hum Sci*. 2011;31:389-412.
14. Erikson EH. The life cycle completed (extended version). New York: WW Norton & Company; 1998. 134 p.
15. Brink TL, Yesavage JA. Geriatric depression scale. *Clin Gerontol*. 1984;1(1):37-43.
16. Kim JS, Lee HS, Jung IK, Kwak DI. Depressive symptoms of the spousal bereaved elders. *J Korean Assoc Geriatr Psychiatry*. 1998;2(1):85-93.
17. Kim JS. A study of social activities and ego integrity of the aged [dissertation]. [Seoul]: Ewha University; 1988. 36 p.
18. Erikson EH. Childhood and society. 2nd ed. New York: WW Norton & Company; 1968.
19. Lewis ML, Bulter RN. Life-review therapy: putting memories to work in individual and group psychotherapy. *Geriatr*. 1974; 29(11):165-73.
20. Kim HM, Jun SY. The effect of group art therapy through reminiscence on the cognitive function and depression of the demented old people. *J Korean Art Ther*. 2012;19(5):1289-312.
21. Jeong Y, Choi MH. Effects of music-based group reminiscence program on interpersonal relationship, self-esteem and depression in hospitalized elderly people. *J Korean Clin Nurs Res*. 2009;15(3):75-84.

22. Baltes PB, Meyer KU, editors. The berlin aging study: Aging from 70 to 100. New York: Cambridge University Press; 2001. 553 p.
23. Schulenberg SE. Psychotherapy and movies: on using films in clinical practice. *J Contemp Psychotherapy*. 2003;33(1):35-48. <http://dx.doi.org/10.1023/A:1021403726961>
24. Taft LB, Nehru MF. Reminiscence, life review, and ego integrity in nursing home residents. *Int J Aging Hum Dev*. 1990; 30(3):189-96.
25. Kim MS. The effects of a recall-based group counseling program on improvement of self-integration among elderly. *J Korean East West Sci*. 2010;13(2):97-113.
26. Kim HJ, Song YH. The effects of reminiscence-oriented sand-tray play for ego-integrity of the elderly. *J Korean Play Ther*. 2014;18(1):73-87.
27. Westerhof GJ, Bohlmeijer E, Webster JD. Reminiscence and mental health: a review of recent progress in theory, research and interventions. *Aging Soc*. 2000;30(4):697-721. <http://dx.doi.org/10.1017/S0144686X09990328>