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1.

가 , 가 가 .(, 1993).
(Anderson et al. 1987; Barile, 1997; Cook, 1992; LeNoeuf & Carter, 1996)
(Shangold, 1990)
가 (, 1989, Wilson & Kneisel, 1988)
(McCraw, 1991 ; Wilmoth, 1996)

25.3% (, 1996). 40 가 가 (, 1997)

(, 1995). Walker (1987) 6가 . (Allison & Keller, 1997; Brown et al, 1995; Kauffman, 1985; Lord et al, 1993; Lord & Castell, 1994; Mersy, 1991; Mills, 1994; Robert, 1989; Skender et al, 1996).

(dance movement)

가

(Snyder, 1992)

2.

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3. 가

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(Wilson & kneisl, 1988).

(, 1995)

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, 1997; , 1996; 1992; , 1988; Radloff, 1975)

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가 (, 1987).
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, estrogen
(Mattews, 1992; Wasaha & Angeopopulos, 1996). (WHO)
, 100 1990 5
2020 ‘ , 가
(, 1997).
(, 1988).
estrogen level (Wood & Mitchell,
1996) 20 50 가 (, 1996).
3.4% 30% , 30.1%
(1987).
15-45% , 30-60% .(, 1992)
, , , , , , , , , , 가
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. (, 1992; , 1988).
serotonin
(, 1992; , 1993; , 1987; ,
1989; Owens & Nemeroff, 1994; Tietz, 1996)
Van Praag & De haan(1979) Serotonin 가
가 , 가
가 Serotonin가 가
가 . Van Praag & De Hann(1980) Serotonin
5-hydroxytryptophan Serotonin

2. (Dance Movement Program)

(movement)

(Snyder, 1992).

Schoop(1974)

(Dancing)

가

Heber(1993)가

10

가 가

Snyder(1992)

가 가

, , 가 가 , 가,
가 가 가 가 가 , ,

(Van Zandt & Lorenzen 1984).

Fitzpatrik, 1990),

(Heber, 1993),

(Flores, 1995)

(Goldberg &

가

,
(, 1996)

(, 1994),

(Heber, 1995)

가 .

1.

39

K

40-60

300

235 (78.3%)

가

235

CES-D(The Center for Epidemiologic Studies Deparession Scale)가 16 25

67 (28.5%)

46

23 ,

23

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2.

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29 8

1997 10 6 11

1)

Heber(1993)가

가

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3 (5-10),

2 (30),

2

(10-15) 50

2) 4 4 , 1 4 4 ,
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2)
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 Radloff(1977)가 (1993)가 20 4 가
 CES-D(Center for Epidemiologic Studies Deparession Scale) 가
 Cronbach's (1993)
 0.91, 0.86 .

(2)
 Wood (1969) (1988)가 , 13 3
 Life Satisfaction Index-Z 가
 Cronbach's (1988) 0.84, 0.81

(3)
 (1994)가 8 10 100 ,
 가 Cronbach's (1995)
 0.96, 0.94 .

(4)
 3ml HPLC
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3)
 SAS .
 x²-test , , , t-test .
 , paired t-test
 unpaired t-test .

1.

1)

x²-test

가 (1)

Table 1. Hemogeneity test for general characteristics of subjects between the experimental and control groups

Characteristic	Group		Total N (%)	x ²	P
	Experimental N (%)	Control N (%)			
Age					
40-44 yrs	3 (15.79)	8 (40.00)	11 (28.21)	4.650	.199
45-49 yrs	4 (21.05)	6 (30.00)	10 (25.64)		
50-54 yrs	10 (52.63)	5 (25.00)	15 (38.46)		
55-60 yrs	2 (10.53)	1 (5.00)	3 (7.69)		
Educational level					
None	0 (0.00)	2 (10.00)	2 (5.13)	6.501	.090
Elementary	5 (26.32)	5 (25.00)	10 (25.64)		
Middle	11 (57.89)	5 (25.00)	16 (41.03)		
high	3 (15.79)	8 (40.00)	11 (28.20)		
College	0 (0.00)	0 (0.00)	0 (0.00)		
Religion					
Protestant	8 (42.11)	3 (15.00)	11 (28.21)	5.851	.119
Catholic	1 (5.26)	4 (20.00)	5 (12.82)		
Buddhism	9 (47.37)	9 (45.00)	18 (46.15)		
None	1 (5.26)	4 (20.00)	5 (12.82)		
Job					
Employed	15 (78.95)	13 (65.00)	28 (71.79)	0.936	.333
Unemployed	4 (21.05)	7 (35.00)	11 (28.21)		
Menopause					
Yes	11 (55.56)	12 (66.67)	23 (58.97)	0.305	0.581
No	8 (44.44)	8 (33.33)	11 (41.03)		
Perceived Health condition					
very good	2 (10.53)	1 (5.00)	3 (7.69)	1.161	.762
Good	3 (15.79)	4 (20.00)	7 (17.95)		
Normal	12 (63.16)	11 (55.00)	23 (58.97)		
Poor	2 (10.53)	4 (20.00)	6 (15.39)		
Very poor	0 (0.00)	0 (0.00)	0 (0.00)		
Total	19(100.00)	20(100.00)	39(100.00)		

2) , , Serotonin
, serotoninincl t-test
가 (2).

Table 2. Homogeneity test for depression, life satisfaction self-efficacy, serotonin level between the experimental and control group

	Experimental Mean ± SD	Control Mean ± SD	t	p
Depression	1.11 ± 0.28	1.08 ± 0.34	1.50	0.8031
Life satisfaction	1.96 ± 0.25	1.85 ± 0.31	1.47	0.2390
Self- efficacy	60.07 ± 17.96	52.37 ± 21.65	1.45	0.2407
Serotonin (µg/ml)	0.16 ± 0.07	0.14 ± 0.07	1.12	0.4234

2.

1) 가 1:				가
		1.11 ± 0.28	0.79 ± 0.38	
	(t=-3.49, P=0.0026),	1.08 ± 0.34	1.12 ± 0.51	가
			0.32 ± 0.40	
	0.04 ± 0.27	가	가	(t=2.20, P=0.0021) 가 1
	(3)			
2) 가 2 :				가 가
		1.96 ± 0.25	2.09 ± 0.32	
	가 (t=3.14, P=0.0056),		1.85 ± 0.31	1.80 ± 0.27
			0.13 ± 0.34	가 0.06 ±
0.35		가	가 2	(t=1.42, P=0.0049)(3
).
3) 가 3:				가 가
		60.07 ± 17.96	64.86 ± 18.79	가
		52.39 ± 21.65	48.38 ± 18.93	가
	(t=-2.41, P=.03)		5.35 ± 20.78	가 4.61 ±
8.34		가	가 3	(3)
4) 가 4 :				가 가
			0.16 ± 0.07 μg/ml	0.19 ± 0.08 μg/ml
	가	0.14 ± 0.07 μg/ml	0.15 ± 0.07 μg/ml	가
		0.04 ± 0.09 μg/ml	0.01 ± 0.07 μg/ml	가
	가 가 4			(3)

Table 3. Effect of Dance Movement Program within and between two groups

	Before Mean ± SD	After Mean ± SD	t	p	After Mean ± SD	t	p
Depression							
Exp.	1.11 ± 0.28	0.79 ± 0.38	-3.49	0.0026	-0.32 ± 0.40	2.20	0.0021
Cont	1.08 ± 0.34	1.12 ± 0.51	0.67	0.5129	0.04 ± 0.27		
Life satisfaction							
Exp.	1.96 ± 0.25	2.09 ± 0.32	3.14	0.0056	0.13 ± 0.34	1.42	0.0049
Cont	1.85 ± 0.31	1.80 ± 0.27	0.85	0.4084	-0.05 ± 0.35		
Self efficacy							
Exp.	60.07 ± 17.96	64.86 ± 18.79	1.09	.29	5.35 ± 20.78	6.20	0.0616
Cont	52.37 ± 21.65	48.38 ± 18.93	-2.41	.03	-4.61 ± 8.34		
Plasma serotonin							
Exp.	0.16 ± 0.07	0.19 ± 0.08	1.77	0.0946	0.14 ± 0.09	1.88	0.0524
Cont	0.14 ± 0.07	0.15 ± 0.07	-0.77	0.4500	0.01 ± 0.07		

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가 . Morgan(1985)

가

Brown(1992)

. Allison Keller(1997)

가

가

, 1.11 0.79
1.08 1.12 (P=.0021) en

가 (, 1985; 1996; Blumenthal, 1982; Brown et al, 1995;McCann & Holmes, 1984; Noreau et al, 1995)

(, 1993; Muck-Seler et al, 1996; Owens & Nemeroff, 1994; Tietz, 1996; Van Praag & De Haan, 1979).

0.16µg/ml 0.19µg/ml 0.03µg/ml 가 0.14µg
/ml 0.15µg/ml 0.01µg/ml 가 가
가

(, 1993)

가

(, 1996)

(Stevenson & Topp, 1990)

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(Martin, 1989).

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McAuley Jacobson(1991)

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가

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K 40-60 CES-D

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SAS Program x²-test, paired t-test unpaired t-test

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 - 2. 가 .
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- 1. , , , , , , , , , , , , . (1996). .2(2),235-245
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- 3. (1993). _____
- 4. (1995). 가 .48(4),1201-1214
- 5. , (1997). _____ .3(2),117-138
- 6. (1994). _____
- 7. , (1997). .8, 59-66
- 8. , , (1996). _____ :

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13. (1988).
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15. (1985). 가
16. (1992). 31, 1073- 1083.
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18. (1989).
19. (1995).
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- Abstract -

Key concept: Dance movement program. Psychological wellbeing, Middle aged women, Wellbeing with depression tendency

The Effect of Dance Movement Program on Psychological Health in Middle Age Women

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Dance movement program. Psychological wellbeing, Middle aged women, Wellbeing with depression tendency, , \$%

This study was designed to confirm the effects of the Dance Movement Program on psychological health in middle-age women with depression tendency.

67 women with mild to moderate depression scoring between 16-25 were selected among 235 responded to CES-D (Radloff, 1977, Cho and Kim, 1993). The 46 volunteered to participate in the study were assigned the control. 7 attritions occurred during the course of the experiment leaving thirty-nine subjects : nineteen experimental and twenty control, for the final analysis. Research subjects revealed to be homogenous demographically and by health-related variables.

The 50-minute Dance Movement Program was performed by the experimental group 3 times a week for eight weeks, from October 6 to November 29, 1997.

Depression, life satisfaction, self efficacy were measured before and after the course of Dance Movement Program. Plasma serotonin was measured to identify its relationship with depression,

Homogeneity tests revealed satisfactory level on relevant research variables.

Data were analyzed by t^2 -test, paired and unpaired t-tests.

The results are as follows :

- 1) The hypothesis that depression score of experimental group will decreased than control group was supported by t-test($t=2.20$, $P=.0021$)
- 2) The hypothesis that life satisfaction score of experimental group will increased than control group was supported by t-test($t=1.42$, $P=.0049$).
- 3) The hypothesis that self-efficacy score of experimental group will increased than control group was not supported by t-test($t=6.20$, $P=.0616$).
- 4) The hypothesis that level of plasma serotonin will increased than control group was not supported by t-test($t=1.88$, $P=.0524$)

Thus, the effects of the Dance Movement Program for the improvement of psychological health gram for the improvement of psychological health for the middle-aged women with depression tendency are scientifically confirmed by this study.