

Analysis of Quality of Life among Middle Aged and Elderly Women Participating in Health Dance Exercise

Mi Ryeong Song¹ and Li Ra Song²

¹Associate Professor, Department of Nursing, Hoseo University

²Graduate student, Graduate school, Sejong University, Korea
songmr@hoseo.edu, suhhyun@hotmail.com

Abstract

The purpose of this study was to analyze QOL among middle aged and elderly women participating in health dance exercise. This study used a cross-sectional survey design. The data collected from 192 women during August to September in 2013 using a questionnaire. Collected data were analyzed using frequency, independent t-test, one-way ANOVA, Correlation and multiple regression with the SPSS 21.0. Mean scores for BMI, body image, self-esteem, psychological happiness, leisure satisfaction and QOL were 22.1, 3.02 (5-point scale), 2.80 (4-point scale), 3.39 (5-point scale), 3.75 (5-point scale), and 3.47 (5-point scale) respectively. Self-esteem, health status, marital status and psychological happiness accounted for 53.4% of the variance in quality of life among those participating in health dance exercise. To promote the QOL of women participating in health dance exercise, self-esteem, health status, marital status and psychological happiness should be considered as important factors.

Keywords: QOL, BMI, Body Image, Psychological Happiness, Self-esteem, Leisure Satisfaction, Dance

1. Introduction

1.1. The Necessity of this Study

Women's role in society is increasing in importance and so is the influence of women in making decisions within the home. As the life expectancy of women increases, managing their health is becoming an important issue in terms of overall national competitiveness [1].

Due to modern lifestyle trends that result in decreased physical activity, encouraging exercise is an important part of promoting the overall health of people. This is especially true for middle-aged and elderly women facing menopause [2]. Exercise such as swimming, aerobics, and weight-lifting are recommended for middle-aged and elderly women. Recently health dance exercise has become popular because it is viewed as enjoyable form of exercise [3]. Health dance is very enjoyable and can promote social interaction. Health dance is not physically demanding and is not only recommended for middle aged women but for elderly women as well.

According to previous research, factors related to quality of life [QOL] of women participating in health dance exercise are: body components [4], body image [5], self-esteem [6], psychological happiness [7], and leisure satisfaction [8].

However, previous research has only considered these factors individually and not together. This research attempts to analyze factors related to QOL in terms of BMI, body image, self-esteem, psychological happiness, leisure satisfaction, which were reported on in previous research on an individual basis as QOL related factors.

1.2. Purpose of Study

This study attempts to analyze and verify factors affecting the QOL of middle-aged and elderly women participating in health dance exercise.

2. Methods

2.1. Design

This is a cross-sectional research designed to analyze the QOL of middle-aged and elderly women practicing health dance.

2.2. Sample

Research subjects were middle-aged and elderly women participating in health dance programs offered by cultural centers within large cities for more than three months. Research was conducted after the purpose of the research was fully understood by the participants and after they signed an agreement to participate in the research. When G-Power program was used, the effect size was (f^2) 0.15, confidence level 0.05, number of factors 11, and the reliability level of 95% required at least 178 participants. 200 surveys were conducted and 192 of them were used for analysis.

2.3. Data Collection

Data was gathered by researchers visiting locations where health dance programs were conducted. Surveys were conducted among those who were willing to participate in the research. They were asked to answer the survey questions on their own, which took about 10-15 minutes. Small gifts were given after answering the survey questions as a token of appreciation.

2.4. Instruments

2.4.1. Body Image

The tool was developed by Rowe [9] and modified by Cho and Song [10]. The Cronbach's α were from .65 to .83 for the subscale in Cho and Song's study [10] and in this study the Cronbach's α was .70.

2.4.2. Self-Esteem

Self-Esteem scale was developed by Rosenberg [11] and translated into Korean by a researcher. This 4 points Likert type scale is composed of 10 items. The Cronbach's α was .76 in Rosenberg's study [11] and Cronbach's α was .76 in this study.

2.4.3. Psychological Happiness

This scale was developed by Yang [12] and modified by Lee [13]. This 5 points Likert type scale is composed of 20 items. The Cronbach's α was .93 in Lee's study [13] and in this study Cronbach's α was .91.

2.4.4. Leisure Satisfaction

Beard and Ragheb [14] developed LSS [Leisure Satisfaction Scale]. LSS was translated by Lee [13] and the modified version by Kim [8] was used in this study. This scale has 12 items in total and it has a 5 point Likert type scale. The Cronbach's was .94 in this study.

2.4.5. Quality of Life:

The light version of WHOQOL-100 developed by WHO was used. WHOQOL-BREF translated by Kwon [15] was used - 26 questions, 5 point measurement. The Cronbach's α was .77 in Kwon's study [15] and the Cronbach's α was .93 in this study.

2.5. Analysis

Collected data were analyzed using Win SPSS 21.0 to identify average and standard deviation of research subjects' BMI, body image, self-esteem, psychological happiness, leisure satisfaction and QOL. Analysis was conducted by independent t-test and ANOVA and stepwise multiple regression was used to identify factors influencing QOL.

3. Results

3.1. Difference in QOL According to General Characteristics

The most common age among the subjects of this research was 50- 59 and most of them were home makers. Most of them (49.5%) described their health status as average. More than half of them (59.8%) indicated that they were economically middle class. About half of them (46.5%) identified their motive for engaging in health dance exercise as an effort to enhance their health conditions. Among the characteristics of the research subjects, marital status, health status and economic status affected their QOL (Table 1).

Table 1. QOL According to General and Health Dance Exercise Related Characteristics

Characteristics	Categories	N (%)	QOL	
			M (SD)	t or F (p)
Age (yrs)	40-49	38(20.2)	3.54(0.50)	1.51 (.214)
	50-59	86(44.3)	3.42(0.44)	
	60-69	56(29.6)	3.51(0.44)	
	Above 70	12(5.9)	3.26(0.59)	
Marital status ⁺	Married ^a	180(94.5)	3.49(0.44)	5.71 (.004) a>b
	Single ^b	7(3.1)	2.98(0.88)	
	Others ^c	5(2.3)	3.12(0.40)	
Health status ⁺	Good ^a	78(43.3)	3.69(0.43)	19.32 (<.001) a>b
	Average ^b	100(49.5)	3.29(0.40)	
	Bad ^c	14(7.3)	3.45(0.58)	
Career	Housewife	159(82.5)	3.45(0.45)	.72 (.396)
	Others	33(17.5)	3.53(0.54)	
Education	Middle School	15(7.6)	3.33(0.68)	1.08 (.341)
	High School	76(39.7)	3.43(0.45)	
	College	99(52.7)	3.50(0.44)	
Economic ⁺ status	Good ^a	61(33.2)	3.62(0.46)	5.85 (.003) a>b
	Average ^b	117(59.8)	3.40(0.44)	
	Bad ^c	14(6.9)	3.30(0.60)	

Participating period	3Mo - <1yr	87(46.0)	3.52(0.47)	1.27 (.282)
	1yr - <2yr	46(23.8)	3.43(0.45)	
	2yr - <3yr	30(14.9)	3.31(0.50)	
	above 3yr	25(13.2)	3.51(0.45)	
	Missing	4(2.0)	3.39(0.29)	
Motivation	Health	91(46.5)	3.40(0.48)	1.49 (.218)
	Hobby	78(41.4)	3.53(0.41)	
	Recommendation	14(7.2)	3.41(0.70)	
	Others	9(4.9)	3.60(0.30)	

†: scheffe test

3.2. BMI, Body-image, Psychological Happiness, Leisure Satisfaction and QOL

The average BMI was 22.1, body-image 3.02, self-esteem 2.8, psychological happiness 3.39, leisure satisfaction 3.75 and QOL 3.46 (Table2).

3.3. Factors Influencing QOL

Factors influencing subjects' QOL were self-esteem, health status, marital status and psychological happiness and these accounted for 53.4% of the variance in QOL (Table 3).

Table 2. Level of BMI, Body Image, Self-esteem, Psychological Happiness, Leisure Satisfaction and QOL

Variables	Score	Mean	SD	%
BMI		22.14	2.42	
Body Image	1 ~ 5	3.02	0.25	60.4
Self-esteem	1 ~ 4	2.80	0.31	70.0
Psychological happiness	1 ~ 5	3.39	0.54	67.8
Leisure satisfaction	1 ~ 5	3.75	0.60	75.0
QOL	1 ~ 5	3.46	0.47	69.2

BMI: Body mass index, QOL: Quality of life

Table 3. Factors Influencing QOL

Variables	B	SE	β	T	<i>p</i>	R2	F	<i>P</i>
Constant	1.286	.248		5.180	<.001			
Self-esteem	.570	.096	.368	5.941	<.001			
Health status	-.301	.054	-.312	-5.593	<.001	53.4	47.65	<.001
Marital status	-.629	.141	-.241	-4.466	<.001			
Psychological happiness	.228	.056	.261	4.097	<.001			

Health status reference =good; Marital status reference=married

4. Conclusion

This research reached the conclusion that middle-aged and elderly women participating in health dance exercise had higher QOL when they were married and their health and economic status were good. These results are similar to previous research results. This research implies the need to place more attention on women living alone whose health status is average. Also, among various factors, self-esteem and psychological happiness were identified as being important - indicating that psychological factors were more important than physical or leisure activities with regard to the QOL of middle-aged and elderly women participating in health dance exercise. When health dance programs are implemented there is a need to increase self-esteem and consider psychological aspects in order to enhance the QOL of middle-aged and elderly women.

References

- [1] M. R. Song and L. R. Song, "Factors Influencing Quality of Life among Women Participating in Health Dance", Proceedings of the 2nd International Workshop of Healthcare and Nursing, vol. 40, (2013), pp. 113-116.
- [2] J. E. Taunton, A. D. Martin, E. C. Rhodes, L. A. Wolski, M. Donnelly and J. Elliot, "Exercise for the Older Woman: Choosing the Right Prescription", Br J Sports Med, vol. 31, no. 1, (1997), pp. 5-10.
- [3] A. E. Olvera, "Cultural Dance and Health: A Review of the Literature", Am J Health Educ, vol. 39, no. 6, (2008), pp. 353-359.
- [4] F. Arslan, "The Effects of an Eight-Week Step-Aerobic Dance Exercise Programme on Body Composition Parameters in Middle-Aged Sedentary Obese Women", Int Sportmed J, vol. 12, no. 4, (2011), pp. 160-168.
- [5] S. Muller-Pinget, I. Carrard, J. Ybarra and A. Golay, "Dance Therapy Improves Self-body Image Among Obese Patients", Patient Educ Couns, vol. 89, no. 3, (2012), pp. 525-528.
- [6] M. A. Valentine-Garzon, M. Maynard and S. Z. Selznick, "ROM Dance Program Effects on Frail Elderly Women in an Adult Day-care Center", Phys & Occup Ther Geriatr, vol. 11, no. 1, (1992), pp. 63-83.
- [7] I. S. Park and Y. H. Kim, "The Impact of Line Dance Club Members' Participation on Behaviors to Improve Health and Psychological Happiness: Targeting Middle-Aged Women", Journal of Korean Physical Education Association for Girls and Woman, vol. 24, no. 5, (2010), pp. 57-70.
- [8] J. S. Kim, "The Effects of Participating in Line Dance on the Leisure Immersion, Leisure Satisfaction and Psychological Sense of Well-Being of Middle Aged Woman", Major in Physical Exercise Graduate School of Korea National Sport University, (2013).
- [9] D. A. Rowe, "Development and Validation of a Questionnaire to Measure Body Image. Dissertation Paper", University of Georgia, (1996).
- [10] J. H. Cho and K. J. Song, "The Construct-Related Validation of an Body Image Questionnaire for College Women", Journal of Korean Society for Measurement and Evaluation in Physical Education and Sports Science, vol. 4, no. 1, (2002), pp. 31-46.
- [11] M. Rosenberg, "Society and the adolescent self-image", Princeton, NJ: Princeton University Press, (1965).
- [12] M. H. Yang, "Physical Activity and Psychological Well-being: Development of Cognitive-Affective States Scale", Korean Journal of Sport Psychology, vol. 9, no. 2, (1998), pp. 113-123.
- [13] Y. J. Lee, "The Relationship with Physical Self-Concept on the Self-Esteem, Psychological Well-Being and Life Satisfaction", Major of Physical Exercise Graduate School of Chonnam National University, (2002).
- [14] J. G. Beard and M. G. Ragheb, "Measuring Leisure Satisfaction", J Leisure Res, vol. 12, no. 1, (1980), pp. 20-33.
- [15] J. G. Lee, "The Contribution of Participation in Sports & Exercise Programs to Life Satisfaction of Adults", Major in Physical Education Graduate School of Seoul National University, (1992).
- [16] H. G. Kwon, "The Effects of the Quality of Life as Recognized by the Middle Aged Women on the Self Esteem and Satisfaction of Life", Major in Family and Housing Studies Graduate School of Yeungnam University, (2011).

Authors



Mi Ryeong Song

1999. 8: Ph.D in Nursing, Seoul National University, Korea
2006. 9-present: Associate Professor, Department of Nursing,
Hoseo University, Korea



Li Ra Song

2011. 9-present: Graduate student, School of Nursing,
Graduate school, Sejong University, Korea