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The relationship between SOC strategy, life satisfaction, and successful aging in middle-aged women

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Abstract

This is a descriptive correlational study aimed at determining the relationship between SOC strategy, life satisfaction, and successful aging in middle-aged women. The study population was middle-aged women aged 40-65 years living in one metropolitan city, and 295 data collected using a structured questionnaire were used to analyze the results. The collected data were analyzed using descriptive statistics, independent t-test, one-way ANOVA, and Pearson's correlation using SPSS WIN/PC 24.0 statistical program. In the results of this study, the general characteristics related to successful aging in middle-aged women were identified as age, occupation, religion, economic status, presence of chronic diseases, and health status perception, menopause as significant influencing variables. In addition, successful aging was positively related to SOC strategy and life satisfaction among the middle-aged women in this study ($p < .05$). In particular, life satisfaction was highly correlated with successful aging in this study, and in this regard, efforts should be made to develop various programs to help middle-aged women feel satisfied with their lives so that they can transition to successful aging.

Keywords: strategy, Life Satisfaction, Middle-aged Women, Successful Aging

1. Introduction

The period of midlife is a life transition that marks the beginning of aging and a time of redefining the meaning of life while facing various challenges [1], especially for middle-aged women, who frequently experience stress-mediated depression along with the physical and emotional symptoms that come with menopause [2]. Therefore, when faced with the challenges that arise during the aging process, middle-aged adults achieve successful aging by selecting goals (S), appropriating their resources (O) to achieve those goals, and employing coping strategies (C) to compensate for the challenges that arise [3].

Many of the studies conducted in Korea have identified factors associated with successful aging in older adults only [4-6]. However, aging is not just limited to the elderly, it is a universal phenomenon along the life continuum that occurs in anyone from middle age onward, and as a psychological developmental process of mental maturation, the scope of aging research should be expanded [7]. In addition, the association of successful aging with a variety of variables needs to be confirmed in a broader population, such as in a recent study that identified the relationship between successful aging and posttraumatic growth, aging anxiety, and spirituality in women in late middle age [8].

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The sense of crisis and attitudes toward aging that midlife women experience before and after menopause threatens their physical and psychological health and contributes to low life satisfaction [9]. Satisfaction with life was identified as a factor influencing perceptions of successful aging along with health-promoting behaviors [4], and successful aging and strategy with SOC were presented as the main variables influencing quality of life in middle-aged women [10].

Getting through midlife is an important factor in quality of life in later life [11], and there is a need for repeated assessments of SOC strategy, satisfaction, and successful aging during this period, but research is still lacking. Advances in medical technology are lengthening the lifespan, and successful aging from midlife onward is a major concern in the modern era.

Therefore, this study aims to identify the level of SOC strategy as a factor related to the process of successful aging among middle-aged women experiencing the transition to old age, and to determine the level of life satisfaction and perception of successful aging. In addition, the findings on the relationship between SOC strategy, life satisfaction, and successful aging may provide an empirical basis for the development of programs to promote successful aging in middle-aged women.

2. Method

2.1 Study design

This is a descriptive correlational study conducted to determine the level of SOC strategy, life satisfaction, and successful aging among middle-aged women and to determine the relationship between the variables.

2.2 Research Subjects

The subjects of this study were middle-aged women aged 40 to 65 years old who understood the purpose and methodology of the study and voluntarily agreed to participate in the study. Other than age and gender restrictions, there were no additional restrictions on participation in the study. The target number of participants was set at 300 based on previous research [12] that identified relevant factors for successful aging in older adults. 300 questionnaires were collected, of which 295 were used in the analysis after excluding 5 questionnaires that were not returned in good faith.

2.3 Study instrument

2.3.1 SOC strategy

In this study, SOC strategy in middle-aged women was measured using a shortened version of the instrument developed by Baltes, Baltes, Freund & Lang [13] and adapted by Song [14]. Each question presents you with a target variable and a distractor variable and asks you to select the variable that matches your attitude or behavior. The scores are calculated as 1 if the target variable is selected and 0 if the distractor variable is selected, with a maximum score of 12. A higher score indicates a higher level of SOC strategy use. In Song's study [14], the reliability of the tool was Cronbach's $\alpha = .70$, while in this study it was $.66$.

2.3.2 Life satisfaction

In this study, Life satisfaction was measured by a single question asking about the level of satisfaction with one's current life, along with questions to ascertain general characteristics. The questions were answered on a scale of Dissatisfied (1 point), Neutral (2 points), Satisfied (3 points), and Very Satisfied (4 points), with higher scores indicating greater satisfaction with life.

2.3.3 Successful aging

In this study, successful aging in middle-aged women was measured using an instrument developed by Jung & Sung [15]. The tool was developed for middle-aged women living in Korea and reflects the developmental characteristics of middle age, which is different from the previously used tools for older adults. The tool consists of a 38-item Likert 4-point scale that measures nine subdomains: self-fulfillment (6 questions), coping with physical changes (5 questions), coping with psychological changes (5 questions), interpersonal relationships (3 questions), coping with menopausal symptoms (4 questions), economic security (4 questions), maintaining physical health (5 questions), social support (3 questions), and coping with social changes (3 questions). A higher summed score indicates a higher level of successful aging, with a reliability Cronbach's $\alpha = .90$ at the time of tool development and $.93$ in this study. Cronbach's α for the nine subdomains ranged from $.61$ to $.90$.

2.4 Data collection method

In this study, to protect the ethical aspects of the research participants, a recruitment announcement was posted on the Internet platform and a link to the questionnaire was sent to the subjects who showed their willingness to participate voluntarily. The Internet platforms that posted the recruitment announcements were the homepages of three organizations that serve the citizens of D-metropolitan area. The questionnaire utilized an online Google Form and was structured so that the questions in the questionnaire were asked after the study description and consent form were signed. Data collection was conducted over a one-month period from October 1 to 31, 2023. The study description explained the purpose of the study, anonymity and confidentiality, and informed participants that they could refuse to participate at any time if they did not wish to do so. The questionnaire took less than 10 minutes to complete.

2.5 Method of data analysis

The data collected in the study were analyzed by the SPSS 24.0 (SPSS, Inc., Chicago, IL, USA) program. The general characteristics of the middle-aged women who participated in the study were analyzed by descriptive statistics using frequencies, percentages, means, and standard deviations. Participants' levels of SOC strategy, life satisfaction, and successful aging were analyzed using descriptive statistics. The differences in the level of successful aging according to participants' general characteristics were analyzed using independent t-tests and one-way ANOVA. Correlations between participants' SOC strategy, life satisfaction, and successful aging were analyzed using Pearson's correlation coefficient.

3. Results

3.1 General characteristics of participants

The general characteristics of the middle-aged women in this study included age, occupation, religion, education, spouse, economic status, chronic diseases, perceived health status, and menopausal status. The average age of participants was 52.67 ± 4.65 years, with 212 (71.8%) in their 50s. Of the participants, 230 (78.0%) were employed, and 262 (88.8%) were religious. In level of education, 165 (55.9%) were college graduates, and 247 (83.7%) were married women with a spouse. The majority of respondents, 288 (97.6%), reported their economic status as middle or upper, and 183 (62.0%) reported no chronic health conditions. Health status was perceived as normal or better by 269 (94.2%) of the participants, with 194 (65.8%) identified as menopausal (Table 1).

Table 1. Characteristics of Participants (n=295)

Characteristics	Categories	n (%) or	Mean \pm SD
Age (yr)	40s	61 (20.7)	52.67 \pm 4.65
	50s	212 (71.8)	

	60s	22 (7.5)
Job	Yes	230 (78.0)
	No	65 (22.0)
Religion	Yes	262 (88.8)
	No	33 (11.2)
Education	High School Diploma	36 (12.2)
	Bachelor	165 (55.9)
	Master's degree or higher	94 (31.9)
Spouse	Yes	247 (83.7)
	No	48 (16.3)
Economic states	Upper	87 (29.5)
	Middle	201 (68.1)
	Lower	7 (2.41)
Chronic diseases	Yes	112 (38.0)
	No	183 (62.0)
Health status perception	Healthy	107 (36.3)
	Normal	162 (54.9)
	Unhealthy	26 (8.8)
Menopause	Yes	194 (65.8)
	No	101 (34.2)

3.2 SOC strategy, life satisfaction, and successful aging of participants

The participants' level of SOC strategy was found to be an average of 7.71 ± 2.52 on a 12-point scale, and their life satisfaction was found to be an average of 2.57 ± 0.65 on a scale of 1 to 4. Successful aging among the middle-aged women in this study averaged 108.94 ± 15.20 out of a possible 152 points. When comparing the scores of the subscales on a scale of 100, we found that Self-fulfillment (79.08) had the highest score and coping with physical changes (65.00) had the lowest score (Table 2).

Table 2. SOC strategy, Life Satisfaction, and Successful Aging (n=295)

Variables	Mean \pm SD	Range	Out of 100
SOC strategy	7.71 ± 2.52	0 - 12	
Life satisfaction	2.57 ± 0.65	1 - 4	64.25
Successful aging	108.94 ± 15.20	38 - 152	71.67
- Self-fulfillment	18.98 ± 2.48	6 - 24	79.08
- Coping with physical changes	13.00 ± 3.38	5 - 20	65.00
- Coping with psychological changes	14.13 ± 3.12	5 - 20	70.65
- Interpersonal relationships	9.38 ± 1.41	3 - 12	78.16
- Coping with menopausal symptoms	10.70 ± 2.93	4 - 16	66.88
- Economic security	11.42 ± 2.19	4 - 16	71.38

- Maintaining physical health	14.68±2.75	5 - 20	73.40
- Social support	8.14±2.07	3 -12	67.83
- Coping with social changes	8.51±1.78	3 - 12	70.92

3.3 Differences in successful aging based on general characteristics

Successful aging among middle-aged women in this study differed significantly by age, occupation, religion, economic status, chronic disease, perceived health status, and menopause. Middle-aged women in their 50s had higher levels of successful aging than those in their 60s ($F=5.61$, $p=.004$), and having a job was associated with higher scores for successful aging ($t=1.98$, $p=.049$). Middle-aged women who were religious had higher scores for successful aging ($t=2.96$, $p=.004$), and those who reported higher economic status had higher successful aging scores ($F=22.99$, $p<.001$). The absence of chronic disease was associated with higher levels of successful aging ($t=-2.40$, $p=.019$), and participants who perceived themselves as healthy had higher successful aging scores than those who reported being moderately healthy ($F=5.82$, $p=.003$). It was also found that women who had not yet reached menopause had a significantly higher successful aging score ($t=3.42$, $p=.001$) (Table 3).

Table 3. Successful Aging according to Characteristics of Participants (n=295)

Characteristics	Categories	n (%)	Successful aging	
			Mean ± SD	T or F (p) Scheffe test
Age (yr)	40s ^a	61 (20.7)	105.89±16.70	5.61 (.004) b>c
	50s ^b	212 (71.8)	110.63±14.82	
	60s ^c	22 (7.5)	101.14±10.41	
Job	Yes	230 (78.0)	109.87±16.07	1.98 (.049)
	No	65 (22.0)	105.66±11.05	
Religion	Yes	262 (88.8)	109.57±15.67	2.96 (.004)
	No	33 (11.2)	103.91±9.48	
Education	High School Diploma	36 (12.2)	112.33±14.52	1.73 (.179)
	Bachelor	165 (55.9)	107.62±15.64	
	Master's degree or higher	94 (31.9)	109.95±14.52	
Spouse	Yes	247 (83.7)	109.38±15.44	1.13 (.258)
	No	48 (16.3)	106.67±13.80	
Economic states	Upper ^a	87 (29.5)	117.31±18.29	22.99 (<.001) a>b,c
	Middle ^b	201 (68.1)	105.75±12.05	
	Lower ^c	7 (2.41)	96.43±12.03	
Chronic diseases	Yes	112 (38.0)	106.40±13.38	-2.40 (.019)
	No	183 (62.0)	110.49±16.04	
Health status perception	Healthy ^a	107 (36.3)	112.59±15.03	5.82 (.003) a>b
	Normal ^b	162 (54.9)	106.30±14.24	
	Unhealthy ^c	26 (8.8)	110.35±18.65	

Menopause	Yes	194 (65.8)	111.08±14.95	3.42 (.001)
	No	101 (34.2)	104.82±14.88	

3.4 Correlations between social strategy, life satisfaction, and successful aging

Successful aging was significantly positively correlated with SOC strategy ($r=.12$, $p=.047$) and life satisfaction ($r=.59$, $p<.001$) among the middle-aged women in this study, and a significant positively correlation was found between SOC strategy and life satisfaction ($r=.19$, $p=.001$). In other words, higher levels of SOC strategy and higher levels of life satisfaction were associated with higher levels of successful aging (Table 2).

Table 4. Relationship between SOC Strategy, Life Satisfaction, and Successful Aging (n=295)

Variables	SOC strategy r (p)	Life satisfaction r (p)	Successful aging r (p)
SOC strategy	1		
Life satisfaction	.19 (.001)	1	
Successful aging	.12 (.047)	.59 (<.001)	1

4. Discussion

The results of this study confirmed the relationship between successful aging, SOC strategy, and life satisfaction in middle-aged women and identified common characteristics that influence successful aging. The detailed meanings of these findings will be discussed.

The average SOC strategy of the middle-aged women in this study was 7.71 out of 12, which is slightly higher than the average of 7.48 in a previous study [10] of the same age group and 7.50 in a previous study [16] of older adults. However, the SOC strategy measurement scales used in the study are designed to simply select coping behaviors, which makes it difficult to ensure objectivity in the results. It is recommended that future research should develop a likert-type scale to identify the frequency of SOC strategy behaviors. In this study, life satisfaction among middle-aged women averaged 64.25 on a 100-point scale. This is higher than the average life satisfaction score of 60.6 in previous studies [4] of older adults. While it is difficult to make direct comparisons because the same instruments were not used, it is important to recognize that quality of life can decline with age, so it is important to find ways to ensure that life satisfaction in midlife is maintained well into old age. In this study, middle-aged women aged successfully with an average score of 108.94 on a scale of 152, higher than the average score of 94.79 in previous studies [10]. The characteristics of the participants in this study, particularly the high proportion of those with a college degree or higher and a job, are likely to be associated with these differences.

In the results of this study, successful aging differed by age, occupation, religion, economic status, presence of chronic diseases, and health status perception, as well as menopause status. The variables associated with successful aging identified in our results are partially consistent with the findings of Lee & Sung [17], who reported higher levels of successful aging with age and subjective health. However, in other studies [10] of middle-aged women, there was no variation in general characteristics associated with successful aging. This variation in the variables associated with successful aging across studies is likely due to the fact that the successful aging tool was developed to reflect the characteristics of middle-aged people, but the age range of middle-aged people is broad, ranging from 40 to 65 years old, so it includes many people who do not have the characteristics of middle-aged women who are approaching menopause. Therefore, future studies should replicate the findings in middle-aged women with menopause-related characteristics. In addition, the variables of occupation, religion, and economic status identified in this study are factors related to women's social security in midlife and need to be supported in these areas in order to lead to successful aging.

Successful aging was positively associated with greater use of SOC strategies and higher life satisfaction among the middle-aged women in this study. In particular, the correlation with life satisfaction was found to be quite high. The positive relationship between successful aging and SOC strategy has been demonstrated in a number of studies [3], [7], [10], [14], [16], suggesting that interventions aimed at increasing SOC strategy should be multifaceted in order to lead to successful aging. The relationship between successful aging and life satisfaction is supported by the findings of Jang [4], who demonstrated in a study of older adults that satisfaction with life is a key variable mediating the process of successful aging. Therefore, to increase the level of successful aging, various programs to increase life satisfaction should be implemented along with the promotion of the use of SOC strategies.

There are limitations to the generalizability of the results of this study, as it only included a subset of participants from a specific geographic region. In addition, life satisfaction was measured with a single question, which did not allow for a detailed analysis of subfactors, so future research should be conducted using a structured questionnaire with multiple questions. Despite these limitations, the findings of this study are significant in that they identify relevant variables that may increase successful aging in middle-aged women from multiple perspectives and demonstrate their association with SOC strategies and life satisfaction.

5. Conclusion

In the results of this study, successful aging in middle-aged women was positively correlated with SOC strategy and life satisfaction. In addition, successful aging differed by age, occupation, religion, economic status, presence of chronic diseases, and health status perception, as well as menopause status. Based on these results, in order to increase the level of successful aging in middle-aged women, it can be suggested that more targeted interventions should be offered to those who are vulnerable with regard to personal characteristics and that different intervention programs should be developed to increase SOC strategies and life satisfaction.

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