



Understanding of Factors Influencing Happiness of Middle-Aged Women in Korea Based on Maslow's Hierarchy of Needs

Su Jin Kim¹ and Myung-Haeng Hur² ✉

¹Department of Nursing, Chung Cheong University, Cheongju, Republic of Korea

²Department of Nursing, Eulji University, Daejeon, Republic of Korea

Objective Middle-aged women experience a lot of events of physical changes and various mental conflicts. The purpose of this study is to determine variables related to happiness, and to make and verify the model for happiness of middle-aged women.

Methods We constructed conceptual model for happiness of middle-aged women in Korea, based on Maslow's hierarchy of needs. This model consisted of three exogenous variables (health status, financial distress, and social support) and three endogenous variables (self-esteem, positive thinking, and happiness). For middle-aged women in Korea, we returned 442 questionnaires of 460 participants.

Results Model fit of the modified model was satisfied; $\chi^2=102.108$, GFI=0.959, CMIN/DF=2.917, RMSEA=0.068, AGFI=0.922, CFI=0.977, SRMR=0.0368. Happiness was explained by 82% through health status, financial distress, social support, self-esteem, and positive thinking. As Maslow's hierarchy of needs, happiness of middle-aged women is related to basic needs (health status, financial distress, and social support), psychological needs (self-esteem and positive thinking) and self-fulfillment needs (happiness).

Conclusion Our study shows that it is required intervention for meeting basic factor such as health status, financial distress and social support in order to increase happiness of middle-aged women.

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Key Words Women, Happiness, Social support, Health status.

INTRODUCTION

As the life span increases, the middle age has become a major period to deciding the life of old age.¹ The middle age is the turning point of life that can re-assess women's lives.² This period also acts as the bridge that can have an important impact on the rest of their life. In middle age, women experience the changes and confusion in various aspects of life.^{3,4} Physically, they are increasingly interested in issues related to health because their body has menopause and gets weaker. Mentally, women are confused about their role in family. It is important for middle-age women to satisfy physical and mental life.⁵ These satisfactions have much to do with happiness, which is a good measure to judge successful people and society.⁶

Happiness is not just a state that negative emotion is removed, but a peak experience of self-realization that is accomplished by maximizing one's own abilities.⁷ The happiness of middle-aged women affects their welfare and psychological well-being directly.⁸ Happiness can expand cognitive and emotional aspects. It makes the person's physical and psychological aspects available fully. In other words, happiness is the best value that people can enjoy in their own life through the manifestation of possibilities and positive emotions.⁹

Factors influencing happiness of middle-aged women

Various factors affect happiness of middle-aged women internally and externally. Internal factors related to psychological condition include attitude, commitment, positive thinking, self-esteem and so on. Among these, positive thinking and self-esteem are attracting attention as an important factors influencing happiness.¹⁰ External factors related to external environment include economic power, education, income, health status, social support and so on. Among these, health status, financial distress, and social support have been reported to affect the happiness of middle-aged women. These health conditions are closely related to the happiness, and it

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✉ Correspondence: Myung-Haeng Hur, PhD

Department of Nursing, Eulji University, 77 Gyeryong-ro 771beon-gil, Jung-gu, Daejeon 34824, Republic of Korea

Tel: +82-42-259-1714, Fax: +82-42-259-1709, E-mail: mhhur@eulji.ac.kr

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is reported that the better the health condition, the more positive the subjective perception of life.¹¹

Positive thinking is the social emotional attitude such as life satisfaction and optimistic potentiality. People with high positive thinking has high self-efficacy because they have generally a high level of happiness and self-esteem in life, and because they are proficient in social relations and expressive emotions.¹² As positive thinking is increased, emotional and psychological well-being is increased, and satisfaction for life is also increased.⁹

Self-esteem is the positive acceptance, and the evaluation of one's own abilities and values.¹³ High levels of self-esteem in middle-aged women are associated with satisfactory psychological well-being.¹⁴ It enhances happiness by acting as an important coping factor in various crisis situations facing middle age.¹⁵

Health status is the balance of subjective health perceptions of physical, mental and social health.¹⁶ It is a key concept explaining happiness because it enables a variety of physical and mental functions to perform. Also, as the frequency of positive interactions with colleagues based on physical health is increased, self-esteem and happiness are increased.¹⁷

Financial distress is the economic imbalance that reduces satisfaction with life and affects happiness. Also, those who experienced positive economic situation showed higher happiness.¹⁸ However, if they are above a certain income level, they no longer affect happiness. Therefore, although the average income increases, happiness does not always increase. In general, as the age of middle-aged women increases, economic stress increases due to income restrictions, retirement preparation, retirement, spouse retirement, admission of children and marriage of children. Therefore, the economic stress decreased with the stable and regular income of middle-aged women, and the lower the economic stress, the higher the level of happiness of women.¹⁹

Social support refers to the degree of trust and recognition from family members, friends, and others through relationships.²⁰ Social support and positive interpersonal relations have been shown to improve the sense of well-being through emotional fulfillment.²¹ The relationship between family and acquaintances, such as social support, is caring and respectful, and positive support of the surroundings that can confirm their value. In addition, expanding social relations reduces negative emotions such as loss feelings and increases belief in oneself.⁴ High social support elevates self-esteem and improves happiness.²²

Conceptual framework

There are various theories related to happiness. The desire fulfillment theory is that people have happiness when they

have something like money, health, honor, and knowledge. However, the theory has a limit that does not increase the happiness when possessing a certain degree or more.²³ Maslow's hierarchy of needs explain that self-realization and happiness are the stage of maturity of personality, and that they were gradually satisfied from basic desire to psychological desire by stages.⁷ This theory clarified the process by which humans enjoy happiness by helping them realize hidden potential and self-realization.²⁴ It is suitable for explaining the happiness of a middle-aged woman who satisfies psychological needs in stages after basic external factors are satisfied.

Therefore, this study selected Maslow's hierarchy of needs⁷ as theory for happiness of middle-aged women in Korea. Health status, financial distress and social support were found to be positive factors affecting happiness by changing positive thinking and self-esteem.^{25,26} Psychological variables such as positive thinking and self-esteem have a direct and powerful influence on happiness.²⁷

Based on Maslow's hierarchy of needs, this study constructed conceptual model and proposed hypothetical model for happiness of middle-aged women (Figure 1). This model consisted of 3 exogenous variables, 3 endogenous, and 11 measured variables. As Basic Needs, health status has 3 variables (physical health, mental health, and social health), financial distress has 1 variable (financial distress), and social support has 2 variables (family, significant other). As Psychological Needs, self-esteem has a variable (self-esteem) and positive thinking has 2 variables (subjective satisfaction and goal pursuit). As Self-fulfillment Needs, happiness has 2 variables (positive factor and negative factor).

Study's purpose

This paper analyzes the relationship related to happiness of middle-aged women in Korea using various factors: positive thinking, self-esteem, social support, financial distress, and health status. The purpose of this study is to investigate the inner and outer factors for happiness of middle-aged women based on Maslow's hierarchy of needs. The theoretical framework of this study explained human happiness as self-realization and growth theory based on human desire.²⁴ The theory distinguishes human desire satisfaction in three stages. The first is stage of satisfying the basic needs related to the external physical situation. The next is stage of satisfying the psychological needs related to the internal achievement. Final stage is the self-fulfilling desire fulfillment stage of experiencing the happiness by successively satisfying the self-realization need. This study investigated the influence variables of middle-aged women related to happiness and found a direct and indirect relationship among middle-aged women. Furthermore, we will provide the framework and basic data

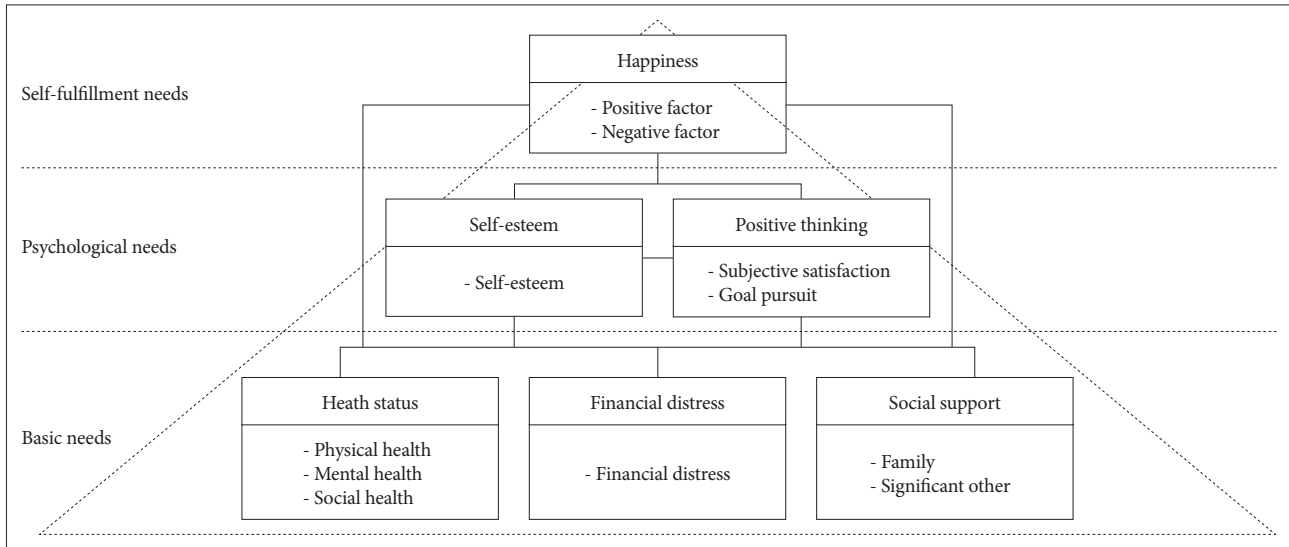


Figure 1. Conceptual model based on Maslow's hierarchy of needs.

needed to develop nursing intervention strategies to enhance the happiness of middle-aged women.

METHODS

Participants

Participants were middle-aged women between the ages of 40 and 65. They agreed to a written explanation that they would understand the purpose and content of the study and participate in this study. Data collection was conducted for middle-aged women living in four metropolitan cities and other cities in Korea from February 5 to April 5, 2015. A total of 460 questionnaires were distributed in this study and 442 copies were collected (response rate=96%). A total of 420 copies were used for final analysis except for 22 insufficient data.

Instrumentals

Happiness was measured using The Oxford Happiness Questionnaire,²⁸ translated in Korea.²⁹ This measurement tool contains 29 questions and rated on a 6-point Likert scale. Cronbach α of this study was 0.91 whereas original author reported Cronbach α of 0.90. A higher score indicates more happiness.

Positive thinking was measured using Positive Thinking Scale.³⁰ This measurement tool contains 18 questions and rated on a 5-point Likert scale. Cronbach α of this study was 0.92 whereas original author reported Cronbach α of 0.88. A higher score indicates more positive thinking.

Self-esteem was measured using Rosenberg Self Esteem Scale (RSES),¹³ translated in Korea.³¹ This measurement tool contains 10 questions and rated on a 4-point Likert scale. Cron-

bach α of this study was 0.82 whereas original author reported Cronbach α of 0.85. A higher score indicates a higher self-esteem.

Social support was measured using Multi-dimensional Scale of Perceived Social Support (MSPSS),²⁰ translated in Korea.³² This measurement tool contains 12 questions and rated on a 7-point Likert scale. Cronbach α of this study was 0.94 whereas original author reported Cronbach α of 0.86. A higher score indicates more social support.

Financial distress was measured using In Charge Financial Distress/ Financial Well-Being Scale (IFDFW),³³ translated in Korea.³⁴ This measurement tool contains 8 questions and rated on a 10-point Likert scale. Cronbach α of this study was 0.95 whereas original author reported Cronbach α of 0.95. A higher score indicates less financial distress.

Health status was measured using Total Health Index (THI).³⁵ This measurement tool contains 10 questions and rated on a 5-point Likert scale. Cronbach α of this study was 0.95 whereas original author reported Cronbach α of 0.91. A high score for any factor indicates that health status is not good. Therefore, in the analysis, negative score means that health has a positive effect.

Data analysis

This study performed structural equation model (SEM) using SPSS version 21.0 and AMOS 21.0 (IBM Corp., Armonk, NY, USA). We selected fit indices as follows: the relative chi-square (CMIN/DF; <3), the goodness of fit index (GFI; ≥ 0.9), the adjusted goodness of fit index (AGFI; ≥ 0.9), the comparative fit index (CFI; ≥ 0.9), standardized root mean residual (SRMR; ≤ 0.08), and root mean square error of approxima-

tion (RMSEA; 0–0.10).

Ethical considerations

This study was approved by the Institutional Review Board of Eulji University in Korea (EU15-01). Participants were informed of the purpose of the survey and agreed with our questionnaire.

RESULTS

Preliminary analyses

The mean age of participants was 51.8±7.3 (mean±SD) years and their mean duration of marriage was 26.2±9.8 (mean±SD) years. Most of them were married with 392 (93.3%). For the level of education, 200 (47.6%) graduated from high school, 148 (35.2%) from university, and 72 (17.2%) from middle school or less. 300 (71.4%) had religion and 284 (67.6%) had the occupation. In marriage, 181 (43.1%) were satisfied and 52 (12.4%) were dissatisfied. 210 (50%) were menopausal (Table 1). Descriptive statistics and normality test of the measured variables is showed in Table 2. Bivariate correlations between the variables are reported in Table 3.

Hypothetical model testing and modified model

For hypothetical model, the effect of health status ($\beta=0.103$, $p=0.056$), financial distress ($\beta=0.094$, $p=0.076$), and social support ($\beta=0.078$, $p=0.238$) for happiness was not significant. Therefore, the 3 pathway were not selected as direct pathway, and hypothetical model was modified. Model fit of the modified model was satisfied; $\chi^2=102.108$, GFI=0.959, CMIN/DF=2.917, RMSEA=0.068, AGFI=0.922, CFI=0.977, SRMR=

0.0368 (Table 4). This study selected the modified model as the final model as shown in Figure 2.

In modified model, self-esteem was significant in direct ef-

Table 1. Participant characteristics (N=420)

Characteristic	Categories	N (%)
Age (yr)	40–49	171 (40.7)
	50–59	170 (40.5)
	≥60	79 (18.8)
Duration of marriage (yr)	10 or less	21 (5.0)
	11–20	105 (25.0)
	21–30	152 (36.2)
	More than 31	142 (33.8)
	Marital status	Married
Marital status	Divorce	6 (1.5)
	Left alone	22 (5.2)
	Education	Middle school or less
Education	High school	200 (47.6)
	College or more	148 (35.2)
	Religion	Yes
No		120 (28.6)
Own occupation	Yes	284 (71.4)
	No	136 (28.6)
Satisfaction of marriage	Satisfaction	181 (43.1)
	Moderate	187 (44.5)
	Dissatisfaction	52 (12.4)
Menses	Regular	164 (39.0)
	Irregular	46 (11.0)
	Menopause	210 (50.0)

Table 2. Descriptive statistics of the measured variables (N=420)

Variables	Item	Categories	M±SD	Skewness	Kurtosis
Health status	30				
Physical health (X1)	10	10–50	28.07±8.09	0.488	-0.118
Mental health (X2)	10	10–50	23.53±7.71	0.296	0.003
Social health (X3)	10	10–50	24.21±5.65	-0.182	0.234
Financial distress (X4)	8	8–80	55.33±15.56	-0.564	0.270
Social support	12				
Family (X5)	4	4–28	24.46±4.37	-0.730	0.203
Significant other (X6)	8	8–56	41.38±8.45	-0.231	-0.398
Self-esteem (Y1)	10	10–40	31.20±3.93	0.134	-0.236
Positive thinking	18				
Subjective satisfaction (Y2)	13	13–65	47.51±8.07	0.241	-0.330
Goal pursuit (Y3)	5	5–25	19.25±3.27	-0.069	-0.657
Happiness	29				
Positive factor (Y4)	17	17–102	70.33±11.20	0.470	0.146
Negative factor (Y5)	12	17–72	48.96±7.98	0.205	-0.057

fect and total effect from health status, financial distress and social support (Table 5). Positive thinking was significant in direct effect and total effect on health status, financial distress, social support, and self-esteem. Positive thinking was also significant indirectly from health status, financial distress, and social support. Happiness showed significant direct effect and total effect from positive thinking and self-esteem. The indirect effect and total effect from health status, finan-

cial distress, and social support were significant. Happiness was explained by 82% through health status, financial distress, social support, self-esteem, and positive thinking.

DISCUSSION

In this study, we investigated factors influencing happiness of middle-aged women in Korea using health status, finan-

Table 3. Bivariate correlations among the measured variables (N=420)

	X1	X2	X3	X4	X5	X6	Y1	Y2	Y3	Y4	Y5
X1	1										
X2	0.720*	1									
X3	0.616*	0.765*	1								
X4	-0.368*	-0.448*	-0.343*	1							
X5	-0.320*	-0.463*	-0.406*	0.422*	1						
X6	-0.342*	-0.506*	-0.453*	0.417*	0.767*	1					
Y1	-0.341*	-0.522*	-0.489*	0.463*	0.601*	0.613*	1				
Y2	-0.414*	-0.555*	-0.493*	0.584*	0.536*	0.570*	0.693*	1			
Y3	-0.308*	-0.491*	-0.379*	0.410*	0.507*	0.532*	0.639*	0.670*	1		
Y4	-0.307*	-0.465*	-0.413*	0.490*	0.495*	0.546*	0.695*	0.684*	0.568*	1	
Y5	-0.401*	-0.563*	-0.478*	0.466*	0.477*	0.499*	0.592*	0.569*	0.509*	0.542*	1

*p<0.01. X1: Physical health, X2: Mental health, X3: Social health, X4: Financial distress, X5: Family, X6: Significant other, Y1: Self-esteem, Y2: Subject satisfaction, Y3: Goal pursuit, Y4: Positive factor, Y5: Negative factor

Table 4. Model fit of the modified model

Model	CMIN (χ^2)			CMIN/DF	GFI	AGFI	CFI	SRMR	RMSEA
	χ^2	DF	p						
Hypothetical	93.724	32	<0.001	2.929	0.961	0.919	0.979	0.0324	0.068
Modified	102.108	35	<0.001	2.917	0.959	0.922	0.977	0.0368	0.068

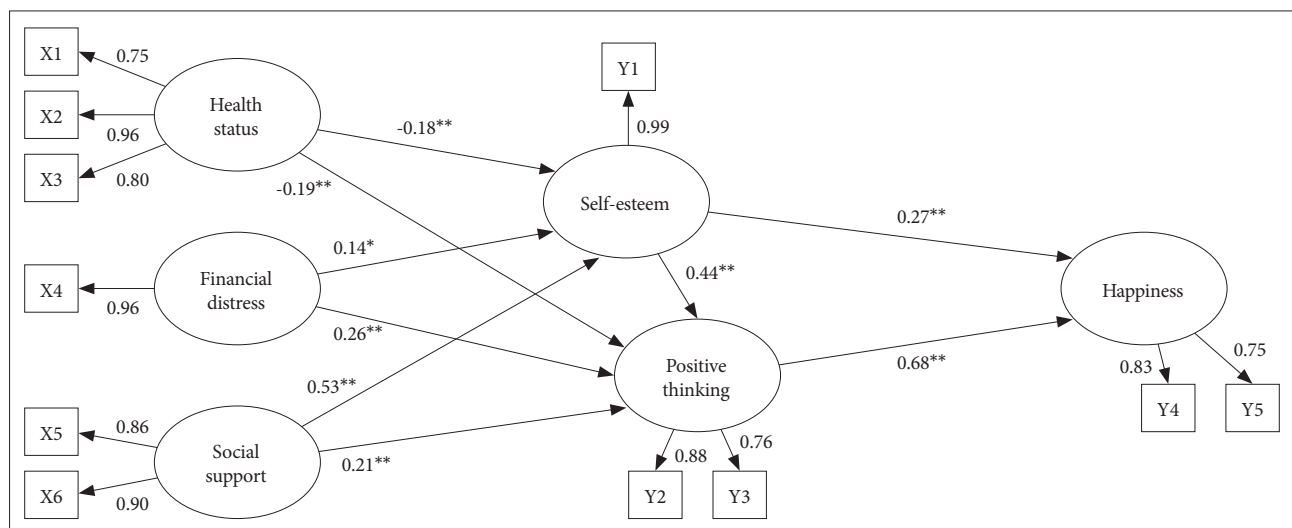


Figure 2. Final path diagram of the modified model. *p<0.01, **p<0.001. X1: Physical health, X2: Mental health, X3: Social health, X4: Financial distress, X5: Family, X6: Significant other, Y1: Self-esteem, Y2: Subject satisfaction, Y3: Goal pursuit, Y4: Positive factor, Y5: Negative factor

Table 5. Direct, indirect and total effect of the modified model (N=420)

	Paths	Direct effect (p)	Indirect effect (p)	Total effect (p)
Health status	→ Self-esteem	-0.181 (<0.001)		-0.181 (<0.001)
Financial distress	→	0.135 (0.002)		0.135 (0.002)
Social support	→	0.525 (<0.001)		0.525 (<0.001)
Health status	→ Positive thinking	-0.194 (<0.001)	-0.080 (0.008)	-0.274 (0.005)
Financial distress	→	0.255 (<0.001)	0.059 (0.005)	0.314 (0.005)
Social support	→	0.206 (<0.001)	0.231 (0.005)	0.437 (0.005)
Self-esteem	→	0.439 (<0.001)		0.439 (<0.001)
Health status	→ Happiness		-0.233 (0.005)	-0.233 (0.005)
Financial distress	→		0.248 (0.005)	0.248 (0.005)
Social support	→		0.434 (0.005)	0.434 (0.005)
Self-esteem	→	0.266 (<0.001)	0.297 (0.005)	0.563 (0.005)
Positive thinking	→	0.675 (<0.001)		0.675 (<0.001)

cial distress, social support, self-esteem, and positive thinking. This study made a structural model of their happiness based on Maslow’s hierarchy of needs, which defined human desire achievement as basic needs, psychological needs, and self-fulfillment needs. This model consisted of three exogenous variables (health status, financial distress, and social support) and three endogenous variables (self-esteem, positive thinking, and happiness). The results showed that health, financial distress and social support affected happiness through the medication of self-esteem and positive thinking. Self-esteem and positive thinking were also found to affect happiness directly or indirectly. The results showed that the happiness of middle-aged women is gradually experienced from the basic needs to the self-fulfillment needs as Maslow’s hierarchy of needs. Happiness was explained by 82% through health status, financial distress, social support, self-esteem, and positive thinking. Based on the results, we discussed five factors affecting the happiness of middle-aged women as follows.

Positive thinking has the greatest impact among the five factors influencing the happiness of middle-aged women in Korea. Positive thinking was one of the most influential factor of happiness.³⁶ This results showed that attention should be paid to strengths and competences of middle-aged women, such as positive thinking.³⁷ This means that the level of positive thinking of middle-aged women should be raised to improve the subjective satisfaction of life.³⁰ Therefore, it is necessary to strengthen the positive competencies of middle-aged women in order to improve the positive thinking of middle-aged women and to increase the happiness.

Self-esteem of middle-aged women affected happiness directly, and influenced happiness through positive thinking indirectly. Lyubomirsky et al.³⁸ indicate that self-esteem is the major predictor for happiness. In addition, the results of Diener and Seligman⁹ suggest that high level of self-esteem pro-

motes individual’s cognitive and emotional interpretation in a positive direction to promote happiness. The results of these previous studies are consistent with the results of this study. Therefore, to improve the self-esteem of middle-aged women, it is necessary to have a program to have the right self-image, and an intervention plan to confirm its effect.

Social support has no direct impact on happiness, but has an indirect effect on happiness through self-esteem and positive thinking. The higher the social support, the higher the self-esteem and positive thinking, and eventually the middle-aged woman’s happiness is increased. Helgeson³⁹ suggests that social relations and support relieve stress, and improve life positively. Diener et al.⁴⁰ assert that a good relationship with family members and others is a positive factor that elevates self-esteem and positive thinking. Therefore, in order to promote the happiness of middle-aged women, it is necessary to consider the social support system of the family, and the surrounding people who can positively accept themselves.⁹

Financial distress doesn’t directly affect happiness but it indirectly affects happiness through self-esteem and positive thinking. These results suggested that the direct influence of financial distress was reduced in the process of analyzing collectively the variables of self-esteem and positive thinking rather than the relationship between economic stress and happiness only. Lowering of financial distress leads to higher self-esteem and positive thinking, and eventually to a rise in the happiness of middle-aged women. In the case of economic level above average, this study is confirmed that desire such as self-development or self-acceptance acts as a stronger factor for happiness.⁴¹ Therefore, it is necessary to try to grasp and control the various variables affecting happiness so that middle-aged women can overcome the financial distress situation.

Health status has no direct effect on happiness, but it has an indirect effect on happiness through self-esteem and posi-

tive thinking. In other words, if the health condition is good, self-esteem and positive thinking increase, and eventually it shows that the happiness of middle-aged women increases. The healthier people are, the more positive emotional expression and lively lives are maintained.⁴² In addition, the positive perception of the health level of the person increases the happiness by acting as a strong will to promote health.⁴³ Therefore, middle-aged women should be provided with information on physical and psychological health of middle-aged women so that they can positively perceive their health condition, and intervention methods to educate health promotion methods that can be practiced continuously.

Based on the result of this study, to improve the happiness of middle-aged women, efforts should be made to improve the happiness by appropriately managing health condition, lowering financial distress, maintaining social support systematically and promoting self-esteem and positive thinking. In other words, self-esteem and positive thinking based on health status, financial distress, and social support are decisive factors for the happiness of middle-aged women. Therefore, middle-aged women need to develop various psychological and emotional programs that can enhance self-esteem and improve positive thinking.

The results of this study showed that health status, financial distress, social support, self-esteem, and positive thinking were important factors for the happiness of middle-aged women. We also found that health status, financial distress, social support, self-esteem, and positive thinking affected happiness. Therefore, it is necessary to develop nursing intervention education and programs that emphasize basic needs such as health status, financial distress, and social support in order to enhance the happiness of middle-aged women. In addition, for middle-aged women whose basic needs have been met, it is necessary to improve the positive thoughts and self-esteem, which are direct influences of happiness.

Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

Author Contributions

Conceptualization: Su jin Kim, Myung-Haeng Hur. Data curation: Su jin Kim. Formal analysis: Su jin Kim, Myung-Haeng Hur. Investigation: Su jin Kim, Myung-Haeng Hur. Methodology: Su jin Kim, Myung-Haeng Hur. Project administration: Myung-Haeng Hur. Resources: Su jin Kim. Software: Su jin Kim. Supervision: Myung-Haeng Hur. Validation: Su jin Kim, Myung-Haeng Hur. Visualization: Su jin Kim. Writing—original draft: Su jin Kim, Myung-Haeng Hur. Writing—review & editing: Su jin Kim, Myung-Haeng Hur.

ORCID iDs

Myung-Haeng Hur <https://orcid.org/0000-0003-0523-8926>
Su Jin Kim <https://orcid.org/0000-0001-9266-1575>

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