

The Relationship between Regret and Subjective Well-being in Middle Aged Women

Su Hyun Jang¹ and Sung Hee Lee^{2,1}

¹Doctoral completion, College of Nursing, Kyungpook National University, Daegu, KOREA

²Professor, College of Nursing, Kyungpook National University, Daegu, KOREA

¹snubhangel@naver.com, ²leesh@knu.ac.kr

Abstract

We aimed to investigate how different coping styles for regret appraisals and experiences affect subjective well-being among middle aged women. Data were collected using a self-administered questionnaire from 40–65 year old women residing in D city and K province of South Korea. For data analysis, SPSS/WIN 21.0 was used to conduct t-tests, ANOVAs, Pearson's correlation coefficients, and hierarchical regression analysis. We found several correlations between subjective well-being and sub-scales of regret coping styles: pursuit of alternative goals was positively correlated with life satisfaction, while ruminating on regret, goal separation, and pursuit of alternative goals were positively correlated with psychological well-being a domain of subjective well-being. The hierarchical regression analysis indicated that life satisfaction, another aspect of subjective well-being, increased with higher monthly income, lower regret intensity, and greater pursuit of alternative goals. Meanwhile, with psychological well-being, as another aspect of subjective well-being, was found to be positively predicted by better perceived health and greater rumination on regret, goal weparation and pursuit of alternative goals. These results demonstrate the need to develop and implement programs that consider the various regret coping styles to increase the standards of subjective well-being among middle aged women in South Korea.

Keywords: Regret, Middle aged women, Subjective well-being, Life satisfaction, Psychological well-being

1. Introduction

1.1. Background

Recent advances in science and medical technology have led to an increase in average human life expectancy. According to future population estimates, the elderly population is expected to account for 24.3% of the whole population by 2030, with 21.6% and 27% of the male and female populations being elderly, respectively [1]. In other words, South Korea will soon become a “ hyper-aged” society. The female elderly population is showing a particularly rapid increase: The mean life expectancy for women in South Korea was estimated to be 75.5 years in 1990, 79.6 years in 2000, and 82.8 years in

¹ Corresponding Author: Sung Hee Lee,
Kyungpook National University.College of nursing,
680 Gukchaebosang-ro, Jung-gu, Daegu 700-422, South Korea
Tel: +82-53-420-4935, E-mail: leesh@mail.knu.ac.kr.

2010[2], indicating a clear but gradual increase in the population of post-middle aged women.

Middle aged women typically experience an increased sense of freedom with the decrease in their childrearing responsibilities, which often leads them to redirect their potential abilities. Nevertheless, it brings its share of obstacles for women: from a physiological perspective, middle age is characterized by the developmental crisis of menopause, whereas from a psychosocial perspective, it brings feelings such as pressure, emptiness, and guilt relating to their familial role [3]. As middle age is the developmental stage just before old age, the way in which an individual copes with and accepts these characteristics of middle age has an impact on their quality of life in old age. Indeed, rumination about the past, unresolved problems, and regret can negatively affect these women's lives throughout the remainder of middle age and beyond [4].

Regret is a natural and essential phenomenon in human development. During the course of their development, humans must make numerous choices, the outcomes of which are not always successful. These experiences of failure lead to regret about the choices that were or were not made; people are usually sensitive to their own failures, and regret not having made better choices. In particular, when a personally important decision leads to a bad outcome, or the individual believes that there were better choices, the resulting regret can cause severe psychological pain[5]. Indeed, regret is frequently accompanied by negative emotions, and can have a strong negative effect on overall quality of life [6].

Subjective well-being refers to an individual's subjective evaluations of their overall life. It is broadly conceptualized as comprising the domains of life satisfaction and psychological well-being, with the former referring to one's perceived evaluation of life as a whole [7], and the latter to immediate affective judgments (positive or negative) of individual events or experiences in one's life [8].

Subjective well-being might differ depending on one's regret coping styles. Styles of coping with regretful experience are both a defense mechanism to protect the self and a means of resolving problems. Thus, different regret coping styles will likely have different effects on middle aged women. For instance, middle aged women who do not make an actual effort to overcome regretful past behaviors, and are unable to cope appropriately tend to experience strong negative emotions, such as disappointment and despair. Moreover, those who are not able to escape invasive thoughts about regretful events can suffer from psychological maladjustment [9]. Therefore, healthcare providers, including nurses might attempt to help improve the well-being of middle aged women faced with difficult, irreversible problems by encouraging them to spend an unreasonable amount of time trying to resolve these problems and to separate their goals from their selves, thereby reducing the level of psychological disturbance, and take up new goals [10]. In addition, middle aged women should be encouraged to avoid focusing on regrets that cannot be changed as they enter into old age, and should attempt to reduce the strength of this regret, find goals that have personal meaning, and pursue those goals [11].

Since Landman [5] established the concept of regret, there have been several representative studies of regret overseas, including investigation of regret experiences [12] and regret domains [13]. In South Korea, Yoon and Yoo [14] and Joo and Chong [15] both analyzed the effects of regret on subjective well-being in elderly individuals. As such, domestic studies have mostly focused on the content, frequency, and related emotions of regret experiences among elderly individuals. Recently, Han, *et al.*, [16] studied the relationship between life regrets and subjective well-being in unmarried women in their 30s; however, there have been no studies on how subjective well-being is affected by regret appraisals and regret coping styles in middle aged women in South Korea.

Thus, the present study is the first Korean study of regret in middle aged women. Specifically, we measured the regret appraisals (specifically, intensity and frequency of

various regret domains) and regret coping style. In terms of the intensity, frequency, and domains of regret, and regret coping styles (rumination on regret, goal separation, and pursuit of alternative goals) of middle aged women, and investigated how these variables affect subjective well-being in this population. The results of the present study will be valuable as foundational data for the development of programs to promote subjective well-being in Korean middle-aged women with different regret coping styles.

1.2. Purpose

The purpose of the present study is to determine the relationships between regret appraisals, regret coping styles, and subjective well-being (including its various domains), and to ascertain the factors that predict subjective well-being.

2. Methods

2.1. Study Design

The present study used a descriptive survey method to ascertain the effects of regret appraisals and regret coping styles on subjective well-being among middle-aged women. The research model is displayed in <Figure 1>. We hypothesized that regret appraisals and regret coping styles will affect subjective well-being in middle-aged women. Among regret appraisals, regret frequency and intensity were expected to show a negative correlation with subjective well-being, while all regret coping styles were expected to show a positive correlation with subjective well-being.

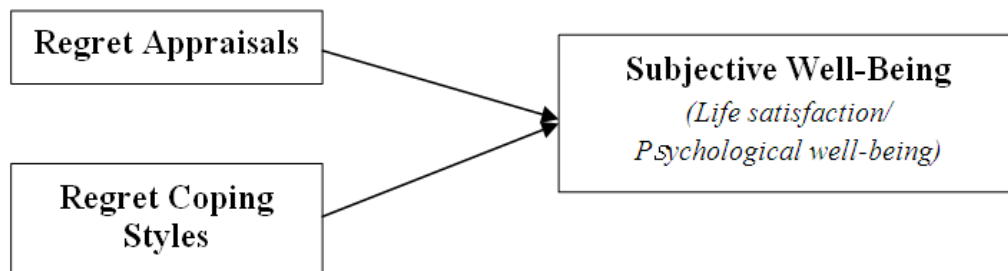


Figure 1. Study Model

2.2. Participants and Data Collection

We recruited 40 to 65 year old women as participants from among the parents of students at two universities in D city and K province. A preliminary survey was administered to 10 middle aged women between August 10 and 17, 2015, prior to the main survey. The main survey was then conducted by the authors and 2 trained research assistants between August 23 and September 23, 2015. Participants were selected via arbitrary sampling and informed that they could withdraw at any time if they did not want to respond to the questionnaire. To protect participants' personal information, their anonymity was assured by asking the participants only to complete the survey and give their birth date; they were not asked to give their names. Furthermore, the participants' written consent was obtained. G* Power was used to calculate the samples size for hierarchical regression analysis, assuming an effect size of .15, a power of .95, a statistical significance of .05, and 5 independent variables, the minimum number of participants required was 160. Data were collected from 200 consenting participants, and the final analysis was conducted on 180 questionnaires, as 20 were excluded for incomplete answers. Thus, the number of the number of participants was considered suitable for this study.

2.3. Instruments

2.3.1. **Regret Appraisals:** For regret appraisals, the regret domain, intensity, and frequency were measured. The regret domain was measured using the major life regret scale by Roese and Summerville [13], and adapted into Korean by Joo and Chong [15]. This scale comprises 12 regret domains (education, career, romance, parenting, self-improvement, leisure, finance, family, health, friends, spirituality, and community), each rated in terms of intensity and frequency. Regret intensity refers to the current strength of regret in given while regret frequency refers to how often the participant currently thinks of the relevant regret domain. Both intensity and frequency are rated using 7-point scales (range from 1 to 7) according to Han, *et al.*, [16]. With higher scores representing higher regret intensity or frequency.

2.3.2. **Regret Coping Styles:** These were measured using the Coping Styles Scale for Regret Experiences in Old Age, developed by Yoo[10], with reference to a study by Wrosch *et al.*[17]. The scale comprises 12 items, with 4 items each in the subscales of rumination on regret, goal separation, and pursuit of alternative goals. This instrument uses a 5-point Likert scale, with higher scores signifying more positive regret coping styles. In this study, the Cronbach's α coefficient was .69 overall, while it was .80 for rumination on regret, .81 for goal separation, and .66 for pursuit of alternative goals.

2.3.3. **Subjective Well-being:** As noted before, subjective well-being comprises life satisfaction and affective well-being [7]. Life satisfaction was measured using the Satisfaction with Life Scale developed by Diener, *et al.*, [18], and adapted in to Korean by Joo and Chong [15]. This instrument comprises 5 items each measured on a 7-point Likert scale, with total scores ranging between 5 and 35. Higher scores indicate greater life satisfaction. The Cronbach's α coefficient in the present study was .90.

Psychological well-being was measured using the Intensity and Time Affect Scale of Diener, *et al.*, [19], and adapted into Korean by Joo and Chong [15]. This instrument comprises 24 items measured on a 7-point Likert scale, with 8 items on assessing positive affect and 16 items on assessing negative affect. The range of possible scores is 24–158, with higher scores indicating more positive psychological well-being. The Cronbach's α coefficient in this study was .92.

2.4. Ethical Approval

Data were collected after receiving the approval of the institution review board (IRB 2015-0010) at the researchers' affiliated institution.

2.5. Data Analysis

Data analysis was performed using SPSS/WIN 21.0. Descriptive statistics, such as frequency, means, and standard deviation, calculated for the general characteristics, regret appraisals, regret coping styles, and subjective well-being. T-tests and ANOVAs were used to test the differences in the main variables by general characteristics, while Pearson's correlation coefficients were used to analyze correlations between the main variables. A hierarchical regression analysis was used to analyze the impact of general characteristics, regret appraisals, and regret coping styles on subjective well-being.

3. Results

3.1. Differences in subjective well-being by general characteristics and regret appraisals

Of all participants, 81.7% were aged 40–50 years old. For educational level and

occupation, the most common response were university graduate (43.9%) and unemployed (37.8%), Most participants were married (92.2%), and the most common response for religion was Buddhist (36.7%). The most commonly reported monthly income was 4–6 million KRW. Furthermore, 77.2% of participants lived with their husband and children, while 40.6% responded that their perceived health was “okay”. The most commonly reported regret was in the self-improvement domain (29.4%). Using 5 as the median value of regret intensity among all regret domains, 52.4% of participants had a regret intensity of 5 or higher. Using 4 as the median value for regret frequency, 65.5% of participants responded that they had a frequency of 4 or higher (Table 1).

When subjective well-being was analyzed in terms of general characteristics and regret appraisals, life satisfaction showed significant differences by education level ($F=2.309, P<.05$), monthly income ($F=6.332, P<.001$), perceived health ($F=3.099, P<.05$), and regret intensity ($F=2.386, P<.018$), but there was no inter-group difference for education level and life satisfaction. Meanwhile, perceived health ($F=5.968, P<.001$), regret intensity ($t=.029, P<.05$), and regret frequency ($F=2.779, P<.05$) showed significant differences in psychological well-being (Table 1).

Table 1. Differences in Subjective Well-being According to General Characteristics and Regret Appraisals (N = 180)

Characteristics		Category	N(%)	Life Satisfaction			Psychological Well-being		
				M(SD)	t / F	p	M(SD)	t / F	P
General Characteristics	Age	40-45 years	46(25.6)	18.84(6.41)	.344	.793	122.52(18.27)	1.091	.354
		46-50 years	83(41.6)	17.72(6.41)			121.06(19.25)		
		51-55 years	35(19.4)	18.28(6.84)			125.45(21.10)		
		56-60 years	16(8.9)	17.50(6.67)			129.43(15.90)		
	Occupation	Employed	112(37.8)	18.00(6.65)	-.263	.793	123.19(18.51)	.146	.884
		Unemployed	68(22.2)	18.26(6.35)			122.76(20.26)		
	Education Level	High school graduate or below	89(39.5)	16.97(6.40)	2.309	.022	122.11(19.30)	-.637	.525
		University graduate or above	91(60.5)	19.19(6.49)			123.93(19.03)		
	Marital Status	Married/ <i>de facto</i> marriage	169(93.9)	18.30(6.49)	1.682	.094	123.56(19.35)	1.474	.142
		Unmarried/divorces	11(6.1)	14.90(6.47)			114.81(13.51)		
	Religion	Religious	124(68.7)	18.34(6.55)	.754	.452	122.91(19.54)	-.127	.899
		Non-religious	56(31.3)	17.55(6.49)			123.30(18.37)		
Monthly Income	<2 million KRW ^a	30(16.7)	15.56(6.63)	6.332	.000	118.80(19.62)	2.199	.090	

	2-4 million KRW ^b	55(30.5)	16.98(5.95)	120.10(18.68)	
	4-6 million KRW ^c	67(37.2)	18.43(6.69)	124.59(18.70)	
	≥6 million KRW ^d	28(15.6)	22.21(5.20)	129.57(19.33)	
a,b<d					
Cohabitants	Husband	13(7.2)	17.38(5.00)	2.697.022119.00(19.43) .499 .777	
	Husband and children	139(77.2)	18.84(6.44)	124.25(19.18)	
	Husband and husband's family	2(1.1)	14.50(2.12)	118.50(2.12)	
	Alone	3(1.7)	20.00(7.00)	119.66(6.65)	
	Husband and children and (husband's or own) family	10(5.6)	15.70(5.33)	118.10(21.06)	
	Other	13(7.2)	12.76(7.50)	119.23(20.84)	
Perceived Health	Healthy ^a	76(42.3)	19.68(7.24)	3.099.028128.96(18.41)5.968.001	
	Okay ^b	73(40.6)	17.24(5.55)	120.89(18.06)	
	Slightly poor ^c	29(16.1)	16.48(6.20)	114.31(18.99)	
	Very poor ^d	2(1.1)	12.50(3.53)	102.50(21.92)	
a>c					
Regret Appraisals	Regret Domain	Education	31(17.2)	17.93(6.99)	2.316.014123.96(20.04)1.845.056
		Career	24(13.3)	15.29(4.40)	117.87(20.53)
		Romance/friends	12(6.7)	18.25(7.05)	126.75(18.81)
		Parenting	13(7.2)	16.84(5.68)	116.75(17.85)
		Self-improvement	53(29.4)	17.86(6.54)	121.22(17.75)
		Leisure	17(9.4)	19.47(7.75)	127.94(22.93)
		Finance	9(5.0)	17.77(4.05)	126.66(12.07)
		Family	5(2.8)	18.20(3.03)	109.20(10.13)
		Health	10(5.6)	20.50(7.12)	128.20(16.76)
		Spirituality	3(1.7)	22.66(1.52)	143.66(5.85)
		Community	3(1.7)	31.66(4.16)	147.66(18.14)
Regret Intensity (Median 5)	≤ 4	66(47.6)	19.60(5.99)	2.386.018127.12(17.61)2.204.029	

	≥ 5	114(52.4)	17.22(6.68)	120.66(19.65)
Regret Frequency (Median 4)	≤ 3	62(35.5)	19.38(6.91)	1.933.055 128.40(18.63)2.779.006
	≥ 4	118(65.5)	17.42(6.23)	120.21(18.86)

3.2. Regret Appraisals, Coping Styles of Regret, and Subjective Well-Being

In terms of subjective well-being, the participants had a mean life satisfaction score of 18.10, and a mean affective well-being score of 123.03. The mean score for regret intensity was 4.8, and the mean score for regret frequency was 4.06. The mean score for overall regret coping styles was 35.75, with 12.88 for rumination on regret, 10.94 for goal separation, and 11.92 for pursuit of alternative goals (Table 2).

Table 2. Regret Appraisals, Coping Styles of Regret, and Subjective Well-Being (N = 180)

Variable	Sub-sclae	Score Range	M(±SD)
Regret Appraisals	Regret Intensity	1-7	4.8(1.30)
	Regret Frequency	1-7	4.06(1.53)
Regret Coping Styles		12-48	35.75(4.14)
	Rumination on Regret	4-16	12.88(2.27)
	Goal Separation	4-16	10.94(2.63)
	Pursuit of Alternative Goals	4-16	11.92(2.20)
Subjective Well-being	Life Satisfaction	5-35	18.10(6.52)
	Psychological Well-being	24-158	123.03(19.13)

3.3. Correlation between Subjects' Subjective Well-being and Sub-factors in Regret Coping Styles

The correlations between the regret coping styles (rumination on regret, goal separation, and pursuit of alternative goals) and sybjective well-being domains were invewtigated. Notably, only pursuit of alternative goals showed a positive correlation with life satisfaction ($r=.21, p<.001$).

Regarding the correlations with psychological well-being, rumination on regret showed a positive correlation with psychological well-being ($r=.47, p<.001$), as did goal separation ($r=.28, p<.001$), and pursuit of alternative goals ($r=.20, p<.001$) (Table 3).

Table 3. Correlations between Subjective Well-being and Regret Coping Style(N=180)

	Rumination on Regret	Goal Separation	Pursuit of Alternative Goals
Life Satisfaction	.143 (<i>p</i> =.079)	.107 (<i>p</i> =.224)	.215 (<i>p</i> <.001)
Psychological Well-being	.467 (<i>p</i> <.001)	.276 (<i>p</i> <.001)	.203 (<i>p</i> <.001)

3.4. Factors that Affect Subjective Well-being in Middle Aged Women

The explanatory power of each factor predicting subjective well-being was analyzed through a hierarchical regression analysis. First, to investigate factors affecting life satisfaction, monthly income was inserted into Model 1, regret intensity was added to make Model 2, and pursuit of alternative goals, a sub-factor of regret coping styles, was added to make Model 3. In Model 1, a monthly income of ≥ 6 million KRW explained 7.9% of the variance in life satisfaction ($F=8.654, P<.001$). In Model 2 monthly incomes of < 2 million and ≥ 6 million KRW, and as well as a regret intensity of ≥ 5 together explained 10.4% of variance in life satisfaction ($F=7.917, P<.001$); in Model 3 monthly income < 2 million and monthly income ≥ 6 million KRW, regret intensity of ≥ 5 , and pursuit of alternative goals together explained 15.1% of variance in life satisfaction ($F=8.932, P<.001$). These results were statistically significant. The strongest predictor of life satisfaction was regret intensity ($\beta=.954, P<.05$) (Table 4).

Table 4. Factors Influencing Life Satisfaction in Middle Aged Women (N =180)

Independent Variable	Model 1			Model 2			Model 3		
	B	β	t	B	β	t	B	β	t
Monthly Income (<2 million KRW)	-2.212	-.127	-1.733	-2.658	-.152	-2.089*	-2.474	-.142	-1.995*
Monthly Income (≥ 6 million KRW)	4.436	.247	3.379**	4.074	.227	3.127*	3.909	.218	3.079*
Regret Intensity (≥ 5)				-2.366	-.175	-2.441*	-2.826	.954	-.209*
Pursuit of Alternative Goals							.676	.207	3.267*
Constant	17.779		31.349***	19.408		22.288***	11.635		4.607***
R^2		.089			.119			.170	
R^2_{adj}		.079			.104			.151	
F		8.654***			7.917***			8.932***	

* $P<.05$, ** $P<.01$, *** $P<.001$

Then, to investigate the factors predicting psychological well-being, perceived health was inserted into Model 1, regret intensity and regret frequency were added for Model 2, sub-factors of regret coping styles (rumination on regret, goal separation, pursuit of alternative goals) were added for Model 3. In Model 1, good perceived health (“healthy”) explained 7.8% of the variance in psychological well-being ($F=6.071, P<.001$). In Model 2, good perceived health and regret frequency ≥ 4 explained 10.5% of the variance in psychological well-being ($F=5.189, P<.001$). Finally, in Model 3, good perceived health, rumination on regrets, goal separation, and pursuit of alternative goals explained 33.4% of the variance in affective well-being ($F=12.243, P<.001$). These results were statistically significant. The variable that best explained psychological well-being was rumination ($\beta=.410, p<.001$). (Table 5).

Table 5. Factors Influencing Psychological Well-being in Middle Aged Women (N = 180)

Independent Variable	Model 1			Model 2			Model 3		
	B	β	t	B	β	t	B	β	t
Perceived Health (“healthy”)	8.121	.210	2.702*	7.207	.186	2.417*	6.004	.155	2.208*
Perceived Health (“slightly poor”)	-5.723	-.110	-1.422	-6.281	-.121	-1.574	-.212	-.004	-.060
Regret Intensity (≥ 5)				-2.345	.059	-.763	-2.008	-.031	-.745
Regret Frequency (≥ 4)					-.161	-2.072*	-3.141	-.078	-1.153
Rumination on Regrets							3.452	.410	6.209***
Goal Separation							1.496	.206	3.180*
Pursuit of Alternative Goals							1.556	.179	2.669*
Constant	119.640		54.831***	125.954		38.927***	43.723		3.934***
R^2		.094			.130			.364	
R^2_{adj}		.078			.105			.334	
F		6.071**			5.189***			12.243***	

* $P<.05$, ** $P<.01$, *** $P<.001$

4. Discussion

In the present study, we surveyed regret and subjective well-being among middle aged women, which has so far not been attempted in the domestic or foreign literature. This study demonstrated that regret appraisals and coping styles affected subjective well-being in middle aged women.

The domains most commonly regretted by middle-aged women were “self-improvement” and “education”. A considerable number of participants at 37% were unemployed housewives, which may be the main reason for their regrets in the self-improvement domain. This is similar to the findings Roese and Summerville [13], who performed a comprehensive analysis of the regret domains in previous studies and found that the most commonly cited regret domain was education.

Additionally, in the regression analysis, the pursuit of alternative goals was the only sub scale of in regret coping styles that affected both aspects of subjective well-being (life satisfaction and psychological well-being). This is similar to the adaptive goal disengagement model proposed by Wrosch, *et al.*, [17], which hypothesizes that people’s

lives can be improved by their giving up on unattainable or unattained goals, rather than continually thinking about them. In this model, older adults who were good at revising their goals showed a mutual association between resetting new goals and psychological well-being. This indicates that in order to improve both aspects of subjective well-being – life satisfaction and psychological well-being – it is more effective to break free from the past and, regretful memories, and to actively find and pursue new goals. In contrast to our findings, Han, *et al.*, [16] noted that positive affect decreased depending on the extent of the goal reassignment. However, their study investigated younger, unmarried women compared to the middle aged women of the present study, making direct comparisons of the results of these two studies difficult.

The results of the regression analysis showed that monthly income influenced life satisfaction, with an income of less than 2 million KRW per month associated with lower life satisfaction, and an income of at least 6 million KRW per month associated with greater satisfaction. This suggests that income level influences subjective well-being in middle aged women by acting largely on their cognitive assessment of their own life; in contrast, it had little impact on psychological well-being. Additionally, among regret appraisals, regret intensity influenced life satisfaction, but did not influence psychological well-being.

The importance of this study is that it is the first, domestically or overseas, to investigate the effect of regret appraisals and coping styles on subjective well-being among middle aged women. Nevertheless, it is difficult to generalize the results of this study to all middle-aged women in South Korea, since the study was only performed living in some parts of D city and K province.

5. Conclusion

This study confirmed that regret appraisals and coping styles for regret affect subjective well-being among middle-aged women. Specifically, life satisfaction increased with higher monthly income, lower regret intensity, and more positive pursuit of alternative goals. Meanwhile, psychological well-being was found to increase with better perceived health, more rumination on regrets, better goal separation, and better pursuit of alternative goals. These results can be used as foundational data for the future development of regret-related interventions targeting middle-aged women. Based on these results, the following suggestions can be made:

First, there is a need to study the effects of regret appraisals and comfort coping styles on subjective well-being in middle aged men.

Second, there is a need to develop and apply programs to improve subjective well-being among middle-aged women according to their regret coping styles.

References

- [1] "Statistics Korea", (2007), <http://kostat.go.kr/portal/korea/index.action>.
- [2] "Statistics Korea", (2006), <http://kostat.go.kr/portal/korea/index.action>.
- [3] K. B. Kim, J. H. Yoo and E. J. Lee, "The experiences of the middle-aged women's crisis", *J. Korean Acad Nurs*, vol. 32, no. 3, (2002), pp. 305-316.
- [4] M. Jokisaari, "Regrets and subjective well-being; a life course approach", *J Adult Dev*, vol. 11, no. 4, (2004), pp. 281-288.
- [5] J. Landman, "Regret: a theoretical and conceptual analysis", *J. Theory Soc. Behavior*, vol. 17, (1987), pp. 135-160.
- [6] L. M. Okun and P. Karloy, "Life regrets and current goals as predictors of psychological adjustment", *J Pers Soc. Psychol*, vol. 66, no. 4, (1994), pp. 731-741.
- [7] E. Diener, "Subjective well-being", *Psychol. Bull*, vol. 95, no. 3, (1984), pp. 542-575.
- [8] N. M. Bradburn, "The structure of psychological well-being", Aldine, Chicago, (1969).
- [9] C. Worsch and J. Heckhausen, *Psychology and Age*, vol. 17, (2002), pp. 340-350.
- [10] K. Ryu, "The differential influences of coping styles of life regrets on the subjective well-being in later life", *Korean J. Dev. Psychol*, vol. 23, no. 2, (2010), pp. 73-92.

- [11] J. Heckhausen and R. Schulz, "A life-span theory of control", *Psychol. Rev.*, vol. 82, (1995), pp. 1-5.
- [12] T. Gilovich and V. H. Medvec, "The experience of regret: What, when, why", *Psychol Rev*, vol. 102, (1995), pp. 379-395.
- [13] N. J. Roesse and A. Summerville, "What we regret most...and shy", *Pers. Soc. Psychol. Bull.*, vol. 31, no. 9, (2005), pp. 1273-1285.
- [14] H. S. Yoon and H. J. Yoo, Pakhaksa, Seoul, (2008).
- [15] M. J. Joo and Y. S. Chong, "Relationships of locus of control and regret experiences with subjective well-being in the aged", *Korean J. Dev. Psychol.*, vol. 22, no. 4, (2009), pp. 15-36.
- [16] M. Y. Han and S. W. Ahn, "Relationship of life regrets subjective well-being in single women in their 30", *Korean J. Soc. Pers. Psychol.*, vol. 24, no. 1, (2010), pp. 29-46.
- [17] C. Wrosch, M. F. Schulz, G. E. Miller, R. Schulz and C. S. Carver, "Adaptive self-regulation of unattainable goals: Goal disengagement, goal reengagement, and subjective well-being", *Pers. Psychol Bull.*, vol. 29, (2003), pp. 1494-1508.
- [18] E. Diener, R. A. Emmons, R. J. Larsen and S. Griffin, "The Satisfaction With Life Scale", *J. Pers. Asses.*, vol. 49, no. 71-75, (1985).
- [19] E. Diener, H. Smith and F. Fujita, "The personality structure of affect's", *J. Pers. Soc. Psychol.*, vol. 69, (1995), pp. 130-141.
- [20] S. H. Jang and S. H. Lee, *Adv. Sci. Technol. Letters*, vol. 116, (2015), pp. 110-115.

Authors



Su-Hyun Jang, She received her M.S. in Nursing from Kyungpook National University, South Korea in 2011. She complete her doctoral course of Nursing at Kyungpook National University, in 2015. Her present research interests are Middle age Women, Sexual Health and Sexual Violence.



Sung Hee Lee, She is a Ph.D. professor of the College of Nursing at Kyungpook National University. She is a RN and has the Ph.D. degree in Nursing Science from Kyungpook National University. Hers research interests are low fertility, fetal attachment behaviors and adult attachment.

