

The Associations Between Satisfaction of Life, Mental Health, Resilience and Family Support in Korean College Students

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Abstract: The aim of this study was to determine the factors related to satisfaction with life in Korean college students. A total of 194 students from N university was enrolled for the cross-sectional survey design. The instruments were revised Symptom Checklist-90-Revision for mental health problem, resilience, family support and satisfaction with life scale. Data were analyzed using descriptive statistics, Pearson's correlation and stepwise multiple regression. The mean scores of mental health problem, resilience, family support and satisfaction with life were 36.11, 3.50, 4.01 and 22.65, respectively. Life satisfaction was significantly positively related to resilience ($r = 0.22, p < 0.001$), family support ($r = 0.39, p < 0.001$) and negatively related to mental health problem ($r = 0.28, p < 0.001$). Family support ($\beta = 0.33, p < 0.001$), mental health problem depression ($\beta = -0.24, p < 0.001$) and resilience ($\beta = 0.15, p = 0.020$) had significant effects on satisfaction with life ($F = 19.82, p < 0.001$). Explained variance for the satisfaction with life was 24.3%. In conclusion, mental health promotion program for decreasing depression and enhancing resilience are recommended to promote satisfaction with life in college students.

Key words: Life satisfaction, resilience, family support, depression, student, variance

INTRODUCTION

College students are in a significant developmental period (Settersten *et al.*, 2005). In fact, late adolescence in which college life begins is a transition period that focuses on various tasks in order to establish self-identity and prepare for adult life. At this time they experience a lot of stress in adapting to college life and preparing for psychological, economic and social independence. More specially, college students have various stresses such as adaptation of college life, problems of values, friendship, academic achievements and school expenses, so, it is more emotionally uneasy than ever. The stress of college students is expressed in a variety of physical and mental stress symptoms, physical symptoms (headache, muscle aches, backache, fatigue, heart rate, etc.) and behavioral symptoms (crying, forgetfulness, obesity, self-fanfare, aggression, obsessive behavior, etc.) emotional symptoms (anxiety, depression, anger, frustration, loneliness, etc.) (Han, 2005). Due to so much stress, mental problems begin to appear for the first time in transition period to adults (Kessler *et al.*, 2005).

Mental health is conceived of as subjective well-being: individual's evaluations of how good they feel about and how well they see themselves functioning in life (Keyes *et al.*, 2012). The mental health problems of domestic youth and college students are increasing year by year. According to previous study, the prevalence of depression among Korean college students was 30.1% and more than 12% of students have suffered from maladjustments including depression (Yeun and Jeon, 2015). This is high compared to 28.5% for depression and 6.9% for suicide in US adolescents (Lee, 2010). Mental health problems that occur during adolescence usually last for adulthood, therefore, prevention and management are necessary (Ringeisen *et al.*, 2009).

Life satisfaction, on the other hand is a personal perception of one's status in relation to his or her goals, expectations, norms and interests in the culture and value system of an individual (WHO., 1993). According to previous studies, the stress of college students negatively affects the satisfaction of life (Kim, 2011) their satisfaction is significantly lower than other age groups (Park *et al.*, 2004). The satisfaction of life in this period has a great effect on the satisfaction of life after becoming

an adult. However, it depends on how the individual accepts, overcomes and recovers the situation. In other words, the satisfaction of life depends on the resilience of the individual, so, it is attracting attention as an adaptive mechanism that can cope with stress and the adversity of life.

Resilience means to bounce back or recover to its original state, is understood to be mainly mental resistance (Hong, 2006). It plays a role of an effective coping mechanism, higher positive emotions, self-leadership, self-esteem and it lower stress or negative emotions such as depression. Furthermore, resilience is a mitigating factor that protects individuals from stress (Lee, 2012). Additionally, resilience showed partial defense mechanism against stress which showed negative effect on quality of life (Kim, 2011; Kang, 2016). Also, family resilience and social support was impacted to the quality of life indirectly, since, family resilience and social support were revealed to play a role of controlling to enhance the quality of life and the satisfaction level (Kang, 2016). However, there are insufficient studies on individual and family factors that affect the satisfaction of life in Korea.

This study aims to examine college student's mental health status, resilience, family support and life satisfaction and the factors affecting life satisfaction. In this study, to determine the factors affecting the satisfaction of life of college students, we tried to check the influence of mental health, resilience and family support as the main variables, based on this, this study would be able to provide a basis for intervention to improve the life satisfaction of college students.

MATERIALS AND METHODS

Study design: This study is a descriptive correlational study to investigate factors affecting life satisfaction of college students.

Samples: The subjects of this study were the university students located in Chungnam Province and the data collection was conducted in 2014. The G*Power 3.1.0 program (Faul *et al.*, 2009) estimated the sample size. It revealed that 130 persons would be necessary for a significance level of 0.05, a power (1- β) of 0.80, an effect size of 0.15 (medium) and 13 predictors, thus, 194 persons would be required for regression analysis.

Measurements

Satisfaction with life: Life satisfaction is defined as "a global assessment of a person's quality of life according to his chosen criteria" Shin and Johnson (1978). The

Satisfaction With Life Scale (SWLS) Korean version, developed by Diener *et al.* (1985) was used to measure student's life satisfaction. There were a total of 5 items based on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Higher scores indicated a higher satisfaction with life. Cronbach's alpha for SWLS in this study was 0.84.

Mental health problem: The Symptom Checklist-90-R (SCL-90-R) is designed to evaluate a broad range of psychological problems and symptoms of psychopathology. A modified version by Yoo and Hong (1997) refer to Symptom Checklist-90-Revision standardized by Kim *et al.* (1983), the questionnaire consisted of 8 items of somatization, 2 items of depression, 5 items of anxiety, 3 items of hostility, 3 items of interpersonal sensitivity and 4 items of psychoticism. A total of 25 items is a 5-point scale, higher scores indicated severe mental health problem. Cronbach's alpha for mental health problem in this study was 0.94.

Resilience: Resilience is the ability to recover from adversity and to resurrect or cope with it successfully this study used the tool developed by Shin *et al.* (2009). There were a total of 27 items based on a 5-point Likert scale, hence, higher scores mean higher level of resilience. The reliability coefficient of resilience by Shin *et al.* (2009) was 0.91, 0.93 in this study.

Family support: Family support scale by Lee *et al.* (1998) was used. There were a total of 5 items based on a 5-point Likert scale. Higher scores indicated higher family support. Cronbach's alpha for Family support by Lee *et al.* (1998) was 0.81 this paper was 0.95.

Data collection: The data were collected on October, 2014. The subjects of this study were 218 students in N university. However, 194 respondents were analyzed except for 24 incomplete ones.

To begin the study an informed consent was obtained from the participants. The research instruments were completed by the participants and were eventually collected. All students completed the informed consent form and agreed to participate prior to administering the study. Participants also received information on this study including purpose, potential risks and benefits of this study and the data collection procedures.

Furthermore, the study was conducted with respect to the participant's rights, the possibility of refusing participation in the study at any time, anonymous participation and confidentiality.

Data analyses: All data were statistically analyzed using SPSS 23.0 (PASW, Chicago, IL, USA). Frequencies and percentages were calculated for the student's general characteristics: means and standard deviations were estimated and t-tests and ANOVA were used to determine variations in life satisfaction by general characteristics. Pearson product-moment correlation coefficient assessed the correlation among variables. The factors affecting life satisfaction were identified using stepwise multiple regression analysis.

Limitation: This study was conducted on students in one university by a convenience sampling method. Therefore, generalization of the results to other students should be handled with care and caution.

RESULTS AND DISCUSSION

Demographic characteristics: The demographic characteristics of the study participants are presented in Table 1. The sample included 52.3% females, 70 students (37.0%) of the participants were freshmen at the university. About 41 students (21.8%) of the participants were majoring in business. Table 1 shows life satisfaction according to general characteristics. There were significant differences in gender ($t = 2.73, p = 0.031$), male students (mean 23.66) score higher than female (mean 21.96).

Descriptive statistics and correlations for variables: Descriptive statistics for mental health, resilience, family support and life satisfaction are shown in Table 2. The mean scores of mental health problem, resilience, family support and satisfaction with life were 36.11 ± 0.41 (ranging 1-100), 3.50 ± 0.37 (ranging 1-5), 4.01 ± 0.82 (ranging 1-5) and 22.65 ± 0.84 point (ranging 1-35), respectively. Correlations for mental health problem, resilience, family support and life satisfaction is shown in Table 3. Life satisfaction was significantly positively related to resilience ($r = 0.22, p < 0.001$), family support ($r = 0.39, p < 0.001$) and negatively related to mental health problem ($r = -0.28, p < 0.001$) as well as subscales of the mental health problem except for somatization.

Factors influencing the satisfaction with life: Multiple regression analysis was conducted to determine the factors affecting satisfaction with life. Family support ($\beta = 0.33, p < 0.001$), mental health problem_depression ($\beta = -0.24, p < 0.001$) and resilience ($\beta = 0.15, p = 0.020$) were found to be factors significantly associated with satisfaction with life. These variables explained 24.3% of the variance in participant's satisfaction with life (Table 4).

Table 1: General characteristics and comparison of satisfaction with life by general characteristics (N = 194)

Variables/Categories	n	%	Mean	SD	t/F	p-values
Age (yrs)			21.3	2.27		
Gender						
Male	92	47.7	23.66	5.61	2.73	0.031
Female		101.0	21.96	5.55		
Grade						
1st	70	37.0	22.34	4.87	1.01	0.390
2nd	34	18.0	22.35	6.70		
3rd	41	21.7	23.73	5.01		
4th	44	23.3	23.70	5.39		
Major						
Social Science	38	20.2	22.32	4.50	0.97	0.424
Business	41	21.8	24.17	5.36		
Engineering	36	19.1	23.28	4.89		
Art and Physical Education	34	18.0	22.24	4.81		
Health and Medical Science	39	20.7	22.36	6.37		
Residence						
With parent	97	51.3	22.38	4.66	2.64	0.074
Dormitory, lodging	54	28.9	22.78	6.51		
Living alone	38	20.1	24.71	5.15		

Table 2: Descriptive statistics for studyvariables (N = 194)

Variables	Mean±SD	Min.	Max.	Range
Mental health_total	36.11±0.41	25.00	72.00	0~100
Somatization	12.54±0.13	1.00	34.00	8~40
Depression	3.04±0.39	1.00	8.00	2~10
Anxiety	7.44±0.50	1.00	23.00	5~25
Hostility	3.77±0.95	1.00	15.00	3~15
Interpersonal sensitivity	4.06±0.90	1.00	13.00	3~15
Psychoticism	5.26±0.50	1.00	17.00	4~20
Resilience	3.50±0.37	1.00	4.22	1~5
Family support	4.01±0.82	1.00	5.00	1~5
Satisfaction with life	22.65±0.84	1.00	35.00	5~35

This research was attempted to find out the factors that impact on life satisfaction among university students. Life satisfaction is a central theme of subjective well-being which means conscious and cognitive judgment that assesses the state of life based on a set of criteria set by an individual (Ringeisen *et al.*, 2009). It can be said that the satisfaction of life is undergone different cognitive processes for each individual because it reports higher satisfaction of life when the present situation of it is in agreement with the standard established by one self.

College students are exposed to the stresses of individual internal change, academic achievement, interpersonal relations and environmental change as a transition period of life from adolescence to adulthood at the developmental stage (Steinhardt and Dolbier, 2008). In addition, Korean college students entered college through intense entrance examinations but stress is exacerbated by external factors such as competition overheating, difficult employment, economic difficulties due to high tuition fees and worry about getting a job. Some college students are experiencing psychological maladjustment such as low academic achievement, interpersonal

Table 3:Correlations among variables

Variables	r(p)									
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
X1	1									
X2	0.46 (<0.001)	1								
X3	0.58 (<0.001)	0.8 (<0.001)	1							
X4	0.36 (<0.001)	0.46 (<0.001)	0.65 (<0.001)	1						
X5	0.33 (<0.001)	0.52 (<0.001)	0.6 (<0.001)	0.54 (<0.001)	1					
X6	0.45 (<0.001)	0.59 (<0.001)	0.63 (<0.001)	0.5 (<0.001)	0.69 (<0.001)	1				
X7	0.8 (<0.001)	0.76 (<0.001)	0.89 (<0.001)	0.71 (<0.001)	0.69 (<0.001)	0.77 (<0.001)	1			
X8	0.01 -0.845	-0.15 -0.037	-0.12 -0.095	-0.06 -0.378	-0.11 -0.117	-0.16 -0.027	-0.09 -0.204	1		
X9	-0.15 -0.036	-0.21 -0.004	-0.2 -0.006	-0.15 -0.035	-0.23 -0.001	-0.19 -0.011	-0.24 -0.001	0.1 -0.162	1	
X10	-0.12 -0.099	-0.33 (<0.001)	-0.32 (<0.001)	-0.16 -0.029	-0.31 (<0.001)	-0.28 (<0.001)	-0.28 (<0.001)	0.22 -0.002	0.39 (<0.001)	1

X1 = Somatization, X2 = Depression, X3 = Anxiety, X4 = Hostility, X5 = Interpersonal sensitivity, X6 = Psychoticism, X7 = Mental health_total, X8 = Resilience, X9 = Family support, X10 = Satisfaction with life

Table 4: Factors affecting life satisfaction of college students

Variables	B	SE	β	t-values	p-values
Constant	10.40	3.69	-	2.82	0.005
Family support	2.04	0.41	0.33	5.03	<0.001
Depression	-1.86	0.51	-0.24	-3.63	<0.001
Resilience	2.09	0.89	0.15	2.34	0.020

F = 19.82 (p<0.001), R² = 0.243, Adj R² = 0.231

problems, depression and anxiety and may experience severe mental health problems leading to the choice of death itself (Kim and Kim, 2013).

The current study indicated that life satisfaction was affected significantly by family support, mental health and resilience. That is to say, the results of the study showed that life satisfaction among college students increased as the resilience and family support increased but as the depression increased the life satisfaction decreased. This matched a previous study in which resilience reduces negative emotional experiences such as anger, sadness and anxiety (Park *et al.*, 2004) and resilience and depression have a significant negative correlation (Gwak, 2012). In addition, this study supports the research by Lee (2011) that resilience reduces job stress and improves life satisfaction. Steinhardt and Dolbier (2008) conducted a resilience improvement program for college student to decrease stress and mental illness. As a result of the research they suggested that resilience enhancing program may be useful for management and prevention of stress in college students. Based on these studies, it can be seen that resilience is a factor in improving mental health and we can confirm that the resilience of college students should be strengthened to enhance life satisfaction and mental health.

Family support is a perception of positive support in the physical and mental aspects of a family that an individual feels as a member of the family. In this study, family support was a factor affecting life satisfaction, the higher the perceived support of family, the more satisfaction of life. It seems that family support is more necessary for college students who are in a critical period of development. The positive emotional support and material support of the family during college years who prepare for their careers and independence from their parents as adults will enhance the life satisfaction of college students. According to previous research, 34.6% of college students reported being affected by their parents, 33.3% by friends and 16.8% by girls or boyfriends (Kim, 2002). In other words, college students are more affected by parents than anyone else. Additionally, college students are late adolescents and this is the final period when they are influenced by the original family members. Therefore while attending college, family support such as care and encouragement will enhance their life satisfaction so that they can make good decisions about their careers and be prepared for work.

Unlike adults, college students are immature psychologically and physically and are in a period of rapid change. In addition they experience anxiety and stress because they cannot control rapid changes with their own strengths. Resilience can be utilized as a positive resource to endure stress for college students. It is believed that the satisfaction of life of college students can be improved by strengthening resilience and family support. There is a need for a resilience program that can be applied to college students.

CONCLUSION

This study was attempted to identify the affecting factors on the life satisfaction of college students. The present survey was conducted on October, 2014. The collected data from 194 participants were analyzed. The main results of this study are as follows. The level of mental health is 36.11 ± 0.41 point (ranging 1-100) and the level of resilience is 3.50 ± 0.37 point (ranging 1-5). The level of family support is 4.01 ± 0.82 point (ranging 1-5). The level of life satisfaction is 22.65 ± 0.84 (ranging 1-35). Life satisfaction was significantly positively related to resilience ($r = 0.22$, $p < 0.001$), family support ($r = 0.39$, $p < 0.001$) and negatively related to mental health ($r = -0.28$, $p < 0.001$). The results showed that family support, depression and resilience were the factors affecting the satisfaction of life ($F = 19.82$, $p < 0.001$) and explanatory power was 24.3%.

SUGGESTIONS

Further studies are suggested to develop and apply the strategies to promote resilience and mental health are needed in the future.

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