

## Exploration of the differences in positive-negative psychological factors influencing the life satisfaction and depression of college students by gender and family economic level

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### ABSTRACT

This study identifies the factors affecting life satisfaction and depression of Korean college students and analyzes the differences between gender and family economic level in positive (self-esteem, ego-resilience, self-identity, life satisfaction) and negative emotions (attention deficit, aggression, depression, social withdrawal). The data from the 7<sup>th</sup> year of the Korean Children and Youth Panel Survey (KCYPs) conducted by the Korea Youth Policy Research Institute (KCYPs) with a total of 2,351 university students were used, and finally, 1220 subjects were selected. The statistical analysis methods of T-test, ANOVA, and multiple regression analysis were utilized with SPSS 23. The male students had significantly higher positivity than female students except for attention deficit. Those who said that they had a higher family economic background had significantly higher positive emotions and lower negative emotions except social withdrawal. Aggression had the greatest influence on depression, and the higher the satisfaction of life and self-esteem, the lower the depression. In terms of life satisfaction, self-esteem and self-resilience were identified as positive factors and depression as a negative factor. In other words, to increase the life satisfaction of college students, an intervention program to increase self-esteem and lower depression will be needed.

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### 1. Introduction

Life satisfaction is an important factor for a healthy life. In the context of Korea, the satisfaction of college students after completing severe entrance examinations is important for healthy college life, academic achievement, and successful career development. The psychological construct of 'satisfaction with life' is understood as a cognitive component of subjective well-being (Pavot and Diener, 2008). Life satisfaction is defined as "a judgment process in which an individual evaluates his or her quality of life based on his or her own criteria" by Pavot and Diener (1993). Therefore, the appraisal of life satisfaction is based on a cognitive evaluation of an individual's overall quality of life-based on self-selected criteria (Pavot and Diener,

1993). Studies have shown that demographic variables (e.g., gender, socioeconomic status) play a very small role with respect to life satisfaction among adolescents (Proctor et al., 2009). Studies that have found gender differences generally report that boys score higher in life satisfaction than girls (Goldbeck et al., 2007). Life satisfaction is a central construct with respect to other emotional, social, and behavioral constructs (Proctor et al., 2009). Socioeconomic status including income and educational level has a moderate effect on life satisfaction (Dubois and Tevendale, 1999; Moksnes and Espnes, 2013).

Among the factors influencing life satisfaction, there are self-concept and self-esteem, especially for adolescents and early adult college students. According to Dubois and Tevendale (1999), self-esteem is a psychological vaccine that can protect against all kinds of developmental problems. Indeed, there are many kinds of research that self-esteem significantly gives an influence on mental health and life satisfaction (Moksnes and Espnes, 2013). The self-concept is an individual's view of oneself and is called self-esteem. In other words, self-esteem is an individual's judgment of how valuable "I am". One of

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the self-concepts is a sense of self-identity in which one realizes who they are, and it has been reported that those whose self-identity is not established have a high score for depression (Sowislo and Orth, 2013). In the field of health research, the relationship between self-esteem and depression has been widely studied over many years (Sowislo and Orth, 2013; Trzesniewski et al., 2006). The variables of depression, self-esteem, and self-identity are closely related to each other.

Depression is another critical issue in the lives of college students. Depressed college students feel low self-worth and negatively evaluate themselves, which damages their self-esteem. The results of a survey conducted by the Dong-A newspaper company on 607 young people aged 20 to 29 from March 5 to 19, 2021 found out how difficult times young people are having with depression and frustration amid the recent COVID-19 crisis. A total of 501 people (82.5%) answered that they usually experience depression or frustration, and 51.3% of them cited the difficulty in finding employment as the biggest reason. Depression refers to a state of mind that has a negative impact on the overall daily life from thinking, attitude, perception, and cognition to interpersonal relationships. Depression is accompanied by various psychological problems, and painful emotional reactions such as frustration, guilt, worthlessness, loneliness, and hopelessness, leading to negative and pessimistic thoughts, and furthermore to self-deprecation and suicidal thoughts, where they consider themselves as incompetent, inferior, and worthless (Kim et al., 2014). Depression experienced by college students varies from mild depression to severe psychotic conditions that interfere with their daily lives (Sowislo and Orth, 2013; Trzesniewski et al., 2006; Kim et al., 2014).

Low socioeconomic status (SES) has been found to be associated with a higher prevalence of depression. Lorant et al. (2003) performed a meta-analysis and found that low socioeconomic status is related to the prevalence of depression (Lorant et al., 2003). In a study on the relationship between depression and socioeconomic status in Korea, Cho et al. (1998) found that a nationwide sample analysis is similar to that of previous studies in foreign countries. Kang and Chi (2021) categorized self-efficacy, hope, optimism, and resilience as positive psychological capital and all were found to be factors affecting depression. Among the four factors of positive psychological capital, self-efficacy was found to be the most influential factor. From these results, the lower the self-efficacy, hope, optimism, and resilience, the higher the perception of depression among college students.

It is necessary to pay attention to the positive psychological state of trying to solve the current difficulties and look at the future from a positive perspective. Positive psychological factors refer to a positive psychological state of an individual to perform well in a given task and achieve successful results (Luthans and Youssef, 2007). It is not innate

but can be changed with effort, so it is a psychological factor that changes an individual's attitude and affects behavioral results (Luthans and Youssef, 2007). Therefore, if a positive psychological state is maintained, we can be mentally and physically healthy and achieve the expected performance in the work given to us (Youssef-Morgan and Luthans, 2015). On the other hand, there is a need to decrease the negative psychological state.

Therefore, this study aims to explore the differences in negative or positive psychological factors by gender and family economic level and to find out the most influencing factors on life satisfaction and depression among college students using the psychological variables used in the Korea Child and Youth Panel Survey (KCYPs). There are four factors (self-esteem, ego-resilience, self-identity, life satisfaction) in the category of the positive domain and four factors (attention deficit, aggression, depression, social withdrawal) in the negative domain. The specific research questions are as follows:

- First, what is the difference between positive and negative psychological factors according to the gender of college students?
- Second, what is the difference between positive and negative psychological factors according to the family economic level of college students?
- Third, what are the psychological factors that affect the depression of college students?
- Fourth, what are the psychological factors that affect the life satisfaction of college students?

## 2. Research methods

### 2.1. Research subjects

The data from Korea Children's Youth Panel Survey (KCYPs) conducted by the Korea Youth Policy Institute were used in this study. The KCYPs was implemented in 2010 to identify the patterns of growth and development in children and adolescents. A total of 7,071 samples were selected from 16 provinces, including 1st graders and 4th graders in elementary schools, and 1st graders in middle schools, using the multi-step cluster sampling method. In this study, the first year of middle school in 2010 and the first year of college students in 2016 was targeted. Of the 2,351 samples extracted, the last 1,220 questionnaires excluding the missing data from the questionnaire responses related to this study were used for the final analysis. The demographic characteristics of the survey subjects are shown in Table 1. There were 575 male students (47.1%) and 645 female students (52.9%). Looking at the economic level of their families reported directly by college students, 233 (19.1%) answered that they are living well, 781 (64.0%) of them are average, and 206 (16.9%) of them are low.

**Table 1:** Demographic characteristics of subjects  
(n=1,220)

Classification		Frequency	Per Cent
Gender	Male	575	47.1
	Female	645	52.9
	High	233	19.1
Family economic level	Middle	781	64.0
	Low	206	16.9

**2.2. Instruments**

In total, eight variables were assessed. All scales consisted of a four-point Likert scale (not at all=1, no =2, yes=3, and very much=4). The reversed items were reversely coded, so the higher the sum of the items, the higher the variables. The variables were categorized into positive and negative factors.

**2.2.1. Positive factors**

As for the positive emotions in this study, four variables were chosen from the section of social-emotional development in the KCYPS database. Self-esteem used by Rosenberg (1965) has 10 items. Ego-resilience is composed of 14 items by Block and Kremen (1996). Self-identity consists of 8 items. Life satisfaction consists of 3 items. All four scales consisted of a 4-point Likert scale (not at all=1, no =2, yes=3, and very much=4). The reversed items

were reversely coded, so the higher the sum of the items, the higher the variables. Cronbach's alpha for self-esteem, ego-resilience, self-identity, and life satisfaction are .843, .826, .722, and .781, respectively. The specific items of the four positive factors are in Table 2.

**2.2.2. Negative factors**

As for the negative emotions in this study, four variables were chosen from the section of social-emotional development in the KCYPS database. Attention deficit and aggression were extracted from the scale by Jo and Im (2003) and each variable has 7 and 6 items respectively. Depression consists of 9 items taken from Simple Mental Diagnostic Tested by Kim and Kim (1998). Social withdrawal consists of 5 items by Kim and Kim (1998). All four scales consisted of a four-point Likert scale (not at all=1, no =2, yes=3, and very much=4). The reversed items were reversely coded, so the higher the sum of the items, the higher the variables. Cronbach's alpha for attention deficit, aggression, depression, and social withdrawal are .797, .807, .829, and .894, respectively. The specific items of the four negative factors are in Table 3.

**Table 2:** Items of four positive psychological factors

Variables	Items
Self-esteem	I am satisfied with myself
	Sometimes I think I'm useless*
	I feel I have a lot of strength
	I can do the same job as everyone else
	I feel I have little to be proud of*
	Sometimes I feel like I'm useless*
	I feel that I am worth at least as much as everyone else
	I wish I could have a little more respect for myself*
	I tend to feel like a loser*
	I have a positive attitude towards myself
Ego-resilience	I am generous with my friends
	I am okay with sudden surprises, and I cope well with them.
	I like to try new things that I have never done well
	I tend to make a good impression on people
	I enjoy trying new foods
	I am a very energetic person
	When I go to the same place, I like to go a different route than the one I always took
	I am more curious than others
	I usually think a lot before I act
	I like new and different kinds of work
	My life is full of interesting things every day
	I can confidently say that I am a strong-willed person
	When I get angry with other people, I get better quickly
	I like most people I meet
I have a clear set of goals for my life	
Self-identity	I can't stay focused on one thing*
	I carry out my work to the end as planned
	It's best to just follow what most people do*
	Instead of waiting for the good thoughts of others, I think and act for myself
	I am receptive to others' words and easy to be influenced by other people's words and actions*
Life satisfaction	I am reluctant to meet strangers*
	I feel uncomfortable when I am with people*
	I enjoy living
	I don't have much to worry about
	I think my life is happy

\* Reverse items

**Table 3:** Items of four negative psychological factors

Variables	Items
Attention deficit	Even after being praised or punished, I quickly become distracted again
	When solving a problem, I tend not to read the problem to the end
	I don't want to do a task that requires me to concentrate for a long time
	I often lose school supplies such as pencils and erasers
	I make mistakes or accidents due to a lack of attention
Aggression	I feel difficulty in sitting calmly while studying
	I tend to miss out on letters
	Sometimes I quibble at even small things
	Sometimes I interfere with what others are doing
	If someone doesn't let me do what I want, I make complaints
Social withdrawal	I fight over little things
	Sometimes I get angry all-day
	Sometimes I cry for no reason
	I feel awkward when there are a lot of people around
	I am very shy
Depression	It is difficult to express my opinion clearly to others
	I feel shy
	I hate to go out in front of people
	I don't have much energy
	I feel unhappy or sad or depressed
	I am worried a lot
	I feel like dying
	I am good at crying
	When something goes wrong, I often think that it is because of me
	I feel lonely
I feel a lack of interest or motivation in everything	
The future doesn't seem promising	
Everything is hard	

\* Reverse items

**2.3. Data analysis**

The collected data were analyzed using SPSS version 23.0. First, students' personal variables and positive-negative psychological variables (self-esteem, ego-resilience, self-identity, life satisfaction, attention deficit, aggression, depression, social withdrawal) were analyzed by descriptive statistics such as frequency, minimum score, maximum score, mean and standard deviation. Second, the differences among the variables (self-esteem, ego-resilience, self-identity, life satisfaction, attention deficit, aggression, depression, social withdrawal) according to gender and family economic level were verified with t-test and one-way ANOVA. Third, a correlation analysis (Pearson's Correlation Coefficient Analysis) was conducted to examine the correlation between students' psychological variables. Fourth, stepwise multiple regression

analysis was conducted to analyze the effects of positive and negative psychological variables on life satisfaction and depression.

**3. Research results**

**3.1. Descriptive statistics of main variables**

The mean of positive psychological factors (M=2.83) was higher than that of negative psychological factors (M=1.96). In positive psychological factors, self-esteem with a value of 2.95 was the highest, followed by life satisfaction with 2.85, ego-resilience with 2.84, and self-identity with 2.67. In negative psychological factors, social withdrawal with a score of 2.20 was the highest, followed by attention deficit with 2.05, depression with 1.81, and aggression with 1.78 (Table 4, Fig. 1).

**Table 4:** Descriptive statistics of variables

Classification	Variables	No.	Minimum score	Maximum score	Mean	SD
Positive psychological factors	Self-esteem	1220	1.40	4.00	2.95	.43
	Ego-resilience	1220	1.50	4.00	2.84	.38
	Self-identity	1220	1.38	4.00	2.67	.40
	Life satisfaction	1220	1.00	4.00	2.85	.55
Negative psychological factors	Attention deficit	1220	1.00	3.71	2.05	.50
	Aggression	1220	1.00	3.67	1.78	.51
	Depression	1220	1.00	3.70	1.81	.52
	Social withdrawal	1220	1.00	4.00	2.20	.70

The means and standard deviation of each item in four positive psychological factors are shown in Table 5. In terms of self-esteem, the item "sometimes I think I am useless\*" is the highest (M=3.22), followed by "sometimes I feel like I am useless\*" (M=3.20). As these are reverse items, the subjects did not feel like they are useless. The item "I wish I could have a little more respect for myself\*" was the

least (M=2.13) and it means that the level at which the college students respect themselves was the lowest. In terms of ego-resilience, they tend to be generous with friends was the highest (M=3.20) and the score of the item "when I go to the same place, I like to go a different route than the one I always took" was the least. In terms of self-identity, there was no item more than three-point. The highest

score was from the item "I feel uncomfortable when I am with people\*" (M=2.86) and the lowest score was from the item "I am receptive to others' words and easy to be influenced by other people's words and

actions\*." In terms of life satisfaction, they enjoy living the most (M=3.06) but they tend to have some worries (M=2.47).

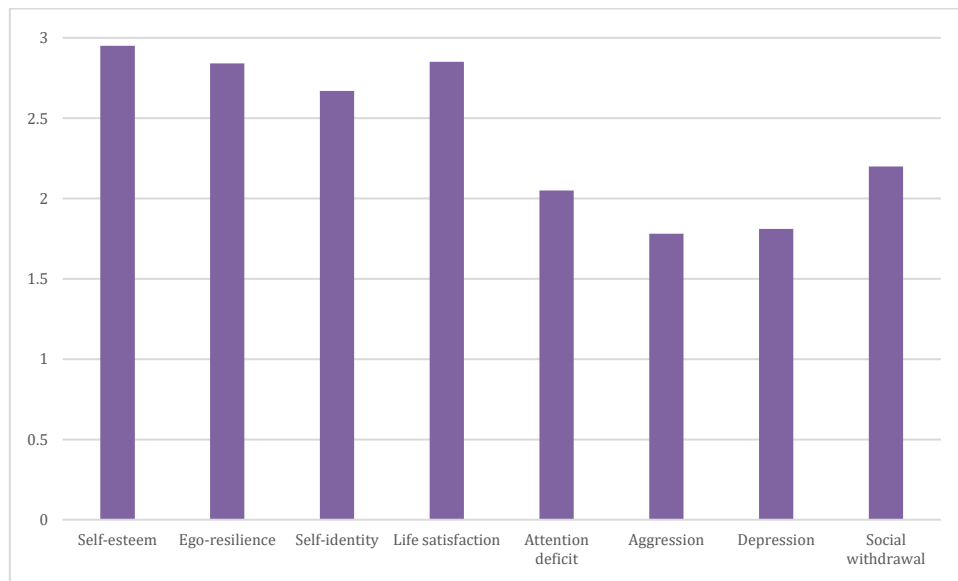


Fig. 1: Descriptive statistics of variables

Table 5: Descriptive statistics of items in positive psychological factors

Variables	Items	Minimum score	Maximum score	Mean	SD
Self-esteem	I am satisfied with myself	1	4	2.92	.622
	Sometimes I think I'm useless*	1	4	3.22	.748
	I feel I have a lot of strength	1	4	2.80	.660
	I can do the same job as everyone else	1	4	3.12	.571
	I feel I have little to be proud of*	1	4	2.97	.720
	Sometimes I feel like I'm useless*	1	4	3.20	.734
	I feel that I am worth at least as much as everyone else	1	4	3.10	.614
	I wish I could have a little more respect for myself*	1	4	2.13	.730
	I tend to feel like a loser*	1	4	3.17	.734
	I have a positive attitude towards myself	1	4	2.96	.638
	I am generous with my friends	1	4	3.20	.531
	I am okay with sudden surprises, and I cope well with them.	1	4	2.97	.621
	I like to try new things that I have never done well.	1	4	2.82	.733
Ego-resilience	I tend to make a good impression on people.	1	4	3.10	.555
	I enjoy trying new foods	1	4	2.84	.803
	I am a very energetic person	1	4	2.79	.695
	When I go to the same place, I like to go a different route than the one I always took	1	4	2.56	.816
	I am more curious than others	1	4	2.78	.656
	I usually think a lot before I act	1	4	2.88	.686
	I like new and different kinds of work	1	4	2.78	.700
	My life is full of interesting things every day	1	4	2.51	.726
	I can confidently say that I am a strong-willed person.	1	4	2.62	.754
	When I get angry with other people, I get better quickly	1	4	2.91	.683
	I like most people I meet	1	4	3.14	.580
	I have a clear set of goals for my life.	1	4	2.70	.729
	I can't stay focused on one thing*	1	4	2.69	.696
Self-identity	I carry out my work to the end as planned	1	4	2.64	.660
	It's best to just follow what most people do*	1	4	2.77	.724
	Instead of waiting for the good thoughts of others, I think and act for myself.	1	4	2.78	.637
	I am receptive to others' words and easy to be influenced by other people's words and actions*	1	4	2.34	.632
	I am reluctant to meet strangers*	1	4	2.60	.770
Life satisfaction	I feel uncomfortable when I am with people*	1	4	2.86	.734
	I enjoy living	1	4	3.06	.604
	I don't have much to worry about	1	4	2.47	.770
	I think my life is happy	1	4	3.05	.615

\* Reverse items

The means and standard deviation of each item in the four negative psychological factors are shown in Table 6. In terms of attention deficit, the item "I don't

want to do a task that requires me to concentrate for a long time" was the highest (M=2.36). The item "even after being praised or punished, I quickly

become distracted again" was the least (M=1.92). In terms of aggression, all six items are less than two points, so the level of aggression of the college students does not seem to be high. Out of them, the item "sometimes I quibble at even small things" was the highest (M=1.96) and the score of the item "sometimes I cry for no reason" was the lowest. In terms of social withdrawal, the highest score was

from the item "I am very shy" (M=2.33) and the lowest score was from the item "it is difficult to express my opinion clearly to others." In terms of depression, nine items were less than two points and only one item was more than two points including "I am worried a lot" (M=2.30) and the item "I feel like dying" which was the lowest.

**Table 6:** Descriptive statistics of items in negative psychological factors

Variables	Items	Minimum score	Maximum score	Mean	SD
Attention deficit	Even after being praised or punished, I quickly become distracted again.	1	4	1.92	.663
	When solving a problem, I tend not to read the problem to the end.	1	4	2.16	.766
	I don't want to do a task that requires me to concentrate for a long time.	1	4	2.36	.787
	I often lose school supplies such as pencils and erasers	1	4	1.99	.827
	I make mistakes or accidents due to a lack of attention	1	4	2.11	.750
	I feel difficulty in sitting calmly while studying	1	4	2.13	.730
	I tend to miss out on letters	1	4	1.72	.678
Aggression	Sometimes I quibble at even small things	1	4	1.96	.762
	Sometimes I interfere with what others are doing.	1	4	1.76	.695
	If someone doesn't let me do what I want, I make complaints	1	4	1.91	.750
	I fight over little things	1	4	1.75	.700
	Sometimes I get angry all-day	1	4	1.66	.717
	Sometimes I cry for no reason	1	4	1.64	.723
Social withdrawal	I feel awkward when there are a lot of people around	1	4	2.16	.880
	I am very shy	1	4	2.33	.842
	It is difficult to express my opinion clearly to others	1	4	2.02	.780
	I feel shy	1	4	2.25	.846
	I hate to go out in front of people	1	4	2.27	.880
	I don't have much energy	1	4	1.80	.740
	I feel unhappy or sad or depressed	1	4	1.69	.720
Depression	I am worried a lot	1	4	2.30	.891
	I feel like dying	1	4	1.38	.570
	I am good at crying	1	4	1.86	.854
	When something goes wrong, I often think that it is because of me.	1	4	1.97	.835
	I feel lonely	1	4	1.95	.844
	I feel a lack of interest or motivation in everything	1	4	1.65	.668
	The future doesn't seem promising	1	4	1.79	.766
	Everything is hard	1	4	1.77	.735

\* Reverse items

### 3.2. Differences in positive-negative psychological factors by gender

As a result of analyzing the difference in psychological factors according to the gender of students, statistically, significant differences were found in all psychological variables except for attention deficit. In this study, male students showed

higher positivity than female students in all four positive factors, and all male students showed low negativity in all three negative factors except attention deficit. Table 7 shows a difference in positive-negative psychological factors by gender (n=1,220).

**Table 7:** Difference in positive-negative psychological factors by gender (n=1,220)

Classification	Variables	N	Mean	SD	t
Positive psychological factors	Self-esteem	Male 575	3.01	0.44	3.944***
		Female 645	2.91	0.43	
	Ego-resilience	Male 575	2.89	0.40	3.854***
		Female 645	2.81	0.36	
	Self-identity	Male 575	2.71	0.42	2.659**
		Female 645	2.64	0.39	
Life satisfaction	Male 575	8.76	1.74	3.564***	
	Female 645	8.42	1.59		
Attention deficit	Male 575	14.43	3.61	.291	
	Female 645	14.37	3.40		
Negative psychological factors	Aggression	Male 575	10.28	3.04	-4.281***
		Female 645	11.04	3.13	
	Depression	Male 575	17.06	5.46	-6.894***
		Female 645	19.12	4.95	
	Social withdrawal	Male 575	2.15	0.74	-2.898**
		Female 645	2.26	0.68	

\*\*\*p<.001

### 3.3. Differences in positive-negative psychological factors by family economic level

As a result of analyzing the difference in emotional factors according to the level of the family economic level, statistically, significant differences were found in all seven variables except for social withdrawal. The student group who reported that the family economic level was high showed the

highest positivity in all the positive psychological statuses and the lowest score in the four negative psychological factors. The level of family economic level influences the psychological factors of college students. Table 8 shows a difference in positive-negative emotions by family economic level (n=1,220).

**Table 8:** Difference in positive-negative emotions by family economic level (n=1,220)

Classification	Variables	N	Mean	SD	F	
Positive psychological factors	Self-esteem	High	233	3.06	0.42	10.539***
		Middle	781	2.95	0.42	
		Low	206	2.87	0.5	
	Ego-resilience	High	233	2.92	0.38	5.258**
		Middle	781	2.84	0.37	
		Low	206	2.82	0.4	
	Self-identity	High	233	2.77	0.42	9.728***
		Middle	781	2.66	0.4	
		Low	206	2.62	0.41	
	Life satisfaction	High	233	9.01	1.64	18.821***
		Middle	781	8.59	1.59	
		Low	206	8.05	1.85	
Attention deficit	High	233	14.01	3.61	7.377**	
	Middle	781	14.3	3.41		
	Low	206	15.21	3.59		
Negative psychological factors	Aggression	High	233	10.52	3.36	3.894*
		Middle	781	10.59	2.96	
		Low	206	11.23	3.3	
	Depression	High	233	17.13	5.12	16.795***
		Middle	781	17.98	5.23	
		Low	206	19.93	5.32	
Social withdrawal	High	233	2.12	0.73	5.720	
	Middle	781	2.2	0.71		
	Low	206	2.34	0.67		

\*p<.05, \*\*p<.01, \*\*\*p<.001

### 3.4. Correlation between psychological factors

Generally, all eight variables were significantly correlated with each other. Life satisfaction had a statistically significant positive correlation with all three positive psychological factors, and among them, it showed the highest relationship with self-esteem (r=.605). On the other hand, life satisfaction had a statistically significant negative relationship with all four negative factors, among which depression showed the highest negative relationship

(r=-.599). Depression had the highest negative relationship with self-esteem (r=-.635), and the lowest statistic relationship with ego-resilience (r=-.399). The social withdrawal had the highest negative relationship with self-identity (r=-.570) and the lowest relationship with life satisfaction (r=-.321). Aggression had the strongest correlation with attention deficit (r=.557) and the weakest relationship with ego-resilience (r=-.237). Table 9 shows the correlation among variables.

**Table 9:** Correlation among variables

	SE	ER	SI	LS	AD	AG	DE	SW
(Pavot and Diener, 2008) SE	1							
(Pavot and Diener, 1993) ER	.507**	1						
(Proctor et al., 2009) SI	.548**	.508**	1					
(Goldbeck et al., 2007) LS	.605**	.463**	.373**	1				
(Dubois and Tevendale, 1999) AD	-.341**	-.249**	-.444**	-.212**	1			
(Moksnes and Espnes, 2013) AG	-.395**	-.237**	-.266**	-.308**	.557**	1		
(Sowislo and Orth, 2013) DE	-.635**	-.399**	-.468**	-.599**	.496**	.596**	1	
(Sowislo and Orth, 2013) SW	-.400**	-.385**	-.570**	-.321**	.445**	.369**	.521**	1

SE(Self-esteem); ER(Ego-resilience); SI(Self-identity); LS(Life satisfaction); AD(Attention deficit); AG(Aggression); DE(Depression); SW(Social withdrawal); \*\*, \*\*p<.01

### 3.5. Factors affecting college students' depression

First, the level of explanations of self-esteem, aggression, life satisfaction, and social withdrawal was 63.2% (r<sup>2</sup>=0.632), and this regression model was statistically significant (F=524.331, p<0.001). To grasp the relative influence, the standardization

coefficients were found to be aggression (0.334), life satisfaction (-0.277), self-esteem (-0.252), and social withdrawal (0.207). The higher the level of aggression and social withdrawal and the lower the degree of self-esteem and life satisfaction, the more influence on depression. Tolerance and VIF statistics were checked to identify multicollinearity problems. As a result, the tolerance value was less than 1.0, the

VIF value was less than 10, and the Durbin-Watson value was 1.897, which was close to 2, thus it did not have the problem of multicollinearity. Table 10 shows factors affecting the increase of depression of college students by multiple regression analysis.

### 3.6. Factors affecting college students' life satisfaction

First, the level of explanations of self-esteem, attention deficit, and depression was 46.5% ( $r^2=0.465$ ), and this regression model was statistically significant ( $F=353.866$ ,  $p<0.001$ ). To grasp the relative influence, the standardization

coefficients were found to be depression (-0.338), self-esteem (0.302), and self-resilience (0.174). The higher the level of self-esteem and self-resilience, and the lower the degree of depression, the more influence on life satisfaction. Tolerance and VIF statistics were checked to identify multicollinearity problems. As a result, the tolerance value was less than 1.0, the VIF value was less than 10, and the Durbin-Watson value was 1.912, which was close to 2 so it did not have the problem of multicollinearity. Table 11 shows factors affecting the increase of life satisfaction of college students by multiple regression analysis.

**Table 10:** Factors affecting the increase of depression of college students by multiple regression analysis

		<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Depression	(Constant)	2.521	.101		25.036	.000
	Self-esteem	-.305	.028	-.252	-10.861	.000
	Aggression	.342	.020	.334	17.070	.000
	Life Satisfaction	-.264	.021	-.277	-12.602	.000
	Social Withdrawal	.155	.015	.207	10.541	.000
$R^2=.633 \Delta R^2=.632 F=524.332(p=.000)$						

**Table 11:** Factors affecting the increase of life satisfaction of college students by multiple regression analysis

		<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
Life Satisfaction	(Constant)	1.640	.157		10.437	.000
	Self-esteem	.384	.037	.302	10.411	.000
	Depression	-.355	.029	-.338	-12.374	.000
	Self-resilience	.255	.036	.174	7.129	.000
$R^2=.466 \Delta R^2=.465 F=353.866(p=.000)$						

## 4. Conclusion

This study aims to find the current psychological status of college students, to examine the differences of positive (self-esteem, ego-resilience, self-identity, life satisfaction) and negative (attention deficit, aggression, depression, social withdrawal) psychological factors, and to explore the psychological factors affecting the life satisfaction and depression of college students. This study used the data from the Korea Child and Youth Survey (KCYPs) and screened the data of college students.

First, the mean of positive psychological factors was higher than the negative factors among college students. Self-esteem was the highest, followed by life satisfaction, ego-resilience, and self-identity. In negative psychological factors, social withdrawal was the highest, followed by attention deficit, depression, and aggression. These results report that there is a need to make higher self-identity among college students and to lower their social withdrawal. As college students in Korea find it increasingly difficult to find a job, they experience confusion about their identity as college students. This is because it is difficult to set goals for how to conduct college life, such as whether they need to be a student studying academics or a person preparing for a job. The social withdrawal of Korean university students is also related to the reality of difficulties in finding employment and the cultural reality in which college life as a community is less emphasized amid growing individualistic tendencies. The fact that college students have a low sense of self-identity and

low social withdrawal indicates that there is a relationship between the two variables. In other words, to improve social withdrawal, it is necessary to raise self-identity as a healthy self-concept of college students and to enhance progressive attitude.

Second, when analyzing the difference in psychological factors according to the gender and family economic level of students, male students showed higher positivity and lower negativity than female students. That is, in this study, male students are more positive than female students and this result could be interpreted because, in Korea, female students are more sensitive and get more stress from a difficult situation in which getting a job or obtaining good grades are not easy in college. Regarding the economic level, the group of students who reported their family economic level is high is more positive in psychological status. This result is consistent with the study by Lorant et al. (2003). It is known that socioeconomic status gives an impact on the stability of the psychological status of university students (Dubois and Tevendale, 1999; Moksnes and Espnes, 2013; Lorant et al., 2003).

Third, aggression, life satisfaction, self-esteem, and social withdrawal affected depression. To decrease the depression of college students, aggression and social withdrawal should decrease and self-esteem and life satisfaction should increase. Programs to develop self-esteem and social competency for college students are easier than programs dealing with aggression and life satisfaction. Depression, self-esteem, and self-resilience influenced life satisfaction. To make



intervention programs to level up life satisfaction, programs are needed to raise self-esteem and self-resilience. The life satisfaction of college students was negatively related to depression, and depression was closely related to aggression. To increase life satisfaction, depression is reduced. At this time, as a program to reduce depression, self-esteem or self-resilience can be increased. It is defined by Rosenberg (Cho et al., 1998) that self-esteem is an individual's feelings and thoughts on one's own importance. It reflects the concept of "global" or "general" self-esteem. Self-esteem is a large part of a college student's self-understanding and can be a dynamic component that is susceptible to internal and external influences in early adulthood. Pavot and Diener (2008) reported that both self-esteem and life satisfaction represent a person's global assessment.

As in previous studies, when this study found out that self-esteem is the factor that most affects the life satisfaction of university students, in the future, universities will be able to develop and proceed with programs to increase students' self-esteem.

The college student period is an intermediate stage of transition from childhood to adulthood, and various experiences are made according to developmental changes. In addition, it is known that internalizing problems such as depression, anxiety, and social withdrawal, and externalizing problems such as aggression and delinquency, occur when the developmental task is not successfully performed during the development process (Trzesniewski, 2006). In other words, it is predicted that the internalizing problem behavior of social withdrawal in college students directly affects the externalizing problem behavior of aggression and lowers life satisfaction (Agnew, 1992).

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## Compliance with ethical standards

## Conflict of interest

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## References

- Agnew R (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1): 47-88. <https://doi.org/10.1111/j.1745-9125.1992.tb01093.x>
- Block J and Kremen AM (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2): 349-361. <https://doi.org/10.1037/0022-3514.70.2.349> **PMid:8636887**
- Cho MJ, Nam JJ, and Suh GH (1998). Prevalence of symptoms of depression in a nationwide sample of Korean adults. *Psychiatry Research*, 81(3): 341-352. [https://doi.org/10.1016/S0165-1781\(98\)00122-X](https://doi.org/10.1016/S0165-1781(98)00122-X)
- Dubois DL and Tevendale HD (1999). Self-esteem in childhood and adolescence: Vaccine or epiphenomenon? *Applied and Preventive Psychology*, 8(2): 103-117. [https://doi.org/10.1016/S0962-1849\(99\)80002-X](https://doi.org/10.1016/S0962-1849(99)80002-X)
- Goldbeck L, Schmitz TG, Besier T, Herschbach P, and Henrich G (2007). Life satisfaction decreases during adolescence. *Quality of Life Research*, 16(6): 969-979. <https://doi.org/10.1007/s11136-007-9205-5> **PMid:17440827**
- Jo BH and Im KH (2003). Development and validation of emotional or behavioral problems scale. *Korean Psychological Counseling and Psychotherapy*, 15(4): 729-746.
- Kang J and Chi M (2021). The Relationship between Job-Seeking Anxiety and Depression of Face-to-face Service Major Students under COVID-19: Moderating Effect of Positive Psychological Capital. *The Association of Korea Counseling Psychology Education Welfare*, 8(3): 177-191. <https://doi.org/10.20496/cpew.2021.8.3.177>
- Kim SH and Kim KY (1998). Development of behavior problem scale for children and adolescence. *Journal of Korean Home Management Association*, 16(4): 155-166.
- Kim SH, Kim JH, Jung HS, and Park JC (2014). Depressive symptoms among a group of medical students: Prevalence, related factors and moderating effect by the positive psychology. *Journal of Korean Society Depression Bipolar Disorder*, 12(2): 128-136.
- Lorant V, Deliège D, Eaton W, Robert A, Philippot P, and Ansseau M (2003). Socioeconomic inequalities in depression: A meta-analysis. *American Journal of Epidemiology*, 157(2): 98-112. <https://doi.org/10.1093/aje/kwf182> **PMid:12522017**
- Luthans F and Youssef CM (2007). Emerging positive organizational behavior. *Journal of Management*, 33(3): 321-349. <https://doi.org/10.1177/0149206307300814>
- Moksnes UK and Espnes GA (2013). Self-esteem and life satisfaction in adolescents-Gender and age as potential moderators. *Quality of Life Research*, 22(10): 2921-2928. <https://doi.org/10.1007/s11136-013-0427-4> **PMid:23661225**
- Pavot W and Diener E (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5(2): 164-172. <https://doi.org/10.1037/1040-3590.5.2.164>
- Pavot W and Diener E (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 3(2): 137-152. <https://doi.org/10.1080/17439760701756946>
- Proctor CL, Linley PA, and Maltby J (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10(5): 583-630. <https://doi.org/10.1007/s10902-008-9110-9>
- Rosenberg M (1965). *Society and the adolescent self-image*. Princeton University Press, Princeton, USA. <https://doi.org/10.1515/9781400876136>
- Sowislo JF and Orth U (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1): 213-240. <https://doi.org/10.1037/a0028931> **PMid:22730921**
- Trzesniewski KH, Donnellan MB, Moffitt TE, Robins RW, Poulton R, and Caspi A (2006). Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Developmental Psychology*, 42(2): 381-390. <https://doi.org/10.1037/0012-1649.42.2.381> **PMid:16569175**
- Youssef-Morgan CM and Luthans F (2015). Psychological capital and well-being. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 31(3): 180-188. <https://doi.org/10.1002/smi.2623> **PMid:26250352**