A Structural Analysis of the Factors Influencing Life Satisfaction of Korean Youths

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Abstract

Adolescence is a very important period to think about future directions where one's aim in life and to establish one's ego since it is a period of transition to pass through from premature and adrift youth to mature and rigid adult. However, the level of life satisfaction investigated from Korean youths in adolescent period is shown as the lowest among OECD countries. It is very crucial to analyze which factors are important to decide the level of life satisfaction and how these factors influence the level of life satisfaction.

In this study, to analyze factors which affect to life satisfaction of youths and their learning attitude - essential school activity prior to life satisfaction in youth period, we firstly focused on relationships with parents, peers, and teachers as factors which affects to learning attitude and life satisfaction. We analyzed structural relationships among factors using structure equation model, and investigated the gender difference in suggested model. We also discussed the analysis results and concluded with further research directions.

Keywords*: Adolescent, Learning Attitude, Life Satisfaction, Parenting Style, Peer Attachment, Relationship of Teacher*

1. Introduction

The suicide rate of Korea in 2013, which has come to 29.1 in 100,000 people, is two times more than the one of OECD-member countries, which has come to 12. Compared to Hungary whose suicide rate ranks second in the world, the rate of Korea is overwhelmingly high. Especially, suicide has been indicated as a main cause of death among Korean youths and has come to very serious social problem in Korea. According to 'The Statistics of Youth', Ministry of Gender Equality and Family and National Statistical Office have announced, the first cause of death of 9-24 year old youths in 2012 is 'intentional self-injury', suicide. Also, it is reported that 8 in 100,000 youths kill themselves. In responses to 'Have you thought of suicide in recent 1 year?', National Youth Policy Institute and The Study on the Current Status of Korean Children's and Youth's Rights have announced, about 37% of 9-24 year old youths answered that they have considered about committing suicide. Notably, the suicide rate of youth is higher during the semester and also higher as school achievement is lower.

In addition, according to data reported on May 2009, the objective measures of education level such as school grades, school entrance rate and desire of learning were listed on the second place among 20 countries, but subjective happiness is the lowest [1]. According to these results, in general, learning attitude and achievement have very

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important influence on youths and stress and tension toward study also can be primary causes that reduce life satisfaction of youths [27].

This study aimed to examine how the factors related to learning of youths affect to life satisfaction. Moreover, we also examined what variables can directly increase life satisfaction of youths. We used the third raw data of first grade in middle school of '2012 Korean Children and Youth Panel Research', performed by National Youth Policy Institute.

This paper is organized as follows: i) Deriving several variables affecting life satisfaction based on literature reviews, ii) Identifying data structure of variables through exploratory factor analysis, iii) Analyzing structural relationship among variables with structural equating model, iv) Investigating the statistical gender difference of research model, v) Discussing the analysis results and future research direction with concluding remarks.

2. Literature Review

2.1. Related Works

2.1.1. Parenting Style: Parenting Style means various types of parenting divided by how parents bring up their children and how characteristics of parenting affect to psychological growth and behavior of children [2]. Parenting Style can be seen as a combination of parenting attitude and behavior. Parenting attitude means inner belief and value when they educate their children and parenting behavior means specific behaviors of parents which have an influence on children [3].

2.1.2. Peer Attachment: Studies related to attachment have mostly dealt with relationships between parents and their children [4]. Bowlby *et al.*, said attachment theory is about an emphasis on importance of attachment between parents and children in children development, it offers theoretical structure about relationships with others who are meaningful to someone as well as parents. Attachment behavior system is defined as behavioral process to seek closeness and maintain connection with one specific person or more than one who provide physical and psychological stability. Thus, an individual who forms stable attachment cherishes oneself and make stable personal relationships based on positive interaction and trust accumulated from experience with others. The early conception of attachment is mainly about the conception between parents and children but recently, attachment is receiving attentions in various kinds of relationships. Particularly, in adolescence, children consider attachment with peer group as more important than one with parents and it is defined as Peer Attachment.

In adolescent period, children spend more time in interacting with peer group by being separated from parents and also, relationships with peer become very important by focusing their interests on peer [5]. In this period, children needs more friends than any other period, and the level of perceived happiness of children get higher as relationships with peer is more stable. Because children consider their friends as primary attachment subject and make relationships with them, not parents, in adolescent period [6], they have higher level of life satisfaction as they have more friends [7].

2.1.3. Relationship with Teacher: Human is a social being and grows up through social interaction such as making direct and indirect relationships with others. Particularly, in adolescence, children spend the most time in school so that relationships in school are emerged as important. In addition to Peer Attachment, a relationship between teacher and children can play an important role in life satisfaction, it is defined as Relationship with Teacher.

A school, social environment which has the most direct influence on adolescent students, is an institution which performs educational activities on the purpose of individuals' growth and self-realization through interactions between teachers and students. Teachers have important influence righteous development as well as cognitive development such as objective knowledge and students develop necessary knowledge, skills, value, attitude, a view of society through teachers [8]. Also, as children perceive that their teachers support, trust, and understand more, they are given more positive influence in their psychological happiness [9]. Regarding these previous researches, positive experiences in relationship with teachers, as an important variable in adolescent psychological maturity, are highly related to personal growth of adolescent students. Therefore, we regard this relationship as critical to life satisfaction.

2.2. Learning Attitude

Learning Attitude means attitude of learners when learning something, which includes individual's positive or negative disposition in learning [10]. And, Learning Attitude, as a cognitive, sentimental, behavioral tendency, can be learned through learning experiences of learners [11]. According to preceding researches, as student have more positive relationships with school, teachers, and peers, their learning attitude have more positive tendency [12-13]. Apart from these results, variables, which affect to learning attitude, are distraction, perfectionism, emotional instability, sense of inferiority, and obsession and those students are seen to have physical and psychological problems.

2.3. Life Satisfaction

Life satisfaction is an evaluation about how much individual is satisfied with one's life in general life and it can be used interchangeably with the concept ot living satisfaction, quality of life, subjective well-being, and happiness [14]. Generally variables affecting Life satisfaction of youth are various, ranging from sociodemographic variables to relationships with parents and peers, learning achievement, self-esteem, and emotional problems [15]. The previous studies suggest the realm related to family and school life have the strongest influences on life satisfaction of youth [16], and especially stress related to learning is the most serious. This study has used development scale of Kim *et al.*, (2006) to measure life satisfaction. Whole scales are consist of 3 questions, and Cronbach is 0.75. Higher grades on life satisfaction means higher degrees on life satisfaction of children and youth.

3. Research Model and Hypothesis

3.1. Research Model

Based on the previous studies, we suggest the research model depicted in Figure 1 to understand life satisfaction of youth. The model considers four antecedent variables, Parenting Style(PS), Peer Attachment(PA), Relationship with Teacher(RT), Learning Attitude(LA), and one consequent variable, Life Satisfaction(LS). As shown in Figure 1, we assumed the structural relationships - Parenting Style, Peer Attachment, Relationship with Teacher both directly and indirectly affect to Life Satisfaction. Learning Attitude influences directly on Life satisfaction or mediating the influence of the three exogeneous variables.
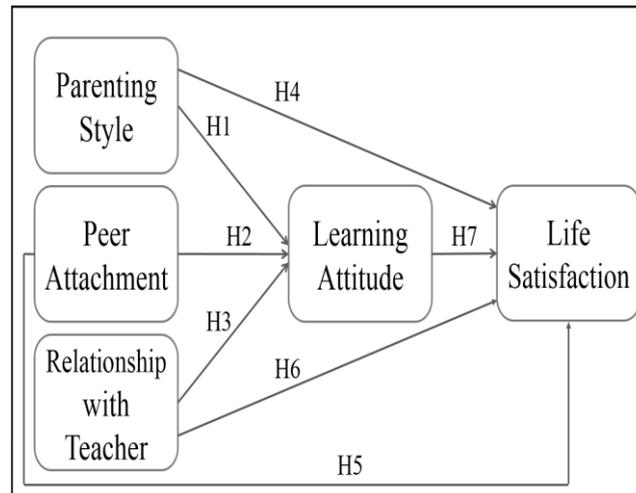
Figure 1. Research Model

3.2. Operational Definitions of Research Constructs

In this study, we adopt five research constructs as shown in the research model. To clarify the concept of the constructs, we establish the operational definition of the five constructs and their measurement variables as shown in Table 1.

Table 1. Operational Definition and Measurement

Constructs	Operational Definition	Measurement variables
Parenting Style	Various types of parenting divided by how much parents give love to children and provide behavior guide about behavior of children when bringing up their children	1. My parents put a bigger emphasis on me than anything. 2. My parents are interested in my school life and ask me questions about my school life. 3. My parents always care about my body, clothes, bedding to be clean. 4. My parents make me receive appropriate treatment when I am seriously sick.
Peer Attachment	Desires to consider peers as special social subjects and make and maintain intimate emotional relationships with peers	1. My friends respect my opinion when having conversation with me. 2. My friends listen carefully to what I am saying. 3. I tell my friends about my worries and problems. 4. My friends fully understand me. 5. I can talk to my friends when I want to open my heart to someone.
Relation of Teacher	Interaction between students and teachers through building a relationship	1. I warmly greet teacher when I met him/her. 2. I feel comfortable talking to teacher. 3. I am glad to meet teacher outside school. 4. My teacher is nice to me. 5. I hope my class teacher not to be changed in next year.
Learning Activity	As reactions of learners in learning, positive or negative disposition and attitude of individuals about learning	1. I enjoy class hours in school. 2. I do every my homework 3. I fully understand what I have learned from class. 4. I ask someone such as parents, teacher and friends when having questions.
Life Satisfaction	To evaluate how much individuals are subjectively satisfied with one's life.	1. I feel happy to live. 2. I don't worry much. 3. I think my life is happy.

3.3. Research Hypothesis

In this study, we established 7 research hypotheses based on the research model.
Since we judged children's emotion and attitude toward learning can be affected by parents, who affect to overall children's life in the long term [17], and their parenting style, we established Hypothesis 1.
Hypothesis 1: Parenting Style will have a positive influence on Learning Attitude of youths (H1).

In adolescence, children spend most of time with peers being separated from their parents. Thus, we judged that desires for attachment with peers are the strongest comparing to any other relationships. Thus, we established Hypothesis 2 because we regard children's learning attitude would be more stable as peer attachment are satisfied.

Hypothesis 2: Peer Attachment will have a positive influence on Learning Attitude of youths (H2).

In terms of learning achievement, students can be given the biggest help from their teachers [18]. Thus, we established Hypothesis 3 since we thought relationships between teachers and students have the most direct impact on learning attitude.

Hypothesis 3: Relationship with Teacher will have a positive influence on Learning Attitude of youths (H3).

We thought that life satisfaction of children is higher when relationships between parents and children are better and they think their parents understand them well. Since we regard parenting style would have an impact on life satisfaction, we establish hypothesis 4.

Hypothesis 4: Parenting Style will have a positive influence on Life Satisfaction (H4).

We regard that the higher peer attachment is, the higher life satisfaction is in adolescence. [19]. Thus, we established Hypothesis 5.

Hypothesis 5: Peer Attachment will have a positive influence on Life Satisfaction (H5).

School life accounts for one of the biggest parts of student's life. So, students inevitably spend much time with their teachers as well as their peers. Thus, we thought relationship with teacher would have an impact on life satisfaction and established Hypothesis 6.

Hypothesis 6: Relationship with Teacher will have a positive influence on Life Satisfaction (H6).

We judged that the one of the biggest concerns of youths is academic achievement. Thus, we regard that Learning Attitude of youths will largely affect to their life satisfaction in general. Based on this expectation, we established Hypothesis 7.
Hypothesis 7: Learning Attitude of youths will have a positive influence on Life Satisfaction (H7).

4. Empirical Analysis

4.1. Data Collection

Research data was surveyed and collected in 'Korean Children and Youth Panel Research', performed by National Youth Policy Institute [20]. KCYPS has annually conducted monitoring research for seven years from 2012 to 2016 and this research aims at understanding development of social, psychological aspects of children and youths. Sample of KCYPS represents first and fourth grade students in elementary school and first grade students in middle school as population in 2010 and it is derived in multi-stratified cluster sampling way [21]. Also, it has been gone through sampling process.

2,352 surveys are collected but we used only 2,258 surveys excluding some cases with missing value and low credibility. Also, we replaced responses marking 'I have no idea' with mean 2.5 for 5-point scale.

4.2. Validation of Measurement and Hypothesis

4.2.1. Factor Analysis and Reliability Analysis In this study, we conducted exploratory factor analysis to identify the data structure of measurement variables and reliability analysis to confirm consistency of the variables. SPSS PAWS 19 is used for analysis and the result of analysis is shown in Table 2 [22].

Table 2. EFA and Reliability Analysis

Factor Var	F1	F2	F3	F4	F5	Communality	Cronbach's α
PA4	.827	.116	.146	.094	.105	.739	
PA2	.810	.084	.198	.115	.090	.723	
PA3	.809	.126	.066	.065	.075	.685	.884
PA1	.784	.106	.206	.116	.106	.692	
PA5	.774	.084	.087	.056	.160	.642	
RT3	.111	.825	.043	.115	.045	.710	
RT2	.160	.786	.032	.140	.107	.675	
RT4	.074	.761	.116	.173	.051	.631	.841
RT5	-.014	.743	.072	.055	.062	.564	
RT1	.205	.693	.046	.228	.070	.582	
PS3	.169	.088	.802	.098	.067	.694	
PS4	.208	.078	.769	.114	.075	.659	
PS2	.188	.065	.763	.132	.136	.657	.758
PS1	.038	.039	.636	.006	.043	.409	
LA3	.096	.130	.110	.794	.142	.688	
LA2	.057	.127	.096	.784	.032	.644	
LA4	.165	.170	.098	.728	-.044	.597	.776
LA1	.065	.271	.032	.624	.299	.559	
LS3	.168	.121	.151	.134	.843	.794	
LS2	.092	.034	.053	.013	.821	.687	.814
LS1	.197	.130	.117	.159	.804	.741	
Eigen Value	3.521	3.153	2.430	2.409	2.260	Cum. Var. (%) 65.585	
Var. (%)	16.765	15.013	11.574	11.471	10.763		
Kaiser-Meyer-Olkin's Measure : 0.877, Bartletts's Spericity Test : P-value = 0.000							

Principal Component Analysis is used for extracting factors. We adopt varimax rotation for clear and simple interpretation by eliminating multi-collinearity among factors.

To examine possibility of factor analysis, we compute KMO(Kaiser-Mayer-Olkin)'s Measure of Sampling Adequacy and the value was 0.877 higher than recommended level of 0.5. Therefore, we conclude that sample response was suitable for regression analysis. Also, factor analysis is possible only if there are correlations among some variables. We conducted bartlett's test of sphericity in order to confirm whether there are correlations or not. The p-value is 0.000 so that correlation matrix is not an identity matrix. Also, we confirm that there are correlations among certain variables. At the end, we examined communality and verify that the value of communality was higher than recommended level of 0.5. We also conduct reliability analysis, Cronbach's α, in order to examine consistency among each measurement variables. According to the results of reliability

analysis, all of Cronbach's α values are higher than 0.7 and meet the reliability criterion. The results of exploratory factor analysis and reliability analysis are shown in Table 2.

4.2.2. Path Analysis: To figure out the structural relationship among the constructs, we conduct path analysis using Structural Equation Model. Table 3 shows the model fit of the suggested research model. The normed chi-square ($\chi 2/df$) denotes a normalized chi-square value by considering the degree of freedom to adjust the size of the correlations in the model: the larger the correlations the poorer the fit. A model with a normed chi-square value of less than 3 is considered to have a good fit [23].

The Goodness of Fit Index (GFI) refers to the ratio of the sum of the squared difference between the observed and reproduced matrices to observed variances. The GFI ranges from 0 (no fit) to 1 (perfect fit) [24]. The recommended level for the GFI is greater than 0.9. The Adjusted Goodness of Fit Index (AGFI) is the adjusted value of the GFI that considers the complexity of a model. The tight standard for the AGFI is greater than 0.9; the loose standard is greater than 0.8. GFI and AGFI in this study is 0.967 and 0.956 respectively, higher than recommended level of 0.9, so that it is judged as appropriate[28].

The Comparative Fit Index (CFI) was developed to overcome the deficiencies of the Normed Fit Index (NFI). A disadvantage of the NFI measure is in that it increases as more parameters are added to the model. A value between 0.90 and 0.95 is acceptable, and above 0.971 is high enough to meet the recommendation level.

The Root Mean Square Error of Approximation (RMSEA) represents a measure of the approximate fit rather than a perfect fit, adjusting the problems caused by the degree of freedom and the sample size. Good models have an RMSEA of 0.05 or less and acceptable models 0.08 or less [25]. In this study, RMSEA was 0.039, so that it was judged as very appropriate.

The Standardized Root Mean Square Residual (SRMR) measures the standardized difference between the observed covariance and the predicted covariance. The value ranges from 0 to 1 and a model with SRMR value less than 0.08 is considered a good fit and less than 0.1 an acceptable fit. In this study, SRMR was 0.0359, so that it was judged as very appropriate.

Table 3. Fit Measure

Fit Index	Value	Recommended Level
χ^2	792.503 (.000)	The smaller, the better (Significant p<0.01)
df	176	-
Q(χ^2/df)	4.503	< 3.0
Goodness Fit Index	0.967	> 0.90
Adjusted Goodness Fit Index	0.956	> 0.90
Root Mean Squared Error of Approximation	0.039	if < 0.08, adequate if < 0.05, very adequate
Standardized Root Mean Squared Error Residual	0.0359	< 0.10
Normed Fit Index	0.936	> 0.90
Non Normed Fit Index	0.965	> 0.90
Comparative Fit Index	0.971	> 0.90

As shown in the above table, all fit indices meet the recommended level.

Table 4 below shows results of path analysis of the research model and statistical significance of each path.

Table 4. Results of Path Analysis

Hypothesis	Path	Coefficient	t-value	p-value	Results
H1	PS → LA	0.195	6.888	0.000***	Supported
H2	PA → LA	0.106	3.776	0.000***	Supported
H3	RT → LA	0.410	14.082	0.000***	Supported
H4	PS → LS	0.150	5.4	0.000***	Supported
H5	PA → LS	0.226	8.189	0.000***	Supported
H6	RT → LS	0.075	2.708	0.007***	Supported
H7	LA → LS	0.217	7.184	0.000***	Supported

PE: Parenting Style, PA: Peer Attachment, RT: Relation of Teacher, LA: Learning Attitude, LS: Life satisfaction. * < 0.1, ** < 0.05, *** < 0.01

The Hypothesis H1(Parenting Style will have positive influence on Learning Attitude of youths) is supported with p-value 0.000 at 0.001 significant level. This result implies positive Parenting Style can cause positive Learning Attitude of youths.

The Hypothesis H2(Peer Attachment will have positive influence on Learning Attitude of youths) is supported with p-value 0.000 at 0.001 significant level. Based on this result, we can expect that positive Peer Attachment results in positive Learning Attitude of youths.

The Hypothesis H3(Relationship with Teacher will have positive influence on Learning Attitude of youths) is supported with p-value 0.000 at 0.001 significant level. This result shows that relationships between youths and teachers affects to learning attitude positively. The better Relationship with Teacher is, the more positive Learning Attitude of youths is.

The Hypothesis H4(Parenting Style will have positive influence on Life Satisfaction) is supported with p-value 0.000 at 0.001 significant level. This result implies that Parenting Style affects to children in adolescence positively.

The Hypothesis H5(Peer Attachment will have positive influence on Life Satisfaction) is supported with p-value 0.000 at 0.001 significant level. This result shows that children in adolescence think relationships with peers important as well as parents. Moreover, Peer Attachment has positive influence on Life Satisfaction.

The Hypothesis H6(Relationship with Teacher will have positive influence on Life Satisfaction) is supported with p-value 0.007 at 0.001 significant level. This result, similar to The Hypothesis H5, shows that good relationship with teachers has positive impact on Life Satisfaction of youth.

Lastly, The Hypothesis H7(Learning Attitude will have a positive influence on Life Satisfaction) is supported with p-value 0.00 at 0.001 significant level. This result means that positive Learning Attitude, inevitable activities in school life of youth, can affect to Life Satisfaction of youth. Figure 2 depicts the path analysis results and significant level of each path.
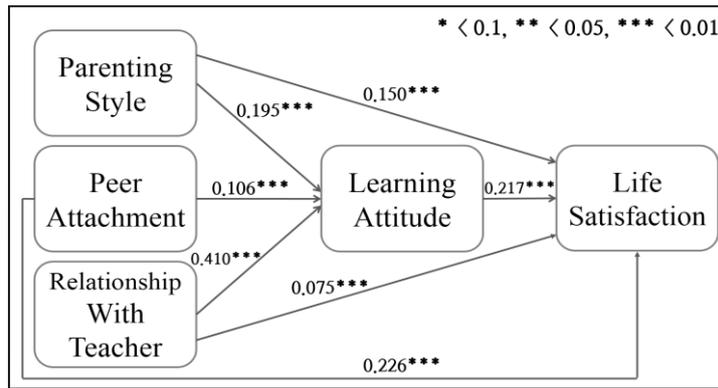
Figure 2. Path Coefficient and Hypotheses Test Results

In this study, we established parenting style, peer attachment, and relationship with teacher, which are considered as important to life satisfaction in adolescence, as external variables. Also, we added variable of Learning Attitude and tried to figure out whether it affects to life satisfaction. Reviewing the previous research, we defined each factor and conducted factor analysis and reliability analysis about established research model. After that, we analyzed structural relationships among variables through structure equation model. With the results of analysis, we confirmed that parenting style, peer attachment, and relationship with teacher in adolescence have positive impacts on learning attitude. And, learning attitude affected by those 3 factors have a positive influence on life satisfaction. Moreover, parenting style, peer attachment, and relationship with teacher have direct influence on life satisfaction without going through learning attitude.

We also conduct additional analysis - group comparison to investigate the gender difference. But no difference was found between gender groups. Overall, we can find that not only social interaction or relationships of youth but learning attitude can affect positively to life satisfaction in adolescence. The results of study are meaningful for following reasons. First, Korea society emphasizes on achievement of learning and provides high quality of education environment compared to any other countries. However, Korean youths actually think quality of education and life satisfaction are very low contrary to existing well-made education environment [26]. This means that learning environment is not a critical factor for satisfaction of learning and life. This study is meaningful not only because it is examined how relationships with parents, peers, and teachers are important to learning attitude and life satisfaction, but also because it is confirmed that learning attitude mediates the influence of social interaction or relationships of youth to life satisfaction.

However, the following further researches are needed to overcome research limitations: i) controlling income level among respondents such as household income, ii) considering personal psychological condition like self-esteem or social confidence.

Acknowledgments

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