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Structural Relationship between the Study Experience and Student Engagement that Affects the Personality Prediction

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The study is designed to provide a baseline for course design methods that affect students' level of satisfaction in elective courses by considering personality and structurally analyzing the correlation between the study expe-rience and student engagement that are identified as factors contributing to course satisfaction. As a research tool, the National Assessment of Student Engagement in Learning (NASEL) started by the Korea Educational Development Institute since 2013 to advance the value of education and knowledge at universities was used. The survey was conducted online and conducted as a full enumeration survey. As for an analysis method, model verification was conducted using a structural model between study experience, course engagement, and elective course satisfaction. The study result showed that, first of all, there was a correlation between the variables of a study experience, course engagement, and level of student satisfaction in elective courses. Second, it was found that study experience through course engagement had a higher impact on the level of student satisfaction in elective courses than direct study experiences did on satisfaction. The result of this research verified that student' study involvements, particularly cooperative knowledge, events for critical thinking, and inspiring study in-volvements, are crucial to augment the contentment of the college learners in elective courses. In particular, the study showed that engagement in elective courses, in addition to the study experience, affects class satisfaction in terms of operating elective classes by confirming the indirect effect of course engagement in the correlation between the study experience and the satisfaction in electives.

Keywords: student, personality, satisfaction, elective, learning, experience, engagement, relationship, structural equation statistical analysis

1. Introduction

A management of quality education and the progress of teaching methods play an essential role in developing elective courses in university education. It should not be overlooked that elective classes have something to do with students' growth as leaders with both sophistication and dignity, putting aside the social and political aspects of structural reform in higher education.

To this end, study involvements at colleges must be student-centered education considering personality, not teacher-centered. Kim (2015) suggests that instructors should play the role of

a guide to facilitate learners to construct knowledge, not the role of a transmitter that delivers professional knowledge in the related field to learners [1]. Through this process, students can construct their study experience subjectively and actively construct their knowledge. Class satisfaction varies depending on how the instructor teaches during the course of the class [2]. Cooperative learning had an affirmative outcome on interactions with peers. Also had an affirmative outcome on resource utilization. Cooperative learning is more positive than competitive learning [3]. Therefore, providing many opportunities for cooperative learning in students' study experiences can increase learners' class satisfaction.

Also, various studies have been conducted on factors that can influence class satisfaction other than study experiences. Among those studies, a study on the effects of the interaction between professors and students, active cooperative learning, and student engagement on student satisfaction with major and elective courses found that student engagement has the most significant impact on the satisfaction of students in electives [4]. The study showed that among various factors affecting class satisfaction, teaching methods and study ex-periences can make a difference in the class engagement of students.

This study is intended to provide a baseline for designing teaching methods through the structural model that affects student satisfaction in electives by structurally analyzing the correlation between the study experience and engagement, which was identified as factors affecting class satisfaction based on previous studies, not by simply searching for predictive factors that influence the satisfaction. To solve the motive of this research, research questions were set below.

Research Problem 1. What is the connection among the study involvement, student engagement, and class contentment?

Research Problem 2. What is the structural relationship between study experience, student engagement, and class satisfaction?

Therefore, in this study, we would like to focus on the preceding research that studied the factors affecting student engagement and class satisfaction, focusing on the effect of study experience on class satisfaction as a parameter of student engagement.

2. Background

2.1. Factors Affecting Student Engagement

Student engagement is the degree of positive perception, belonging, pride, and satisfaction with the educa-tional activities of the university where the student is attending. Different researchers have different defi-nitions of student engagement, but mainly it includes academic commitment, confidence in college, pride, overall satisfaction and belonging to education, and attachment to college [5]. In other words, student en-gagement is an important topic in recent higher education research that indicates a student's degree of positive perception and satisfaction with college [6].

Personal characteristics, household income level, pre-university academic achievement, university envi-ronment, university size, university establishment type, and other factors affect the factors that influence student engagement. First, among the individual characteristics,

female learners convey greater student commitment than male learners showed a higher degree of student engagement, indicating that the influence of gender was inconsistent [7]. According to a study by Byun (2017), the perceived campus environment differs according to gender, which may lead to differences in study experience [8]. It was found that the higher the age and grade, the higher the student engagement, and the longer the university students stay at school, the more positive the continuous immersion effect [9]. In other words, the longer the members stay at the university, the more attached they are to the organization to which they belong. In Korea, it appears that the degree of student engagement decreases as the grade level increases, suggesting that an in-depth study is needed on how student engagement changes over time and the factors that influence the change [10].

In the case of household income, students who received financial aid or found it difficult to pay tuition showed higher student engagement [5]. In Korea, the lower the average monthly household income, the higher the college commitment [11], [12]. However, there is also a study result that college commitment decreases in economically difficult cases, indicating that the influence of household income is inconsistent [13], [14].

High school grades, which indicate the degree of academic achievement before entering college, were found to affect student engagement [15], [16]. If we look at high school grades as a degree of the learner's readiness or achievement before entering college, it can be concluded that the higher the grade, the higher the student engagement. On the other hand, there are studies that show that high school grades or college admissions grades do not directly affect college students' college immersion, but indirectly influence them through college GPA [7]. In Korea, high school grades and CSAT scores have conveyed to have a direct positive outcome on college students' obligation [7], [18].

Several research conducted at home and abroad that student engagement varies depending on the charac-teristics of the university. The characteristics of a university include the establishment type, size, location, reputation, and establishment type of the university [5], [6]. Among the characteristics of a university, the location of the university is an important variable for student engagement. For example, university students located in the metropolitan area show higher student engagement than university students located in rural areas because universities located in Seoul perceive that they have high social reputation, high quality of education, and more opportunities for social capital formation [6], [10]. In the study of Hong (2014), it was found that the larger the university, the greater the influence of professor-student interaction on student engagement [16]. It can be inferred that the larger the university, the more stable it can secure students and secure the university's finances, which can lead to investment in education to increase students' immersion in the university. In Korea, Kwon's (2013) study found that the type of establishment was not related to student engagement [11]. On the other hand, Bae (2014) found that public universities had higher overall student engagement than private universities [10]. In the study of Han (2015), it was found that the type of estab-lishment, the size, and the relational climate were the characteristics of the university that affect student engagement [12]. Looking at each significant variable in detail, the higher the teacher facility security rate and the higher the average value of the students' high school grades, the higher the degree of university com-mitment perceived by college students. As such, university characteristics that affect student engagement also show different results depending on the study.

2.2. Factors Affecting Satisfaction with Liberal Arts Classes

Satisfaction is a feeling that humans subjectively recognize, whether mental or material, as a person's sub-jective emotive status for the achievement of a certain goal or need [19]. In behavioral science, satisfaction is defined as a sense of satisfaction based on human selfish needs or needs. It is a concept that indicates the degree of motivation and goal achievement. Class satisfaction is a state in which the learner achieves his or her goals through class, fits well with the class situation and environment, and trust is formed in the class. Students think positively about the various elements that make up the class and feel satisfied with it [20]. When the learner has positive thoughts about the class, that is, when the class satisfaction is high, the class content is absorbed well as their own and they learn effectively, so class satisfaction has an important effect on knowledge acquisition.

Class satisfaction is when students achieve their learning goals through class only when the class expectations they have experienced are met through teaching and learning activities, and have a positive perception of class by meeting their needs and receiving appropriate rewards. Class satisfaction is the satisfaction of having an emotional attitude of enthusiasm, interest, and favor for the class as internal and external needs are satisfied in the course of a student's participation in class, and this may vary from individual to individual. Class satisfaction is achieved through the interaction of background factors such as students' knowledge, motivation, and self-efficacy [21], as well as the educational environment of the classroom and teaching methods such as teachers' teaching strategies, attitudes, and class execution ability [22].

In particular, liberal arts classes at universities are influenced by the changes of the times and the educational philosophy of universities. In the case of the liberal arts curriculum at domestic universities, the focus is on ensuring learners' choices and fostering basic culture. Universities in the United States also recognize the reputation of liberal arts education and recognize the educational significance and value of liberal arts ed-ucation itself, not as an accessory to major or professional education. As the awareness of the importance of liberal arts education is growing in domestic universities, universities are improving the satisfaction of liberal arts classes by trying various educational methods and convergence approaches between disciplines.

Factors influencing satisfaction with liberal arts classes can be first divided into professor-student interactions related to students' educational experience, and the amount of student's own learning. Lee and Choi (2008) presented student-professor interaction, mutual cooperation between students, active learning activities, the effort put into learning, prompt feedback, and various study experiences [23]. Shin and Min (2009) attempted a comprehensive and comprehensive approach to college students' class satisfaction by suggesting five factors: professor, class operation, interaction and feedback, class content, and evaluation [24].

In particular, in relation to the teaching methods of liberal arts classes, according to a study by Park (2005), the result of examining the teaching methods of liberal arts subjects was the lecture-style class at 88.7%, followed by presentation, discussion, and laboratory practice at 18.6%, respectively %, accounting for 14.4% [25]. Considering that lecture-style classes account for 80.9% of the teaching methods in major subjects, this means that the ratio of lecture-style classes in liberal arts subjects is much higher. To acquire meaningful

understanding and insight in liberal arts classes, simple knowledge understanding or memorization is not enough, and active study experiences and feedback on the learning process are important. Moreover, if you learn in a learning environment similar to the environment you will encounter, the transfer effect is high. Now, universities need to diversify their teaching methods to increase their contentment with liberal arts courses and make efforts to respond to the demands of the times and society of liberal arts education.

Another factor affecting the contentment of liberal arts classes is an expansion of education itself, such as the professor's teaching competency and the quality of lectures, and the characteristics of students and teachers themselves. The complex aspects of lecture characteristics, background variables of students, and teacher characteristics affect the educational satisfaction of college students [26]. Teacher characteristics that affect class satisfaction include the professor's teaching ability, teaching experience and experience, readiness, and enthusiasm. In the liberal arts class, the instructor advises the learning team members on how to listen, how to give and receive feedback, the process and techniques for planning specific actions and finding alternatives, how to reach an agreement, and how to encourage other members, and systematic methods and tools By providing an opportunity and atmosphere for team members to reflect on their progress at the right time and for the right time to organize the learning contents, it contributes to instilling the learning motivation of the members and enhancing the class satisfaction.

3. Study Methods

3.1. Subject

The subjects are the students of a 4-year E college located in Gyeonggi-do. The study was an online survey, conducted as a complete enumeration survey in 2019, and 303 response data were used as the research object, excluding response data with many missing values.

Table 1: General characteristic (N=303)

Observational variable		Frequency	%
Gender	Male	235	77.6
	Female	68	22.4
Grade	1	138	45.5
	2	84	27.7
	3	35	11.6
	4	46	15.2
Line	Humanities line	6	2.0
	Social line	7	2.3
	Education line	31	10.2
	Engineering line	34	11.2
	Natural line	27	8.9
	Pharmaceutical line	152	50.2
	Arts and Sports line	16	5.3
	Others	30	9.9

3.2. Research Tool

The measurement tool used in this study was started by the Korea Educational Development Institute to investigate the teaching-learning process of 4-year university students. The

measurement items consist of a total of 15 items in the case of study experiences (3 items for cooperative study experiences, 6 items for thinking ability promotion activities during class, and challenging study experiences). Commitment to college consists of eight queries associated to a sense of belonging and superiority in the division and colleges. Contentment with liberal arts classes comprises of 14 queries about the objectives of liberal arts classes and the contents and ways of courses.

3.3. Data Analysis

To test this research problem, the IBM SPSS Statistics 25 program and AMOS 18.0 programs were used to evaluate the collected statistics. First, occurrence study and descriptive data study were directed to inspect the subjects' socio-demographic factors and the means and standard deviations of observed variables. Also, correlation study was directed to see the relationship among the observed variables, and multicollinearity, which refers to the extraordinary interrelationship among autonomous variables, was detected. Moreover, an absolute fit indices ($\chi 2$, RMSEA), which absolutely evaluates how fine the theoretical prototypical fits the statistics, and the relative fit indices (NFI, IFI, TLI, CFI), which shows how fine the hypothesized prototypical explains the data compared to a worst independent model were studied through the fit index discussed in the model verification utilizing the structural model between study experience, student engagement, and class satisfaction. To properly assess a research design, it's essential to choose a design that is not influenced by a scope of a sample and fits the data well, and is at the same time simple and straightforward.

Item parceling was used for the sub-factors of student study experiences since a fundamental equation prototypical was applied in solving a research questions. Item parceling can increase the likelihood of achieving a normal distribution by expanding the range of indicator scores and making indicators more reliable because related items are combined. It also helps reduce estimation errors by decreasing the number of estimated parameters compared to the case of using individual items [27], [28]. Plus, the maximum likelihood estimation (ML) was adopted for parameter estimation.

4. Results

4.1. The descriptive statistics and correlation analysis between study experience, student engagement, and student satisfaction in electives

Table 2: Technical statistics on study experience, student engagement, and student satisfaction in electives.

Category			Min	Max	Mean	SD
Study experience	CL	Cooperative study experience	1.00	4.00	2.72	.722
	CC	Study experiencefor critical thinking	1.00	4.00	2.48	.691
	CCL	Challenging study experience	1.00	4.00	2.42	.615
	Total		1.00	4.00	2.54	.680
Student Engagement	UC1	Sense of belonging to their department	1.00	4.00	2.98	.704
	UC2	Sense of belonging to their university	1.00	4.00	2.85	.721

	UC3	Pride in their department	1.00	4.00	2.75	.809
	UC4	Pride in their university	1.00	4.00	2.53	.809
	UC5	Peer relationship satisfaction	1.00	4.00	1.77	.744
	UC6	Satisfaction of university continuation	1.00	4.00	1.97	.825
	UC7	Student expectations of their university	1.00	4.00	2.35	.757
	UC8	Student satisfaction with their choice of university	1.00	4.00	2.66	.729
	Total		1.00	4.00	2.48	.760
Satisfaction in electives	CS1	Clear course goals	1.00	4.00	3.04	.548
	CS2	Lesson plan	1.00	4.00	3.10	.521
	CS3	Effective teaching strategies	1.00	4.00	3.05	.576
	CS4	Instructional relevance	1.00	4.00	3.05	.602
	CS5	Practical examples	1.00	4.00	3.04	.610
	CS6	Class material	1.00	4.00	3.10	.559
	CS7	Interest in class	1.00	4.00	2.89	.681
	CS8	Additional explanation	1.00	4.00	3.04	.599
	CS9	Volume of learning	1.00	4.00	2.99	.575
	CS10	Feedback	1.00	4.00	2.93	.642
	CS11	Scope of evaluation	1.00	4.00	3.13	.560
	CS12	Fairness in evaluation	1.00	4.00	3.09	.579
	CS13	Academic sophistication	1.00	4.00	2.96	.682
	CS14	Class quality	1.00	4.00	2.93	.668
	Total		1.00	4.00	3.02	.600

Overall, the standard deviation of the study experience was 2.55 (0.680), the standard deviation of student engagement was 2.48 (0.76), and the standard deviation of contentment in non-compulsory courses was 3.02 (0.600) presented in Table 2.

As a result of analyzing the correlation between the variables of the study experience, student engagement, and student satisfaction in electives, the relationship coefficient between all variables was .118-.784, showing a statistically important positive connection.

4.2. The structural relationship of the effect of study experiences and student engagement on satisfaction with electives

4.2.1. Evaluation of the Initial Research Model Fit

A structural model in which college students' study experience influences satisfaction with electives and student engagement affects satisfaction with electives was created based on previous studies to explore the structural relationship between earning experience, student engagement, and satisfaction with electives. Fig. 1 shows the initial research model, and the effects of the model fit analysis are shown in Table 3.

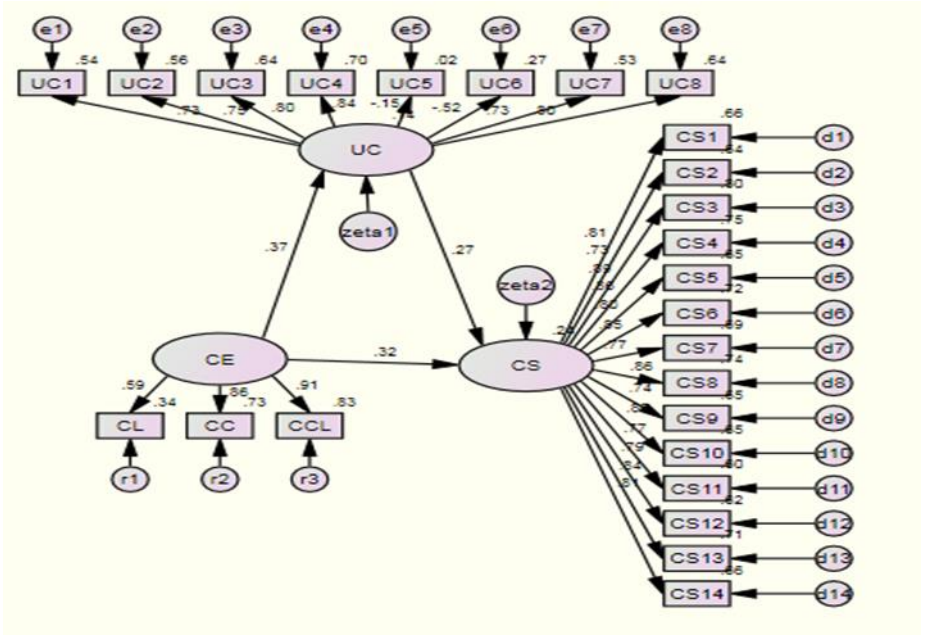

Figure 1: Initial research model

Table 3: Results of suitability analysis of early research models

	χ2 (p)	df	RMSEA	NFI	IFI	TLI	CFI
A research model	982.512(.000)	272	.093	.841	.880	.867	.879
Acceptance criteria	p>.05		.10>	.9<	.9<	.9<	.9<

This study verified how well the structural model fits through the comparative fit index (CFI), which is less subtle to the tester scope, the root mean square mistake of approximation (RMSEA) considering the simplicity of the model, and the non-normal fit index.

The fit evaluation results showed that the insignificant hypothesis that the model fits the data was excluded at the importance degree of .05 ($\chi 2$ =982.512, p=.000). The RMSEA value of this study is .093, which con-sidered being an acceptable fit according to Steiger's (1990) suggestions to define an acceptable fit as an RMSEA value less than or equal to .10, a close fit if less than or equal to .05, a good fit if less than or equal to .01 [39]. But the research model was partially modified by referring to previous studies to search for a model that can better reflect the characteristics of the data. Modification indices were utilized to modify the model, and bigger values in the indices indicate that the model would be improved. Thus, it is necessary to examine a model fit by improving values with larger modification indices in order among the values presented in the amendment guides.

The analysis of the modification indices showed that a model fit would increase the most when it is modified to set the correlation between 'e1' and 'e2', 'e5' and 'e6', 'e7' and 'e8', which are the error terms of student engagement, and'd13' and'd14', which are the error terms of satisfaction with elective classes. It implies that among the sub-factors of student engagement, both a sense of belonging to the department and the colleges are categorized as a sense of belonging, except for the measurements of the unique content. Peer relationship satisfaction

and satisfaction of university continuation are classified as student satisfaction with their school life, except for the measurements of each unique content. Moreover, learner anticipations of their colleges and learner contentment with their option of colleges fall into the category of student satisfaction with their university. Lastly, setting the correlation between the two variables' error terms is meaningful as academic sophistication is converging with the quality of classes, except for measuring the specific content of academic sophistication and class quality.

So the correlation was configured between the error terms' e1' and 'e2', 'e5' and 'e6', and 'e7' and 'e8' for student engagement based on the analysis of the modification indices. For reanalysis, a revised model was designed to set the correlation between 'd13' and 'd14', which are the error terms of satisfaction with electives. The best-fitting model drawn from the result is [Image 2], which shows the path coefficients between the variables and represents direct and indirect outcome among the variables. A goodness-of-fit outcome for this design is presented in Table 4.

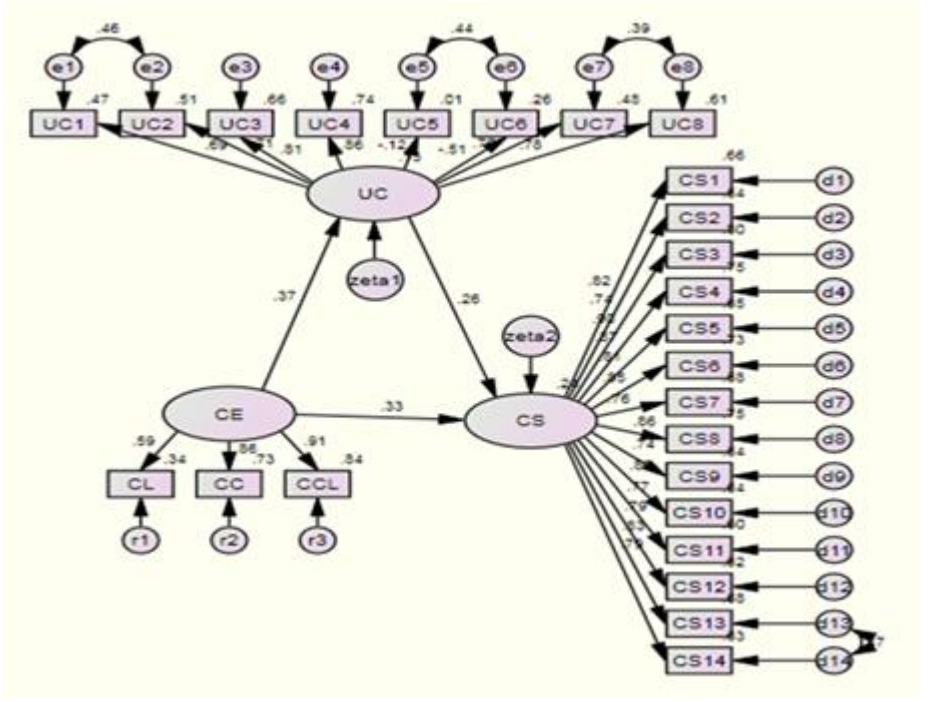

Fig. 2: Modification Study Model (Standardization Coefficient)

Table 4: Modification Model Goodness-of-fit

	χ2 (p)	df	RMSEA	NFI	IFI	TLI	CFI
Initial model	982.512(.000)	272	.093	.841	.880	.867	.879
Modification Model	752.604(.000)	268	.077	.878	.918	.908	.918
Acceptance criteria	p>.05		.08>	.9<	.9<	.9<	.9<

The modified model of Table 4 tells us that it is better than the initial one as the value of χ2, the exact fit index is 752.604, the probability of significance is .000, and RMSEA, the close fit index, is .077. It is safe to say that the relative conformity indices such as NFI, IFI, TLI,

and CFII all meet the approval standards and is good models. The effect coefficients of the updated version on contentment with choices are displayed in Table 5.

Table 5: The effect coefficients of the revised model

Modify Model Path			Estimate	S.E.	C.R.	p
Student engagement	↔	Study experience	.315	.057	5.506	.000
Class satisfaction	↔	Student engagement	.237	.058	4.071	.000
Class satisfaction	↔	Study experience	.262	.050	5.239	
***p<.001						

The path coefficients among the latent variables is all important (p<.001) when judging by the C.R. value, presented in Table 5. The statistical implication level of the path coefficients and the estimated path coef-ficients between variables in the modified design as shown in Table 5, the estimates for 'study experience→ student engagement', 'student engagement → satisfaction with electives', and 'study experience→ satisfaction with electives' are of significance level .001, and the path coefficients are statistically significant.

Also, the direct and indirect outcome of the college learners' study experience in class on the satisfaction of electives were studied using student engagement as a parameter, and test methods for the significance of indirect effects include the Sobel test, Aroian test, Goodman test, and bootstrapping.

This study adopted bootstrapping, which estimates the sampling distribution of coefficients and treats random samples of data as a substitute for the population. The BC (Bias-Corrected Percentile) method was utilized to calculate the significance probability when verifying the significance of the indirect effects. Table 6 presents the analysis results based on the bootstrap method.

Table 6: The effect coefficients of the revised model

Path Type				**Direct effect**	**Indirect effect (student engagement)**	**Total effect**
Independent variable → Medium variable	Study experience	→	Student engagement	.365***	-	.365***
Independent variable → Dependent variable	Study experience	→	Class satisfaction	.330***	.328***	.424***
Medium variable → Dependent variable	Student engagement	→	Class satisfaction	.257***	-	.257***
***p<.001						

First of all, looking at the total effect in Table 6, college students study experience showed a total effect of β = .365 (p<.001) on student engagement. Second, student engagement was a total effect of β=.257(p<.001) on satisfaction with elective classes. Third, study experience indicated an indirect effect of β= .328(p<.001) on satisfaction with elective courses through student engagement as and the total effect was β=.424(p<.001). It was found that student study experience through class engagement has a higher effect on improving student satisfaction with electives than study experience alone. It is therefore essential to improve student engagement along with the study experience for increasing student satisfaction with elective courses.

5. Discussion

The study was designed to look for ways to increase student satisfaction in elective classes by analyzing the structural relationship between student engagement and cooperative study experience, critical thinking activities, and challenging study experiences related to study experiences. The research result was summarized as follows.

First, a correlation exists between the variables of study experiences, student engagement, and class satis-faction.

Second, student study experience through class engagement has a higher effect on improving student sat-isfaction with electives than study experience alone.

The results are supported by the result of an earlier study by Song (2018), which explored the effects of student engagement, professor-student interaction [4], and active/cooperative learning activities on satisfaction in major-related courses and satisfaction in elective courses with data collected through a research tool (SASEL) and showed student satisfaction in electives are affected by class engagement. A study conducted by Kang (2011) found that student engagement contributes to improving student satisfaction in remote education settings [30]. In a study by Won (2018), student engagement was found to positively affect satisfaction with electives [31].

As a result of confirming the positive effect of student engagement on the contentment of liberal arts courses, it can be explained by the 'college effect theory'. According to Asitn and Antonio (2012)'s In-puts-environment-outcomes(IEO) model, 'student outcomes' in universities are determined by individual characteristics or pre-admission experiences (inputs) as well as environmental factors provided by the uni-versity environments [32]. At this time, the core of the environmental factor becomes the effort to support systematic learning at the university level. By linking this 'college effect model' with the 'student involvement theory or student engagement theory' theory, when a student receives systematic learning support from the university, he/she experiences a variety of study experiences and actively participates in learning. It can be concluded that academic achievement is increased due to continuing without interruption. In addition, it is necessary to promote cooperative learning at the university level to increase student engagement among university students and promote meaningful study experiences. In particular, cooperative learning takes place through social media or online media rather than physical encounters in online class situations. These lim-itations may impede students' ability to achieve academic and social cohesion. Therefore, in online learning, it is required to operate a learning mentor or mentee program, or to organize a learning community and small group and to support learning through it.

In addition, to increase the contentment of the liberal arts class, an instructor should make a systematic plan for the class and proceed. As the class progresses, the class atmosphere should be checked and the class should be conducted with sincerity. It should motivate students by inducing class participation and keeping the number of assignments and the professor's feedback appropriate. Teaching materials and reference materials for class should be used to further enhance the quality of lectures, and student attendance should be thor-oughly managed to create a class atmosphere in which all students participate. In addition, the instructor must do his/her best to prevent the class suspension from occurring while instilling the awareness

that students receive a fair evaluation by fully understanding the evaluation criteria during the lecture period. This is because student satisfaction with the instructor affects the instructor's faithful class preparation, professional knowledge of class content, class progress, motivation, teaching method, devoted content presentation, enthusiasm for class, and learning evaluation [33]. Fry, Ketteridge, and Marshall (2003) highlighted that learning environments and teaching activities in higher education should provide study experiences in ways to satisfy learners requirements as learners' necessities is diversified with the progress of learning [34].

Astin (1993) suggested that active study experiences have a positive result on the educational accomplishment and satisfaction of the learners [35]. When allowing for the results of these studies, it was confirmed that student study experience and student engagement influence satisfaction with electives. However, most of the earlier studies focused on verifying how factors that act on student satisfaction in electives directly influence one another. The hypothesis that student-centered study experience affects satisfaction with electives has been proved through previous studies, but studies that structurally analyzed the indirect effects of engagement are not enough.

The study demonstrated that the study experiences, especially cooperative learning, activities for critical thinking, and interesting study involvements, are vital to enhance the contentment of the college learners in elective courses. In particular, it was proved that student engagement affects the satisfaction of electives in addition to study experiences in class in terms of the management of elective courses by confirming the indirect effect of student engagement in the relationship between study experiences and class satisfaction [36-38].

To improve satisfaction with electives, it is necessary to develop teaching support programs for elective classes that are differentiated from programs for major-related classes to provide better study experiences. In addition, follow-up studies need to be done to evaluate what factors of students' study experience outside of lecture influence the contentment with electives in enhancing the satisfaction in electives. In addition, to augment the contentment of the liberal arts class, an instructor should make a systematic plan for the class and proceed. As the class progresses, the class atmosphere should be checked and the class should be conducted with sincerity. It should motivate students by inducing class participation and keeping the number of assignments and the professor's feedback appropriate. Teaching materials and reference materials for class should be used to further enhance the quality of lectures, and student attendance should be thoroughly managed to create a class atmosphere in which all students participate. In addition, the instructor must do his/her best to prevent the class suspension from occurring while instilling the awareness that students receive a fair evaluation by fully understanding the evaluation criteria during the lecture period. This is because student satisfaction with the instructor affects the instructor's faithful class preparation, professional knowledge of class content, class progress, motivation, teaching method, devoted content presentation, enthusiasm for class, and learning evaluation [33].

6. Conclusions

This research is to find the variables that impact the agreement of liberal arts courses as the learning results that appear in the teaching-learning process of college students. In particular,

this study aimed to analyze the structural relationship among the measurement variables of cooperative learning, experience of thinking ability promotion activities in class, challenging learning experience, and college immersion variables and how they relate to learning experience. The study results are summarized as follows.

First, it was found that there was a relationship among the variables of college learners' study experience, school involvement, and liberal arts class contentment.

Second, it was found that college students study experience through college immersion had a higher influence than the direct influence of liberal arts class satisfaction on the contentment of college learners.

In order for the university liberal arts education to be competitive as developed teaching, to develop the quality of the curriculum and to promote the ultimate growth of students' capabilities, the liberal arts curriculum should reflect the learner's needs. As shown in the results of this study, classes should be operated considering the predictor variables that influenced the contentment of liberal arts courses. However, the predictors shown in the outcome of this research, there will be other variables that influence the contentment of liberal arts courses. Therefore, in order to consider the limitations of this study, I would like to suggest follow-up studies as follows.

First, since the subject of the study was only learners, it is necessary to grasp the perceptions of instructors who are conducting teaching activities. Considering various situations that may appear in the teaching-learning process, it is essential to identify the relationship for the improvement of satisfaction in liberal arts classes.

Second, this study analyzed the structural relationship with satisfaction with general education classes, but a comprehensive analysis is needed by additionally comparing the structural relationship with satisfaction with major classes.

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