# The Study of social factors toward Academic Satisfaction in E-Learning Education

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# **Abstract**

This paper investigates the empirical implications. The research question of this study is to verify the influences of psychological and environmental factors toward performance satisfaction and durability of learning in E-Learning University. For empirical verification, a survey was conducted targeting 500 students in E-learning Universities. The results show that actional environment on academic satisfaction in learning is the most important factor followed by physical environment, internal motivation, and academic burnout. The effect of psychological factors on learning persistence was important in the order of academic vision, internal motivation, actional environment and physical environment. The effect of academic satisfaction on learning durability proved to be statistically significant. The results suggest that actional environment should be considered with top priority to increase the academic satisfaction. learning satisfaction, academic vision, and academic satisfaction to enhance students' intention to continue studies are important. Academic burnout has a negative effect on both academic satisfaction and learning persistence, suggesting that this aspect should be properly addresses. The effects of student background variables in E-learning were explored.

Keyword: E-Learning education, psychological and environmental factors, internal motivation and attachment, actional environment, academic satisfaction, academic burnout

## I. Introduction

The era of smart, the evolution of e-learning is only expected to speed up. Now is the world where people can meet various forms of educational contents that links around the world through various wired and wireless device.[1] Also, as it will be shared and spread through various SNS, the quality of e-learning contents will be

get better.[2] This study aims to verify the effects of learner's psychological and academic environmental factors on learning satisfaction and is intended to investigate the degree to which interaction and other predictors contribute to student satisfaction in online learning status. Based upon this, to identify the factors affecting academic satisfaction and learning durability.

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Academic leaders in Korea. indicated that online learning is critical to the long-term growth of long life educational institutions, reporting that the increase in demand for online courses or programs is greater than that for face-to-face courses. It is worthwhile to investigate student satisfaction in online settings because new technologies have altered the way that students interact with instructors and classmates (Kaminski, Switzer, & Gloeckner, 2009).[3] [7] This study investigated factors (i.e., the influences of psychological and environmental factors toward performance satisfaction and durability of learning in On-Line University.) associated with student satisfaction in fully online learning settings.

## II. Related Study

The intrinsic motivation helps learners have enthusiasm and passion for learning, which in turn affect academic performance.[4] [5] In a learning environment, self-efficacy is the confidence and courage to establish academic plans and pursue the goals. Intrinsic and self-efficacy are more important in On-Line learning where learner need

to study for themselves. [6][7] The results of studies demonstrate that may students' learning through cyber classes are likely to decide to quit studying during the course due to personal factors. [8]

Environmental factors have effects on students' cognitive feature, creativity, academic achievement and act as important factor in forming behavioral patterns such as self-concept, attitude, interest, and personality. [9] academic satisfaction proved to be important factors in evaluating academic performance. Learning attachment refers to learners' continued involvement until they achieve the academic goals in some specific educational institutions or courses or complete them successfully. [10]

## III. Research Methods

## 1. Respondents

This study targeted the students in the first term of 2016, in On-Line learning Universities. A questionnaire survey was conducted through the site of the school June 1 till June 20, 2016. The data collected from respondents were processed. As for the demographics of the respondents, there were more male students (270)than female students(230) in 500 cases.

#### 2. Research measures

The psychological and environmental factor shown that students' cognitive engagement can be altered by various elements in the learning environment design such as factors related students' perceptions of teaching quality, characteristics of tasks and learning activities, teachers' behaviors during instruction, classroom goal structures, the integration of student oriented learning, action learning, problem-based learning, and constructivist learning, and academic disciplines.

Satisfaction and adhesion of E-learning were to explain adult learners' intrinsic value and academic self-efficacy as predictors of learning persistence, satisfaction, and academic achievement in e-learning environment. This study was based on a web survey 500 of in On-Line learning Universities in 2016. The analysis results of the study are as follows: The results showed that only intrinsic value meaningfully expected academic persistence and satisfaction after the prediction analysis of intrinsic value and academic self-efficacy toward academic persistence. satisfaction and academic achievement. On the other hand, both intrinsic value and academic self-efficacy didn't predict academic achievement. And satisfaction was revealed as a meaningful predictor for academic persistence, while academic achievement didn't predict academic persistence. Based on these results, this study suggested e-learning strategies to improve adult satisfaction, as well as to strengthen intrinsic value. The strategies related with intrinsic value were presented with the categories of objectives, tasks, instructional design and environment, and teaching-learning activities.

# IV. Research Findings

Table 1. Verification of the validity and the reliability of independent variables

Factor		Measured item	Factor loadings	Eigen value	Variance	cronbach's learning persistence
	intrinsic	fun	.815	2.248	11.238	0.747
Psychological	motivation	new thing	.802	2.240		
characters	aalf afficaas	important role	.665		F 067	0.607
	self efficacy	what I want	.642	1.013	5.067	0.607
	academic burnout	too many things to learn	.822	1.585	7.926	0.747
	Dulliout	hard to learn	.821			
	vision	job expertise	.810	1.970	9.852	0.744
Environment		potential development	.719		9.002	0.744
characters	physical	easy to contents	.823	4.288	01 110	700
	environment	design screen .701		4.200	21.440	.793
	Actional environment	student and professor	.857		6.551	
		exchange between students	.785	1.310		0.692

Total variance: 62.074, KMO=0.773 \*p,0.01

As a result of the exploratory factor analysis of the environmental characteristics, an independent variable of this study, academic burnout, academic vision, physical environment, and actional environment proved to have conceptual validity, respectively. Furthermore, when considering cronbach's learning persistence value(academic value.747, academic vision .744 physucal environment .793, and actional environment .692), it is through that

there is internal consistency. The findings from KMO and Bartlett to identify the suitability of samples for a factor analysis showed they are statistically significant(p<.001)(see Table 1)

Correlation between psychological characters, environmental characters, academic satisfaction and learning persistence was as follows.

The findings of the analysis of the correlation between independent variables(psychological characteristics, scholastic factor of the students in cyber universities) and dependent variables (academic satisfaction and persistence) are exhibites. Intrinsic motivation with academic have correlation satisfaction(r=.303)and learning persistence(r=.389)(p<.05)

Table 2. Correlation between independent variables and dependent variables

	im	se	fv	ef	al	ls	la
im	1						
se	.572*	1					
fv	.267*	.340*	1				
ef	.244*	246*	.278*	1			
al	.220*	.224*	.322*	.544*	1		
ls	.312*	.295	.296*	.538*	.678*	1	
la	.387*	.348*	.423*	.372*	.383*	.477*	1

(R\*\*2: .436, adjustment R\*\*2: .424, DW: 1.587)

\* im(internal motivation), se(self efficacy), fv(future vision), ef(environmental factor), al(actional learning), Is(learning satisfaction), Ia(learning attachment)

Environmental factor has correlation with learning attachment, especially with satisfaction factor.

Actional factors, in common with environmental factor have the higher correlation with satisfaction

factor than learning attachment.

this study suggested e-learning strategies to improve adult learners' satisfaction, as well as to strengthen intrinsic value. The strategies related with intrinsic value were presented with the categories of objectives, tasks, instructional design and environment, and teaching-learning activities.

Table 3. Effect of psychological and environmental factors on satisfaction

class	В	S.E	В	t	р	F	VIF	
Contant	125	.298		421	.674			
im	.127	.056	.101	2.244	.024*		1.434	
se	.100	.064	072	1.603	.107		1.544	
fv	.026	043	.025	.574	.566	60.13	1.278	
ef	2.75	.056	.223	4.773	.000**		1.466	
al	.572	.052	.523	11.272	.000*		1.478	
B2 = .54Revised B2=.54								

<sup>\*</sup>p<0.05, \*\*p<0.01

The results showed the accountability of psychological factor and environmental factors on satisfaction was 54%, of 5 independent variables, motivation influence environment and actional factor influences satisfaction.

Table 4. Effect of psychological and academic factors on learning attachment factors on satisfaction

class	В	S.E	ß	t	р	F	VIF
Contant	1.262	.298		4.321	.000		
im	.242	.058	.233	4.252	.000**		1.434
se	.086	.064	076	1.403	.163	27.12	1.544
fv	.202	045	.243	4.672	.000**	21.12	1.383
ef	.146	.057	.142	2.553	.012**		1.466
al	.157	.053	.166	2.972	.003*		1.487
R2 = .33 Revised R2=32 *p<0.05, **p<0.01							

The results showed the accountability of psychological factor and academic factors on satisfaction was 33%, of 5 independent variables,

Table 5. Effect of satisfaction factor on learning attachment

	В	S.E	ß	t	р	F		
constant	2.72	.155		17.4 32	.000	90.93**		
I.satisfaction	.386	.043	.477	9.55 5	.000* *	90.93**		
R2 = .23. Revised R2=.23								

## V. Conclusion

This study aims to empirically verify the effects of the psychological factors environmental factors on satisfaction and attachment, targeting cyber or digital schools. Based on the findings as above, the followings can be suggested to improve the satisfaction factor and learning attachment of the students in cyber education. First, female students who have low level of satisfaction factor will be the target group to improve the satisfaction in cyber education.

Second, learning vision of psychological factors and environmental factors proved to be a factor that had the greatest effect on attachment, which implies that there is less likelihood the students would quit in the middle if the student have higher future vision. Fourth, this study has significance in that it addressed learning satisfaction which has been seldom delt with as an independent variable affecting academic satisfaction learning attachment in on line education institutions that produce more dropouts than offline educations institutions. The fact has significance in that it has addresses the explanatory variables to be managed to improve the academic satisfaction and learning attachment of the learning students in E-Learning schools comprehensively and identified the importance of interaction, future vision. and Open educational resources have great potential and their use can ensure quality teaching and learning, but the activity has not inspired the great mass of higher education teachers in Universities.

Further the studies that discover a wide range of variables with significance among individual psychological factors and environmental factors and include them are required.

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