

# INCREASE POSITIVITY IN LEARNING OF STUDENTS AT DANANG ARCHITECTURAL UNIVERSITY, VIETNAM

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**Abstract:** *Through survey results from 343 students studying at Danang Architecture University, this study has synthesized the concepts of learning positivity, research hypotheses about the relationship factors, research results preceded in analyzing and evaluating the impact of these factors on the positivity in learning of students at Danang Architecture University. Combining basic analysis in quantitative research such as statistics, Cronbach's alpha reliability, EFA & CFA factor analysis, SEM model from SPSS and AMOS software. The research results show that: (1) The factors of Facilities, Teaching staff, Training Program, Student's initiative, Student's passion have statistical significance in affecting the positivity in learning; (2) And the factor Student's passion is statistically significant in affecting Student's initiative.*

**Keywords:** *Student, Learning, Positivity.*

## **I. Introduction**

With the explosion of information technology will diversify forms of learner's access to knowledge, and more specifically, today's new-age students have many ways to acquire knowledge, however, many people have not taken the initiative to access knowledge (Boniwell et al., 2016; Halliday et al., 2019). Therefore, it is necessary for learners to increase positivity in learning (Hofman et al., 2005).

Positivity in learning is an extremely valuable quality of learners in modern society and plays a special role in improving the effectiveness of the teaching

process (Conoley et al., 2014; Halliday et al., 2019). Studying the learning positivity of students and providing measures to promote the active learning of students in majors is not only the central task of the school but also the mission of the lecturers. Pointing out the status of positivity in learning of students is not only meaningful in theory but also has profound practical significance (Halliday et al., 2019). For international integration, it is very important to improve students' activeness in learning activities because it is the driving force for improving and updating training content in the fastest and latest way (Boniwell & associates, 2016; Kern et al., 2017b; Halliday et al., 2019).

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Recognizing the importance of positivity in learning, the authors decided to conduct the study “*Increase positivity in learning of students at Danang Architectural University, Vietnam*” which will contribute to the assessment of the factors affecting the positivity in learning of students at Danang Architecture University and propose managerial implications to improve positivity in learning of students at Danang Architecture University.

## II. Theoretical basis

### 2.1. Positivity

The positivity of the individual is associated with the active state of the subject. Positivity includes the initiative, creativity, and consciousness of the subject in activities. Individual positivity is an attribute of personality that is characterized by a strong influence of ongoing actions on the subject. The positivity is reflected in the efforts of the self, in the initiative, self-discipline; and in the end, it is the high results of the subject’s purposeful activities. Positivity is formed and developed in individuals’ daily activities (Vu, 2011; Halliday et al., 2019).

### 2.2. Positivity in learning

Positivity in learning is a concept used to refer to the process of mobilizing internal factors (perceptions, emotions, etc.) with external manifestations through gestures, words and behaviors to fulfill the learning purpose (Thai, 2003).

Positivity in learning is the individual’s positivity that is differentiated and directed at solving learning problems and tasks to achieve learning goals. Positivity in learning includes both internal and external forms. Although Positivity in learning and cognitive

positivity are closely related (cognitive positivity is the premise to promote learning positivity) but not the same thing, there are many cases of Positivity in learning is shown outside rather than positivity in thinking, this is the external form of positivity (behavior, action, mode of action...). In addition, positivity in learning also has a causal relationship with personality qualities of learners such as self-discipline, independent thinking, initiative, and creativity (Vu, 2011).

### 2.3. Research hypotheses

#### 2.3.1. *The relationship between facilities and positivity in learning of students*

Facilities at educational institutions always play a role in promoting the learning spirit of learners (Conoley et al., 2014). Many studies show that the better the facilities, the higher the self-study and positive thinking in learners’ thinking (Conoley et al., 2014; Halliday et al., 2019). The educational units have a large area, fully equipped with good sound and light systems, which is a condition that helps students’ active learning to be improved (Halliday et al., 2019).

So, we recommend: Hypothesis 1 (H1): Facilities have a positive impact on the positivity in learning of students at Danang Architectural University.

#### 2.3.2. *The relationship between the teaching staff and positivity in learning of students*

The teaching staff always play a great role in the educational environment, it is the lecturers who inspire the learners to conquer knowledge and promote the activeness in learning of the learners (Halliday et al., 2019). Through the teaching staff, learners can find the right orientation in adding and

receiving new knowledge (Conoley et al., 2014; Halliday et al., 2019). Research results of Halliday et al (2019) show that learners will easily be more active in learning if teachers are dedicated.

So, we recommend: Hypothesis 2 (H2): The teaching staff has a positive impact on the positivity in learning of students at Danang Architectural University.

### 2.3.3. *The relationship between the training program and positivity in learning of students*

The training program is a guide-to-guide teachers and learners to the goal of conquering knowledge, so the training program plays a great role in improving the teacher's activeness in learning (Boniwell et al., 2016; Kern et al., 2017b; Halliday et al., 2019). Learners will be more interested if the training program follows reality (Conoley et al., 2014; Halliday et al., 2019). Therefore, it is very necessary to study the impact of the training program on the activeness in learning.

So, we recommend: Hypothesis 3 (H3): The training program has a positive impact on the positivity in learning of students at Danang Architectural University.

### 2.3.4. *The relationship between student's initiative and positivity in learning of students*

The students will have good results if they are active in learning (Boniwell et al., 2016; Kern et al., 2017b; Halliday et al., 2019). Student's initiative reflects that learners actively learn and improve their knowledge of the training contents, actively take the initiative in taking and completing the tasks assigned by the lecturer, and actively participating in all lessons. assessment exams: therefore, the

more active learners are, the more actively they will learn to get the best results (Boniwell et al., 2016).

So, we recommend: Hypothesis 4 (H4): Student's initiative has a positive impact on the positivity in learning of students at Danang Architectural University.

### 2.3.5. *The relationship between student's passion and student's initiative, positivity in learning of students*

Passion refers to an individual's interest in a certain issue, learners will actively learn if they have passion; therefore, the learners will have good learning results if they are actively study (Boniwell et al., 2016; Kern et al., 2017b; Halliday & associates, 2019). Learner's passion is reflected in the learners' interest in the field they are studying, the desire to share the learned knowledge with friends and society and improve their knowledge after each lesson (Boniwell et al., 2016). Therefore, passion really plays a role in enhancing the learner's initiative and the learner's activeness.

So, we recommend: Hypothesis 5 (H5): Student's passion has a positive impact on the positivity in learning of students at Danang Architectural University & Hypothesis 6 (H6): Student's passion has a positive impact on the positivity in learning of students at Danang Architectural University.

## III. Research Methodology

The research methods are used as follows:

- *Qualitative method*: First, the authors conduct research, synthesize theories and previous studies related to the research topic. Next, the authors conducted discussions with 10 experts

to supplement and adjust the observed variables of the factors in the proposed research model.

- *Quantitative method:* Data collected from direct consultation with students at Danang Architecture University. Basic analytical techniques (statistics, Cronbach's alpha, EFA, CFA, and SEM) are conducted by SPSS 20 and AMOS 20 software to demonstrate the impact of factors on Positivity in learning of students at Danang Architecture University.

The scales of factors from the previous researchers areas follows: *Facility factor* with 3 scales from Conoley et al. (2014); Halliday et al. (2019); *Teaching staff* with 4 scales from Conoley et al. (2014); Halliday et al. (2019); *Training Program* with 4 scales from Conoley et al. (2014); Halliday et al. (2019); *Student's initiative* with 3 scales from Boniwell et al. (2016); *Student's passion* with 3 scales from Conoley et al. (2014); Boniwell et al. (2016); *Positivity in learning* with 3 scales from Conoley et al. (2014); Boniwell et al. (2016); Halliday et al. (2019). So, we have 20 scales for 6 factors (Facilities (FA), Teaching staff (TS), Training Program (TP), Student's initiative (SI), Student's passion (SP), Positivity in learning (PL)).

According to Hoang and Chu (2008), the sample size must be at least four or five times the number of observed variables. Thus, in this study, the author uses a minimum number of research votes corresponding to 20 observed variables:  $5 \times 20 = 100$  observations. However, to ensure the persuasion and quality of the model results, the author conducted a survey of 350 votes, including 343 valid questionnaires with all the information on the questionnaire.

#### IV. Research results and discussion

In 343 students surveyed, the authors made preliminary statistics on survey information such as: Gender, major and year of study. Statistical results show the difference between the survey subjects in terms of gender male and female; in which, the proportion of female and male is 60.1% and 39.9%, respectively; and the number of students from all majors and year of study in the survey is spread evenly.

The first, Cronbach's alpha results show that, Cronbach's alpha coefficient of Facilities (FA), Teaching staff (TS), Training Program (TP), Student's initiative (SI), Student's passion (SP), Positivity in learning (PL) is 0.719; 0.866; 0.831; 0.785; 0.833; 0.866. All Cronbach's Alpha coefficients of the factors are relatively high from 0.7 upwards. The correlation coefficient of the total variables is greater than 0.3; except for the variable TS4 (belong to Teaching staff factor, TS4's content is: Teachers always create conditions to support learners) which has a correlation coefficient of the total variable less than 0.3, so the authors remove the TS4 variable, showing that the variables are closely correlated, ensuring all variables (19 variables of 6 factor groups) meet the requirements of SEM model analysis.

Next, the 19 variables belonging to factors were included in the Exploratory Factor Analysis (EFA), the EFA's result show that,  $KMO = 0.51$ , the Approx. Chi-Square is 2.852,199 with significance level  $Sig. = 0,000 \ll 0.05$  (Table 1). This confirms the KMO value ensuring the appropriateness of EFA and the significance level of the data put into performing factor analysis.

Table 1: Rotated Component Matrix

Content	Component					
	1	2	3	4	5	6
TP3: The training program is updated and renewed to match the reality and needs of learners	0.891					
TP2: The training program ensures enough time and specialized knowledge content for learners	0.821					
TP4: The training program is specifically introduced to learners	0.818					
TP1: The training program always has practical content programs for learners	0.722					
PL3: Learners strive to get the best results in assessments		0.909				
PL2: The lecturer is willing to introduce their friends about the field they are studying		0.896				
PL1: The lecturer feels happy when they come to class		0.858				
TS3: The lecturer always gives full and detailed instructions about the subject and enthusiastically supports students' questions			0.910			
TS1: Lecturers impart knowledge and practical experience in the teaching process			0.846			
TS2: Lecturers always ensure novelty and update new knowledge for learners			0.815			
SP2: Learners want to share the knowledge they have learned with friends and society				0.895		
SP3: Learners want to learn and improve their knowledge after each lesson				0.876		
SP1: Learners are interested in the subject				0.729		
SI3: Learners actively participate in all lessons and assessments					0.893	
SI2: Learners take the initiative in doing homework and completing the tasks assigned by the teacher					0.860	
SI1: Learners actively learn and improve their knowledge of the training content					0.755	
FA2: Classrooms are fully equipped and ensure the health of learners						0.860
FA1: Classroom area ensures the number of students participating in learning						0.845
FA3: Classrooms ensure enough light and sound for learners						0.676
KMO = 0.751; Chi-square = 2.852,199 (Sig. = 0.000)						
Eigenvalues	3.798	2.966	2.354	2.049	1.666	1.082
% of Variance extracted	19.987	15.612	12.392	10.782	8.766	5.695
% of Total variance extracted	19.987	35.598	47.990	58.772	67.538	73.233

Source: SPSS Analysis Results

The eigenvalue value is 1.082 greater than 1 and stops at the third line with the total variance extracted is 73.233% greater than 50% (Table 1). This value is quite high with 73.233% of data variability explained by six factors. At the same time, all factor load factors are greater than 0.5 and arranged in three separate groups of factors, these are groups of factors Facilities (FA), Teaching staff (TS), Training Program (TP), Student’s initiative (SI), Student’s passion (SP), Positivity in learning (PL).

Next, the results of CFA analysis (Image 1) have shown that the distributed value of Chi-square/df = 1.659 < 3 (Sig. = 0.000 < 5%); GFI=0.936 > 0.9; TLI=0.959 > 0.95; CFI = 0.967 > 0.95 and RMSEA = 0.044 < 0.08 (Image 1); therefore, the data is quite good, guaranteed for analysis (Nguyen & Nguyen, 2011).

In the meantime, all standardized factor loadings are greater than 0.5, which means as having statistical significance, so the concepts reach convergent validity. For that reason, there are 6 main factors to analyze: Facilities (FA), Teaching staff (TS), Training Program (TP), Student’s initiative (SI), Student’s passion (SP), Positivity in learning (PL).

In addition, the variance explained values of all factors are higher than 0.5 and the composite reliability values of all factors are higher than 0.7 (Table 2); therefore, the data is quite good, guaranteed for analysis. As well, the P-value of the correlation coefficients for each pair is less than 0.05 (5%), so the correlation coefficient for each pair of these concepts differs from 1% at 95% reliability. Thereby, these concepts achieve discriminant validity.

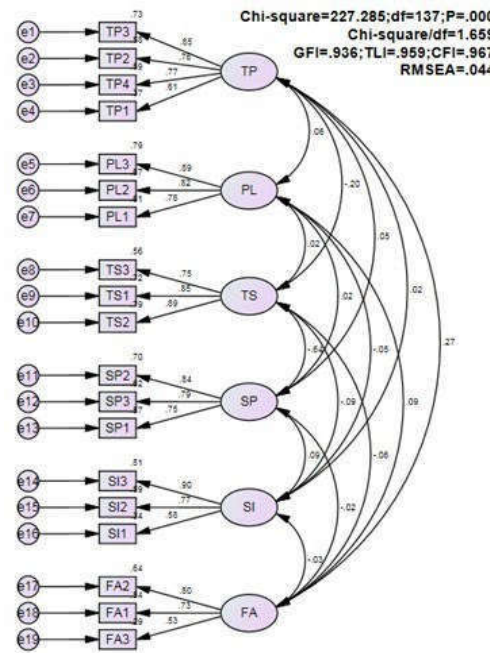


Image 1: Standardized results of CFA

Source: Results of AMOS analysis

Table 2: Variance extracted and Composite reliability

No.	Factor	Variance extracted	Composite reliability
1	Facilities	0.798	0.798
2	Teaching staff	0.825	0.825
3	Training Program	0.816	0.816
4	Student’s initiative	0.799	0.799
5	Student’s passion	0.705	0.705
6	Positivity in learning	0.830	0.830

Source: Calculation results of the author’s team

Derived from CFA analysis results, the results of the structural equation modeling (SEM) were also consistent with market data; this is reflected in some indicators, such as: the distributed value of Chi-square/df = 1.628 < 3 (Sig. = 0.000 < 5%); GFI = 0.936 > 0.9; TLI = 0.961 > 0.95; CFI = 0.968 > 0.95, and RMSEA = 0.043 < 0.08 (Image 2).

Table 3: Results from SEM model

Relationship	Estimate	Standardized estimate	Standardized estimate according to the diagram	C.R.	P
CD <--- DM	0.099	0,100	0,10	1.25	***
TC <--- VC	0.084	0,076	0,08	0.67	0.003
TC <--- GV	0.076	0,077	0,08	1.17	0.009
TC <--- CT	0.052	0,053	0,05	1.00	***
TC <--- CD	0.053	0,051	0,05	1.33	0.004
TC <--- DM	0.072	0,070	0,07	0.00	0.006

Note: \*\*\* is 0% (0,000); Source: Results of AMOS analysis

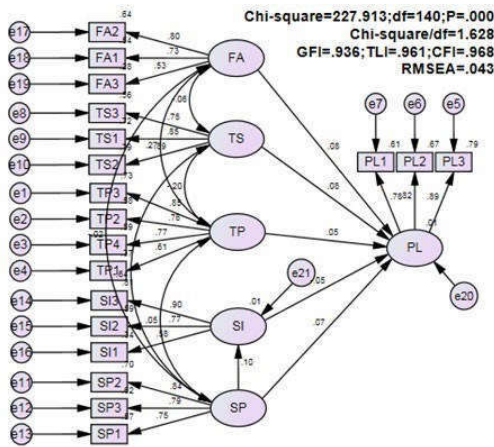


Image 2: SEM model results show the impact of factors

Source: Results of AMOS analysis

At the same time, based on the analysis results, the P-Value of the influence relationships between the factors, we see, the P-Value is less than 5% (Table

3). Therefore, the relationships among the factors Facilities (FA), Teaching staff (TS), Training Program (TP), Student’s initiative (SI), Student’s passion (SP), Positivity in learning (PL) are statistically significant in Structural Equation Model SEM.

According to the results of the SEM model, it shows that the factors of Facilities, Teaching staff, Training Programs, Student’s initiative, Student’s passion have a positive impact on Positivity in learning with regression coefficients is 0.08; 0.08; 0.05; 0.05; 0.07 (Table 3). This means that when the factors of Facilities, Teaching staff, Training Programs, Student’s initiative, Student’s passion are better/increase by 1 unit, then Positivity in learning set in turn increased by 0.08; 0.08; 0.05; 0.05; 0.07 units.

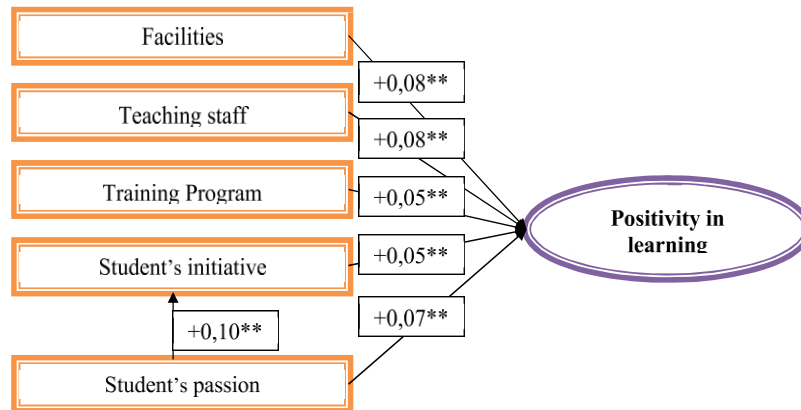


Image 3: SEM model results show the impact of factors

Note: \*\* (Significant 1%); Source: Synthesize from analysis results

And the factors Student's passion has a positive impact on Student's initiative with a regression coefficient is 0.10 (Table 3); this means that when the student's passion factor is better/increase by 1 unit, the student's initiative increases by 0.10 units.

Along with that, based on the results of the SEM model, the author's team conducted Bootstrap testing and obtained the absolute value of the CR coefficient of the relationships between the factors all less than 2 (Table 3); this confirms that the SEM model results can be completely trusted because the standard deviation is very small.

#### **V. Conclusion and managerial implications**

After analyzing the SEM model, the study has shown the impact of the factors on the Positivity in learning of students at Danang Architecture University, specifically: (1) The factors of facilities, teaching staff, training program, students' initiative, student's passion have statistical significance in affecting learning Positivity in learning of students; (2) And the factor Student's passion is statistically significant in affecting the student's initiative.

Based on the results of the research model achieved, the authors propose the following administrative implications to increase the Positivity in learning of students:

*Management implications for the facilities factor:* (i) Implementing the management of documents, procedures and records according to ISO quality management standards to bring efficiency and quality in management products, services and paperwork; (ii) It is necessary to regularly check, maintain or replace

equipment and machinery for the job; (iii) Making financial reserves to prepare financial resources for the purchase of new equipment to catch up with the modernization trend in administrative work.

*Management implications for the teaching staff factor:* (i) Creating a happy atmosphere, cultivating enthusiasm to help staff/lecturers stick together more; (ii) Promoting teamwork is a solution with good influence by regularly organizing collective activities; (iii) Create comfortable information exchange meetings, from which lecturers actively share working experiences with each other, accumulate knowledge and actively learn more about new issues.

*Management implications for the training program factor:* (i) Paying attention to new training programs and new subjects from universities in the world and in the country to update and supplement new training programs; (ii) Increasing the amount of practice time in conjunction with the theoretical course to help students approach reality; (iii) Maintaining the survey and evaluation of learners, former learners and employers about training programs to receive and update the latest information on market needs, demand from learners in order to have the best training program.

*Management implications for the student's initiative factor:* (i) Regularly create group discussions, group exercises and presentations for students to be proactive in sharing knowledge; (ii) In addition, lecturers should encourage students to plan their work and study; (iii) And the students need to clearly define the necessary work to be done, arrange in the order of the tasks that need to be prioritized.



*Management implications for the student's passion factor:* (i) Regularly introduce and refer to the job position and working environment after graduation through the course to orient and clearly define the student's work goals, from which the students will further increase their passion for learning; (ii) Apply scholarship policies, link many businesses, organize seminars and conferences to share job opportunities and shape jobs for students, to help students understand catch career opportunities and enjoy the field more; (iii) Increase and expand many social activities and clubs to help students increase their soft skills.

Although trying to complete the study in the best way, however, due to the limitation of time and knowledge, the study still has certain limitations such as the small sample size, the scope of the study only at Danang Architecture University. Therefore, subsequent studies can increase the sample size and expand the scope of the study to other provinces and cities to increase the applicability of the research results.

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