

# The effects of academic personality type, teachers' devotion and expectation on the recognition of media utilization

Ji-suk Kim and Jeong-kyoum Kim

Dept. of Education, Chungnam National University,  
99, Daehak-ro, Yuseong-gu, Daejeon, Korea  
Corresponding author.

Copyright © 2015 Ji-suk Kim, Jeong-kyoum Kim. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Abstract-** The purpose of this study is to investigate the correlation among academic personality of students, teachers' devotion, expectation, and the Recognition of Media Utilization in a university. To do this, a survey was carried out targeting 130 preliminary teachers in Daejeon & Chungnam universities. According to the research findings, each variable showed a meaningful correlation and especially, a meaningful relevance appeared among standard type-exploration type ( $r=.22$ ,  $p<.01$ ), standard type-teachers' devotion ( $r=.25$ ,  $p<.01$ ), standard type-teachers' expectation ( $r=.19$ ,  $p<.05$ ), standard type-Recognition of Media Utilization ( $r=.18$ ,  $p<.05$ ), teachers' devotion-teachers' expectation ( $r=.47$ ,  $p<.01$ ), teachers' devotion-Recognition of Media Utilization ( $r=.20$ ,  $p<.05$ ), teachers' expectation-Recognition of Media Utilization ( $r=.72$ ,  $p<.01$ ). The study also said that teachers' devotion and expectation had a meaningful influence on their recognition of media utilization ( $F=83.379$ ,  $p<.001$ ). On the basis of this analysis, we can assume that standard type students are relatively positive in media utilization during classes. Also, the higher the recognition on teachers' devotion and expectation is, students seem to more positively realize on media utilization.

**Keywords-** University Instruction, Academic Personality Type, Teachers' Devotion and Expectation, Media Utilization

## 1. Introduction

In more recent days, higher education institutions have tried to develop the quality of a lecture and research using Information & Communication Technology (ICT) and innovate our education depending on students' characteristics. Accordingly, turning an education paradigm from teaching to learning, the role of learners in a university is getting increased. Learners have come to participate in classes as a self-regulating being actively acquiring knowledge, but not as a passive consumer anymore. Consequently, we need empirical researches to find out the factors influencing learners' recognition on media utilization. In this research, I examined learners' academic personality types, which is an important variable to understand learners' characteristics, and the relevance to teachers' devotion, expectation, and the recognition on media utilization, which is appreciated by students.

The questions in accordance with this paper's purpose are as follows: First, is there any correlation between

learners' academic personality type and teachers' devotion, expectation, recognition of media utilization in universities?; Second, does learners' academic personality type effect on their cognition of media utilization in universities?; Third, do teachers' devotion and expectation effect on the recognition of media utilization in universities?

## 2. Literature Review

Due to the rapid growth of Information & Communication Technology, teaching activities applying various media have taken place in classes. Yet in-depth studies for these processes have not been made. In this paper, the factors influencing teachers' media utilization were by and large divided as follows: 1) factors on teachers; 2) factors on classes; 3) factors on learners; 4) factors on environment.

### 2.1. Factors on Teachers

First of all, personal characteristics of teachers play a very important role in the process of teachers' selecting and utilizing the media, the term, teachers' characteristics, means their inherent nature as a main agent conducting teaching behaviors. Teachers' most important role is to provide high quality learning experiences and then draw out a desirable outcome, which is determined through effective teaching behaviors in a teaching-learning situation. To clear up teachers' characteristics affecting their behaviors, the variables like their characteristics of human nature and good behaviors were brought light on [1-2].

### 2.2. Factors on Classes

In general, teachers should consider teaching contexts, select proper teaching behaviors, and apply them in classes. It means that effective teaching behaviors could be altered according to a situation and suggests that even the same teachers' same behaviors could imply different meaning depending on teaching contexts [3-5].

### 2.3. Factors on Learners

Teachers should understand learners' individual differences and prepare teaching techniques, strategies, and teaching materials suitable for each learner to teach effectively. Learner factors which teachers especially consider important are in most cases age, previous experience, learning style, interest, maturity, socioeconomic background, and learning attitude etc. Edmunds and Smith [6]

emphasized that comprehending learner characteristics such as age, previous experience, learning style, interest, maturity, socioeconomic background, and learning attitude is a very important thing to perform effective classes. It means that teachers, through comprehending learners' individual differences, can lay out much better teaching methods reflecting learners' diversity and perform more adequate teaching behaviors.

#### 2.4. Factors on Environment

Universities are a kind of a social system with complex characters like human, physical, and environmental factors and have their distinctive organizations and structures in their own way [7]. And so organizational characteristics of universities influence teaching behaviors directly or indirectly. Especially, as teachers select their own effective teaching behaviors in accordance with physical, psychological and social conditions of their own universities, unique characteristics of an organization can expedite or hinder their teaching behaviors [1, 8].

### 3. Methods

#### 3.1. Participants

The survey was carried out targeting 130 preliminary teachers in universities in Daejeon & Chungnam universities to analyze the relevance between academic personality of students, teachers' devotion, expectation, and the recognition on media utilization. Participants are made up of 49 male students, 81 female students.

#### 3.2. Instrument and data analysis

In this research, U&I learning type test of Yeonwoo Institute of Psychology was conducted to figure out character-types related to students' learning. U&I learning type test is composed of three parts: 54 learning behavior types; 52 academic personality types, and 58 learning skill abilities. First, Only 52 questions identifying the academic personality were used in this paper. According to the result of calculating Cronbach  $\alpha$  coefficient in the lower scale of an academic personality, behavior type was .75, standard type .63, exploration type .62, and ideal type .57. Secondly, to examine students' recognition on teachers' devotion, a modified teachers' devotion measurement tool devised by Hong [7] was utilized. In addition, to examine students' recognition on teachers' expectation, a modified tool of Kim [1] was used, which was an adapted version of Sweatt [9]. According to the result of calculating Cronbach  $\alpha$  coefficient in teachers' devotion and expectation degree, teachers' devotion was .89 and teachers' expectation .93. At last, 9 questions measuring preferences for utilization on the new media, its usefulness, and the recognition on a class effect were used. The result of calculating Cronbach  $\alpha$  coefficient in the recognition scale on the media utilization was shown as .85.

### 4. Results

#### 4.1. The correlation of academic personality types, teachers' devotion and expectation, and recognition on media utilization

According to the research findings on students' academic personality types, teachers' devotion and expectation, and the

recognition on the media utilization in university classes, there indicated meaningful correlations with one another as follows: standard type-exploration type ( $r=.22, p<.01$ ), standard type-teachers' devotion ( $r=.25, p<.01$ ), standard type-teachers' expectation ( $r=.19, p<.05$ ), standard type-recognition on media utilization ( $r=.18, p<.05$ ), teachers' devotion-teachers' expectation ( $r=.47, p<.01$ ), teachers' devotion-recognition on media utilization ( $r=.20, p<.05$ ), teachers' expectation-recognition on media utilization ( $r=.72, p<.01$ ).

#### 4.2. The influence of academic personality type to the recognition on media utilization

Multiple regression analysis was carried out to investigate the impact of students' academic personality type to the recognition on media utilization in university classes. According to the result of identifying multicollinearity among each variable, tolerance nearly came close to 1 as .92~.97, VIF coefficient was under 10, which verified the fact that there was no problem in multicollinearity. The regression analysis on the recognition of media utilization is Table 1. According to the table, the regression model composed of independent variables in this research to explain the recognition of media utilization was statistically not meaningful.

Table 1. The correlation of academic personality types, teachers' devotion and expectation, and recognition on media utilization ( $n = 130, p < .05, ** p < .01$ )

Variables	1	2	3	4	5	6	7
1. behavior type							
2. standard type	-0.08	1					
3. exploration type	0.10	0.22**	1				
4. ideal type	0.11	-0.06	-0.12	1			
5. teachers' devotion	0.08	0.25**	0.08	-0.05	1		
6. teachers' expectation	0.04	0.19*	0.01	0.02	0.47**	1	
7. recognition on media utilization	0.03	0.18*	-0.03	0.09	0.20*	0.72**	1

Table 2. The influence of academic personality type to the recognition on media utilization ( $n = 130, p < .05$ )

Dependent variable	Independent variables	Non-standardized coefficients		B	T	VIF
		B	Standard error			
recognition on media utilization	behavior type	.005	.011	.041	.484	1.038
	standard type	.033	.014	.202	2.353*	1.063
	exploration type	-.010	.013	-.064	-.740	1.085
	ideal type	.019	.017	.094	1.106	1.035
R=.219, R <sup>2</sup> (adj.R <sup>2</sup> )=.048(.020), F=1.719						

Table 3. The influence of teachers' devotion and expectation on the recognition of media utilization ( $n = 130$ ,  $**p < .01$ ,  $***p < .001$ )

Dependent variable	Independent variables	Non-standardized coefficients		B	T	VIF
		B	Standard error			
recognition on media utilization	teachers' devotion	-.204	.077	-.171	-	1.273
	teachers' expectation	.705	.057	.802	2.648**	1.273
R=.739, R <sup>2</sup> (adj.R <sup>2</sup> )=.545(.539), F=83.379***						

#### 4.3. The influence of teachers' devotion and expectation on the recognition of media utilization

To fine out the influence of teachers' devotion and expectation on the recognition of media utilization, multiple regression analysis was conducted. According to the result of identifying multicollinearity among each variable, tolerance nearly came close to 1 as .79, VIF coefficient was under 10, which verified the fact that there was no problem in multicollinearity. The regression analysis on the recognition of media utilization is Table 2. According to the result, the regression model composed of independent variables in this research to explain the recognition of media utilization was statistically meaningful ( $F=83.379$ ,  $p<.001$ ). These variables had about 54.5% impact on the recognition of media utilization.

#### 5. Discussion and conclusion

The purpose of this research was conducted to analyze the relevance among students' academic personality type, teachers' devotion and expectation, and Recognition of Media Utilization. As a lot variety of new media is applied in recent university classes, investigating students' Recognition of Media Utilization and identifying its related variables is a very significant thing. On the basis of this analysis, we can assume that standard type students are relatively positive in media utilization during classes. Also, the higher the recognition on teachers' devotion and expectation is, students seem to more positively realize on media utilization. It suggest that the media should be well used considering not only standard type students who are responsible, earnest, and mandatory oriented but ones who have various academic personality types. Especially, a class medium should be carefully designed and instructed after considering students who do not actively participate in classes [10].

#### References

[1] K. Y. Kim, The hierarchical linear relationship among teaching behaviors, professor-student characteristics, instructional contexts, and organizational characteristics in junior colleges, Unpublished doctoral dissertation of Seoul National University (2010).  
 [2] M. J. Dunkin, B. J. Biddle, The study of teaching, New York: Holt, Rinehart and Winston (1974).  
 [3] P. C. Abrami, S. d'Apollonia, S. Rosenfield, The dimensionality of student ratings of insruction: What we know and what we do not, *Effective teaching in higher*

*education: Research and practice* (2007), New York: Agathon Press.  
 [4] J. Brophy, Teaching, *Brussels: International Academy of Education* (2000).  
 [5] Shulman, L. S. (1986). Those who understand: knowledge growth in teaching. *Educational Research*, 15(2), 4-14.  
 [6] N. A. Edmunds, C. L. Smith, Learning how to teach, VA: *American Vocational Association* (1996).  
 [7] C. N. Hong, The Structural relationship between school characteristics and teacher commitment, Unpublished doctoral dissertation of Seoul National University (2005).  
 [8] L. W. Anderson, Increasing teacher effectiveness (2nd ed.), Paris: *UNESCO, International Institute for Educational Planning* (2004).  
 [9] S. S. Sweatt, The relationship among teacher expectations, teacher attitudes toward the TAAS, and student achievement, Unpublished doctoral dissertation of University of North Texas (2000).  
 [10] J. K. Kim, J. S. Kim, Analysis on the Relevance among Academic Personality Type, Teachers' Devotion and Expectation, and the Recognition on Media Utilization. *Proc. of the 3rd International Conference on Advanced Green and Smart Technology* (2015).

**Received: May 10, 2015**