

Intrinsic and Extrinsic Academic Motivation of Students in Teacher Education University of Ho Chi Minh City, Vietnam

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ABSTRACT The Academic Motivation is divided into two types: Intrinsic Academic Motivation and the Extrinsic Academic Motivation. Academic motivation is one of the factors contributing to student achievement and academic success. This study was conducted to understand students' Intrinsic Academic Motivation and Extrinsic Academic Motivation. The sample included 212 students (71 male and 141 female). The results of correlation analysis show that there is a positive correlation between students' Intrinsic Academic Motivation and Extrinsic Academic Motivation. There is a gender difference in extrinsic academic motivation, in which female students have higher extrinsic academic motivation than male. There is no gender difference in intrinsic academic motivation. Findings also suggest that there is no difference in significance to major intrinsically and extrinsically academic motivation. Based on the above research results, the research team proposes future research directions and ways to promote students' motivation.

INTRODUCTION

Academic motivation is one of the factors that can lead to academic achievement; have impact on the initiation, tendency, intensity, and persistence of behaviors related to acquiring knowledge in students' learning environment (Nguyen et al. 2019; Le et al. 2020). The motivation is classified into two main types consisting of intrinsic academic motivation and extrinsic academic motivation, and additionally non-motor state (amotivation). Intrinsic academic motivation is the propensity with which the individuals perform the activities naturally out of interest, excitement; desire to conquer and experience challenges (Deci et al. 1985a). In contrast, extrinsic academic motivation drives people to engage in the activities due to their concern for an outcome other than the individual's interest in the activities (Deci et al. 1985b). These two types of motivation have effects on the achievement and learning goals of the students (Ayub 2010) as well as push their efforts on learning (Goodman et al. 2011). Based on research by Walker et al. (2006), there was no correlation between the intrinsic and the extrinsic motivation

from Southwestern University students. However, the study by Chang (2005) showed that the intrinsic and the extrinsic motivations were inversely correlated. On the contrary, D'Lima et al. (2014), Goodman et al. (2011) and Akpur (2020), suggested that the correlation between students' extrinsic and intrinsic motivation. Similarly, several studies comparing the gender differences between males and females in the intrinsic and the extrinsic motivation were also concerned and conducted in countries around the world. Specifically, the research conducted by Bhat et al. (2016) indicated that there was a significant discrepancy between male and female in terms of extrinsic motivation. Similar to the above results, Ayub (2010) also showed sex differences in the intrinsic and the extrinsic motivation, in particular, female students had higher intrinsic motivation than male students, and whereas the male students' extrinsic motivation was higher than the one of female students (Ayub 2010). Based on these findings, Ayub (2010) claimed that males were considered the main breadwinner of the family in comparison to the role of females, so there was an influence on the learning outcomes and motivation between them (Ayub 2010). Besides, in the same view, the study by Salehpour et al. (2020) presented that female students experienced higher intrinsic motivation

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than male students, while extrinsic motivation was higher for male students than for female students. D'Lima et al. (2014) found that female students had a higher extrinsic motivation than male students, contrary to the previous research (D'Lima et al. 2014). In Vietnam, several studies related to this topic, such as the academic motivation of students of Binh Duong University (Nguyen et al. 2014). According to Nguyen et al. (2017), students have relationships between academic motivation and procrastination. It can be seen that the researches on the relationship between the intrinsic and extrinsic academic motivation of students in Vietnam have not been disseminated yet. On the contrary, the topic of correlation, gender differences, and disciplines referred to the intrinsic and extrinsic academic motivation have been studied a lot in the world. This study aims to fill the gap above with the subjects that are students in Vietnam.

According to the Research Objectives of the Topic, There are 3 Hypotheses Tested

- H_{o1} : There is a positive correlation between the intrinsic and extrinsic academic motivation of the student's Teacher Education University in Ho Chi Minh City.
- H_{o2} : There is a significant gender difference in the intrinsic and extrinsic academic motivation of the student's Teacher Education University in Ho Chi Minh City.
- H_{o3} : There is a significant difference in the field of study between the intrinsic and extrinsic academic motivation of the student's Teacher Education University in Ho Chi Minh City.

METHODOLOGY

Data Collection

The study participants were 212 students from two Teacher Education University in Ho Chi Minh City, including the University of Education, Sai Gon University, Vietnam. The survey instrument was distributed to 250 students' Teacher Education University in Ho Chi Minh City, Vietnam, of which students answered with

212 questionnaires, including 71 (33.5%) males and 141 (66.5%) females, 149 non-pedagogical students (70.3%), and 63 pedagogical students (29.7%). The academic year includes 55 freshmen (25.9%), 81 sophomores (38.2%), 58 juniors (27.4%), and 18 seniors (8.5%), with a response rate of 84.8 percent, not exceeding the rate of 30 percent that the researchers requested for analysis, not exceeding the rate of 30 percent that the researchers requested for analysis (Dillman 2000; Tran-Chi 2019). The researchers contacted students from the Ho Chi Minh City Teacher Education University for the survey. The team first explained the study's purpose to the participants until they agreed to complete the questionnaires.

Table 1: Research participants

	Major	
	Quantity (n)	Percentage (%)
Pedagogical	63	29.7
Non-pedagogical	149	70.3
<i>School Year</i>		
Freshman	55	25.9
Sophomore	81	38.2
Junior	58	27.4
Senior	18	8.5
<i>Gender</i>		
Male	71	33.5
Female	141	66.5

Measurement

Participants completed an academic motivation scale developed based on self-determination theory given by Vallerand et al. in 1992. The scale was adapted by the authors Nguyen et al. (2019). The Academic Motivation Scale (AMS) includes seven main subscales: Amotivation (AM); 3 types of extrinsic motivation that are External Regulation (ER) - doing something just to get a reward or avoid being punished, Introjected Regulation (INR) - adjusting behavior through self-assessment, Identified Regulation (IDR) - someone does something because he or she determines its meaning or value; 3 types of intrinsic motivation consisting of Intrinsic Motivation to Know (IMTK), Intrinsic Motivation to Accomplish (IMTA) and Intrinsic Motivation to Experience (IMTE). The academic motivation scale (AMS) includes 28 items measured on a 7-point Likert scale, from 1 (Absolutely inappro-

appropriate) to 7 (Absolutely appropriate) (Nguyen et al. 2019). The reliability of the academic motivation scale (AMS) (Cronbach's alpha) for this target group is quite high at 0.81. The confidence coefficients (Cronbach's alpha) for the subscales from AM to IAM range between 0.46 and 0.87. The reason for the larger or lower academic motivation scale (AMS) in subscales may be from contextual differences and participants that tended to respond according to their understanding. The mean for the sample of the above subscales includes: extrinsic academic motivation (M= 4.98, SD=.95); intrinsic academic motivation (M= 4.61, SD= 1.02); IDR 5.29 (SD=1.03); ER 5.09 (SD= 1.17) and IMTK 5.06 (SD= 1.08). The research presents AMBER's descriptive statistics; INR; IDR; IMTA; IMTA; IMTA, IAM, and IAM.

RESULTS

These researches gave us valuable new insights into the Teacher Education University students in Ho Chi Minh City having higher extrinsic academic motivation M = 4.98 (SD = .95) than the intrinsic academic motivation M = 4.61 (SD = 1.02). Therein, the highest subscale was IDR with a mean of 5.29 (SD = 1.03), followed by ER miniatures with a mean of 5.09 (SD = 1.17), and the IMTK's mean was 5.06 (SD = 1.08). The mean and standard deviations of each subscale in students' academic motivation of the Teacher Education Universities in Ho Chi Minh City are presented.

Results shows the correlation between the intrinsic and extrinsic academic motivation, and the relationship between the subscales. Results indicates that there was a positive connection between the intrinsic and the extrinsic academic motivation ($r = .605, p < .01$). In addition, the 3 subscale pairs with the highest positive correlation are IMTK and IMTE ($r = .752, p < .01$), IMTA and IMTE ($r = .715, p < .01$), INR and IMTA ($r = .663, p < .01$). However, there is also an inverse correlation between the subscale AM and IDR ($r = -.230, p < .01$), AM and IMTK ($r = -.188, p < .01$).

Results from t-test show that there were significant differences between males and females in terms of extrinsic academic motivation $t(210) = -3.58, p = .01$; in which the extrinsic academic motivation of male students (M = 4.66; SD = 1.01) was lower than the one of female students (M = 5.14; SD = .87). There was not a notable divergence in the intrinsic academic motivation that exists between males and females $t(210) = -1.48, p = .01$. No substantial difference was found in the scores for Pedagogical (M=4.66; SD=1.01) and Non Pedagogical (M=4.58; SD=1.03). It was also realized that there was no discrepancy in the students' majors in relation to the intrinsic academic motivation $t(210) = .65, p = .01$, and extrinsic academic motivation $t(210) = 1.21, p = .01$.

DISCUSSION

Research on the relationship between internal and external motivation of students of Ho Chi Minh City Teacher Education University

Table 2: Correlation and descriptive statistics of the research variables

	<i>EAM</i>	<i>ER</i>	<i>INR</i>	<i>IDR</i>	<i>IAM</i>	<i>IMTK</i>	<i>IMTA</i>	<i>IMTE</i>	<i>AM</i>
EAM	1								
ER	-	1							
INR	-	.498**	1						
IDR	-	.551**	.438**	1					
IAM	-	.605**	-		1				
IMTK	-	.325**	.408**	.619**	-	1			
IMTA	-	.391**	.663**	.399**	-	.645**	1		
IMTE	-	.285**	.394**	.485**	-	.752**	.715**	1	
AM	-	0.01	.100	-.230**	-	-.188**	.064	-.021	1
Mean	4.98	5.09	4.55	5.29	4.61	5.06	4.29	4.49	2.37
SD	.95	1.17	1.30	1.03	1.02	1.08	1.21	1.12	1.26

** $p < .01$, *** $p < .001$

Abbreviations: M: Mean; SD: Standard Deviation; AM: Academic Motivation ER: External Regulation; INR: Introjected Regulation; IDR: Identified Regulation; IMTK: Intrinsic Motivation to Know; IMTA: Intrinsic Motivation to Accomplish; IMTE: Intrinsic Motivation to Experience; EAM: Extrinsic Academic Motivation; IAM: Intrinsic Academic Motivation.

Table 3: Gender difference and majors related to the intrinsic and extrinsic academic motivation

		<i>EAM</i>			<i>IAM</i>		
		<i>M</i>	<i>SD</i>	<i>t-test</i>	<i>M</i>	<i>SD</i>	<i>t-test</i>
<i>Gender</i>	Male	4.66	1.01	.00	4.47	1.06	.51
	Female	5.14	.87		4.69		.99
<i>Major</i>	Pedagogical	5.10	.86	.23	4.69	.98	.68
	Non-pedagogical	4.92	.98		4.58		1.03

p<.01, *p<.001

shows that students' internal academic motivation is higher than external academic motivation. The result was contrary to a previous study by Tarn Thuy Duong (2019) and Luong et al. (2019), which indicated that the level of the extrinsic motivation of the students was higher than the intrinsic motivation. Besides, the results were accumulated and analyzed through a t-test to test gender and discipline distinction. Research has shown that intrinsic and extrinsic academic motivation of students of Ho Chi Minh City Teacher Education University had a positive correlation. This result is similar to studies by D'Lima (2014), Goodman (2011), and Akpur (2020), who suggested that the correlation between students' extrinsic and intrinsic motivation (D'Lima et al. 2014; Goodman et al. 2011; Akpur 2020). However, it is contrary to Walker's (2006) study and Hsin-Hui Chang's study in Taiwan (Chang 2005), which indicated no link between intrinsic and extrinsic academic motivation among the students. Similarly, Khavid et al.'s study (2020), has shown no significant difference in the mean score of the extrinsic motivation between the students. The research has presented the overlap and differences with various research results due to each subject's specificity. Thus, it can be seen that the first hypothesis of the study has been accepted that there is a positive correlation between the intrinsic and extrinsic academic motivation students' Teacher Education University in Ho Chi Minh City. The study has displayed substantial variations in extrinsic motivation between males and females, in which males have lower motivation than females. Similarly, with the results of Bhat et al. (2016) and D'Lima (2014), there is a difference in the intrinsic and extrinsic motivation between the genders (D'Lima et al. 2014). In con-

trast to the above study, Nadia Ayub and Salehpour et al. proclaimed that although the work also showed gender differences in the motivations, male participants had higher extrinsic motivation than female ones (Ayub 2010; Salehpour et al. 2020). The findings have also manifested no difference in the intrinsic motivation between males and females; and no dissimilarity in intrinsic and extrinsic motivation between the majors. In this study, several limitations can be found. The most obvious limit is the number of samples taken by students from just two universities in Ho Chi Minh, Vietnam. This is just a general evaluation based on the results obtained from students in Ho Chi Minh City. However, it did not fully resolve the above deficiencies. Future studies will overcome these limitations. The research is conducted with the expectation of playing a vital role in expanding similar studies to bridge the gap between research and practice among university students in Vietnam compared to the world at a larger scale and give us a more detailed and broader perspective.

CONCLUSION

The results have indicated a positive correlation between intrinsic and extrinsic academic motivation among the students of Teacher Education University in Ho Chi Minh City. There is a gender difference in extrinsic academic motivation. Female students have a higher extrinsic motivation than male students; there is no gender difference in intrinsic academic motivation and no significant discrepancy between intrinsic and extrinsic motivation. The study is carried out with the expectation of initially opening up research problems about the intrinsic and extrinsic motivation of students in Vietnam.

RECOMMENDATIONS

This study recommends the relationship between the internal and external academic motivation of teacher education university students to pay attention to academic motivation and to identify learning motivation to promote students to learn more actively in the university environment.

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