Influences of Readiness for Self-directed Learning on Students' Self-directed Learning at Vietnamese University

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Abstract

Research aims to inspect level of readiness for self-directed learning and level of self-directed learning of students at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City. The study was conducted with a sample of 395 students voluntarily participated. The scale employed was the self-rate self-directed learning scale developed by Williamson (2007) and the readiness for self-directed learning scale developed by Fischer et al (2010). Results indicated the level of the self-directed learning amongst students at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City was high, accroding to Williamsons' (2007) modified scored frame. However, there was significant difference in level of self-directed learning and level of readiness for self-directed learning amongst different academic – year students. Last but not least, results also revealed a strong correlation between self-directed learning and the readiness for self-directed learning amongst students.

Keywords: Readiness for self-directed learning; self-directed learning; students

1. Introduction

1.1 Problems statement

Because of technology revolution, the world witnessed rapid changes in all aspects of lives. Human is once again confronted with challenges, which is no longer from mother earth but from modernization and industrialization. Every day, to keep up with advanced technology and changes in lives created by technology, human rush into all walks of lives to compete with robots and other intelligent agents. The world no longer require human for survival fights as it used to be thousand years ago. Nowadays, adaptation and aggressive progress is new homework for human being. Imagination of waking up in the morning with helpless situation since robot and intelligent bodies work all the things one person can do. It is not a terrible feeling but also a sign of extinction. As an emerging economic environment, Vietnam, in recent years, has undergone through changes not only in infrastructures but also in employments and labor market. Increased robots and intelligent machines have been imported and assigned into workforce. Vietnam government acknowledged the trends and took firsthand in renovation in both economic and education platform. To keep next generation of Vietnam out of sidewalks of lives, Vietnamese government shaped education direction into life-long education, which not only encourages but also equips learners to have enough knowledge and competencies to adapt and working in labor markets in era of globalization and next industrial revolution. One of the most important competencies for life - long education is self-directed learning. Playing a crucial part of education, self-directed learning equips learners' capacity not only to adapt well with new situation but also to know how to develop oneself in long term. In new education program issued by Vietnamese government in 2018, self-directed learning becomes learning outcomes for all learners from primary schoolers to university students. However, teacher-center and content-center teaching styles heavily impacted Vietnamese education for a long time. As consequences, students usually could not keep up with university lives and study in the first few years. This study aims to inspect the level of readiness for self-directed learning and level of self - directed learning of University of Social Science and Humanities' students in Ho Chi Minh City. From the results, the study could account for at what level of self-directed learning student is and how university can help them to forester self - directed learning.

1.2 Self-directed learning

Self-directed learning is one of the research topic attracting many scholars' interests. As far as this research can be considered, the concept of self-directed learning was first coined by Knowles (1975). According to Knowles (1975) self-directed learning – or self – study, is an *active individual process* (Long 1987, 1989, 1991; Brockett and Hiemstra, 1991; Candy, 1991; Garrison, 1997), *with or without the help of others in understanding their own learning needs* (Long, 1989; Candy, 1991), *self-identifying resources to learn* (Garrison, 1997), *self-select and implement appropriate learning strategies* (Candy, 1991; Garrison, 1997) *and evaluate their own learning outcomes*. Besides that, scholars around the world also contributed to theory of self-directed learning in such aspects as: *self-directed learning is a psychological control; the parallel effect of individual psychology and pedagogical psychology includes psychological self-control, motivational needs, resource identification strategy* (Long, 1987; 1989; 1991);

Self-directed learning is responsible for learning and for learners themselves (Brockett and Hiemstra, 1991); *Self-directed learning is self-directed that was not necessarily taken place in a classroom environment*; *Self-directed learning was not as equally as it was in different situations and majors* (Candy, 1991); *Self-directed learning is self-management, self-monitoring, self-motivation.* (Garrison, 1997).

In brief, scholars have contributed fully and adequately to the theory of self-directed learning. When it comes to self-directed learning, it was mentioned as personal needs, self-management and self-control in perception, towards personal responsibility in learning activities. Self-directed learning could be taken place in any situations. Self-directed learning was applying knowledge to new situations. Within the scope of this research, the concept of self-directed learning of Knowles (1975) was applied. Knowles (1975), self-directed learning is coined as an active individual process, with or without the help of others, in understanding their own learning needs, self-identifying resources to learn, self-select and implement appropriate learning strategies and evaluate their own learning outcomes.

2. Method

2.1 Sample

The sample of this study was a convenient random probability sample. The sample size was calculated according to the formula of Watson (2001). Accordingly, with the total population of the University of Social Sciences and Humanities, Vietnam National University Ho Chi Minh City is approximately 12,540 students (in academic year, 2020 -2021), the research sample applied Waston (2001) with confident level at 50%, the sample size varies from 385 to 390 participants. The official accepted survey sample was 395 students. There were 106 male students and 289 female students. The form of a survey was printed survey form and a google survey form.

2.2 Instruments

Williamson's self-rate self-directed learning scale

Williamson's scale (2007) was assigned in order to examine students' self-directed learning ability with 5 groups of factors: awareness, learning strategy, learning activities, evaluation and interpersonal skill. Accroding to Williamsons (2007), those factors could be accounted as follows: *Awareness*: learners' understanding of the factors motivating them to become a self-directed learner; *Learning Strategies*: explaining the different learning strategies adopted by learners in order to become a self-directed learner; *Learning activities*: necessary learning activities participated actively by learners in order to become a self-directed learner; *Evaluation*: learners monitor, supervise, test and evaluate their own learning process; *Interperson skills*: the ability of learners to interact with friends, teachers and other individuals to help themselves to learn. All items of this scale were set out in the positive direction. Each item has 5 levels of option from 1 to 5 in which, 1 represented as "never" and 05 represented as "always". The maximum and minimum possible scores of the scale were 60 and 300, respectively. According to Williamson (2007), low level of self-directed learning was indicated with score ranges from 60 to 140; intermediate level scores varied from 141 to 220; scores for

high level of self-directed learning was from 221 to 300. Accroding to Williamson (2007), cronbach alpha index was 0.79 for Awareness factor; 0.73 for Learning strategies factors; 0.71 for Learning activities factors; 0.71 for Evaluation factors; 0.71 for Interpersonal skill factors.

Fisher et al (2010) Readiness for self-directed learning

The readiness for Self-directed Learning scale was initially developed as an alternative for Guglielmino's (Guglielmino, L.M. 1977). With the desire to alter the scale developed by Guglielmino (1977), Fisher et al (2001, 2010) have developed a scale in oder to measure readiness for self-directed learning. The scale for readiness for self-directed learning by Fisher et al. (2001) had 40 items. In 2010, Fisher et al revised and proposed a new version short scale with 29 items including 3 factors: Self-management; Desire for Learning; Self-control. Cronbach Alpha index was 0.87 for the total scale (2010); 0.857 for *Self-management*, 0.847 for *Desire for learning*; 0.830 for the *Self-control*. Participants were asked to indicate the degree each item reflecting their own characteristics by using a five-point Likert scale at which 1 indicated "strongly disagree" and 5 indicated "strongly agree".

The Williamson scale (2007) and Fisher et al's scale (2010) was assigned for a pilot study with a sample of 50 students. In this study, the process of language translation and Vietnamization of the two scales was conducted in 4 steps: 1/Translation from English to Vietnamese and translation from Vietnamese to English by different experts with different qualifications at a proficient level of English; 2/ Evaluation of experts who are not involved at the translation stage; 3/ Interview and do experimental research with 15 students to check reading comprehension and survey time; 4/ Completing the official Vietnamese scale.

3. Results

3.1 Cronbach Alpha reliability analysis and Exploratory factor analysis

Williamson's self-rate self-directed learning

There were 395 respondents participating in survey with Williamson's Self-directed learning scale (2007) had the Cronbach Alpha index of the factor groups respectively 0.885 (Awearness), 0.862 (Learning strategy), 0.911 (Learning Activities), 0.908 (Evaluation), 0.905 (Interperson skills). The results of EFA exploratory factor analysis indicated that Initial Eigenvalues in 5 factors with a value of 1,912 (>1), KMO index was 0.936 (>0.05), Sig was 0.00 (<0.05) with total variance explained of 60,268 > 50%. Besides that, the EFA analysis showed that there were 5 factors extracted which were 60.628% variation of observed variables. The rotation matrix (Varimax) showed 5 factors with factor loading greater than 0.5.

Fisher et al (2010)'s self-directed learning readiness scale

The study with the participation of 395 respondents on the scale of readiness for self-directed learning of Fisher et al (2010) has the Cronbach Alpha index of the factor groups respectively 0.91 (Self-management), 0.829 (Desire for learning), 0.879 (Self-control). The EFA analysis showed that the KMO was 0.820; Initial Eigenvalues was 1,865 at 3 factors. Therefore, according to the results, the 29 – item scale of Fisher et al achieved sufficient reliability and validity in this study.

3.2 Self-directed learning of students

The average total score of the self-directed learning of students at the University of Social Sciences Social and Humanities was 157.44. The score indicated that the level of self-directed learning of students was high, according to Williamson's score modified scale in this study. In which, there were 2 students with low self-directed learning (0.5%), 154 (38.98%) students with medium self - directed learning and 239 (60.50%) students with low self-directed learning with high level. Results indicated no correlation between genders and self-directed learning as well as factors in self-directed learning. The independent T-test revealed the results of self-directed learning with Levene's test value. 0.347 > 0.05, T-test value was 0.491 > 0.05. On the other hands, the Levene's test values of the factors (except the evaluhane factor) were all greater than 0.05. The T-test value were 0.36, 0.317, 0.89, 0.672 respectively, overall greater than 0.05. The evaluation factor had a Levene's test value of less than 0.05, and the T-test value was 0.301>0.05. The results showed no difference between genders of students in term of self-directed learning. The results of ANOVA showed that there was no difference between different academic – year students in term of the self-directed learning. However, there was a difference between different academic – year students with factor such as learning strategies and learning activities. With learning strategy, the F-test sig in the ANOVA test was 0.003 < 0.05 and for the learning activity, the Welch test sig in the Robust Tests was 0.003 < 0.05. The average score for the learning strategy factor is highest among second – year students (4,2724), third – year students (4,2315) and fourth – year students (4.1722) and the lowest is 3.9713 belonging to first – year students . The average score for the learning activity factor is highest among first-year students (3,7966), third-year students (3.6061), second-year students (3.5882) and the lowest is fourth-year students (3.41661). In Post Hoc test, the results represented that there was a difference in learning strategies among different academic – year students and based on the average score results, it showed that students in 2nd, 3rd and 4th years have better learning strategies. Moreover, Post hoc test also showed a significant difference between the academic performance of the 3rd and 4th year students, and between the 1st and 4th year students. Based on the mean scores, results showed that the level of participation in learning activities of first-year students is the highest and the level of participation in learning activities of fourth-year students is the lowest. Besides that, there was also a statistically significant difference between third year students and forth year in learning activities.

3.3 Readiness for self-directed learning of students

The One – Way Anova test indicated the Sig index of the self-management and the Sig index of the self-control factor, respectively, were 0.001 and 0.006 (<0.05). The results suggested a statistically significant difference between different academic – year students in term of self-management and the self-control. After Post Hoc analysis with Tamhane and LSD tests employed, the results revealed that there was a difference between different academic – year students in term of self-management. For more specific, the Sig index of self-management is 0.001 between 4th and 3rd year students; 0.002 between 4th and 1st year students; 0.038 between 3rd and 2nd year students; 0.014 between 1st year and 2nd year students (less than 0.05). Besides that, the results also pointed out that there was a statistically significant difference in the self-control amongst the 3rd and 4th year students. For more specific, the Sig

index for the self-control was 0.06 between 3rd and 4th year students (less than 0.05). In comparsion with the average score of each component within readiness for self-directed learning, the results showed that first-year students have the highest average score on self-management (3.67); and fourth-year students have the lowest mean score on self-management (3.14). In addition, the average score of self-management in students of the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City was 3.36. Regarding the self-control, 3rd year students had the highest average score (4.13); 4th year students had the lowest mean score (3.85). The average score of the self-control factor of all students was 4.02. In addition, desire for learning had an average score of 4.25 in all students of the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City. In which, the results show that there was no difference between school years, the average score in each school year is 4.3; 4.15; 4.3; 4.2, respectively.

Table 1. Comparison between differents academic – year students and factors of readiness for self-directed learning

Factors	Academic year	Mean	Standard Deviation
Self-management	**Third year**	3.4667	.81768
	Second year	3.2602	.71614
	Forth year	3.1473	.76309
	First year	3.6690	.72215
	Total	3.3577	.78853
Desire for learning	**Third year**	4.3146	.58069
	Second year	4.1519	.57367
	Forth year	4.2151	.56397
	First year	4.3017	.49610
	Total	4.2519	.57136
Self-control	**Third year**	4.1285	.64682
	Second year	3.9637	.53593
	Forth year	3.8468	.67166
	First year	4.1121	.48682
	Total	4.0222	.62701

3.4 Correlation between Readiness of self-directed learning and Self-directed learning

The correlation test results showed that Sig correlates of Pearson with independent variables including *self-management, desires for learning,* and *self-control* with the dependent variable of self-directed learning was less than 0.05. Therefore, there was a linear relationship (positive correlation) between self-management, desires for learning, and self-control with self-directed learning. Between self-control and self-directed learning has the strongest correlation with r coefficient of 0.661. On contrary, desires for learning and self-directed learning gave the weakest correlation with r coefficient of 0.614. Research results also indicated that Sig correlates Pearson with independent variables including self-management, desires for learning, self-control with dependent variables of awareness, learning strategies, learning activities, evaluation and interpersonal skill were all less than 0.05. Thus, there was a linear relationship between these independent variables and the dependent variables. However, the self-control and self-management has the strongest correlation for the independent variables. Desires for learning only has the strongest correlation with learning activities.

Table 2. Correlation between readiness of self-directed learning and self-directed learning of students at University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City

Correlation variables	Correlation Coefficiency	Self - directed learning	Self - management	Desires for learning	Self - control
Self - directed learning	**Pearson Correlation**	1	.623**	.614**	.661**
	Sig. (2-tailed)		.000	.000	.000
	N	395	395	395	395
Self - management	**Pearson Correlation**	.623**	1	.511**	.599**
	Sig. (2-tailed)	.000		.000	.000
	N	395	395	395	395
Desires for learninng	**Pearson Correlation**	.614**	.511**	1	.572**
	Sig. (2-tailed)	.000	.000		.000
	N	395	395	395	395
Self - control	**Pearson Correlation**	.661**	.599**	.572**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	395	395	395	395

Stepwise multiple regression analysis indicated three optimal predictive models which can explain changes in self-directed learning. The least change in self-directed learning taken was with model 1 (self-control factor), that accounted only 43.7% of changes in students' self-directed learning by self-control factor. The model that accounts for the rapid changes in self-directed learning was model 3 (self-management factors, self-control and desires for learning), which explains 56.7% of the changes in students' self-directed learning by self-management factors, self-control and desires for learning. From the above results of multiple regression analysis, it is possible to build equations to predict the change in expression of self-directed learning of students at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City. For example, with model number 3, self-directed learning = 0.829 (constant) + 0.332 (self-control) + 0.280 (desires for learning) + 0.281 (self-management). In this model, self-control has the strongest effect (Beta = 0.332) and desires for learning has the weakest impact (Beta = 0.28) on self-directed learning of students at University of Science and Technology Society and Humanities, Vietnam National University, Ho Chi Minh City.

Table 3. Models for forecasting changes of students' self-directed learning from the impact of ready for self-directed learning of students at University of Social Sciences and Humanities, Vietnam National University City Ho Chi Minh

Models for forecasting changes of students's self-directed learning from the impact of ready for self-directed learning	Beta	Level of meaningful p
Model 1: r^2=0.437; constant = 1.482; p<0.001		
1 Self-control	0.661	0.000
Model 2: r^2=0.519; constant = 0.745; p<0.001		
1 Self-control	0.460	0.000
2 Desire for learning	0.351	0.000
Model 3: r^2=0.567; constant = 0.829; p<0.001		
1 Self-control	0.332	0.000
2 Desire for learning	0.280	0.000
3 Self-management	0.281	0.000

Annotate:

Dependent vairable: self-directed learning of students at University of Social Sciences and

Humanities, Vietnam National University City Ho Chi Minh.

Impact variable:

Model 1: self-control.

Model 2: self-control and desires for learning.

Model 3: self-control, desires for learning and self-management.

4. Discussion

The results indicated that the self-directed learning of students at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City was high with a total mean score of 157.44 (the average score of 156.13 for male students and 156. 157.92 for female). Self-directed learning in students was the same in both genders. However, the analysis results revealed that there was a difference between students of different academic years in terms of learning strategies and learning activities. Specifically, first-year students had more participation in learning activities than other groups of students. The forth – year students participated in learning activities the least among student groups. In terms of learning strategies, second, third and forth – year students had better learning strategies than first – year students. In which, 2nd year and 3rd year students had the best learning strategy in the group of students.

Besides that, the survey results for the readiness for self-directed learning in students were also very high. In which, there was a difference between the components for the readiness of students in different academic – year students. The factors such as self-management and self-control indicated a statistically significant difference between academic – year students. The analysis results revealed that the third – year students had the highest self-management and self-control. The same could not be told for the forth year students. Interestingly, the first – year students have higher average scores on the two factors of self-management and self-control in comparison with others. This pointed out that the ability to self-manage and self-control in fresh man was higher than others. In addition, the desires for learning of fresh man was also high amongst students of different academic – year students.

The results of the correlation analysis revealed that self-control and self-management were strongly correlated, having the most variable influence on self-directed learning of students at the University of Social Sciences and Humanities. Humanities, Vietnam National University, Ho Chi Minh City. However, the results introduced that the self-directed learning of fourth-year students was the lowest, besides, the self-management capacity and self-control ability of fourth-year students was also the lowest among the group of students. Therefore, students at the University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City, despite having high level of self-directed learning. First-year students participated in many learning activities, have high readiness for self-directed learning (good at self-management ability and self-control ability). However, first-year students still did not have good learning strategies and learning plans. On contrary, the fourth-year students had good study strategies and plans, but the factors of self-control, self-management and participation in learning activities were lower than those of first-year and second-year students.

5. Conclusion

The University of Social Sciences and Humanities, Vietnam National University, Ho Chi Minh City should had teaching plans on self-directed learning and methods for learning in higher education in aims to support first year students. Moreover, the university also needs to pay attention to supporting the fourth year students in learning activities, so that they can master their studies and harmonize their learning activities.

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