EFFECT OF PERSONALITY TRAITS ON PREFERENCE ON ONLINE LEARNING AT YANGON UNIVERSITY OF ECONOMICS[*]

Myint Myint Kyi[1]

Abstract

This paper intends to analyze the influence of personality traits on preference regarding online learning, and the effect of preference on online learning on learning effectiveness of online MBA (Master of Business Administration) students who are attending at Yangon University of Economics in 2020. Out of 85 students, 43 are randomly selected. To collect data from them, questionnaire method is applied by sending structured questionnaires to them via e-mail. Data are being analyzed by both descriptive and multiple linear regression analyses. From analyses, it is found that students' success is largely depending on their preference on self-evaluation and their behavior of effective help seeking from instructors and other students. To seek help, they need to have high agreeableness and openness. For effective self-evaluation, they should be extraverts with high openness. Thus, online students should not be isolated. They should be friendly and emphasize on keeping in touch with university teachers and also with other students.

Keywords*: Extraversion, Agreeableness, Conscientiousness, Openness, Neuroticism, Goal Setting, Environmental Structuring, Task Management, Time Management, Help Seeking, Self-Evaluation

Introduction

The role of technology has been rising year by year all over the world. Individuals, groups, businesses and organizations become rely more and more on technology, especially on information and communication technology in various aspects. In many countries, information and communication technology is necessary in daily lives of people. It is more obvious in individual learning. In Myanmar, Yangon University of Economics launched Master of Business Administration program in 1994, and launched Executive Master of Business Administration program in 2000 due to the requirements for developing country's economy and also for developing industries. However, these two programs have limitation to exclude the interested persons who cannot come in person to classrooms daily except on Sunday. To fill this gap, in 2007, the online Master of Business Administration program has been launched by Yangon University of Economics. In 2020, this online program produced 112 graduates, and about 85 students are in the process of learning and doing theses. Their reasons of joining the online program may not be the same. Some chose the online learning due to time and location constraints. They are living away from Yangon area: in other regions and divisions. Some do not have chance to manage time or devote time to come to physical classrooms. However, some might choose online learning it because of these two reasons but because of their preferences. This paper analyses the effect of personality traits on preferences on online learning.

Rationale of the Study

People choose online learning instead of learning at physical classrooms concerning their convenience, personal constraints, as well as appropriateness to their personal characteristics. If students choose online learning due to other reasons instead of relevancy to their personal

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[1] Department of Management Studies, Yangon University of Economics

characteristics (personal traits), they will not prefer their selected way of online learning. This lack of preferences in online learning will lead to ineffectiveness in this type of learning.

Since 2007, Yangon University of Economics has launched online Master of Business Administration (MBA) program. The main objective of this program is to support to community development through providing qualified and responsible leaders of businesses, organizations, and ministries. By concerning the discipline of this program, most of the subjects are business management related subjects and the degree is ascribed to social science nature. To become high quality graduates, students must learn business cases through online, discuss real and updated trends and issues through online, and conduct research and projects based on the information collected through online. They have less chance to discuss through face-to-face channel. If they choose online learning due to their constraints, not with their personal motives, their involvement in searching information, discussion, and doing research and projects will not be high. Their motives will be closely related to their personality traits. Some may be introvert, curious type and like challenging and finding new things. They will prefer online learning to classroom learning. If they prefer online learning, they will highly involve in getting knowledge from various sources and also in knowledge sharing. Eventually they will become high quality graduates. This paper will find the hidden reasons of preferring online learning and its effectiveness at online MBA program of Yangon University of Economics.

Research Questions

1. What are the main reasons of students choosing online MBA of Yangon University of Economics (YUEco)?
2. Do the YUECo's online MBA students prefer online learning?
3. Is the online learning of YUECo's online MBA students effective to become quality graduates?

Research Objectives

1. To analyse the effect of personality traits on preference on online learning of YUECo's online MBA students.
2. To analyse the influence of preference on online learning on effectiveness of online learning of YUECo's online MBA students.

Research Design

(a) Sampling

There are 85 students who are attending YUECo's online MBA program. In this study, the sample size is 43 (50% of the population). The sampling frame is the list of these 85 students. Source of this list is the student database kept at student affair office of YUECo's online MBA program. This data is received with the permission of the online MBA program director. The 43 students are randomly selected by using simple random sampling method.

(b) Data Collection

The questionnaire method is applied. Data collection medium is online. Questionnaires are sent to sample students' emails. After one week, filled questionnaires are collected. Data are received from only 31 students among 43 randomly selected students.

(c) Data Collection Instrument

Structured questionnaire is used to collect primary data from randomly selected students. The questionnaire consists of 4 parts: personality traits of students, their preference on online learning, effectiveness of online learning, and demographic data. Question items of the first two parts (part A and B) are in Likert-type five point scale (from 1 to 5: from strongly disagree to strongly agree).

Part (A) personality traits part consists of 8 question items including 3 reverse items for extraversion, 9 items including 4 reverse type items for agreeableness, 9 items including 4 reverse items for conscientiousness, 8 items including 3 reverse items for neuroticism, and 10 items including 2 reverse items to measure openness trait. Part (B) preferences on online learning part consists of 5 question items for goal setting, 4 items for environmental structuring, 4 items for task strategy, 3 items for time management, 4 items for help seeking, and 4 items for self-evaluation regarding online learning.

Part (C) effectiveness part contains only quantity type question: student's grades for all subjects they already sit the exam. Part (D) is for demographic factors focusing on number of subjects they have completed.

(d) Data Analysis

For data analysis, descriptive method and multiple linear regression method are applied. To reach the research objectives, the multiple linear regression method is applied. All the Likert type questions are converted from ordinal type into scale type. The data from part (C): grades of students are converted into grade point average (from nominal data type into ratio type).

Theoretical Background

The five personality traits such as extroversion, neuroticism, agreeableness, conscientiousness and openness to experience are rare to change or fluctuate with life cycle stages and these traits are also impacting on behavior (William & Debra A, 1992), especially on learning behavior (Heinstrom, 2000). Students' happiness with online learning would be depending on their characteristics.

The extraverts are active and not reluctant to talk to others while introverts would like to stay away from people and like silence (Howard & Howard, 1998). Extrovert persons will be outgoing as well as energetic while introvert persons will be isolated or solitary. The agreeableness trait is relating to caring and emotional, support, and sympathy and empathy versus ego, selfness, and rude (Feist & Feist, 2008). Persons with high agreeableness will be kind, polite, patient and friendly while persons with less of this trait will like challenging and risk taking. Conscientiousness is relating to focus, concentration achievement and goal oriented versus flexibility, easiness to change and to behave with new style (Howard & Howard, 1998). Persons possess high conscientiousness would like to be efficient and to do tasks systematically. At the other side, ones with less this trait will be careless in doing things.

Neuroticism is relating to anxiety, impatient, temperamental, and hedonic bias versus stability, maturity, calm, and acceptance of reality (Howard & Howard, 1998). The neuroticism does not mean anxiety neurosis; it is nervousness or negative affectivity (McCrae & John, 1992). Persons with high neuroticism will be emotional, moody and easy to be nervous while persons with less of this trait will have high self-confidence.

High openness scale is broader view, creativity, thinking outside the box, easy to learn (Howard & Howard, 1998) and also relating to talent in art and science (Wallach & Wing, 2012). People who have high openness to experience would like to know new things, will be observes, interested in investigating the hidden issues, will like creating new things. However, the persons who have low level of this trait would be consistent and cautious in general.

Literature Review

(a) Effect of Personality Traits on Learning

Personality traits are influencing on learning strategies, which will lead to learning effectiveness of different learners (De Raad & Schouwenburg, 1996)**.** These traits would be driving forces or restraining forces to enthusiasm to learn with a particular style (Blickle, 1996). Conscientiousness and openness are affecting on preference on learning styles and educational interests (De Fruyt & Mervielde, 1996).

Openness is connecting to asking questions, examining, and critical evaluation on assumptions, presentations and theories (Schouwenburg & Kossowska, 1999). The person with high openness scale will link the problems and cases with his or her learning and knowledge (Entwistle & Tait, 1996). Neuroticism has effect on learning style, and students with high neuroticism will try to remember learned things. They will not conduct critical analysis on cases. They like written exam and close book exam, which can be approached by learning by-heard (Entwistle, "Motivational factors in students' approaches to learning", in: learning strategies and learning styles, 1988).

Bayram, Deniz, & Erdogan (2008) stated that there is a significant relationships between learners' personality traits, academic achievement and attitudes towards web based education. Their research focused on 127 students in the e-MBA Master Degree of Bilgi University. Bruso (2019) also proved that personality traits are affecting on self regulated learning strategies: conscientiousness has the strongest effect on learning followed by agreeableness; and neuroticism has no effect on learning. This research covers 4,200 graduate students.
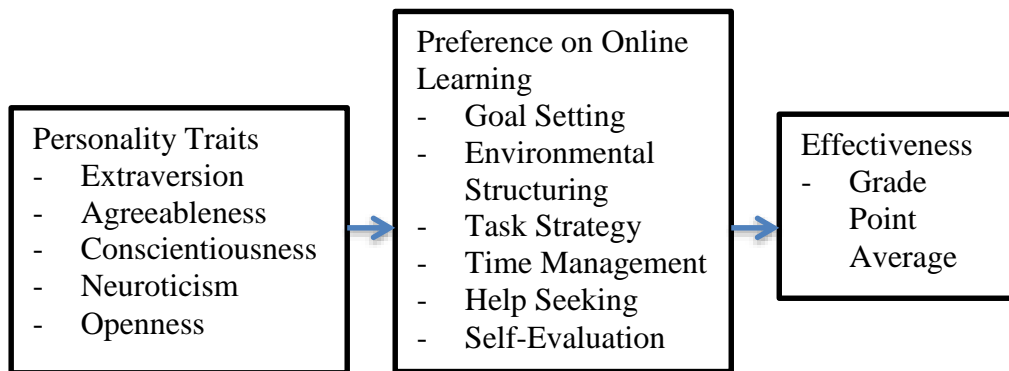
(b) Online Learning Preference

Bruso (2019) explored the variables to measure the online learning preference of students. These variables are goal setting, environmental structuring, task strategy, time management, help seeking, and self evaluation. Goal setting variable measure the student's behavior of identifying short and long term goals to accomplish the online course in time, setting high goals and not compromising for the sake of online learning. Environmental structuring concerns choosing comfortable, quiet and appropriate place for attending online classes and online studying.

Task strategy is to measure preparation for online class: for note taking, to ask questions, and read in-advance the instructed readings. Time management focuses on devoting time to attend online classes regularly and managing time for regular periodic self study. Help seeking measure the effort to get help from classmates, try to discuss face-to-face online, and enclosing the problems for collecting opinions of classmates. Self evaluation is to access finding the similarities and differences between other student's ways of leraning and self ways.

Conceptual Framework

Accounting for the findings from theoretical and literature develops the conceptual framework of the study. This conceptual framework is shown in Figure (1).

Figure (1) Conceptual Framework

Source: Developed for this Study Adapted to Bruso (2019)

In this study, the three variables are focused: personality traits, preference on online learning and effectiveness of learning. The assumption is that the student's preference on online learning will be varied with his or her personality traits, and their preference will lead to the learning effectiveness measured with grade point average. Five personality traits such as extraversion, conscientiousness, agreeableness, openness and neuroticism are considered. Preference on online learning is approached from student's goal setting, environmental structuring, task strategy, time management, help seeking and self-evaluation.

Data Analysis

Descriptive and multiple linear regression analyses are conducted by using the data collected from 31 out of 43 sample students. Based on findings from descriptive analysis, the personality traits of students are shown in Table (1).

Table (1) Personality Traits of Online MBA Students

Sr. No.	Personality Traits	Mean Value
1	Extraversion	3.7
2	Agreeableness	4.1
3	Conscientiousness	2.5
4	Neuroticism	2.8
5	Openness	4.2

Source: Survey Data, June 2020

According to the results, it can be seen that most of the respondents have high tendency to agreeableness and openness. Extraversion is also at high level although it is not too high. Their conscientiousness and neuroticism traits are at the low level (below average). It seems that students are patient and have high emotional quotient. They also like openness; they are not reluctant to take help, to give help and to share knowledge. They are also inventive and like challenging. However, they are not trying for efficiency and well planning. They are calm. They are not moody and nervous in turbulent times.

Based on findings from descriptive analysis on second variable, the students' preference on online learning is shown in Table (2).

Table (2) Students' Preference on Online Learning

Sr. No.	Personality Traits	Mean Value
1	Goal Setting	2.3
2	Environmental Structuring	3.5
3	Task Strategy	2.8
4	Time Management	3.9
5	Help Seeking	4.3
6	Self-Evaluation	3.1

Source: Survey Data, June 2020

Most of the respondents are preparing their online learning with good time management and seeking help and giving helps each other. They are weak in task strategy. They are normally read and think about lessons after lecturing, rather before the class. They are very weak in goal setting: not focusing on course accomplishment in time by schedule. They are not too conscious on learning environment although they consider this point. They are not doing self-evaluation seriously although normal evaluation is conducted.

After the descriptive analysis, to reach the research objectives, multiple linear regression analysis is conducted. Before starting this analysis, data reliability test is conducted. The results are shown in Table (3).

Table (3) Reliability Test Results

Sr. No.	Leadership Styles	No. of Items	Cronbach's Alpha
1	Extraversion	8	0.746
2	Agreeableness	9	0.760
3	Conscientiousness	9	0.761
4	Neuroticism	8	0.684
5	Openness	10	0.711
6	Goal Setting	5	0.823
7	Environmental Structuring	4	0.690
8	Task Strategy	4	0.713
9	Time Management	3	0.821
10	Help Seeking	4	0.822
11	Self-Evaluation	4	0.779

Source: Survey Data, June 2020

As shown in Table (3), the Cronbach's alpha values of both independent variables and dependent variables are above 0.7. Thus, the question items used to measure variables and the respondents' responses are reliable for further analyses (George & Mallery).

The multiple linear regression analysis is conducted to analyze the effect of personality traits on students' preference on online learning. The results of effect of personality traits on goal setting for online learning accomplishment are shown in Table (4).

Table (4) Effect of Personality Traits on Goal Setting

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	0.181	0.266	0.681	0.497	3.069
Agreeableness	0.783***	0.277	2.823	0.005	2.751
Conscientiousness	0.235***	0.043	5.468	0.000	1.000
Neuroticism	0.194***	0.037	5.182	0.000	1.000
Openness	0.266	0.222	1.196	0.234	2.431
R Square	0.295				
Adjusted R Square	0.281				
F Value	21.299***				

Source: Survey Data, 2019   *** Significant at 1 percent level
                                                           ** Significant at 5 percent level
                                                           * Significant at 10 percent level

By concerning the results from multiple linear regression analysis, it is found that students' agreeableness, conscientiousness and neuroticism have positive effect on goal setting for online learning accomplishment. If they are flexible, they will pay more attention to reach learning target (to complete course as per schedule), and they will sacrifice on time finishing for their duties at workplace. If they are taking acre on things and they have anxiety, they will set specific time goals for completion of course.

The results of effect of personality traits on environmental structuring for online learning convenience are shown in Table (5).

Table (5) Effect of Personality Traits on Environmental Structuring

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	0.540***	0.128	4.213	0.000	2.717
Agreeableness	-0.092	0.129	-0.714	0.478	2.847
Conscientiousness	-0.020	0.123	-0.165	0.869	2.937
Neuroticism	0.313**	0.124	2.522	0.014	2.398
Openness	0.340***	0.120	2.839	0.006	2.630
R Square	0.686				
Adjusted R Square	0.664				
F Value	30.983***				
Durbin Watson	1.987				

Source: Survey Data, 2019

Students' extraversion, neuroticism and openness are positively influencing on environmental structuring for online learning convenience. Students who are energetic, sensitive, emotional and inventive, they will find the quiet and convenient place to attend online classes.

The results of effect of personality traits on task strategy for online learning convenience are shown in Table (6).

Table (6) Effect of Personality Traits on Task Strategy

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	0.140	0.164	0.854	0.396	2.717
Agreeableness	0.143	0.166	0.866	0.390	2.847
Conscientiousness	0.292*	0.159	1.836	0.071	2.398
Neuroticism	0.044	0.158	0.277	0.782	2.937
Openness	0.481***	0.154	3.132	0.003	2.630
R Square	0.572				
Adjusted R Square	0.541				
F Value	18.945***				
Durbin Watson	1. 739				

Source: Survey Data, 2019

Students' conscientiousness and openness have positive effect on their task strategy. Students who are efficient and curious, they will prepare questions at ask at the class, and they will read instructed materials ahead the class time.

The results of effect of personality traits on time management for online learning convenience are shown in Table (7).

Table (7) Effect of Personality Traits on Time Management

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	-0.001	0.190	-0.005	0.996	2.717
Agreeableness	0.377**	0.192	1.964	0.053	2.847
Conscientiousness	0.087	0.183	0.477	0.635	2.937
Neuroticism	0.278	0.184	1.511	0.135	2.398
Openness	0.314*	0.178	1.769	0.081	2.630
R Square	0.468				
Adjusted R Square	0.431				
F Value	12.513***				
Durbin Watson	1.742				

Source: Survey Data, 2019

Students' agreeableness and openness have positive effect on time management for online learning. If students have high agreeableness, they won't like challenging. Thus they will manage time well to attend classes regularly. If they have high openness, they will be inventive as well as

curious. Thus they do not want to miss the classes, they like getting knowledge from instructor and classmates.

The results of effect of personality traits on help seeking for online learning convenience are shown in Table (8).

Table (8) Effect of Personality Traits on Help Seeking

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	0.198	0.176	1.125	0.264	2.717
Agreeableness	0.311*	0.178	1.750	0.084	2.847
Conscientiousness	0.250	0.169	1.473	0.145	2.937
Neuroticism	0.234	0.171	1.368	0.176	2.398
Openness	0.342**	0.165	2.077	0.014	2.630
R Square	0.622				
Adjusted R Square	0. 595				
F Value	23.365				
Durbin Watson	2.202				

Source: Survey Data, 2019

If students have high tendency to agreeableness and openness, they will like to share knowledge, and they will not be reluctant to take help from both instructor and classmates.

The results of effect of personality traits on self-evaluation for online learning convenience are shown in Table (9).

Table (9) Effect of Personality Traits on Self Evaluation

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Extraversion	0.430***	0.144	2.997	0.004	2.717
Agreeableness	0.023	0.145	0.157	0.876	2.847
Conscientiousness	0.133	0.138	0.963	0.339	2.937
Neuroticism	0.039	0.139	0.280	0.780	2.398
Openness	0.229*	0.134	1.702	0.093	2.630
R Square	0.521				
Adjusted R Square	0.488				
F Value	15.462***				
Durbin Watson	1.922				

Source: Survey Data, 2019

If students are extroverts and they have high openness trait, they will do self-evaluation by comparing with classmates' ways of learning, their performance and improvements.

Multiple linear regression analysis is also conducted to analyze the effect of students' preference on online learning on effectiveness of learning (accomplishment). The results are shown in Table (10).

Table (10) Effect of Preference on Online Learning on Learning Effectiveness

Model	Unstandardized Coefficients		t	Sig	VIF
	B	**Std. Error**			
Goal Setting	0.223	0.173	1.290	0.201	2.717
Environmental Structuring	0.127	0.175	0.727	0.470	2.847
Task Strategy	0.061	0.166	0.369	0.713	2.937
Time Management	-0.033	0.168	-0.198	0.843	2.398
Help Seeking	0.317***	0.041	7.736	0.000	1.000
Self-evaluation	0.499***	0.162	3.077	0.003	2.630
R Square	0.451				
Adjusted R Square	0.413				
F Value	11.678***				
Durbin Watson	2.129				

Source: Survey Data, 2019

To achieve good results, online students' help seeking behavior and self-evaluation practice are very important. If they seek help through social networking, they can learn from others and they can take advantage over others' knowledge sharing. They will also get support and help from instructors for preparation of exams. If they evaluate their way of learning and performance with others', they can find the weakness areas as well as areas for improvements. These practices will lead them to high achievements.

Findings and Discussion

From this research, it is found that high achievers have been practicing help seeking and self-evaluation for learning lessons and also for continuous improvement. If online MBA students would like to gain high grade point average (high marks from exams), they should be open to ask for help from both instructor and other students. They should also do bench marking by evaluating themselves and by comparing with other students.

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