THE IMPACT OF PERSONALITY ON SATISFACTION WITH SYNCHRONOUS ONLINE ACADEMIC LEARNING

Christina D. Patitsa [*], Alexandros G. Sahinidis [*], Panagiotis A. Tsaknis [*], Venetia Giannakouli [*]

* University of West Attica, Athens, Greece

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Abstract

The purpose of this study is to identify the role personality plays in students' satisfaction with synchronous online academic learning (SOAL), especially during the COVID-19 pandemic. According to the literature, overall students' satisfaction with SOAL depends on a number of factors including the quality of SOAL, the quality of the course design, the responsiveness of the instructors, the Institutional preparedness, the infrastructure available and the fairness of the evaluation system learning (Cohen & Baruth, 2017). To fully explore the students' satisfaction with SOAL it is important to examine another important aspect that relates to students' personalities (Keller & Karau, 2013; El Said, 2021; Sahinidis & Tsaknis, 2021; Benito et al., 2021; Abdous & Yoshimura, 2010).

For the purpose of this research, an anonymous questionnaire was delivered to undergraduate business students studying at a public university in Athens during the first spring lockdown period of 2020 (March to April). There were overall 555 undergraduate business students responding to the questionnaire. We expect that this size sample will be adequate for reliable statistical analyses in order to

produce valid and coherent conclusions (Sahinidis et al., 2020). For the assessment of the Big Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) a 30-item survey questions of 7-point Likert scale was used. Overall student satisfaction with SOAL was measured with a 5-item survey questions using a 7-point Likert scale. Factor analysis was conducted on the research data in order to reduce the total number of Big Five personality variables into fewer numbers of factors representing the five factors of the Big Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) and the critical factors of the overall satisfaction with SOAL). For each factor derived from the factor analysis and for each survey question, the corresponding new variables were calculated as the average of the questions corresponding to each subscale. Furthermore, multiple regression analysis was used with the five personality traits as independent variables and overall satisfaction with SOAL as dependent. Cluster analysis was also conducted which divided our sample and indicated that the emphasis should be placed on personality traits when we measure satisfaction with SOAL. The data were empirically tested using the SPSS software version 24.

Table 1 represents the model summary where the overall regression model was indeed significant. In particular, the results indicated that 14.6% of the variance in the dependent variable (overall satisfaction with SOAL) is related to the independent variables (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) ($F = 18.704$, $p < 0.01$).

Table 1. Model summary

Model	R	R squared	Adjusted R squared	Std. error of the estimate	Change statistics				
					R squared change	F change	df1	df2	Sig. F change
1	0.382[a]	0.146	0.138	1.13903	0.146	18.704	5	549	0.000

Note: a. Predictors: (Constant), Neuroticism, Agreeableness, Openness, Extraversion, Conscientiousness

Table 2 indicates the predictive ability of the Big Five independent variables (that comprise the Big Five personality traits), in terms of overall satisfaction with SOAL. Openness and conscientiousness have a positive and statistically significant relationship with overall satisfaction with SOAL. All other variables (extraversion, agreeableness, neuroticism) have not demonstrated statistically significant results. The variable that affects overall satisfaction with SOAL to the greatest extent is conscientiousness.

Table 2. Coefficients

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	1.357	0.485		2.799	0.005
	Openness	0.265	0.054	0.224	4.927	0.000
	Conscientiousness	0.310	0.065	0.212	4.747	0.000
	Extraversion	0.028	0.044	0.027	0.633	0.527
	Agreeableness	0.024	0.047	0.021	0.505	0.614
	Neuroticism	0.003	0.045	0.003	0.074	0.941

Note: a. Dependent variable: Overall satisfaction.

Finally, cluster analysis (Table 3) divided the research data (sample) into two groups. The first group consisted of 287 students whose mean of overall satisfaction with SOAL was 5.17 while the second group consisted of 268 students whose mean of overall satisfaction with SOAL was 4.28. This analysis revealed that students with higher levels of overall satisfaction with SOAL have higher levels of extraversion, conscientiousness, openness and agreeableness, but demonstrated lower levels of neuroticism than the students with lower levels of overall satisfaction with SOAL.

Table 3. Cluster analysis

Two step cluster	Cluster 1		Cluster 2	
	N	Mean	N	Mean
Openness	287	5.49	268	4.49
Conscientiousness	287	6.18	268	5.37
Extraversion	287	4.94	268	3.6
Agreeableness	287	5.99	268	5.05
Neuroticism	287	3.18	268	4.22
Overall satisfaction with SOAL	287	5.17	268	4.28

The findings above indicate the emphases that need to be placed on personality traits when we measure satisfaction with SOAL. Institutions, teachers and policymakers, taking into consideration these findings will be able to create better educational programs that will fit better the needs of their students and will maximize their satisfaction.

This study investigated the existence of the relationship between personality and students' satisfaction with SOAL and revealed that some of the Big Five personality factors have a positive and statistically significant correlation with overall satisfaction with SOAL. In particular, the findings of the study indicate that openness and conscientiousness, two of the Big Five personality traits, present a positive relationship with overall satisfaction with SOAL. In addition, the factor with the strongest association with overall satisfaction with SOAL is conscientiousness. The findings also suggest that students with higher levels of overall

satisfaction with SOAL present higher levels of openness, conscientiousness, extraversion and agreeableness but lower levels of neuroticism. This research study could make a remarkable contribution to the literature as relevant studies regarding the relationship between personality and students' satisfaction with SOAL are scarce and have been limited thus far. However, there is a need for further research studies to be conducted in order to confirm the validity of the research findings and contribute to the generalization of the conclusions.

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