



The Correlation of Financial-Stress and Educational-Teaching Factors on Students during Online Learning in the Covid-19 (Cov19) Pandemic

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This paper presents empirical evidence on financial-stress (FSF) and educational-teaching (ETF) factors to students. Therefore, the purpose of this research was to identify whether these factors were related to each-other, as well as if they affected students' performance during online learning during the Cov19 pandemic. Correlation analysis (Pearson test r) and multiple regression analysis (R , R^2 , Adj. R^2 , Std. Error, F , Sig. F , Durbin-Watson, Anova) were used during this study. The data were collected from 380 students surveyed at the PhD, Master and Bachelor level at the Kosovos' Universities, where through version 23.0 Windows of the SPSS program, 57 factors were tested which were divided into 11 categories. The results ($\alpha=0.84$, $r=.873$, $R=.982$, Sig.=000) showed that there was a correlation between the financial stress factor (FSF) and the educational-teaching factor (ETF) for students, so to increase performance during online learning the following findings should be considered: 1) students should have had concentration, adaptation and good communication during the lesson, 2) students should have had good financial conditions within the family to adapt to the new learning and teaching environment, 3) stress factors should be removed to increase learning motivation, 4) the university should provide suitable learning opportunities for students who have worked so as not to lose their jobs, 5) there should be reductions in tuition fees or flexible ways to pay them, 6) professors should provide information about exams, lecture, graduations so that students did not have educational-financial stress. Therefore, the six most important findings of this research should be taken into account to increase student performance during online learning. Research implications suggest that focusing during online learning enhances student performance, and that families who have good financial standing have less financial stress to create the conditions for a new learning environment, so these findings may become a reference for subsequent research.

Keywords: cov19, financial stress, higher education, online learning, personal finances

INTRODUCTION

This research aims to examine a new term regarding online learning in relation to the financial-stress factor (FSF) and educational-teaching factor (ETF) given the situation created by Cov19. The implementation of this new term in education must have

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continuous progress in order to increase student performance through methods which reduce stress factors and increase financial factors. (Aljaraideh, 2019). Cov19 has affected several areas such as economic, social and psychological (Hindun et al., 2021). Countries around the world are experiencing economic pressure as a result of rising unemployment, production and distribution of goods, the collapse of the tourism sector or even worse the loss of human life. Therefore, these countries need financial support against Cov19, influencing financial stress factors and education through online learning (Hindun et al., 2021). One of the affected areas is also Education, where due to Cov19 educational institutions were forced to close and start learning online. But what is online learning? Online learning is a learning process which takes place through the internet as one of the forms of distance learning (Al Kandari & Al Qattan, 2020).

This way of learning is being used in every country of the world as a result of the Cov19 pandemic, therefore due to these circumstances caused by the pandemic, teaching and learning online has an important role for students. For centuries the learning process has been realized through classroom methods, but increasing opportunities for distance learning can revolutionize the learning process in a new teaching and learning environment by making higher quality education more cost effective for a larger number of people. Therefore, building a learning environment to meet the educational objectives of students is a challenge faced by education actors and especially teachers. This challenge affects the variables or factors of funding, stress and education (Al Kandari & Al Qattan, 2020). According to (Roca-Hurtuna et al., 2021), in order to keep learning online, training is necessary regardless of the categories of students and when there is good communication with the family, the financial- stress and educational- teaching factors are significantly improved. The basic advantages of e-learning include all-time access to learning, cost reduction, the ability to reach larger markets, more effective learning with personalized instruction and flexibility. Therefore, collaboration in online learning motivates students to learn, to have critical thinking and to be open-minded (Warsah et al., 2021). So, it is emphasized that the main objective or clearly stated issue is whether the financial-stress factor (FSF) and educational-teaching factor (ETF) affect student performance or not. Finally, this paper provides an overview of the strengths and weaknesses of linking to the cost of online learning.

Review Of Literature

Financial stress factors in online learning

Regarding the financial stress in schools and universities according to (Tobin et al., 2021) it was emphasized that universities or schools with financial problems due to Cov19 had greater concerns about financial costs. Therefore, Cov19 affected the world economy in all areas including education by forcing educational institutions to find different methods to teach online, so that students do not get lost in their education from the pandemic crisis (Dhawan, 2020). According to (Amri et al., 2020), pay special attention to the effect of economics on student development, as a result a developed economy affects student development. Due to Cov19 the financial impact on the new teaching and learning environment (C1-MMM=FINTLE, table 2) for students and their

families has increased. In this case, higher education is also facing various challenges in the process of transforming the new teaching and learning environment (Monroy, 2020).

There will be a financial impact to creation and fulfillment of conditions or (C2-KKPS=FICFCOL, table 3) in the C1-MMM=FINTLE (Financial impact on the new teaching and learning environment) for students while holding online learning. In this case one cannot think of students' performance in C1-MMM=FINTLE without the use of technology, especially because of its impact on the growth and development of skills needed for the 21st century (Liesa et al., 2020). To assess the long-term economic impact of the loss from Cov19, (Hanushek and Woessman) used student regressions and the online learning ratio. According to them, the loss of learning will lead to the loss of students, skills related to their productivity, so universities should review the C1-MMM=FINTLE of learning in order for digitalization to improve the student-professor ratio and the work-study ratio (Schleicher, 2020). Cov19 has created the greatest disruption in human history in the educational-teaching and financial-stressful system, affecting nearly 1.6 billion students in more than 200 countries and closing learning spaces close to 94% worldwide (Pokhrel & Chhetri, 2021). This pandemic is seen as one of the determinants of current global economic changes in terms of the dismissal of many workers (students in employment) due to the closure and bankruptcy of many businesses (Turnea et al., 2020). Distances save lives but there is economic pain because many businesses are going bankrupt and laying off workers (employed students and their families who pay for them), and this has challenged and aggravated both financial and educational stresses for students. Even for those who can pay the bills, their gloomy job prospects after graduation create anxiety, while many students carry large student loan debts. But it is essential to state that not all students have the necessary conditions for online learning through technology, so students are living very different educational experiences during the pandemic (Dabrowski, 2020).

Educational teaching factors in online learning

The learning process helps students gain knowledge through cognition and understanding (Wuryaningrum et al., 2020), which influences the teaching and learning factor to enhance study performance. One of the factors that can contribute to the stimulation of students is the digital media created by students, which was implemented a decade ago in higher education, so students completed their assignments through audio, images, moving texts, animations etc. (Ogunmokun et al., 2020). According to (Saroinsong et al., 2019) for a decade the internet has changed people's lifestyles and at the same time damaged daily student life. In their research they found that daily internet use affected the dependence of Indonesian students more than the dependence of Chinese students. This approach led to qualitative research to understand how online learning is accomplished when students use digital media (Reyna, 2019). Another stimulating factor for holding online learning for students is e-learning, which is gaining more and more popularity in formal and non-formal education in both developed and developing countries. But as the main findings by (Iqbal & Bhatti, 2017), were the theoretical and practical implications during the teaching and learning process. Regarding the effectiveness of online learning, according to (Suryanti & Nurhuda,

2021), they analyzed problems on critical development for students. So, if students are not used to analyzing a problem, they do not know how to make the right solution. The importance of communication between students, teachers, and other persons has a major impact on increasing the motivation for online learning during isolation. According to (Alawamleh et al., 2020) it is noted that low communication brings problems for students during online learning. All of these factors affected the decrease in motivation to learn, which also influenced the decline in performance, because indirectly the stress and funding factors affected them. According to (Espino et al., 2021) emotions exposed by students according to network epistemic analysis (ENA) and frequency models, noted that about half of student responses contained positive emotional valence but more than three-quarters had negative emotional valence, as follows stress due to load work, difficulty maintaining focus on learning and balancing tasks and activities at the C1-MMM=FINTLE (new teaching & learning environment), while positive emotions were on schedule. OCL (online collaborative learning) is one of the most important approaches to online learning involving all participants who work together, exchange ideas and opinions, develop and build collaborative projects, etc. (Magen & Shonfeld, 2018). According to (Funa & Prudente, 2021) they analyzed problem-based learning where the findings show that this learning had a major effect on secondary students.

Teaching and learning during Cov19

As stated above, online learning as a concept has been a constant focus of educational research for over two decades. Presenting the results from a collection of literature about learning (Singh & Thurman, 2019) in this case created by Cov19 while holding online learning we must not forget the financial-stress factor (FSF) and educational-teaching factor (ETF) for all students. According to (Weda et al., 2021), one of the main goals during online learning is communication, based on the results it is emphasized that there is satisfaction within the group of students if they communicate with each other, therefore such a variable is taken into study in Kosovo students. The importance of online learning according to (Surur et al., 2020) is the learning strategy. But, if students have stress, they have low motivation to learn, this affects their performance (Majali, 2020). Tasks should be divided among students to achieve performance, especially in difficult subjects (Hobri et al., 2020). According to (Elfirdoussi et al., 2020) they analyzed the situation of online learning during the Cov19 pandemic in Moroccan Universities, the findings showed that online learning was not very interesting for students and that financial means were needed to help teachers conduct training in the use of technology. According to (Gopal et al., 2021) and (Daud et al., 2018) great importance to increase the performance and motivation through online learning of students during Cov19 are: quality of professor, course design, prompt feedback, and expectation of students. According to (Hidajat et al., 2020) to increase student performance there must be motivation, so they suggested that academic motivation is a dynamic and continuous process influenced by internal and external factors such as social support, goal orientation, stress for achievement, self-efficacy etc. The good performance of students during Cov19 according to the results of research by (Miftakhov et al., 2019) was related to the taking of strategic notes by students such as,

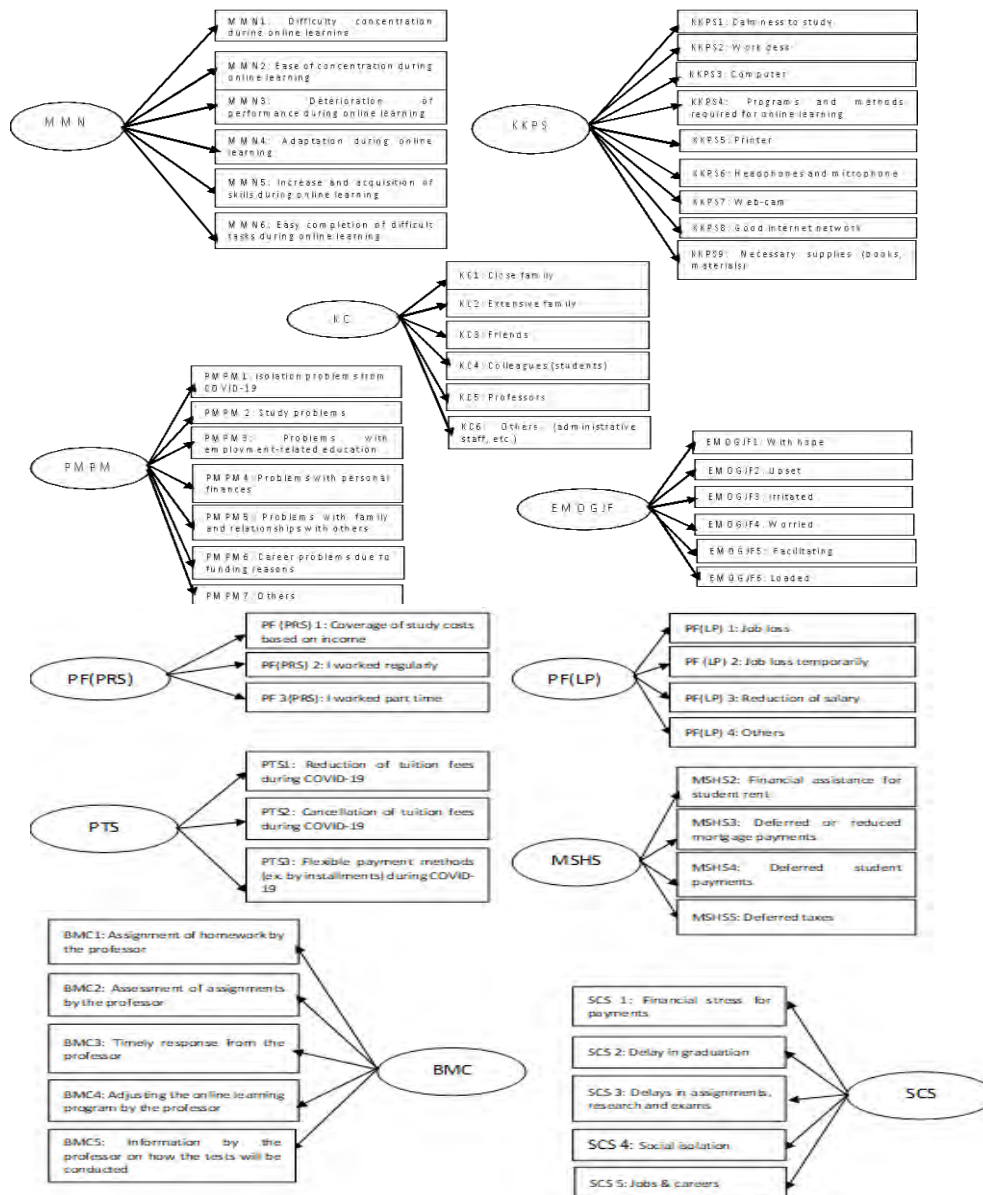
(active listening, information processing and writing). Therefore, based on the literature review, all variables obtained in this research will be analyzed in detail to show the correlation between the financial-stress and educational-teaching factors in student performance. According to (Hali et al., 2021) the new teaching and learning environment (C1-MMM=FINTLE or financial impact on the new teaching and learning environment) it is necessary to have trainings for professors where through these trainings professors will see the experiences of other professors in the online learning environment. Technology has also helped increase diversity in curricula (C2-KKPS= FICFCOL or financial impact to create and fulfill the conditions during online learning), as well as students need to have collaborative methods through communication (C3-KC= FIDCOPOL or financial impact to develop communication with others by purchasing communication tools for online learning). During using the online platform there are some elements which can be considered barriers to C1-MMM=FINTLE or new teaching and learning environment for students such as: delayed responses by students, professors are not always available to respond in student time, motivation diminished by students, feeling of isolation due to lack of presence of classmates, poor network or outdated computer that can slow down the use of lecture materials (Yusuf & Al-Banawi, 2013). These problems can be overcome with the help of professors who adapt their MMN strategies to the needs of students. Therefore, to achieve this, professors should have knowledge and experience in C1-MMM=FINTLE (Erasmus+, 2020). According to (Sumarmi et al., 2021) in their research they noted that mixed learning affected the condition of students during Cov19.

METHOD

For this study, data were collected from higher education institutions, more specifically in Kosovo's Universities. The survey was completed with PhD, Master (MSc, MA) and Bachelor (BSc, BA) level students. A total of 380 questionnaires (212BScBA, 150MScMA and 18Phd) which were analyzed through Pearson test and regression analysis using SPSS version 23.0 for Windows. The research was conducted during the years 2019-2020 as well as the first period of 2021. The analysis included several processes where some of the factors were deleted in order for the model to become acceptable, in which case as stated in the conceptual model the purpose of the Pearson r correlation is to have a value higher than .500 to be acceptable, while the purpose of the F test is to verify the significance of the model as a whole (Sig=.000). 57 tested factors were divided into 11 categories.

Instrument

As stated in the introduction, the main purpose and the objective of this research is the correlation between the financial-stress factor (FSF) and educational-teaching factor (ETF), to students at Kosovo's Universities during online learning. Do these factors correlate with each other, and do they affect student performance? Based on these issues, the findings from econometric models will provide recommendations for Kosovo's universities.



Figures 1&2
Variables included in financial-stress factor (FSF) and educational-teaching factor (ETF)

Figures 1 & 2 explain the designations of each factor including the variables within them. Therefore, factors that were assessed through correlation and regression analysis were divided into the following categories: a) C1-MMN= FINTLE or Financial impact on the new teaching and learning environment, b) C2-KKPS=FICFCOL or Financial impact to create and fulfilled the conditions during online learning, c) C3-KC= FIDCOPOL or Financial impact to develop communication with others by purchasing communication tools for online learning, d) C4-PMPM=FIPRLDOL or Financial impact and problems related to lack of dedication to online learning, e) C5-EMOGJF= FEIOLSICov19 or Financial and emotional importance of online learning since the inception of Cov19, f) C6-PF(PRS)=FP(WRS) or Financial problems (work and relationship with studies), g) C7-PF(LP)=FP (DRS) or Financial problems (dismissal and relationship with studies), h) C8-PTS=FIPTF or Financial impact on payment of tuition fees, i) C9-(MSHS)=FICSS or Financial impact and country support for students, j) C10-BMC=FICPCov19 or Financial impact and cooperation with professors during Cov19, g) C11-SCS= SCov19RFLF or Stresses from Cov19 related to financial and learning factors. Given that Pearson correlation values ($r = +1, -1$) show positive or negative relationships between variables. Therefore, in each group (C1-C11) there is a correlation between the variables in the value 0.758 and above, based on the results processed in each table. Regarding the factors (FSF & ETF) their correlation or relationship has been confirmed through the regression analysis (Approx. Pearson Correlation obtained from the results of all tables is sig. (2-tailed) FSF & ETF = .758)). The purpose of the multiple regression of this research was to investigate (Plonsky & Ghanbar, 2018) the relationship between the predicted variables in the groups (C1-C11) and the dependent variables in each group for the factors (FSF & ETF). Therefore, the coding of all these variables of these groups was analysed through the importance of the test (R^2) as in the table (no.13). In this case, each of the groups has a percentage above 88% (.888), which means that all variables within the groups (C1-C11) affect the correlation and relationship between financial-stress factor (FSF) educational-teaching factor (ETF). Students of families with poor financial conditions will not have the opportunity for a new online learning environment which affects increased financial stress and decreased performance during online learning or vice versa.

Data Collection

Data collection was realized from the results of correlation tests (Pearson test) and regression analysis (R , R^2 , Adjusted R^2 , Std. Error of the Estimate, F , Sig. F , Durbin-Watson, Anova), who evaluated student performance through the financial-stress factor (FSF) and educational-teaching factor (ETF). The data were primary from the student questionnaire.

Data analysis

Research data related to student performance during online learning in pandemic conditions, for all factors were analyzed using tests through correlation and regression analysis.

Hypotheses

Influence of correlation of PSF(financial-stress) & ETF(educational-teaching) factors on student performance during online learning in pandemic conditions=

$$\beta_0 + \beta_1(C1-MMN=FINTLE) + \beta_2(C2-KKPS=FICFCOL) + \beta_3(C3-KC= FIDCOPOL) + \beta_4(C4-PMPM=FIPRLDOL) + \beta_5(C5-EMOGJF= FEIOLSICov19) + \beta_6(C6-PF(PRS)=FP(WRS)) + \beta_7(C7-PF(LP)=FP (DRS)) + \beta_8(C8-PTS=FIPTF) + \beta_9(C9-(MSHS)=FICSS) + \beta_{10}(C10-BMC=FICPCov19) + \beta_{11} (C11-SCS= SCov19RFLF) + \mu$$

H₀: The financial stress factor (FSF) and the educational-teaching factor (ETF) are not significant (unrelated to each-other) to student performance during online learning in the COV-19 pandemic?

H₁: The financial stress factor (FSF) and the educational-teaching (ETF) are significant (related to each-other) to student performance during online learning in the COV-19 pandemic?

So, if the value of r is close to +1, this indicates a strong positive correlation, and if r is close to -1, this indicates a strong negative correlation, if the value of r is 0 there is no relationship between the variables (Hameli, 2017). The correlation analysis for FSF(financial-stress factor) & ETF(educational-teaching factor), represents the degree of linear correlation between the two variables (Taylor, 1990). Normal distribution plays an important role in statistics and in multivariate analysis, in this case the classical model results from the discretization of multinormal variables for all factors related to online learning for students (Leeuw, 1983). In 1885, Sir Francis Galton first coined the term "regression" and completed the theory of bivariate correlation. A decade later, Karl Pearson developed the index we still use to measure correlation, Pearson's r. Therefore, Pearson r and F tests will help us to measure the performance of students' during the online learning in Cov19 pandemic and to show us the correlation between the variables for all the factors included (Rodgers & Nicewander, 2012).

FINDINGS

The results from correlation analysis related to student performance during online learning in the Cov19 pandemic for all variables included in the FSF(financial-stress) & ETF(educational-teaching) factors: a) C1-MMN= FINTLE or Financial impact on the new teaching and learning environment, b) C2-KKPS=FICFCOL or Financial impact to create and fulfilled the conditions during online learning, c) C3-KC= FIDCOPOL or Financial impact to develop communication with others by purchasing communication tools for online learning, d) C4-PMPM=FIPRLDOL or Financial impact and problems related to lack of dedication to online learning, e) C5-EMOGJF= FEIOLSICov19 or Financial and emotional importance of online learning since the inception of Cov19, f) C6-PF(PRS)=FP(WRS) or Financial problems (work and relationship with studies), g) C7-PF(LP)=FP (DRS) or Financial problems (dismissal and relationship with studies), h) C8-PTS=FIPTF or Financial impact on payment of tuition fees, i) C9-(MSHS)=FICSS or Financial impact and country support for students, j) C10-BMC=FICPCov19 or Financial impact and cooperation with professors during Cov19,

g) C11-SCS= SCov19RFLF or Stresses from Cov19 related to financial and learning factors, are presented as follows:

Table 1
Characteristics of the respondents

Characteristic	Frequency	Percentage	Cumulative
Sex			
Male	141	37.1	37.1
Female	239	62.9	100.0
Education Level			
BSc.BA	212	55.8	55.8
MSc.MA	150	39.5	95.3
PhD.	18	4.7	100.0
Monthly household income			
0-300 euro	60	15.8	15.8
301-500 euro	180	47.4	63.2
501-1000 euro	120	31.6	94.8
+ 1000 euro	20	5.3	100.0

Table 1 shows that: The highest response was given by women (62.9), the highest level of education of the respondents was BSc.BA (55.8) and monthly income within their households was 301-500 euros (47.4).

Table 2
C1-MMN=FINTLE or Financial impact on the new teaching and learning environment

Variables		FINTLE1	FINTLE2	FINTLE3	FINTLE4	FINTLE5	FINTLE6
C1- MMN 1	Pearson	1	-.153	.898**	-.129	-.191	.094
	2-tailed		.177	.000	.259	.092	.410
C1- MMN 2	Pearson	-.153	1	-.170	.015	.045	-.016
	2-tailed	.177		.135	.898	.691**	.886
C1- MMN 3	Pearson	.898**	-.170	1	-.116	.000	.086
	2-tailed	.000	.135		.310	.273	.450
C1- MMN 4	Pearson	-.129	.015	-.116	1	.710**	.691**
	2-tailed	.259	.898	.310		.000	.000
C1- MMN 5	Pearson	-.191	.045	-.125	.710**	1	.612**
	2-tailed	.092	.691**	.273	.000		.000
C1- MMN 6	Pearson	.094	.000	.086	.491**	.612**	1
	2-tailed	.410	.886	.450	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C1-MMN or FINTLE have the same meaning

Table 2 shows that: The correlation in the highest percentage of 90% has the variable FINTLE1 with C1-MMN3, which means that if students do not have concentration while online learning their performance will decrease.

Table 3
C2-KKPS=FICFCOL or Financial impact to create and fulfilled the conditions during online learning

Variables		FICFC OL 1	FICFC OL 2	FICFC OL 3	FICFC OL 4	FICFC OL 5	FICFC OL 6	FICFC OL 7	FICFC OL 8	FICFC OL 9
C2- KKPS 1	Pearson	1	.731**	.150	-.067	.223	.183	.160	.167	.236
	2-tailed		.041	.187	.558	.048	.107	.158	.141	.036
C2- KKPS 2	Pearson	.731**	1	.915**	.771**	.265	.738**	.862**	.707**	.650*
	2-tailed	.041		.000	.001	.018	.002	.001	.001	.000
C2- KKPS 3	Pearson	.150	.915**	1	.742**	.844**	.781**	.844**	.715**	.748*
	2-tailed	.187	.000		.000	.002	.000	.000	.005	.000
C2- KKPS 4	Pearson	-.067	.771**	.742**	1	.753**	.614**	.881**	.795**	.883*
	2-tailed	.558	.001	.000		.001	.000	.000	.008	.000
C2- KKPS 5	Pearson	.223	.265	.844**	.753**	1	.711**	.809**	.777**	.697*
	2-tailed	.048	.018	.002	.001		.005	.000	.001	.008
C2- KKPS 6	Pearson	.183	.738**	.781**	.614**	.711**	1	.674**	.895**	.864*
	2-tailed	.107	.002	.000	.000	.005		.000	.000	.000
C2- KKPS 7	Pearson	.160	.862**	.844**	.881**	.809**	.674**	1	.780**	.831*
	2-tailed	.158	.001	.000	.000	.000	.000		.000	.000
C2- KKPS 8	Pearson	.167	.707**	.715**	.795**	.777**	.895**	.780**	1	.268
	2-tailed	.141	.001	.005	.008	.001	.000	.000		.017
C2- KKPS 9	Pearson	.236	.650**	.748**	.883**	.697**	.864**	.831**	.268	1
	2-tailed	.036	.000	.000	.000	.008	.000	.000	.017	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C2-KKPS or FICFCOL have the same meaning

Table 3 shows that: The correlation in the highest percentage of 92% has the variable FICFCOL2 with C2-KKPS3, which means that if students do not have the conditions to hold online learning as a desk and a computer etc., their performance will be reduced or vice versa.

Table 4

C3-KC=FIDCOPOL or Financial impact to develop communication with others by purchasing communication tools for online learning

Variables		FIDCO POL 1	FIDCOPO L 2	FIDCOPO L 3	FIDCOPO L 4	FIDCOPOL 5	FIDCOPOL 6
C3-KC 1	Pearson	1	.865**	.737**	.272	.063	-.032
	2-tailed		.001	.000	.015	.581	.782
C3-KC 2	Pearson	.865**	1	.667**	.806**	.782**	.854**
	2-tailed	.001		.000	.000	.001	.001
C3-KC 3	Pearson	.737**	.667**	1	.669**	.283	.236
	2-tailed	.000	.000		.000	.011	.037
C3-KC 4	Pearson	.272	.806**	.669**	1	.509**	.711**
	2-tailed	.015	.000	.000		.000	.000
C3-KC 5	Pearson	.063	.782**	.283	.509**	1	.612**
	2-tailed	.581	.001	.011	.000		.000
C3-KC 6	Pearson	-.032	.854**	.236	.711**	.612**	1
	2-tailed	.782	.001	.037	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C3-KC or FIDCOPOL have the same meaning

Table 4 shows that: The correlation in the highest percentage of 87% has the variable FIDCOPOL1 with C3-KC2, which means that if students do not have good communication with family, their performance during online learning will decrease or vice versa, because indirectly the stress factor affects them.

Table 5

C4-PMPM=FIPRLDOL or Financial impact and problems related to lack of dedication to online learning

Variables		FIPRL DOL 1	PRLC OL 2	FIPRL DOL 3	FIPRLD OL 4	FIPRL DOL 5	FIPRL DOL 6	FIPRL DOL 7
C4-PMPM 1	Pearson	1	.773**	.037	-.064	-.237	-.154	-.017
	2-tailed		.001	.744	.574	.036	.176	.879
C4-PMPM 2	Pearson	.773**	1	.822**	.729**	.200	.280	.848**
	2-tailed	.001		.000	.003	.078	.013	.000
C4-PMPM 3	Pearson	.037	.822**	1	.878**	.806**	.796**	.727**
	2-tailed	.744	.000		.000	.000	.000	.000
C4-PMPM 4	Pearson	-.064	.729**	.878**	1	.896**	.784**	.895**
	2-tailed	.574	.003	.000		.000	.000	.000
C4-PMPM 5	Pearson	-.237	.200	.806**	.896**	1	.770**	.835**
	2-tailed	.036	.078	.000	.000		.000	.000
C4-PMPM 6	Pearson	-.154	.280	.796**	.784**	.770**	1	.841**
	2-tailed	.176	.013	.000	.000	.000		.000
C4-PMPM 7	Pearson	-.017	.848**	.727**	.895**	.835**	.841**	1
	2-tailed	.879	.000	.000	.000	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C4-PMPM or FIPRLDOL have the same meaning

Table 5 shows that: The correlation in the highest percentage of 88% has the variable FIPRLDOL3 with C4-PMPM4, which means that if students have problems with

personal finances and stress whether to be employed after graduation, their performance will decrease or vice versa because indirectly the stress and funding factors affect the students' performance.

Table 6

C5-EMOGJF= FEIOLSICov19 or Financial and emotional importance of online learning since the inception of Cov19

Variables		FEIOLSI Cov19 1	FEIOLSI Cov19 2	FEIOLS 1 Cov19 3	FEIOLS 1 Cov19 4	FEIOLS 1 Cov19 5	FEIOLS 1 Cov19 6
C5-EMOGJF 1	Pearson	1	-.839**	-.273	-.045	.183	-.124
	2-tailed		.002	.015	.693	.106	.275
C5-EMOGJF 2	Pearson	-.839**	1	.882**	.718**	-.080	.869**
	2-tailed	.002		.000	.000	.482	.001
C5-EMOGJF 3	Pearson	-.273	.882**	1	.800**	.074	.196
	2-tailed	.015	.000		.000	.519	.084
C5-EMOGJF 4	Pearson	-.045	.718**	.800**	1	.085	.795**
	2-tailed	.693	.000	.000		.454	.000
C5-EMOGJF 5	Pearson	.125	-.080	.074	.085	1	-.783**
	2-tailed	.272	.482	.519	.454		.006
C5-EMOGJF 6	Pearson	-.124	.869**	.196	.795**	-.783**	1
	2-tailed	.275	.001	.084	.000	.006	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C5-EMOGJF or FEIOLSICov19 have the same meaning

Table 6 shows that: The correlation in the highest percentage of 88% has the variable FEIOLSICOV19 2 with C5-EMOGJF3 which means that if students are irritated and anxious, their performance will decrease or vice versa, because indirectly the stress and the funding factors affect student performance.

Table 7

C6-PF(PRS)=FP(WRS) or financial problems (work and relationship with studies)

Variables		FP(WRS) 1	PF(PRS) 2	FP(WRS) 3
C6-PF(PRS) 1	Pearson	1	.038	.155
	2-tailed		.737	.173
C6-PF(PRS) 2	Pearson	.038	1	.027
	2-tailed	.737		.813
C6-PF(PRS) 3	Pearson	.155	.027	1
	2-tailed	.173	.813	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C6-PF(PRS) or FP(WRS) have the same meaning

Table 7 shows that: Variables 1,2,3, in PF (PRS) there is no relationship between factors.

Table 8
C7-PF(LP)=FP (DRS) or financial problems (dismissal and relationship with studies)

Variables		PF(DRS)1	PF(DRS)2	PF(DRS)3	PF(DRS)4
C7-PF(LP)1	Pearson	1	.882**	.898**	.790**
	2-tailed		.000	.000	.000
C7-PF(LP)2	Pearson	.882**	1	.822**	.789**
	2-tailed	.000		.000	.000
C7-PF(LP)3	Pearson	.898**	.822**	1	.847**
	2-tailed	.000	.000		.002
C7-PF(LP)4	Pearson	.790**	.789**	.847**	1
	2-tailed	.000	.000	.002	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C7-PF(LP) or FP (DRS) have the same meaning

Table 8 shows that: If students lose their jobs 90% have a reduction in income from which financial problems arise. In all variables the FSF factor will increase but at the same time the ETF factor will decrease.

Table 9
C8-PTS=FIPTF or Financial impact on payment of tuition fees

Variables		FIPTF 1	FIPTF 2	FIPTF 3
C8-PTS 1	Pearson	1	.764**	.850**
	2-tailed		.000	.002
C8-PTS 2	Pearson	.764**	1	.746**
	2-tailed	.000		.000
C8-PTS 3	Pearson	.850**	.746**	1
	2-tailed	.002	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C8-PTS or FIPTF have the same meaning

Table 9 shows that: The variable FIPTF 1 has a positive relationship (correlation) with the variables (2-3), in this case the reduction of tuition fees is correlated 85% with the provision of flexible ways by the University to pay the fees (e.g., through installments).

Table 10
C9-(MSHS)=FICSS or Financial impact and country support for students

Variables		FICSS1	FICSS2	FICSS3	FICSS4	FICSS5
C9-(MSHS)1	Pearson	1	.805**	.734**	.787**	.700**
	2-tailed		.000	.000	.000	.001
C9-(MSHS)2	Pearson	.805**	1	.711**	.714**	.614**
	2-tailed	.000		.000	.000	.000
C9-(MSHS)3	Pearson	.734**	.711**	1	.905**	.863**
	2-tailed	.000	.000		.000	.000
C9-(MSHS)4	Pearson	.787**	.714**	.905**	1	.840**
	2-tailed	.000	.000	.000		.000
C9-(MSHS)5	Pearson	.700**	.614**	.863**	.840**	1
	2-tailed	.001	.000	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C9-(MSHS) or FICSS have the same meaning

Table 10 shows that: The factor for financial support related to deferred or reduced loan payments and deferred student payments has a higher percentage in the amount of 91%, in which financial support for all student payments will facilitate the FSF factor and improve the ETF factor.

Table 11

C10-BMC=FICPCov19 or Financial impact and cooperation with professors during Cov19

Variables		FICPCov19 1	FICPCov19 2	FICPCov19 3	FICPCov19 4	FICPCov19 5
C10-BMC 1	Pearson	1	.842**	.808**	.896**	.844**
	2-tailed		.000	.000	.000	.002
C10-BMC 2	Pearson	.842**	1	.751**	.768**	.702**
	2-tailed	.000		.000	.001	.000
C10-BMC 3	Pearson	.808**	.751**	1	.796**	.736**
	2-tailed	.000	.000		.000	.000
C10-BMC 4	Pearson	.896**	.768**	.796**	1	.617**
	2-tailed	.000	.001	.000		.000
C10-BMC 5	Pearson	.844**	.702**	.736**	.617**	1
	2-tailed	.002	.000	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C10-BMC or FICPCov19 have the same meaning

Table 11 shows that: The correlation in the highest percentage of 90% has the variable FICPCOV19(1) with C10-BMC (4) which means that tasks given to students should be regulated through programs. Therefore, all variables (1,2,3,4,5,) state that the factor ETF will increase at the same time the factor FSF will decrease.

Table 12

C11-SCS=SCov19RFLF or Stresses from Cov19 related to financial and learning factors

Variables		SCov19RF LF 1	SCov19RF LF 2	SCov19RF LF 3	SCov19RF LF 4	SCov19RF LF 5
C11-SCS 1	Pearson	1	.831**	.748**	.722**	.861**
	2-tailed		.000	.000	.004	.000
C11-SCS 2	Pearson	.831**	1	.766**	.714**	.768**
	2-tailed	.000		.000	.005	.001
C11-SCS 3	Pearson	.748**	.766**	1	.625**	.708**
	2-tailed	.000	.000		.000	.000
C11-SCS 4	Pearson	.722**	.714**	.625**	1	.737**
	2-tailed	.004	.005	.000		.000
C11-SCS 5	Pearson	.861**	.768**	.708**	.737**	1
	2-tailed	.000	.001	.000	.000	

By the author. Each of the abbreviations in the table name has the same meaning. e.g., C11-SCS or SCov19RFLF have the same meaning

Table 12 show that: The correlation in the highest percentage of 86% has the variable SCov19RFLF1 with SCS5 which means that student stress is related to work and career. Therefore, all variables (1,2,3,4,5,) emphasize that stress affects both factors FSF&ETF.

Table 13

Regression results for all variables included in both factors (FSF or financial-stress & ETF or educational-teaching)

Variables	Model Summary				Anova	
	R	R ²	Adjusted R ²	Durbin-Watson	F	Sig.
C1-MMN= FINTLE	.932	.912	.891	2.043	157.931	.000
C2-KKPS=FICFCOL	.971	.942	.914	1.985	134.888	.005
C3-KC= FIDCOPOL	.897	.901	.883	1.862	159.287	.007
C4-PMPM=FIPRLDOL	.902	.895	.896	2.131	164.479	.000
C5-EMOGJF= FEIOLSICov19	.887	.885	.853	1.942	142.991	.011
C6-PF(PRS)=FP(WRS)	.967	.901	.899	1.759	162.902	.003
C7-PF(LP)=FP (DRS)	.912	.897	.817	2.021	158.926	.000
C8-PTS=FIPTF	.912	.894	.873	1.562	153.251	.001
C9-(MSHS)=FICSS	.967	.904	.889	2.009	162.927	.000
C10-BMC=FICPCov19	.893	.885	.807	1.983	149.834	.013
C11-SCS= SCov19RFLF	.963	.918	.903	2.161	162.972	.002

By the author. Each of the abbreviations in the table name has the same meaning.

Table 13 shows that, it is stated that R Square has high values for all factors, which means that the dependent variables such as (.912, .942, .901, .895, .885, .901, .897, .894, .904, .885, .918.) are explained by independent variables, while the residuals are explained with variables that are not included in the model with a random error. The values of the Durbin-Watson test indicate that there is no autocorrelation in the model, while the Anova table states that the values of F for all factors are important at any level of significance (sig.=.000).

DISCUSSION

The C1-MMN= FINTLE (Financial impact on the new teaching and learning environment) category included 6 sub-factors, in this case all variables were correlated with the FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of Table 2 it is stated that if there is no concentration during online learning and if students do not adapt to the new teaching and learning environment their performance will decline or vice versa. The C2-KKPS=FICFCOL (Financial impact to create and fulfilled the conditions during online learning) category included 9 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-stress) factors, so according to the results of Table 3 it is stated that if students do not have the conditions to hold online learning such as: desk, computer, programs and methods required by professors, printer, headphones, microphone and camera to discuss during class, tranquility in the learning environment, good network during lectures, necessary supplies such as materials and books, etc., performance of their will decline or vice versa.

The C3-KC= FIDCOPOL (Financial impact to develop communication with others by purchasing communication tools for online learning) category included 6 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching)

factors, so according to the results of Table 4 it is stated that students did not have good communication with family, friends, professors, administrative staff, colleagues and others, regarding the new teaching and learning environment this reduced their performance, because indirectly the stress factor affected them. The C4-PMPM=FIPRLDOL (Problems related to lack of commitment in online learning) category included 6 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of Table 5 it is stated that students had problems with: personal finances, employment stress after graduation, isolation, career, relationships with others, family problems, etc. The C5-EMOGJF= FEIOLSICov19 (Financial and emotional importance of online learning since the inception of Cov19) category included 6 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of Table 6 it is stated that some of the students were: irritated, worried, upset, charged, etc., all of these factors affected their performance during the lesson to be low, while the part of the students who had hope, their performance during the lesson was high. The C6-PF(PRS)=FP(WRS) (Financial problems (dismissal and relationship with studies) category included 4 sub-factors, in this case all variables were related to the FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of Table 8 it is stated that students who had lost their regular job, had lost their temporary or who had a reduction in salary, this directly affected the reduction of financial income, which created great difficulties for students in creating conditions for the new teaching and learning environment (such as: desks, computers, programs, etc.).

Therefore, through these consequences, financial and stressful problems arise, which are directly related to reduced performance during online learning. Many universities around the world provided financial support in various ways for students affected by Cov19. The C8-PTS=FIPTF (Financial impact on payment of study fees) category included 3 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching) factors. So according to the results of Table 9 it is stated that universities should offer students flexible ways to pay tuition fees (for example in installments), because they had stress for their schooling in times of pandemic, this affected performance reduction because indirectly the stress factor and funding affected them. Therefore, the three variables offered by the universities would facilitate the FSF & ETF factors (such as: reduction of fees, extension of deadlines for payment or payment through installments. Cov19 has affected not only people's health but also the way they learn, work and live. So, support from the country's government will alleviate student disorders. The C9-(MSHS)=FICSS (Financial Impact and Country Support for Students) category included 5 sub-factors, in this case all variables were related to FSF(financial-stress)& ETF(educational-teaching) factors, so according to the results of Table 10 it is stated that some of the students could not afford to pay tuition fees in pandemic conditions, so the factors of stress and funding directly affected the study performance.

The C10-BMC=FICPCov19 (Financial impact and cooperation with professors during Cov19) category included 5 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of

Table 11 it is stated that students from some professors did not have information about: how the exams would be held, how to submit assignments through programs, how they would be evaluated for homework, how to get answers from professors in a timely manner, etc. Tuition fees are quite difficult to pay by students in good times, let alone on difficult days like in the case of a pandemic. The C11-SCS= SCov19RFLF (Stresses from Cov19 related to financial and learning factors) category included 5 sub-factors, in this case all variables were related to FSF(financial-stress) & ETF(educational-teaching) factors, so according to the results of Table 12 it is stated that some of the students had some of these stresses such as: financial to make payments, related to graduation delays, work, career, assignments, exams, research, social isolation, all of these types of stresses reduced performance during online learning.

CONCLUSIONS

As stated in the introduction, the Cov19 pandemic has affected every field, including economics and education. Therefore, the aim was to see if Cov19 affected student performance at all levels of study at Kosovos' Universities including 57 variables divided into 11 groups (C1-C11) for the two factors FSF (financial-stress factor) and ETF (educational-teaching factor). According to the results of correlation analysis and multiple regression analysis, it is observed that Cov19 affected student performance and both factors had a relationship between them (ETF & FSF). The State of Kosovo, Universities, Households and students should take into account the following recommendations: 1) must have good concentration, adaptation and communication during online learning, 2) must create conditions for C1-MMN= FINTLE or new teaching & learning environment, 3) must have financial conditions and stress factors must be removed to increase study motivation, 4) online learning opportunities should be created so that students do not lose their jobs, 5) there should be a reduction in tuition fees or flexibility in payment methods, 6) there should be have information from professors on how exams and tests will be conducted and there should be no delays in graduation. This research will be the reference basis for future analysis. Research implications suggest that focusing during online learning enhances student performance, and that families who have good financial standing have less financial stress to create the conditions for a new learning environment, so these findings may become a reference for subsequent research.

REFERENCES

- Al Kandari, A. M., & Al Qattan, M. M. (2020). E-Task-Based Learning Approach to Enhancing 21st-Century Learning Outcomes. *International Journal of Instruction*, 13(1), 551-566. <https://doi.org/10.29333/iji.2020.13136a>.
- Alawamleh, M., Al-Twait, L.M. & Al-Saht, G.R. (2020). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*. (<https://doi.org/10.1108/AEDS-06-2020-0131>).
- Aljaraideh, Y, (2019). Massive Open Online Learning (MOOC) Benefits and Challenges: A Case Study in Jordanian Context. *International Journal of Instruction*, 12(4), 65-78. <https://doi.org/10.29333/iji.2019.1245a>.

- Amri, F., Djatmika, E. T., Wahyono, H., & Widjaja, S. U. M. (2020). The Effect of Using Simulation on Developing Students' Character Education in Learning Economics. *International Journal of Instruction*, 13(4), 375-392. (<https://doi.org/10.29333/iji.2020.13424a>).
- Dabrowski, A., (2020). Teacher Wellbeing During a Pandemic: Surviving or Thriving? *Social Education Research*, 2(1), 35-40. (<https://doi.org/10.37256/ser.212021588>).
- Daud, Y., Dali, P. D., Khalid, R., & Fauzee, M. S. O. (2018). Teaching and Learning Supervision, Teachers' Attitude towards Classroom Supervision and Students' Participation. *International Journal of Instruction*, 11(4), 513-526, (<https://doi.org/10.12973/iji.2018.11432a>).
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5-22, (<https://doi.org/10.1177/0047239520934018>).
- Elfirdoussi, S, Lachgar, M.,Kabaili,H.,Rochdi, A.,Goujdami,D. & Firdoussi, D. (2020). Assessing Distance Learning in Higher Education during the COVID-19 Pandemic. *Education Research International*,13, <https://doi.org/10.1155/2020/8890633>.
- Erasmus+, (2020). Survey on Online and Distance Learning-Results. Available online, <https://www.schooleducationgateway>: Europe's online platform for school education.
- Espino D.P., Wright T., Brown V.M., Mbasu Z., Sweeney M., & Lee S. B. (2021). Student Emotions in the Shift to Online Learning During the COVID-19 Pandemic. *International Conference on Quantitative Ethnography, ICQE 2021: Advances in Quantitative Ethnography*, 334-347. https://doi.org/10.1007/978-3-030-67788-6_23.
- Funa, A. A., & Prudente, M. S. (2021). Effectiveness of problem-based learning on secondary students' achievement in science: A meta-analysis. *International Journal of Instruction*, 14(4) pp. 69-84, <https://doi.org/10.29333/iji.2021.1445a>.
- Gopal, R., Singh, V. & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID 19. *Educ Inf Technol*. <https://doi.org/10.1007/s10639-021-10523-1>.
- Hali, A. U., Zhang, B., Al-Qadri, A. H., & Aslam, S. 2021. A collaborative teacher training approach in different cultures in the era of technology. *International Journal of Instruction*, 14(2), pp. 21-32, <https://doi.org/10.29333/iji.2021.1442a> .
- Hameli, K. (2017). *Multivariate statistical techniques applied in SPSS*. 6 ed. Istanbul.
- Hidajat, H. G., Hanurawan, F., Chusniyah, T., & Rahmawati, H. (2020). Why I'm Bored in Learning? Exploration of Students' Academic Motivation. *International Journal of Instruction*, 13(3), 119-136. <https://doi.org/10.29333/iji.2020.1339a>.
- Hindun, I., Husamah, H., Nurwidodo, N., Fatmawati, D., & Fauzi, A. (2021). E-Learning in COVID-19 pandemic: Does it challenge teachers' work cognition and metacognitive awareness? *International Journal of Instruction*, 14(3), 547-566, <https://doi.org/10.29333/iji.2021.14332a>.

- Hobri, Ummah, I. K., Yuliati, N., & Dafik. (2020). The Effect of Jumping Task Based on Creative Problem Solving on Students' Problem-Solving Ability. *International Journal of Instruction*, 13(1), 387-406. (<https://doi.org/10.29333/iji.2020.13126a>).
- Iqbal, Sh. & Bhatti, A., Z. (2017). What drives m-learning? An empirical investigation of university student perceptions in Pakistan. *Higher Education Research & Development*, 36(4),730-746 (<https://doi.org/10.1080/07294360.2016.1236782>).
- Liesa, M.& Latorre, C. & Vázquez, S. & Sierra, V. (2020). The technological challenge facing higher education professors: Perceptions of ICT. *Sustainability*, 12(13),1-14. (<https://doi.org/10.3390/su12135339>).
- Magen-Nagar, N., & Shonfeld, M. (2018). The impact of an online collaborative learning program on students' attitude towards technology. *Interactive Learning Environments*, 26(5), 621-637, (<https://doi.org/10.1080/10494820.2017.1376336>).
- Majali, S. A. (2020). Positive Anxiety and its Role in Motivation and Achievements among University Students. *International Journal of Instruction*, 13(4), 975-986. (<https://doi.org/10.29333/iji.2020.13459a>).
- Miftakhov, A. F., Sergin, A. A., Starostin, V. G., Torgovkin, V. G., & Savinkova, O. N. (2019). Correlation of Physical Development Indicators with Speed-Strength Performance in 11-12 old-boys. *International Journal of Instruction*, 12(1), 269-282, <https://doi.org/10.29333/iji.2019.12118a>).
- Monroy, F.A. & Llamas, F. & Fernández, M.R. &Carrión, J. L. (2020). Digital Technologies at the Pre-University and University Levels. *Sustainability*, 12(24), 2-16, (<https://doi.org/10.3390/su122410426>).
- Ogunmokun, A., O., & Unverdi-Creig, I., & Said, S., & Avci, T., & Eluwole, K. (2020). Consumer well-being through engagement and innovation in higher education: A conceptual model and research propositions. *Wiley*, 1-12 <https://doi.org/10.1002/pa.2100>.
- Pokhrel, S., & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future*, 8(1), 133-141, (<https://doi.org/10.1177/2347631120983481>).
- Reyna, J. (2019). A model to explore learning processes in learner-generated digital media (LGDM) assignments. *International Technology, Education and Development Conference*, 29-35, <http://dx.doi.org/10.21125/inted.2019.0015>.
- Roca-Hurtuna, M., Martinez-Rico, G., Sanz, R. & Alguacil, M, (2021). Attitudes and Work Expectations of University Students towards Disability: Implementation of a Training Programmed. *International Journal of Instruction*, 14((2), 1-10, <https://doi.org/10.29333/iji.2021.1421a>).
- Schleicher, A., (2020). *The impact of Covid-19 on education. insights from education at a glance*, <https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance>: OECD.

- Singh, V. & Thurman, A. (2019). How Many Ways Can We Define Online Learning? A Systematic Literature Review of Definitions of Online Learning (1988-2018). *American Journal of Distance Education*, 33(4), 289-306, (<https://doi.org/10.1080/08923647.2019.1663082>).
- Surur, M., Degeng, I. N. S., Setyosari, P., & Kuswandi, D. (2020). The Effect of Problem Based Learning Strategies and Cognitive Styles on Junior High School Students' Problem-Solving. *International Journal of Instruction*, 13(4), 35-48, (<https://doi.org/10.29333/iji.2020.1343a>).
- Suryanti, N., & Nurhuda. (2021). The Effect of Problem-Based Learning with an Analytical Rubric on the Development of Students' Critical Thinking Skills. *International Journal of Instruction*, 14(2), 665-684, (<https://doi.org/10.29333/iji.2021.14237a>).
- Saroinsong, P. W. & Sun. X., J., & Boonrungrut, Ch., & Sidiq, B., A. & Nursalim, M., & Wagino, & Simatupang, N., D. (2019). *Excessive Internet Use and Its Hours Usage Control among Indonesian Students in China.*, Ataltis press, Springer Nature. <https://dx.doi.org/10.2991/icei-19.2019.78>.
- Sumarmi., Bachri, S., Irawan, L. Y., & Aliman, M. (2021). E-module in Blended Learning: Its Impact on Students' Disaster Preparedness and Innovation in Developing Learning Media. *International Journal of Instruction*, 14(4), pp. 187-208. <https://doi.org/10.29333/iji.2021.14412a>.
- Tobin, J., Hall, O., Lazris, J., & Zimmerman, D. (2021). Financial Stress and Health Considerations: A Tradeoff in the Reopening Decisions of U.S. Liberal Arts Colleges during the COVID-19 Pandemic. *Journal of Risk and Financial Management*, 14(8), 382, <http://dx.doi.org/10.3390/jrfm14080382>.
- Turnea, E., S., Neșțian, A., S., Tiță, S., M., Vodă, A., I., Guță, A., L. (2020). Dismissals and Temporary Leaves in Romanian Companies in the Context of Low Demand and Cash Flow Problems during the COVID-19 Economic Lockdown. *Sustainability*, 12(21), 2-22, (<https://doi.org/10.3390/su12218850>).
- Warsah, I., Morganna, R., Uyun, M., Hamengkubuwono., & Afandi, M. (2021). The Impact of Collaborative Learning on Learners' Critical Thinking Skills. *International Journal of Instruction*, 14(2), 443-460, (<https://doi.org/10.29333/iji.2021.14225a>).
- Weda, S., Atmowardoyo, H., Rahman, F., Said, M. M., & Sakti, A. E. F. (2021). Factors Affecting Students' Willingness to Communicate in EFL Classroom at Higher Institution in Indonesia. *International Journal of Instruction*, 14(2), 719-734, (<https://doi.org/10.29333/iji.2021.14240a>).
- Wuryaningrum, R., Bektiarso, S., & Suyitno, I. (2020). The Effects of Knowledge Transforming Text on Elementary Students' Declarative, Procedural Knowledge, and Motivation in Environmental Learning. *International Journal of Instruction*, 13(1), 567-586, <https://doi.org/10.29333/iji.2020.13137a>.