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Investigation of Burnout Status, Self-Esteem, Communication Skills and Academic Self-Efficacy Levels of Students in Online Education Process in the COVID 19 Pandemic*

COVID 19 Pandemisinde Çevrimiçi Eğitim Sürecinde Öğrencilerin Tükenmişlik Durumları, Benlik Saygısı, İletişim Becerileri ve Akademik Özyeterlik Düzeylerinin İncelenmesi

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* The first data related to this research were presented at the 8th National Physiotherapy and Rehabilitation Congress as an "oral presentation-summary statement.

ABSTRACT

Aim: The study was designed based on the hypothesis that the online education process affected students' communication skills, burnout, self-confidence, and academic self-efficacy during the COVID-19 period. We aimed to investigate students' communication skills, burnout, self-esteem, and academic self-sufficiency in the online education process during the COVID-19 period.

Material and Method: In our study, undergraduate students between the ages of 18-25 who are continuing their academic training in Istanbul were included. The burnout level of the participants was evaluated using the Maslach Burnout Inventory Student Form, self-esteem Rosenberg Self-Esteem Scale, communication ability Communication Skills Scale, and academic competence using the Academic Self-Efficacy Scale.

Results: 220 students were included in the research. 170 males (77.3%) and 50 females (22.7%) who met the inclusion criteria, were analyzed. According to the results of Pearson correlation analysis, a positive moderate correlation ($r=0.448$, $p<0.001$) between participants' burnout level scores and self-esteem scores, and a moderate negative correlation was found with academic self-efficacy scores ($r=-0.451$, $p<0.001$).

Conclusion: According to other studies in the literature, in our results, students' communication skills and academic self-efficacy are at the forefront during the COVID-19 period of the online education process. It can be said that more research is needed on how to improve communication skills and social interaction to improve academic self-efficacy.

Keywords: Burnout, COVID-19, Distance education, Self-esteem

ÖZET

Amaç: Çalışmanın amacı COVID 19 pandemi döneminde çevrimiçi eğitim sürecinde öğrencilerin tükenmişlik durumlarını, benlik saygısını, iletişim becerilerini, akademik özyeterliklerini araştırmaktır.

Gereç ve Yöntem: Çalışmamıza İstanbul'da bir devlet ve vakıf üniversitelerinde eğitimine devam eden 18-25 yaş arası lisans öğrencileri dahil edilmiştir. Katılımcıların tükenmişlik düzeyleri Maslach Tükenmişlik Envanteri Öğrenci Formu, benlik saygısı Rosenberg Benlik Saygısı Ölçeği, iletişim yeteneği İletişim Becerileri Ölçeği ve Akademik Öz-yeterlik Ölçeği ile akademik yeterlilik değerlendirildi.

Bulgular: Çalışmaya dahil edilme kriterlerini karşılayan 170'i erkek (%77.3) ve 50'si kadın (%22.7) olmak üzere toplam 220 öğrenci dahil edildi. Pearson korelasyon analizi sonuçlarına göre, katılımcıların tükenmişlik düzeyi puanları ve benlik saygısı puanları için pozitif orta düzeyde ($r=0.448$; $p<0.001$), akademik öz-yeterlik puanları ile orta düzeyde negatif bir ilişki bulunmuştur ($r=-0.451$; $p<0.001$).

Sonuç: Lisans öğrencilerinde tükenmişlik sendromunun ortaya çıkmasını önlemek ve akademik öz yeterliği geliştirmek için benlik saygısının nasıl geliştirilebileceği, iletişim becerilerinin ve sosyal etkileşiminin nasıl geliştirilebileceği ve eğitim sisteminin nasıl geliştirilebileceği konusunda daha fazla uygulamalı çalışmalara ihtiyaç vardır.

Anahtar kelimeler: Benlik saygısı, COVID-19, Uzaktan eğitim, Tükenmişlik



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INTRODUCTION

In 2020, the World Health Organization (WHO) officially recognized the new coronavirus pandemic as a public health problem of international importance and declared a state of emergency (Avan & Güngör, 2021). In the SARS-2 outbreak of a new type of coronavirus, educational activities were directly affected, which also caused concern among students receiving education. When this virus spread to the World, the vast generality of countries announced the provisional closure of schools, and it was reported that more than 91 percent of students, about 1.6 billion students were affected worldwide (Miks & McIlwaine, 2020). Young adults between the ages of 18-29 are thought to be the most affected group during the pandemic period in terms of stress and physical activity (Kızıkm et al., 2022). The largest public space affected by the pandemic in schools closed as of March 16 in Turkey is formal and non-formal education. As with the other countries of the world, in Turkey, distance education carries out this process using digital technology to provide effective schooling and training in this field (Bakioğlu & Çevik, 2020).

Online learning, i.e. distance learning, can include simultaneous or asynchronous education practices in which several internet-enabled devices such as mobile phones laptops and laptops are used (Rohmani & Andriani, 2021). Online education is drastically different from the conventional classroom environment when it comes to student interaction, satisfaction, and motivation (Muthuprasad, Aiswarya, Aditya & Jha, 2021).

Rosenberg's self-esteem; defines the negative-positive self-perceptions of individuals. Self-esteem is when an singular considers himself adequate and important, considers himself successful and valuable. Various studies have shown that personnel with excessive self-esteem have a high level of job pleasure (Cataudella et al., 2021). Inadequate self-esteem causes introversion, inadequate communication, inadequate self-expression, and lack of academic achievement (Baybek & Yavuz, 2005).

Burnout syndrome is responsible for excessive emotional fatigue in individuals, usually due to strenuous vocational-educational activities. It refers to burnout, psychological syndrome, fatigue and inability to work (Pereira et al,

Gonçalves & Assis, 2021). To pass their class, students have to succeed in their exams and do their homework and work, and this is a responsibility for them (Salmela-Aro, Savolainen & Holopainen, 2009). The burnout dimension of school burnout is related to academic stress (Schaufeli, Martinez, Pinto, Salanova & Barker, 2002). A abound of university students face critical problems in their schooling. If the situations that students see as problems are prolonged, these students are at risk of proceeded stress and ultimately burnout (Kiema-Junes, Hintsanen, Soini & Pyhältö, 2020). Job-related burnout consists of three distinct symptoms: psychological exhaustion, inadequacy and cynicism. Emotional burnout refers to the feeling of being emotionally distressed from work; cynicism, in addition to this, expresses a cynical attitude towards working, and inadequacy measures feelings of inadequacy as a learner (Kiema-Junes et al., 2020). Burnout and decreased participation can give rise to problems for higher-learning students and educational institutions as they are associated with poor academic performance and low academic motivation. Since student burnout predicts burnout in the workplace in the dimensions of burnout and cynicism, burnout can cause problems during the transition of students to work life (Galbraith & Merrill, 2015).

It has been reported that it is important for university students to take courses on communication and empathy skills (Akgün & Çetin, 2018). Considering the online education process, the student; he can hardly be found in the same environment as the academician, he mostly takes the department classes online from his home and due to the pandemic conditions to socialize with his friends. Looking at the literature, it has not been revealed how students who received online education during the pandemic process viewed their communication skills from their perspective in this process.

The influence of academic self-sufficiency on students' ability to perform a task and academic success is quite high (Bandura, 2010). Individuals with high self-efficacy can perform a task more successfully (Demirdağ, 2015). These individuals are looking for ways to succeed by keeping their motivation high even when they are stressed and working conditions are difficult. With the pandemic, online education applications may have an impact on students because it is an unusual new system.

In the literature, the answer to the question of whether the changing educational conditions with the new world, new order, and the new order in the literature are forcing and consuming students, in this context, what is the place of the student's self-esteem, communication skills, and academic self-efficacy in adopting the online education conditions during the pandemic process, in the management of the process and in meeting the academic load has not been published.

In the light of this information, it was intended as examine the academic self efficacy, burnout status, self esteem, and communication skills of students in the online learning during the COVID-19 period.

MATERIAL AND METHOD

Research Type

The type of this study was cross-sectional research.

Study Population and Sample

Since a sample group was not taken to cover the universe in our research, it was carried out over the study group. At this point, the sampling process was carried out with purposive sampling. Purposeful sampling is called purposive or judgmental sampling, and this is the sampling in which the person himself determines the purpose in line with the information to be given and researches to find them. Here, the focus is on situations with a broad content of information that will illuminate the questions to be answered (Başarer & Başarer, 2019). The sample of the study compose of undergraduate students between the ages of 18-25 who continue their learning at the five different universities in Istanbul. Research data were collected from students studying at five different universities between 14 July 2021 and 15 January 2022. Undergraduate students who volunteered for the study; took active courses during the online education process, and were able to use computers at a level that could fill in questionnaires with an online internet connection were included. Persons who did not accept to participate in the study, graduated, did not have technological equipment such as the internet or computers; and had any physical or psychological illness that prevented them from completing the online questionnaire were excluded from the study. "Informed Consent Form" was taken from the students in the study.

The inclusion criteria of the study were as

follows; volunteering to participate in the study, to have taken active lessons in the online education process, being an active registered, university undergraduate student. Exclusion criteria were refusing to participate in the study, being a graduate student, internet, computer, etc. it was not having technological equipment, having any physical or psychological illness that prevents completing the online questionnaire.

Procedure

Permission to use was derived from the authors who directed by the Turkish validity and reliability study of the questionnaires used in the study. All questionnaires used in the assessment of the participants were converted into an online questionnaire in their original form. Online scales and questionnaires, voluntary consent forms, and demographic data were communicated to the participants via Google Forms. The link of the questionnaire forms created online was communicated via Whatsapp application through the advisors of the universities where the participants were educated. Participants, who accessed the link provided by their advisors, filled out the questionnaires online after declaring that they agreed to participate in the research.

Data Collection Tools

The demographic information (age, gender, height, weight, smoking, class) of the participants included in the study was questioned with the Demographic Data Form prepared by the researchers. In addition, Maslach Burnout Inventory-Student Form (MBI-SF) to determine the level of burnout of the students, Rosenberg Self-Esteem Scale (RSES) to determine the level of self-esteem, Communication Skills Scale (CSS) to evaluate the communication ability, to evaluate the level of academic self-efficacy, Academic Self-Efficacy Scale (ASES) was used.

Demographic Data Form: There are nine questions in total in the demographic data form created online by the researchers via Google Forms. Participants' personal information such as name-surname, age, gender, height, and weight were questioned. In addition, smoking status (amount and duration), university education department and class information were questioned.

Maslach Burnout Inventory - Student Form: The Turkish version of the MBI-SF developed by Schaufeli et al., was made by Çapri et al. (2011). As a result of the confirmatory factor analysis on

a total of 782 university students, a 3-factor structure consisting of 13 items was obtained. It was observed that the correlations between the scores of the sub-factors obtained from the scale varied between 0.32 and 0.83. Item-total test correlations were calculated and it was determined that the correlation values of the sub-factors ranged between .32 and .69. In the criterion-related validity study of MTE-ÖF, the Burnout Scale Short Version (TÖ-KV) was applied and the correlations between the total score of this scale and the sub-factors of MTE-ÖF were calculated, respectively. It was found to be .51, .45 and -.38. While the Cronbach Alpha internal consistency k coefficient calculated to determine the reliability of the scale was found to be .76, .82 and .61, respectively, the test-retest reliability results were found to be .76, .74 and .73, respectively. These sub-factors were named “burnout (5 items)”, “depersonalization (4 items)”, and “competence (4 items)” (Schaufeli et al., 2002), (Schaufeli et al., 2002; Çapri, Gündüz & Gökçakan, 2011).

Rosenberg Self-esteem Scale: The questionnaire, which is included in the literature as one of the four reliable main questionnaires used for the measurement of self-esteem, was developed by M. Rosenberg in 1965. The questionnaire can be applied in groups and to adolescents. There is no time limit in the application. Consisting of 63 items in total, the scale has 12 subtests. In this study, the Self-Esteem subcategory including 10 items was used. The validity and reliability studies of the scale, which was adapted into Turkish by Çuhadaroğlu (1986), were carried through (Çuhadaroğlu, 1986). In scale; Items 1, 2, 4, 6, 7 question positive self-evaluation and score ranging from 3 to 0, while items 3, 5, 8, 9, and 10 question negative self-evaluation and score from 0 to 3'. Scoring is made up to. The total score range is between 0-30, while a score between 15-25 indicates sufficient self-esteem, while a score below 15 indicates low self-esteem (Çuhadaroğlu, 1986). In the reliability study conducted by Rosenberg (1965), it was determined that the test-retest reliability coefficient for the subscales of the RBSS varied between .82 - .88 and the internal consistency coefficient (Cronbach's alpha) varied between .77 - .88. In the reliability study conducted by Çuhadaroğlu (1986) for the Turkish form of the RÖS, it was found that the test-retest reliability coefficient varied between .48 and .79. In this study, the Cronbach's alpha internal consistency coefficient for the self-esteem

subscale is .88 (Özgüngör, 2015).

Communication Skills Scale: The communication skills questionnaire created by Korkut (1996) to measure the communication skills of students consists of five-point Likert type and 25 questions. In addition, the questionnaire has four subscales: Communication Principles and Basic Skills (CBPS), Active Listening (AL), Non-Verbal Communication (NVC), Self-Expression (SE) and Willingness to Communicate (WC). Cronbach's alpha coefficient was calculated for the internal consistency reliability of the scale, and the internal consistency coefficient of the 25-item scale was calculated as .88. Internal consistency coefficients for the sub-factors of the scale are .79 for CBPS; .72 for SE, .64 for NVC and .71 for WC. According to the data taken from 78 people four weeks apart for the repeat of the test, the Pearson moment product correlation coefficients between the two measurements are for the total score. 81, .73 for CBPS, .76 for SE, .70 for NVC and .075 for WC. These values obtained show that the Communication Skills Scale is sufficient for its reliability level and that the scale gives stable results every time it is applied (Korkut, 1996).

Academic Self-efficacy Scale: The questionnaire, whose original form was prepared by Owen and Froman in 1988, was adapted to Turkish culture by Ekici (2012). The 33-item questionnaire consists of three factors: "technical skills", "cognitive practices" and "social status". The questionnaire items are 5-point Likert type and are "Very Little", "Little", "Partly Too Much", "Too Much", and "Very Much" (Ekici, 2012).

Ethics Consideration

The study was carry through by the Declaration of Helsinki and with the approval of the University of Health Science Hamidiye Scientific Research Ethics Committee (Date: 15/06/2021, No: 21/338).

Data analysis

Statistical analyses were performed using the IBM Statistical Package for Social Sciences (SPSS Inc.; Chicago, IL, USA) software for Windows version 20.1. Continuous variables are given as mean \pm standard deviation, median, categorical variables as numbers and percentages. For the analysis of the obtained data, independent sample t-test, ANOVA variance analysis, and linear regression analysis were used. Pearson correlation analysis was used to examine the

relationship between parametric variables.

RESULTS

220 students were included in the study. 170 male (77.3%) and 50 female (22.7%) who met the inclusion criteria, were analyzed. The data results queried to see the average of the demographic data of the student population were as follows. The

mean age of the participants was 20.74 ± 1.726 years, the mean weight was 62.905 ± 12.679 kg, and the mean height was 167.29 ± 8.226 cm. The majority of the participants are male (77.3%), smokers (80.5%), and those attending the first year of university (29.5%) (Table 1).

The average scores obtained by the participants from the questionnaires are indicated in Table 2.

Table 1. Sociodemographic Characteristics

Descriptive Variables	n	%
Gender		
Female	170	77.3
Male	50	22.7
Smoking		
Yes	177	80.5
No	43	19.5
Class		
1st class	65	29.5
2nd class	61	27.7
3rd class	55	25.0
4th class	39	17.7
	Median	X ± SD
Age (year)	20.50	20.74 ± 1.72
Weight (kg)	60.00	62.90 ± 12.67
Size (cm)	165.50	167.29 ± 8.22

n: number, %: percent, X: mean, SD: Standart deviation kg: kilogram, cm: centimeter

Table 2. Scores from Questionnaires

Questionnaire Scores	n	X ± SD
MBI-Burnout	220	12.30 ± 4.40
MTE-Depersonalization	220	9.02 ± 3.62
MBI-Competence	220	11.49 ± 3.09
MBI-TOTAL	220	32.81 ± 9.46
RSES-TOTAL	220	1.86 ± 1.77
CSS-TOTAL	220	100.59 ± 10.75
ASES-Social Status	220	26.98 ± 7.07
ASES-Cognitive Applications	220	62.77 ± 11.81
ASES-Technical Skills	220	12.35 ± 3.22
ASES-TOTAL	220	102.10 ± 19.75

n: number, X: mean, SD: Standart deviation, MBI: Maslach Burnout Inventory, RSES: Rosenberg Self-Esteem Scale, CSS: Communication Skills Scale, ASES: Academic Self Efficacy Scale

For the results of Pearson correlation analysis, positive moderate correlation ($r=0.448$, $p<0.001$) between participants' burnout level scores and self-esteem scores, weak negative correlation with communication skills scores ($r=-0.244$, $p<0.001$) a moderate negative correlation was found with academic self-efficacy scores ($r=-0.451$, $p<0.001$). There was a moderate negative correlation ($r=-0.317$, $p<0.001$) between the self-esteem scores of the participants and their

communication skills, and a moderate correlation ($r=-0.329$, $p<0.001$) between the academic self-efficacy scores of the participants. In addition, a positive moderate correlation was found between academic self-efficacy scores and communication skills scores ($r=0.443$, $p<0.001$) (Table 3).

The burnout status of the participants differed significantly according to smoking ($p=0.002$). It was observed that the burnout status of the smokers was higher than the non-smokers. The

self-esteem of the participants differed significantly according to gender ($p=0.021$). It has been observed that females have lower self-esteem than males (Table 4).

Table 3. Examining the Relationship of the Scales

		MBI-TOTAL	RSES-TOTAL	CSS-TOTAL	ASES-TOTAL
MBI-TOTAL	r	1	0.448**	-0.244**	-0.451**
	p	-	0.000	0.000	0.000
	n	220	220	220	220
RSES-TOTAL	r	0.448**	1	-0.317**	-0.329**
	p	0.000	-	0.000	0.000
	n	220	220	220	220
CSS-TOTAL	r	-0.244**	-0.317**	1	0.443**
	p	0.000	0.000	-	0.000
	n	220	220	220	220
ASES-TOTAL	r	-0.451**	-0.329**	0.443**	1
	p	0.000	0.000	0.000	-
	n	220	220	220	220

MBI: Maslach Burnout Inventory, RSES: Rosenberg Self-Esteem Scale, CSS: Communication Skills Scale, ASES: Academic Self Efficacy Scale, ** $p<0.01$, * $p<0.05$. Pearson correlation

Table 4. Comparison of the Scores Obtained from the Scales According to Demographic Characteristics

	Demographic Variables	Category	n	X	SD	p	t/F
Maslach Burnout Inventory Total Score	Gender	Male	50	31.08	10.80	0.186	1.335
		Female	170	33.32	9.00		
	Smoking	Yes	43	36.79	10.84	0.002*	3.136
		No	177	31.84	8.86		
	Class	1	65	32.86	9.16	0.910	2.187
2		61	30.49	7.85			
3		55	33.67	10.98			
4		39	35.13	9.54			
Rosenberg Self-Esteem Scale Total Score	Gender	Male	170	2.01	1.78	0.021*	2.361
		Female	50	1.36	1.67		
	Smoking	Yes	43	1.86	1.68	0.995	0.006
		No	177	1.86	1.80		
	Class	1	65	1.52	1.60	0.303	1.220
2		61	1.92	1.82			
3		55	2.11	1.86			
4		39	1.97	1.82			
Communication Skills Scale Total Score	Gender	Male	170	100.34	9.84	0.600	-0.527
		Female	50	101.42	13.46		
	Smoking	Yes	43	101.23	10.37	0.653	0.451
		No	177	100.43	10.86		
	Class	1	65	100.68	10.70	0.997	0.015
2		61	100.44	9.45			
3		55	100.45	12.59			
4		39	100.85	10.31			
Academic Self-Efficacy Total Score	Gender	Male	170	100.85	18.73	0.122	-1.556
		Female	50	106.34	22.58		
	Smoking	Yes	43	103.02	20.20	0.738	0.336
		No	177	101.88	19.69		
	Class	1	65	101.54	19.46	0.974	0.075
2		61	102.34	19.19			
3		55	103.00	24.08			
4		39	101.38	14.24			

n: Number, X: Mean, SD: Standart Deviation, * $p<0.05$. ANOVA

Multiple linear regression analysis was carried out to determine whether the variables of communication skill, burnout and self-esteem significantly predicted academic self-efficacy. For the results of the regression analysis, the model was found to be significant ($F=34.651$, $p=0.000$). When the R^2 value is examined; It was determined that communication skills and

burnout explained 31.6% of academic self-efficacy variables. It was found that communication skills ($\beta=0.338$, $p<0.001$) and burnout levels ($\beta=-0.336$, $p<0.001$) significantly predicted academic self-efficacy. However, it was determined that self-esteem ($\beta=-0.071$, $p=0.269$) did not significantly predict academic self-efficacy (Table 5).

Table 5. The Effect of Communication Skills, Self-Esteem, and Burnout on Academic Self-Efficacy

Variables	β	t	p	Ratio %95 CI
Communication Skill	.0338	5.696	0.000	0.407-0.837
Burnout	-0.336	-5.339	0.000	-0.961-(0-.443)
Self-Esteem	-0.071	-1.109	0.269	-2.206-(0.618)

Multiple Linear Regression

DISCUSSION

The self-esteem of the learners differed significantly regarding gender, and it was ensued in our study that women had lower self-esteem than men. There are different results regarding self-esteem and gender in the literature. In some studies where self-esteem was investigated in university students, it was ended up that female students had higher self-esteem than male students as a result of the opposite result to our study (Ekici, 2012; Arıca, 2005; Özkan, 1994). There are also studies in the literature that gender does not affect self-esteem (Altıok, Ek & Koruklu, 2010; Yöyen, 2017; İlhan & Gümüşdağ, 2021; Bayraktar, Sayıl & Kumru, 2009). Similar to our study, in a study conducted by Karakaya et al., it was found that men's self-esteem was higher than women's (Karakaya, Coşkun & Ağaoğlu, 2006).

The analysis result of current researches show that several parameters are related to burnout. Especially for literature, it has been found that self-esteem plays a key role in preventing personal burnout symptoms. It is said that increasing self-esteem will reduce or even prevent burnout (Kupcewicz & Józwick, 2020). When we look at the relationship between burnout and self-esteem, in our research, it was found that as burnout increased, self-esteem decreased. In the study of Mendez et al. (2020), similar to our research, it was surveyed that the level of burnout increased as self-esteem decreased (Méndez, Martínez-Ramón, Ruiz-Esteban & García-Fernández, 2020). In another study, it was clearly indicated that low self-esteem is independently coupled with burnout, while low self-esteem has an indirect effect through mediated variable

stress, in addition to a direct effect on burnout (Johnson et al., 2020). Mahmoudi et al., in their study published in 2019, stated that academic burnout is the only predictor of undergraduate self-esteem (Mahmoudi, Mahmoudi, Sharaki, Shamsaei & Kakaei, 2019). The educational life of students can play a significant part in incrementing the self-esteem of these students by analyzing the factors that the student perceives as stress systematically on the new online site and planning them correctly and in a principled way.

In the study of Junes et al. (2020) on university students, social interaction and communication are negatively affected as the level of burnout increases (Kiema-Junes et al., 2020). In other studies in the literature, communication skills are negatively affected as burnout increases and at the same time, this leads to burnout as communication skills decrease (Jafari, Alami, Charoghchian, Delshad Noghbi & Nejatian, 2021; Messerotti et al., 2020; Emre, Edirne, Özşahin & Türk, 2020). Emphasizing communication skills training can be an effectual and inexpensive way to reduce burnout, both as a result of our study and by the literature (Molero et al., 2021). When we look at the studies in the literature, self-esteem, communication skills, and burnout levels were most researched in health workers. Our study consisted of a population of university students, and our results highlight the situation in this population separately.

Rahmani et al. (2021), students perceived distance education as a burdensome form of learning and reported high levels of burnout, which could negatively affect their academic achievements (Rohmani & Andriani, 2021). In our study, the relationship between increased burnout status and

low academic self-efficacy came to the fore in undergraduate students who study remotely. Interventions aimed at improving academic self-efficacy can increase learners' self-confidence and potentially lead to lower levels of burnout. Other researches in the literature also show parallel results to our study (Mardani, Baghelani & Azizi, 2015). Charkhabi et al. (2013) among their library and technology resources critically needed research opportunities, research deans and principals should focus on resource sites for you to service more students the issues that are emphasized. Among critically needed resources, library and technology facilities, resource research sites are issues that should be focused on by deans and principals to bring more students to their service (Charkhabi et al., 2013).

Limitations

There are some limitations of this study. Firstly, since all individuals participated in the research by their own preferences, it is not possible to generalise the current results to the general population. Secondly, the research data were collected by personal notification surveys, which are considered as a method with limitations. Thirdly, although more than 600 undergraduates attended in the study, there were more students who met the exclusion criteria because the data were collected with the online survey method, and this led to a decrease in the number of students evaluated.

CONCLUSION

As self-esteem and academic self-efficacy decrease, burnout increases in undergraduate collegers. The high communication skills of the undergraduate students who studied online during the pandemic period are with respect to the high academic self-efficacy level. It is associated with high self-esteem, high communication skills and a higher-up of academic self-efficacy. Consequently, the high level of communication skills of college students studying online during the pandemia is associated with a higher-up of academic self-efficacy. To prevent the emergence of burnout syndrome in undergraduate students and to improve academic self-efficacy, there is a need for further applied studies on how to improve self-esteem, improve communication skills and social interaction, and how the education system can be developed in this direction. Situations that may negatively affect academic self-efficacy, especially in university students, should be

reviewed with a multidisciplinary thought system and education and training curricula, and action should be taken to determine what precautions can be taken against these possible negativities. In this context, in relation to the results of the research, course contents and learning methods that increase students' communication and interaction competence can be included in university agendas in order to improve and develop academic self-efficacy.

Ethics Committee Approval

Ethics committee approval was received for this study from the Health Sciences University Hamidiye Scientific Research Ethics Committee (Date: 15.06.2021, and No: 21/338).

Author Contributions

Idea/Concept: A.A., M.Ç., E.N.Ç., E.P., Z.K.; Design: A.A., M.Ç., E.N.Ç., E.P., Z.K.; Supervision/Consulting: A.A., E.P.; Analysis and/or Interpretation: M.Ç., E.N.Ç.; Literature Search: A.A., M.Ç.; Writing the Article: A.A., M.Ç., E.N.Ç., E.P., Z.K.; Critical Review: A.A., M.Ç., E.N.Ç., E.P., Z.K.

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Conflict of Interest

The authors have no conflict of interest to declare.

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