PSYCHOLOGICAL HEALTH OF UNIVERSITY STUDENTS AS FUTURE SKILLED WORKFORCE: PREDICTIVE ROLE OF CYBERBULLYING AND CYBERVICTIMIZATION

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Merve MAMACI¹

Abstract

The psychological health of university students, who represent the future skilled workforce, is crucial for their success in professional life after graduation and their ability to become productive individuals for themselves and society. Therefore, examining the factors that predict the psychological health of current university students, who will form the future skilled workforce, is a topic that requires further investigation. In this study, the relationships between cyberbullying, cybervictimization levels and depression, anxiety, stress levels of university students studying in private universities were examined. The study was conducted in Istanbul and 323 private university students were participated in the research. The data were obtained using the Demographic Information Form, CyberVictimization – Bullying Scale and DASS-21 Scale. Research results showed that university students' cyberbullying and cybervictimization levels predict their depression, anxiety and stress levels. The findings were evaluated and discussed within the framework.

Keywords: Future Workforce, Skilled Workforce, Cyberbullying, Cybervictimization, Psychological Health, University Students

JEL Classification: M50, M19, I30

GELECEĞİN NİTELİKLİ İŞ GÜCÜ OLAN ÜNİVERSİTE ÖĞRENCİLERİNİN PSİKOLOJİK SAĞLIK DÜZEYLERİ: SİBER ZORBALIĞIN VE SİBER MAĞDURİYETİN YORDAYICILIK ROLÜ

Öz

Üniversite öğrencilerinin, gelecekteki nitelikli iş gücünü temsil eden bireyler olarak psikolojik sağlık düzeyleri mezuniyet sonrası profesyonel hayatta başarılı olmaları ve hem kendileri hem de toplum için üretken bireyler olabilmeleri açısından son derece önemlidir. Bu nedenle, mevcut üniversite öğrencilerinin ve gelecekteki nitelikli iş gücünü oluşturacak bireylerin psikolojik sağlık düzeylerini yordayan faktörler incelenmesi gereken bir konudur. Bu araştırmada, özel üniversitelerde öğrenim gören üniversite öğrencilerinin siber zorbalık ve siber mağduriyet düzeyleri ile depresyon, anksiyete ve stres düzeyleri arasındaki ilişkiler incelenmiştir. Araştırma İstanbul'da gerçekleştirilmiş ve araştırmaya 323 vakıf üniversitesi öğrencisi katılmıştır. Araştırmanın verileri Demografik Bilgi Formu, Siber Mağduriyet –Zorbalık Ölçeği ve DASS-21 Ölçeği kullanılarak elde edilmiştir. Araştırma sonuçları, üniversite öğrencilerinin siber zorbalık ve siber mağduriyet düzeylerinin, depresyon, anksiyete ve stres düzeylerini yordadığını göstermiştir. Bulgular, literatür doğrultusunda değerlendirilmiş ve tartışılmıştır.

Anahtar Kelimeler: Geleceğin İş Gücü, Nitelikli İş Gücü, Siber Zorbalık, Siber Mağduriyet, Psikolojik Sağlık, Üniversite Öğrencileri

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¹ Dr., Fenerbahçe Üniversitesi, İktisadi İdari ve Sosyal Bilimler Fakültesi, Psikoloji Bölümü, <u>merve.mamaci@fbu.edu.tr</u>, Orcid ID: https://orcid.org/0000-0001-7882-3670

1. INTRODUCTION

The World Economic Forum (2018) reported that in the forthcoming years, skills and competencies related with technology usage will become increasingly important for workplaces. According to Davey and Harney (2023), the Future of Work statistics indicate that continuous development and change will occur in workplaces and this change will accelerate with the momentum of technological advancements. However, these technological advancements can also bring various threats. Among these threats are phenomena like cyberbullying and cybervictimization, which are increasingly encountered in the workplaces. Thus, investigating, protecting and enhancing university students' psychological health is particularly important for developing countries for the future workforce.

According to the World Health Organization (2021), mental health conditions affect one in seven adolescents aged 10 to 19, accounting for 13% of the total disease burden in this age group. Depression, anxiety, and behavioral disorders are the leading causes of illness and disability among teenagers. Suicide is the fourth most frequent cause of death among people aged 15 to 29. Research shows that students involved in bullying and cyberbullying are at a higher risk of experiencing suicidal thoughts, attempting suicide, or committing suicide (Baiden and Tadeo, 2020). Consequently, electronic aggression has been recognized as a significant public health issue.

One form of electronic aggression is cyberbullying (CB), which can be considered a cause of psychiatric problems and can lead to low academic performance (Aparisi, Delgado, Bo and Martínez-Monteagudo, 2021; Giumetti and Kowalski, 2022; Vaghchipawala, 2023). In addition, parents, academic staff, and specialists have identified CB as an increasing social problem for young people (PACER, 2022). While the internet and electronic devices provide individuals with new ways to socialize, they also enable new types of negative experiences and risks, known as CB (Ferrara, Ianniello, Villani and Corsello, 2018; Palermiti et al., 2017). According to research conducted in Turkey, the prevalence rate of CV among Turkish adolescents was reported to be 35% (Sener, Arıkan and Gülekçi, 2022). This finding shows that CB and cybervictimization (CV) is to be prevalent in Turkey.

As is known, with the rapid advancement of technology, the risk of CB and CV increases, necessitating a comprehensive approach to predict and prevent these phenomena among university students not only for their psychological health but also for quality of future skilled workforce. Therefore, the aim of this study was to investigate the psychological health consequences of CB and CV on university students in Istanbul.

2. CONCEPTUAL FRAMEWORK AND HYPOTHESES

2.1. Cyberbullying and Cybervictimization

Today's adolescents are living in a world where digital technology is widespread and integrated into almost every aspect of life. Basic human activities, such as education, socializing, and entertainment, are increasingly taking place on digital platforms. Thus, it can be said that the growth and advancement of digital communication technology have benefited society in a variety of ways. On the other hand, the internet, in particular, has also become a tool for the rise of cybercrime and CB (Prendes Espinosa, 2018).

The literature offers several definitions of CB. This is a construct in which a perpetrator express hostility to harm the target with intention and frequently through internet. Additionally, it is characterized as bullying that involves the use of electronic media to insult, threaten, harass, or intimidate a peer (Stewart, Drescher, Maack, Ebesutani and Young, 2014). In sum, cyber aggression refers to the act of perpetrating CB, while CV involves exposure to CB (Turliuc, Măirean and Boca-

Zamfir, 2020). As is stated, CV is also a significant issue among teenagers, with severe impacts on psychological health and development.

With the increasing use of digital communication tools in today's world, an individual or group can engage in CB by using power to repeatedly exhibit intentional and aggressive behavior to impact a victim. Bullying can be carried out directly through physical assault or verbal harassment, or indirectly through social exclusion or spreading rumors. While traditional bullying requires face-to-face interaction, CB occurs through the use of digital devices and can rapidly spread to a much larger audience (Pala et. al., 2021).

According to Kowalski and Toth (2018), the power dynamic between a CB and CV may not necessarily be linked to physical size differences; instead, it could be attributed to varying levels of technological knowledge and skills. Moreover, the person engaging in cyberbullying can hide their identity, thereby increasing their power by being less restrained (Kokkinos and Antoniadou, 2019; Lei et al., 2017).

2.2. The Relationship Between Cyberbullying, Cybervictimization and Psychological Health

Various theories have proven useful in explaining the nature of CB and CV. Notably, CB can be understood from a learning standpoint. In a cross-sectional study with adolescents, Barlett and Gentile (2012) found that receiving positive reinforcement from peers and family for engaging in online harm was associated with higher levels of self-reported cyberbullying perpetration. This relationship was similarly identified in an Iranian adult sample by Shadmanfaat, Howell, Muniz, Cochran, Kabiri, and Fontaine (2020).

As a form of cyber aggression, CB and CV can also be explained using Bandura's *Social Learning Theory* (1977). Social learning theory states that individuals learn through social interactions. Furthermore, by observing the actions of others, people learn to model those behaviors, particularly if the observed behaviors are associated with positive outcomes or rewards. Observational learning can happen at any stage of life, and being exposed to influential, powerful figures who manage resources throughout different life phases provides opportunities for new learning through the modeling process.

According to *General Strain Theory* (GST) proposed by Agnew (1992) different forms of strain as more likely to lead to delinquent behavior. Strains perceived as unjust and significant in magnitude are particularly likely to lead individuals to resort to criminal behavior as a coping mechanism. Strains like negative life events and troubled relationships with adults are more likely to result in delinquency compared to setbacks in educational and occupational goals (Agnew, 2001). Additionally, strain doesn't always directly lead to delinquency; instead, negative emotions such as anger, disappointment, depression, and fear may mediate this relationship. According to Agnew (1992) anger is especially influential and more prone to leading to illegitimate coping strategies, possibly due to its connection with aggression and its outwardly directed nature compared to other negative emotions, which are typically self-directed.

As is seen the literature states that CB has negative consequences for both the physical health and psychological health of victims (Tsaousis, 2016). Additionally, students who are exposed to CB are reported to be at an increased risk of depression, anxiety, and substance abuse (Palermiti et al., 2017). Various studies have examined the psychological states of individuals who engage in CB behavior, as well as the psychological problems experienced by those who are exposed to CB. For example, a study conducted in Korea in 2015 reported that students who exhibited CB behavior were associated with psychopathologies such as depression, anxiety, thought disorders, attention problems, and criminal

behavior (Jo et al., 2015). In addition, it can be considered that individuals who engage in CB and spend a significant amount of time in the digital environment may lead themselves to certain risks. Among these risks is the possibility of becoming victims of cyberbullying. They might face cyberattacks from individuals they have previously bullied or from unknown or different individuals.

According to literature review, individuals can be classified as cyber victims, cyber bullies, or cyber victim/bullies based on their online conduct. Furthermore, the physical, psychological, and intellectual consequences of CB are most pronounced in the cyberbully/victim group (Kowalski and Limber, 2013). For this reason, this study examines the impact of CB and CV on levels of depression, anxiety, and stress, considering these variables together.

H1: There is a positive and significant relationship between cyberbullying, cybervictimization, and the levels of depression, anxiety, and stress among university students.

H2: Cyberbullying and cybervictimization together positively predict the levels of depression, anxiety, and stress among university students.

3. METHOD

3.1. Purpose of the Study and Model

This study examines the predictive role of cyberbullying and cybervictimization on depression, anxiety, and stress by considering them together. Thus, the independent variables of the study are cyberbullying and cybervictimization, while the dependent variables are depression, anxiety, and stress.

3.2. Population and Sample

The population of the study consists of students aged 18 and above who are enrolled in private universities in Istanbul. The total number of students in higher education in Istanbul is 1,001,834, with 553,203 students attending state universities and 448,631 students enrolled in private universities (T.C. Istanbul Governorship, 2022). According to Serper and Aytaç (2000), in populations of 500,000, reaching a minimum of 322 participants is sufficient at a 0.05 significance level with a 95% confidence interval. The sample of the study includes 323 students (M = 22.23, SD = 5.513) who are enrolled in private universities and voluntarily agreed to participate in the research.

3.3. Measurements

- **3.3.1. Demoraphic Information Form:** The demographic information form aims to collect the following information: gender, age, marital status, current educational program, income level.
- **3.3.2.** CyberVictimization and Bullying Scale: The CyberVictimization and Bullying Scale (CVBS) was developed by Çetin, Yaman and Peker (2011). The CVBS consists of two scales, one for Cybervictimization and the other for Cyberbullying, encompassing dimensions such as Cyber Deception (CD), Cyber Linguistic Bullying (CLB), and Identity Concealment (IC), each containing 22 questions. Participants respond to situations of CV and the extent of engagement in behaviors involving CB using a five-point Likert-type scale. When examining reliability coefficients, the Cybervictimization Scale (CVS) shows a reliability coefficient of .89, with .86 for the CD sub-dimension, .80 for the CLB sub-dimension, and .68 for the IC sub-dimension. The internal consistency coefficient of the Cyberbullying Scale (CBS) is .89, with the sub-dimensions showing coefficients of .83 for CD, .81 for CLB, and .69 for IC. In this research, the Cybervictimization Scale (CVS) showed a reliability coefficient of .87, and the Cyberbullying Scale (CBS) showed a reliability coefficient of .84.
- **3.3.3. DASS-21 Scale:** The original version of the scale was developed by Lovibond and Lovibond (1995). The adaptation of the scale for use in Turkey was carried out by Yılmaz, Boz and

Araslan (1997). The scale consists of three dimensions, with reliability coefficients reported as .91 for depression, .84 for anxiety, and .90 for stress. The scale comprises 21 items and is responded to using a four-point Likert-type rating. In this research, the reliability coefficients were found to be .89 for depression, .82 for anxiety, and .87 for stress.

3.4. Procedure

The data for the study were collected in June and July of 2022. The sample group was reached both online and face-to-face. Survey links prepared in Google Forms were made available on university online education platforms and during in-person courses within the university. Information about the research was provided, and the link was shared with students who wanted to volunteer. A convenience sampling model was used as the sampling method.

3.5 Data Analysis

In the study, IBM SPSS 25.0 Statistical Package Program was used for the analysis of the data. The Kolmogorov-Smirnov test was employed to assess normality, and descriptive statistical methods were applied. Following Tabachnick and Fidell's (2013) guidelines, skewness and kurtosis values were examined to see if they fell within the range of ± 1.5 . After confirming that the skewness and kurtosis values of the scores were within this range, it was concluded that the scores showed a normal distribution, and parametric tests were used for statistical analysis. Pearson correlation analysis and regression analysis were conducted to determine the relationships between the research variables. Additionally, reliability analyses of the scales used in the study were computed for the sample.

4. FINDINGS

Demographic **%** N Characteristics Gender Female 237 73.4 Male 86 26.6 Marital Status Married 18 5.6 Single 305 94.4 Current Education Associate degree 11 3.4 295 91.3 Undergraduate 11 3.4 Postgraduate PhD 6 1.9 Income Level Low 35 10.8 Middle 263 81.4 25 7.7 High

 Table 1: Findings Regarding Demographic Characteristics

A total of 323 university students participated in the research. The participants consisted of 237 women (73.4%) and 86 men (26.6%). The ages of the participants ranged from 18 to 42 years, with 69.7% aged 18-25, 20.3% aged 26-30, 6.7% aged 30-35, and 3.3% aged 35 and above. It was found that 94.4% of the students were single, while 5.6% were married. Regarding their education level, 3.4% were pursuing an associate's degree, 91.3% were pursuing undergraduate education, 3.4% were pursuing a master's degree, and 1.9% were pursuing a doctorate. In terms of income level, 81.4% of the participants reported a middle income, 10.8% reported a low income, and 7.7% reported a high income.

Table 2: Correlation Results for Research Variables

	1	2	3	4	5
1. Cyberbullying	1				
2. Cybervictimization	.585**	1			
3. Depression	.168**	.163**	1		
4. Anxiety	.218**	.254**	.743**	1	
5. Stress	.236**	.228**	.758**	.734**	1

*p<.05; **p<.01

Pearson correlation revealed a significant positive correlation between cyberbullying and cybervictimization (r=.585; p=.000), depression (r=.168; p=.002), anxiety (r=.218; p=.000) and stress (r=.236; p=.000). In addition, results showed a significant positive correlation between cybervictimization and depression (r=.163; p=.003), anxiety (r=.254; p=.000) and stress (r=.228; p=.000).

Table 3: Multiple Regression Analysis

	r	\mathbf{r}^2	F	В	Bias*	SE*	p*	95%CI*
IV: Depression								
(Constant)				9.895	.028	1.252	.001	7.382; 12.185
Cyberbullying	.186	.035	5.746	.079	.001	.052	.135	025; .185
Cybervictimization				.049	002	.035	.163	022; .116
IV: Anxiety				8.405	045	1.129	8.405	
(Constant)				8.405	045	1.129	.001	6.067; 10.371
Cyberbullying	.268	.072	12.422	.063	9.217E-005	.045	.171	024; .155
Cybervictimization				.080	.002	.028	.008*	.028; .140
IV: Stress								
(Constant)				10.233	079	1.205	.001	7.700; 12.337
Cyberbullying	.260	.068	11.647	.092	.003	.046	.030*	.014; .186
Cybervictimization				.057	.000	.027	.035*	.004; .109

^{*}Bootstrap results for 1000 bootstrap samples

Multiple regression analysis revealed that the model acquired for the effect of CB and CV on depression is significant [F(2-320)=5.746; p=.004]. The model indicates that 3.5% of the variance in depression is explained by CB and CV (r=.186; r^2 =.035) but it is found that CB (B=.079; p=.135; %95CI=-.025; .185) and CV (B=.049; p=.163; %95CI=-.022; .116) have not significant effect on depression.

In addition results showed that the model acquired for the effect of CB and CV on anxiety is significant [F(2-320)=12.422; p=.000]. The model indicates that 7.2% of the variance in anxiety is explained by CB and CV (r=.268; r^2 =.072) and it is found that CV (B=.080; p=.008; %95CI=.028; .140) has significant effect on anxiety while CB (B=.06; p=.171; %95CI=-.024; .155) has not.

Also analysis indicated that the model acquired for the effect of CB and CV on stress is significant [F(2-320)=11.647; p=.000]. The model indicates that 6.8% of the variance in stress is explained by CB and CV $(r=.260; r^2=.068)$ and it is found that CB (B=.092; p=.030; %95CI=.014; .186) and CV (B=.057; p=.035; %95CI=.004; .109) have significant effect on stress.

5. DISCUSSION AND RESULT

Having a job and staying employed are considered as a result of a healthy state of mind (Redekopp and Huston, 2020). A country needs a skilled workforce for social and economical development, and therefore it is important to protect and develop the psychological health of potential candidates. Some of these candidates are composed of university students. Based on this point, this study examined the predictive role of cyberbullying and cybervictimization levels of university students on their depression, anxiety and stress levels, which are related to psychological health. Research results

underscore the importance of considering the multifaceted nature of the impact of cyberbullying and cybervictimization as a risk factor on the psychological health of university students.

Correlation analysis showed a positive and significant relationship between CB, CV and depression, anxiety, stress. This positive relationship suggests that individuals who engage in CB or are exposed to CB may be at risk for psychological health. Alternatively, individuals with psychological health issues may be more likely to engage in CB behavior or experience CV.

According to litereture review, there are studies that demonstrate positive and significant relationships between these variables among university students from different countries (Albikawi, 2023; Alrajeh, Hassan, Al-Ahmed and Alsayed Hassan, 2021; Lee, Kaur, Shaker, Yee, Sham and Siau, 2023). Additionally, individuals who participate in CB and spend considerable time in the digital environment may lead themselves to certain risks, including becoming victims of cyber attacks from those they have previously bullied or from other unknown individuals.

Interestingly, research findings showed that while CB and CV separately did not have a significant effect on depression, depression was explained by the combined effect of CB and CV. The findings also demonstrated that CV and CB have a significant impact on stress, both as separate variables and together, with an even greater impact when combined. This finding suggests that depression is significantly influenced by the combined predictive power of both CB and CV, which contradicts existing literature. The reason for this may be that the combined effect amplifies mental stress in individuals, indicating a cumulative or interactive effect of these variables. This implies that depression and stress may be more pronounced when both CB and CV are present.

Another finding obtained in this research is that CV has a significant effect on anxiety, while CB has no significant effect on anxiety. On the contrary, anxiety is explained by CB and CV with a much greater impact. These results are consistent with the literature, which indicates that people exposed to CB experience various negative emotions and psychosomatic problems (Bottino, et. al., 2015; Fahy et al., 2016; Kowalski, Dillon, Macbeth, Franchi and Bush, 2020; Molero, Martos, Barragán, Pérez-Fuentes and Gázquez, 2022; Martínez-Monteagudo, Delgado, Díaz-Herrero, García-Fernández, 2020; Rahman, Hossain, Bristy, Hoque and Hossain, 2023; Vaillancourt et al., 2017). It is possible for individuals exposed to CB to experience various emotional problems, whereas those who engage in CB may not experience significant negative emotions compared to the victims. This discrepancy may be because perpetrators of CB momentarily feel an artificial sense of power due to the anonymity provided by the digital environment, which can mask their actual level of anxiety. As another option, individuals engaging in CB might be using CB behavior as a form of self-medication for their anxiety.

As previously mentioned, university students represent the skilled workforce of a country's future. Also it is commonly known, the workplaces are becoming increasingly digitalized (Schäfer, Koloch, Storai, Gunkel and Kraus, 2023). In the workplace, digitalization typically entails relying on information and communication technology to effectively perform work-related tasks (Poethke et al., 2019). Thus, with the rise of digitalization, various risks for employees may have also begun to emerge. One of these risks is the potential for aggression in the cyber environment. In other words, CB and CV are not issues that concern only young people and university students; they have also permeated the workplace.

According to Kowalski, Toth and Morgan (2018), in a study of 3,699 participants, 20% experienced the majority of their cybervictimization during adulthood, while 7.5% reported the majority of their traditional bullying victimization occurring in adulthood. Additionally, 30% of the participants stated that they had been bullied at work. As is seen, these incidents are frequently encountered in

professional environments, where cyber harassment and similar occurrences can threaten employees' psychological health (Alrawashdeh et al., 2024) and negatively effect productivity (Karthikeyan, 2021).

Therefore, universities need to take various measures to prevent potential threats among the future workforce. It is crucial to prepare university students for their future careers by informing them about these potential challenges in the workplace and how to address them. Considering that university students who exhibit tendencies toward CB may later enter the workforce and pose a risk of engaging in bullying behaviors in the workplace, it is important to provide training on CB and CV for university students. From this perspective, it is advisable for career development centers at universities to offer guidance to students regarding potential scenarios they may face in their future professional careers. Additionally, individual and group-level interventions by psychological counselors employed by the university can be beneficial.

Lastly, it should be noted that this study has several limitations. First, all data in this study were self-reported by participants, and this may lead to social desirability bias. Second, as this is a cross-sectional study, it was impossible to identify the temporal influence on the variables. Future research should adopt a longitudinal approach to investigate the long-term associations between cyberbullying, cybervictimization, depression, anxiety, and stress.

Conflict of Interest

This study, whether on an individual or institutional/organizational level, has not led to any conflicts of interest.

Ethical Declaration

During the writing and publishing process of this research, adherence to the rules of Research and Publication Ethics has been maintained, and no manipulation has been made to the data obtained for the study.

Ethics Committee Approval: The study received approval from the Fenerbahçe University Ethics Committee (Approval No. 2022/3) on May 10, 2022.

Informed Consent: Participants were initially given the opportunity to review the interview form, and interviews were conducted only after they provided their consent.

Conflict of Interest: The author have no conflict of interest to declare.

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Extended Abstract

Psychological Health Of University Students As Future Skilled Workforce: Predictive Role Of Cyberbullying And Cybervictimization

Aim: This study examines the predictive role of cyberbullying and cybervictimization levels of private university students in İstanbul on their depression, anxiety, stress levels, by considering their cyberbullying and cybervictimization levels together.

Literature Review: The psychological health of university students, who represent the future skilled workforce, is crucial for their success in professional life after graduation and their ability to become productive individuals for themselves and society. Therefore, examining the factors that predict the psychological health of current university students, who will form the future skilled workforce, is a topic that requires further investigation. Today's adolescents are living in a world where digital technology is widespread and integrated into almost every aspect of life. Basic human activities, such as education, socializing, and entertainment, are increasingly taking place on digital platforms. Thus, it can be said that the growth and advancement of digital communication technology have benefited society in a variety of ways. On the other hand, the internet, in particular, has also become a tool for the rise of cybercrime and CB (Prendes Espinosa, 2018). CB is a construct in which a perpetrator express hostility to harm the target with intention and frequently through internet. Cyber aggression describes the act of perpetrating CB, while CV refers to the exposure to CB (Turliuc, Măirean and Boca-Zamfir, 2020). With the increasing use of digital communication tools in today's world, an individual or group can engage in CB by using power to repeatedly exhibit intentional and aggressive behavior to impact a victim. Bullying can be carried out directly through physical assault or verbal harassment, or indirectly through social exclusion or spreading rumors. While bullying requires face-to-face interaction, CB occurs through the use of digital devices and can rapidly spread to a much larger audience (Pala et. al., 2021). As a matter of fact, cybervictimization (CV) is a significant issue among young people, and it can have a severe impact on psychological health and is inextricably linked to adolescents' mental health and development. When literature is reviewed it has seen that individuals can be classified as cybervictim, cyberbully, or cyber victim/bully based on their online conduct. In addition, the physical, psychological, and intellectual consequences of CB are most evident in the cyber bully/victim group (Kowalski and Limber, 2013). For this reason, this study examines the impact of CB and CV variables on levels of depression, anxiety, and stress by considering them together.

Methods: The research was conducted in İstanbul and designed using a quantitative analysis method with a survey model. The population of the study consists of students aged 18 and above who are enrolled in private universities in Istanbul. The sample of the study includes 323 students are enrolled in private universities and voluntarily agreed to respond to the data collection instrument for the research purpose. For measurement tools; demogrpahic information form, CyberVictimization and Bullying Scale (Yaman, and Peker, 2011) and Turkish adaptation of DASS-21 Scale (Yılmaz, Boz and Araslan, 1997) were used. The sample group was reached online and face to face. Survey links prepared in Google forms were distributed via online education platforms and in courses face to face within the university, and information about the research was provided and the link was shared for students who wanted to volunteer. Convenience sampling model was preferred as the sampling method. In the study, IBM SPSS 25.0 Statistical Package Program was used for the analysis of the data. The Kolmogorov-Smirnov test, Pearson correlation analysis and regression analysis were employed.

Findings: According to the research results, all of the study's hypotheses were confirmed;

H1: There is a positive and significant relationship between cyberbullying, cybervictimization, and the levels of depression, anxiety, and stress among university students.

H2: Cyberbullying and cybervictimization together positively predict the levels of depression, anxiety, and stress among university students.