#### **ORIGINAL ARTICLE**



# Investigation of the effect of COVID-19 on attitudes of university students towards family violence

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#### Abstract

Aim The aim of the study is to determine the effects of the COVID-19 pandemic on the attitudes of university students towards domestic violence.

**Subject and methods** This cross-sectional study was carried out between 15 June and 15 July 2021 in Turkey. The study sample consists of 426 students studying in the health departments of two universities (faculty of medicine, dentistry, midwifery, nursing) in the 2020–2021 academic year. Data were collected from university students using a university student descriptive form and the Attitudes Towards Violence Scale in university students.

**Results** The mean age of the participants was  $21.20\pm2.29$  years; 86.4% were women and 40.4% were educated in the midwifery department. It was observed that 39.2% of the students had financial difficulties during the pandemic and 15.3% wanted to leave their school in order not to be a financial burden on their families. It was shown that 4.9% of the students were working for economic reasons during the pandemic period. Psychological and verbal violence was found to increase after the COVID-19 pandemic. There was a significant difference between the students' maternal employment status and the sub-dimension of violence against women (p < 0.05). A significant relationship was found between the educational status of the father and the sub-dimensions of normalizing violence and different dimensions of violence (p < 0.05).

**Conclusion** An important finding of our study is that domestic violence, which is a serious problem in our country, has increased even more during the pandemic period. It is recommended that training on domestic violence be given to university students, as training given in schools on this subject can help to increase awareness regarding the prevention of domestic violence.

Keywords COVID-19 · Pandemic process · Domestic violence · Violence · University students

# Introduction

The COVID-19 pandemic, which is a global situation deeply affecting many countries, has significantly impacted and changed our lives in many areas in Turkey as well. In order to reduce viral spread during the pandemic process, people had to spend time with their family members at home for a long time. In this process, the World Health Organization and the United Nations (UN) report that domestic violence has increased. UN data show that domestic violence

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<sup>2</sup> Departments of Midwifery, Faculty of Health Sciences, Karabuk University, Karabuk, Turkey and abuse have increased in the USA, India, South Africa, France, Turkey, and Australia, where the economic and social burdens and mandatory restrictions caused by the epidemic have also increased domestic violence (Brooks et al. 2020). It has been reported by professional organizations that the rate of domestic violence against women has increased with the adoption of home isolation measures in Turkey. It was noted that the number of women who applied to the emergency unit of a university hospital due to violence was threefold greater in March and April 2020 than in the previous year (Toprak Ergönen et al. 2020; Yıldız and Erbil 2022). In Demircioğlu's study in our country, which included 215 people aged 18-65 years and examined domestic violence during the COVID-19 period, it was seen that 3.4% of women and 4.5% of men were subjected to domestic physical violence. The study determined that physical

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violence increased numerically in men and decreased in women during the quarantine period (Demircioglu 2021).

Mandatory quarantine processes have caused loss of workforce due to health problems and losses among family members, unemployment due to changing living conditions, having to take a break from the workplace or closing of the workplace, taking unpaid leave for employees and experiencing economic fragility. People are thrust into an environment of economic depression fueled by the epidemic process (Brooks et al. 2020; Mertoğlu 2020; Wanqing 2020).

Since Turkey is a country in the Organisation for Economic Co-operation and Development (OECD), it was caught unprepared for the economic crisis. In addition, when the studies and applications are examined, unemployment and job loss are found to have increased during the pandemic (IHD 2020).

Individuals who have changed their lifestyle and entered a new lifestyle at home with problems have started to develop more stressful, tense, sad, angry and aggressive behaviors. In a study of the Prime Ministry Family Research Institute examining the relationship between domestic violence and certain variables, the scores of the unemployed from the violence scale were found to be higher than those in other groups. This shows that the relationship between economic weakness and violence is strong (Mertoğlu 2020).

On the other hand, university students, who are at the transitional stage from childhood to young adulthood (Turhan et al. 2011), together with the effort of education and learning, deal with problems such as the confusion of adolescence, lack of university life and entering a new environment, and on the other hand, struggling with an epidemic process that causes intense changes in the family (Haskan Avcı and Yıldırım 2014). University students who are trying to adapt to their new lives that change within the family can also witness different types of domestic violence, and the meaning they create in their minds can be reflected in their attitudes and behaviors.

In this context, the study was planned to determine the effects of the changing economic management in the family during the pandemic process on the attitudes of university students towards violence.

#### Table 1 Findings of students' work and financial situation

Specifics		No.	%
Income situation before the pandemic	Income less than expenses	104	24.4
	Income equals expenses	253	59.4
	Income more than expenses	69	16.2
Income situation after the pandemic	Income less than expenses	208	48.8
	Income equals expenses	179	42.0
	Income more than expenses	39	9.2
Thinking you have economic freedom as a student	Yes	112	26.3
	No	314	73.7
Experiencing financial difficulties during the pandemic	Yes	167	39.2
	No	259	60.8
Having problems with attending school due to the financial	I will not be able to continue school.	6	1.4
difficulties you have experienced during the pandemic	I will continue my school when the pandemic process is over.	90	21.1
process	I will take a break from school.	6	1.4
	My family wants me to go to school, but I don't want to be an economic burden.	65	15.3
	I did not have financial difficulties during the pandemic process.	259	60.8
Any job status	Yes	30	7.0
	No	396	93.0
Time to start work	pre-COVID	9	2.1
	post-COVID	21	4.9
	I am not working.	396	93.0
Attitudes of students towards their own study situation	My family is/I am very happy because I am working.	10	2.3
	I wouldn't work if I didn't have to financially.	20	4.7
	I am not currently working.	396	93.0
Total		426	100.0

## Methods

#### **Participants**

In order to determine the effect of the changing economic management in the family during the pandemic process on the attitudes of university students towards violence, students studying in the health departments (faculty) of Karabük and Niğde universities were included. The population of the study consisted of 2929 students in the faculty of health sciences of the two universities. It was planned to recruit 340 students, based on 95% power and 5% margin of error, using the Raosoft sample calculator (Raosoft 2004). Considering the missing answers, 426 students (medicine, dentistry, midwifery, nursing departments) were included in the study. Study data were collected online from 15 June to 15 July 2021.

Inclusion criteria for the study:

- Agreeing to participate in the study
- Being a student of the Faculty of Health Sciences of Karabük or Niğde University
- Able to read and write Turkish.

Exclusion criteria for the study:

- Not agreeing to participate in the study
- Being a student at universities other than Karabük or Niğde University
- Unable to read and write Turkish

#### Measures

In order to collect data from university students, a personal information form consisting of 24 questions was used, which was developed by the researchers in line with the literature, and the Attitudes Towards Violence Scale in university students was applied.

Attitudes Towards Violence Scale (ATVS) among university students The ATVS for university students was created by Adıbelli et al. in 2018 and consists of 52 items and five factors (types of violence, normalizing violence, violence against women, disapproving of violence, different dimensions of violence). A validity and reliability study was carried out, and the Cronbach alpha reliability coefficient for the ATVS was found to be 0.91. The scale is five-point Likert type. The total score of the scale ranges from 52 to 260, and a higher total score indicates more positive attitudes in terms of not approving of or accepting violence (Adibelli et al. 2018).

Table 2 The situation of students being exposed to violence in the student of the stud	e in the family during the pandemic	undemic											
Domestic violence situation		Type	of violen	ce expe	Type of violence experienced in the family after COVID	the fa	mily after	COVII				Test statistic*	р
		Economic violence	omic nce	Psych viole	Psychological Verbal vio- violence lence	Verba lence	l vio-	Digita lence	Digital vio- None lence	None			
		- u	%	u	%	ц	%	L L	%		%		
Type of violence experienced in the family before COVID	Economic violence	11	36.67	10	36.67 10 15.15 4	4	9.09	2	28.57 5	5	1.79	294.75	0.00
	Psychological violence	9	20.00	32	48.48	12	27.27	2	28.57	10	3.58		
	Verbal violence	0	0.00	7	3.03	11	25.00	1	14.29	7	0.72		
	Digital violence	7	6.67	1	1.52	б	6.82	7	28.57	0	0.00		
	None	11	36.67	21	31.82	14	31.82	0	0.00	262	93.91		

\*Pearson's chi-square

## Procedure

All measures were compiled to create a single online survey hosted on Google Forms (https://docs.google.com/ forms). After the participants gave their consent, they were directed to questionnaires that lasted approximately 30 minutes. Ethical approval was obtained by the Ethics Committee for this study.

#### **Statistical analysis**

The Statistical Package for Social Sciences (SPSS) for Windows (version 20.0) program was used for the statistical evaluation of the data obtained from the research. It was observed that the data were not normally distributed according to the Kolmogorov–Smirnov test. The data were analyzed by assessing percentage and frequency distributions. The Mann–Whitney U-test was used in paired groups and Kruskal–Wallis tests were used in groups with three or more variables. Spearman correlation analysis was used to determine the relationship between scales and sub-dimensions (Can 2018). The obtained data were evaluated at 95% confidence intervals and significance level of p < 0.05.

# Results

The Cronbach's alpha of the ATVS among university students was determined to be 0.91 for the scale in total by Adıbelli et al., and 0.87, 0.83, 0.83, 0.73, 0.75 in its subdimensions, respectively (Adibelli et al. 2018). In our study, the total Cronbach's alpha of the scale was 0.81, and for the sub-dimensions it was 0.84 for types of violence, 0.87 for normalizing violence, 0.83 for violence against women, 0.61 for disapproving of violence, and 0.76 for different dimensions of violence.

The average age of the students was  $21.20\pm2.29$  years; 86.4% of the students were female and 13.6% were male. It was found that 40.4% studied midwifery, 23.9% nursing, 20.2% medicine and 15.5% dentistry. In addition, 77.9% of

the students lived at home with their mothers and siblings during the pandemic period; 91.5% of the participants' parents lived together, and 62.7% of mothers and 46.9% of fathers were primary school graduates. It was determined that 82.9% of the students' mothers were housewives, and 35.2% of the students' fathers were working in the private sector. The participants had an average of three or more siblings, and an average of two or more children in the family were studying.

When the pre-pandemic level of the students was examined, it was seen that income was equal to expenses for 59.4%, and after the pandemic, income was less than expenses for 48.8%. It was determined that 73.7% of the students thought that they did not have economic freedom, and 60.8% had financial difficulties during the pandemic process. When the problems experienced by the students were examined, it was noted that 21.1% thought that they could continue school after the pandemic, while 15.3% did not want to continue school due to the economic burden. It was observed that 7% of the students worked in any job, and 4.9% started working after the pandemic began (Table 1).

The students' exposure to violence before the pandemic was examined; 72.3% were not exposed to violence, 14.6% were exposed to psychological violence, 7.5% were exposed to economic violence, 3.8% were exposed to verbal violence. It was found that 1.9% of students were exposed to all kinds of violence. When the participants' exposure to violence during the pandemic period is examined, it is seen that 65.5% were not exposed to violence; 15.5% experienced psychological violence, 10.3% verbal violence and 7% economic violence, and 1.6% were found to be exposed to digital violence. When students' pre-pandemic and post-pandemic cases of domestic violence were compared, it was found that psychological and verbal violence increased significantly during the pandemic period (p < 0.05) (Table 2).

Comparing the income status of students before and after the pandemic, it was observed that the income status decreased after the pandemic, and the pandemic affected the income status negatively (p < 0.05) (Table 3).

Table 3 Income status of students before and after the pandemic

Specifics		Incon	ne situatio	on after	the pande	emic		Test statistic*	р
			ne less expenses	Incon exper	ne equals ises		ne more expenses		
		n	%	n	%	n	%		
Income situation before the pandemic	Income less than expenses	91	43.8	13	3.3	0	0.0	229.71	0.00
	Income equals expenses	103	49.5	145	81.0	5	12.8		
	Income more than expenses	14	16.7	21	11.7	34	87.2		

\*Pearson's chi-square

Table 4 Compar	ison of the sub-dimension	is of the At	Table 4 Comparison of the sub-dimensions of the Attitudes Towards Violence Scale and gender	Scale and	gender					
Specifics	Types of violence		Normalizing violence		Violence against women	u	Disapproval of violence		Different dimensions of violence	f
	Median (min-max)	u	Median (min-max)	ч	Median (min-max)	ч	Median (min-max)	u	Median (min-max)	u
Female	19 (13–65)	368	64 (27–70)	368	19 (11–55)	368	30 (11–35)	368	32 (14–35)	368
Male	23 (13–65)	58	61 (44–70)	58	23.5 (11–55)	58	30 (23–35)	58	31 (21–35)	58
Test statistic*	-4.462		-3.464		-4.931		-1.086		0.822	
$p^{**}$	0.000		0.001		0.000		0.277		0.411	
*Mann-Whitney	U test [median (min-ma)	x)]. **Bolc	*Mann–Whitney U test [median (min–max)]. **Bold values: Results are significant if $p$ less than 0.05	icant if <i>p</i> 1	ess than 0.05					

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Specifics	Types of violence		Normalizing violence		Violence against women	en	Disapproval of violence	Se	Different dimensions of violence	of
	Median (min-max)	u	Median (min-max)	u	Median (min-max)	u	Median (min-max)	_ =	Median (min-max)	u
Economic violence	18 (13–41) <sup>ab</sup>	30	64 (42–70)	30	20 (12–34)	30	31 (23–32)	30	31 (21–35)	30
Psychological violence	22 (13–36) <sup>b</sup>	99	63.5 (30-70)	66	21 (11-33)	99	30 (18-34)	99	31 (14–35)	99
Verbal violence	16.5 (14–29) <sup>ab</sup>	4	63 (53–70)	44	19 (12–29)	4	30.5 (26-35)	4	33 (26–35)	4
Digital violence	19 (13–38) <sup>ab</sup>	7	67 (42–70)	7	18 (15-41)	L	31 (21–33)	7	30 (21–35)	Ζ
All violence types	20 (13–65) <sup>ab</sup>	279	64 (27–70)	279	20 (11-55)	279	30 (11–35)	279	32 (14–35)	279
Test statistic*	12.126		1.295		2.772		1.535		5.909	
d	0.016		0.862		0.597		0.820		0.206	

The relationship between the ATVS sub-dimensions of university students and their gender is examined in Table 4. A significant relationship was found between the types of violence sub-dimension, the sub-dimension of normalizing violence (p=0.000), and the sub-dimensions of violence against women (p=0.001) and gender. It was observed that this significant difference was due to male students and that the scores of male students were higher (Table 4).

In the study, when the relationship between the subdimensions of the ATVS and the type of violence experienced during the pandemic was examined, a significant relationship was found only between the sub-dimensions of the types of violence (p = 0.016). It was observed that this significance stemmed from the students who were exposed to verbal and psychological violence (Table 5).

There was a significant relationship between the university year of study of the participating students and the sub-dimensions of the ATVS only with the sub-dimension of normalizing violence (p = 0.035). It was observed that this difference was due to the mean scores of the sixth- and fourth-year students (Table 6).

A Spearman correlation was made between the ATVS sub-dimensions of university students by gender and the relationship between age, number of children and the number of children studying in the family (Table 7). There was a weak positive correlation between the violence against women sub-dimension and the number of siblings (p=0.000) and the number of children studying in the family (p=0.000). There was a weak positive correlation between the confirming violence sub-dimension and the number of siblings (p=0.048), and a weak negative correlation between age (p=0.009). There was also a weak negative correlation between different dimensions of violence and the number of siblings (Table 7).

A significant relationship was found between the educational status of the mothers of the students and the severity of the ATVS, and the sub-dimension of disapproval. It was observed that this difference resulted from literate mothers and mothers who graduated from higher education and primary education (p = 0.001). A significant relationship was found between the educational status of the students' fathers and the violence against women sub-dimension of the ATVS. It was observed that this significant difference was formed by fathers who graduated from high school and primary education (p = 0.039) (Table 8).

# Discussion

In this study, the effect of changing domestic economic management during the pandemic process on the attitudes towards violence of university students studying in different

Year	Types of violence		Normalizing violence		Violence against women	en	Disapproval of violence	0	Different dimensions of violence	f
	Median (min-max)	u u	Median (min-max)	u	Median (min-max)	u	Median (min-max)	u	Median (min-max)	u
1st year	20 (13–65)	105	64 (44–70) <sup>ab</sup>	105	20 (11–55)	105	31 (23–35)	105	20 (13–65)	105
2nd year	19 (13–37)	118	62.5 (30–70) <sup>ab</sup>	118	19 (11–35)	118	30 (12–33)	118	19 (13–37)	118
3rd year	19 (13-65)	125	64 (38–70) <sup>ab</sup>	125	20 (11-55)	125	30 (13–35)	125	19 (13-65)	125
4th year	21 (13-65)	60	64 (27–70) <sup>ab</sup>	60	20 (11-55)	60	30 (11–35)	60	21 (13-65)	09
5th year	19 (15–22)	9	58 (52–63) <sup>a</sup>	9	13.5 (11–28)	9	29 (23–30)	9	19 (15–22)	9
6th year	16 (14–27)	12	68.5 (55–70) <sup>b</sup>	12	14 (11–32)	12	31 (25–31)	12	16 (14–27)	12
Test statistic**	7.96		11.963		9.671		8.562		8.496	
$p^{***}$	0.158		0.035		0.085		0.128		0.131	

departments of health sciences (medicine, dentistry, midwifery, nursing) was examined. An examination of the literature showed that although there are a very small number of studies on this subject, the effects of domestic violence on students were not examined in these studies (Peterman et al. 2020; Vukadin and Škarica 2021).

It was found that students have been subjected to digital violence during the pandemic period. The reasons for this include the online dimension of the education system during the pandemic process, the lack of internet access in rural areas where students are located, and the fact that students no longer want to participate in an activity on an online platform because of increased digital violence (Islam et al. 2020; Mamun et al. 2020). In the example where Manun et al. examined a mother and son suicide pact due to online learning problems related to COVID-19 in Bangladesh, it was emphasized that students with no or limited internet access were suicidal and experienced domestic violence (Mamun et al. 2020). In the study of Dsouza et al., in which they examined mass COVID-19-linked suicide cases in India, it was reported that a student committed suicide because their exams were postponed due to the pandemic (Dsouza et al. 2020).

A significant relationship was observed between the scores of the normalizing violence sub-dimension and the class. As the university year increased, it was observed that the students increasingly normalized the violence. This is thought to be due to the low number of fifth- and sixth-year students. Vukadin et al., in their study including 334 students in which they examined Croatian students' attitudes towards domestic violence during the COVID-19 epidemic, found that the students did not normalize domestic violence and violence against women (Vukadin and Škarica 2021). The findings are similar to our study.

It has been reported in the literature that unemployment and economic insufficiency increase domestic violence (Staggs and Riger 2005; Zhang 2020; Yılmaz and Doğan 2021). This process similarly emerged during the pandemic period. The increase in unemployment because of the pandemic has brought along domestic violence. In a systematic review and meta-analysis of domestic violence during the COVID-19 epidemic by Piquero et al., it was found that economic inadequacy increases domestic violence (Piquero et al. 2021). Studies show that low educational level, unemployment, economic difficulties and inadequacies cause women to be subjected to domestic violence (Faramarzi et al. 2005; Fawole 2008; Obasaju et al. 2009; Anders and Christopher 2011; Çötok 2015). The findings of our study are compatible with the literature.

#### Limitations of the research

The research results are based on the statements of the participants. First, recall bias and social desirability bias may be caused by the self-reported nature of the research. Second, although sociodemographic analysis was performed to predict the situation regarding domestic violence characteristics during the COVID-19 period, the possibility of other remaining confounding factors cannot be excluded. Also, other university students studying in the health department were not included in the study. The fact that this study consists of only university students in the field of health constitutes a limitation. The fact that this is a two-center study and the population size is small limits the generalizability of the study.

# Conclusion

An important finding of our study is that domestic violence, which is a serious problem in our country, increased even more during the pandemic period. Increasing the awareness of university students regarding this issue is of great importance in terms of early detection and minimization of domestic violence. In this context, preparing plans and programs to prevent violence is a priority, especially as long as the effect of the pandemic continues and afterwards, in the content of education and training programs in schools. Our expectation is that this process creates resistance against violence, which is a global problem and is likely to increase in future generations. Training given to university students in schools on this subject can help to increase awareness regarding the prevention of domestic violence.

Table 7The relationshipbetween the Attitudes TowardsViolence Scale sub-dimensionsand age, number of siblings andnumber of siblings studying inthe family

n=426	Types violen		Normaliviolence	0	Violence against v		Disapprov violence	al of	Different dimensio violence	
	r	<i>p</i> ***	r	<i>p</i> ***	r	<i>p</i> ***	r	<i>p</i> ***	r	<i>p</i> ***
Age	0.045	0.353	-0.065	0.181	0.043	0.379	-0.127**	0.009	-0.051	0.298
Number of siblings	0.04	0.405	0.004	0.941	0.198**	0.000	0.096*	0.048	-0.104*	0.031
Number of children studying in the family	0.065	0.183	0.012	0.811	0.194**	0.000	0.017	0.724	-0.037	0.442

\*Significant at the 0.05 level. \*\*Significant at the 0.01 level. \*\*\*Bold values: Results are significant if p less than 0.05

Parents' educational status	Types of violence		Normalizing violence		Violence against women		Disapproval of violence		Different dimensions of violence	violence
Mother's educational status	Median (min-max)	и	Median (min–max)	ц	Median (min–max)	и	Median (min-max)	и	Median (min-max)	-
Literate	20 (13–62)	58	62 (38–70)	58	19.5 (11–52)	58	31 (13–35) <sup>a</sup>	58	31.5 (17–35)	58
Primary education	19 (13-65)	267	64 (27–70)	267	20 (11-55)	267	30 (11–35) <sup>b</sup>	267	32 (14–35)	267
High school	19 (13–35)	64	65 (42–70)	64	19 (11–36)	49	30.5 (12–33) <sup>abc</sup>	64	33 (21–35)	2
Higher education	21 (15–37)	37	63 (30-69)	37	18 (12-34)	37	29 (18–34) <sup>c</sup>	37	32 (14–35)	37
Test statistic*	4.606		3.456		3.486		15.419		6.344	
$p^{**}$	0.203		0.326		0.323		0.001		0.096	
Father's educational status										
Literate	15 (13–38)	29	62 (49–70)	29	19 (11-37) <sup>ab</sup>	29	31 (22–33)	29	33 (26–35)	29
Primary education	19 (13-65)	200	64 (27–70)	200	20 (11–55) <sup>a</sup>	200	30 (11–35)	200	32 (14–35)	200
High school	20 (13-65)	92	63 (42–70)	92	18 (11–55) <sup>b</sup>	92	30 (21–35)	92	32 (21–35)	92
Higher education	20 (13–65)	105	65 (30–70)	105	19 (11–55) <sup>ab</sup>	105	30 (12–35)	105	32 (14–35)	105
Test statistic*	6.769		2.186		8.67		7.212		3.451	
$p^{**}$	0.08		0.535		0.034		0.065		0.327	

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Authors' contributions Sibel Karakoc designed research; Sibel Karakoc, Reyhan Aydin Dogan collected the data; Reyhan Aydin Dogan analyzed the data and drafted the manuscript; Sibel Karakoc, Reyhan Aydin Dogan revised the manuscript. Sibel Karakoc had primary responsibility for final content. All authors read and approved the final manuscript.

Data availability None.

Code availability None.

#### Declarations

**Ethics approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by the Ethics Committee of the University (2021/11)

**Consent to participate** Informed consent was obtained from all individual participants included in the study.

**Consent for publication** The authors affirm that human research participants provided informed consent.

**Conflicts of interest** The authors declare that they have no conflict of interest.

# References

- Adibelli D, Saçan S, Türkoğlu N (2018) Developing the attitudes towards violence scale among university students. Anatolian J Psychiatry 19:202–209. https://doi.org/10.5455/apd.274483
- Anders MC, Christopher FS (2011) A socioecological model of rape survivors' decisions to aid in case prosecution. Psychol Women Q 35:92–106. https://doi.org/10.1177/0361684310394802
- Brooks SK, Webster RK, Smith LE et al (2020) The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet 395:912–920. https://doi.org/10.1016/s0140-6736(20)30460-8
- Can A (2018) Quantitative data analysis in the scientific research process with SPSS, 4th edn. Pegem Academy Publishing, Ankara
- Çötok NA (2015) Perception of women against the phenomenon of violence against women within the gender role. Int J Social Sci Educ Res 1. https://doi.org/10.7816/nesne-01-02-02
- Demircioglu S (2021) Impact of Covid-19 Epidemic on Domestic Violence in Turkey. Int J Social Work Res 1:53–68
- Dsouza DD, Quadros S, Hyderabadwala ZJ, Mamun MA (2020) Aggregated COVID-19 suicide incidences in India: Fear of COVID-19 infection is the prominent causative factor. Psychiatry Res 290:113145. https://doi.org/10.1016/j.psychres. 2020.113145
- Faramarzi M, Esmailzadeh S, Mosavi S (2005) A comparison of abused and non-abused women's definitions of domestic violence and attitudes to acceptance of male dominance. Eur J Obstet Gynecol

Reprod Biol 122:225–231. https://doi.org/10.1016/j.ejogrb.2004. 11.047

- Fawole OI (2008) Economic violence to women and girls: is it receiving the necessary attention? Trauma Violence Abuse 9:167–177. https://doi.org/10.1177/1524838008319255
- Haskan Avcı Ö, Yıldırım İ (2014) Tendency to violence, loneliness and social support in adolescents. J Hacettepe Univ Faculty Educ 29:157–168
- IHD (2020) Economic and social rights report during the Covid-19 Pandemic process. Human Rights Association. https://www.ihd. org.tr/wp-content/uploads/2020/12/Covid-19-Pandemisi-S%C3% BCrecinde-Ekonomik-ve-Sosyal-Haklar-Raporu-1.pdf. Accessed 26 Dec 2022
- Islam MA, Barna SD, Raihan H et al (2020) Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey. PLoS One 15:e0238162. https://doi.org/10.1371/journal.pone.0238162
- Mamun MA, Chandrima RM, Griffiths MD (2020) Mother and son suicide pact due to COVID-19-related online learning issues in Bangladesh: an unusual case report. Int J Ment Heal Addict 1–4. https://doi.org/10.1007/s11469-020-00362-5
- Mertoğlu M (2020) The Effects of the Kovid-19 Epidemic on Uncontrollable Anger and Violence Behaviors of Children and Parents during the Staying at Home Process. J Istanbul Kultur Univ Faculty Law 19:255–266
- Obasaju MA, Palin FL, Jacobs C et al (2009) Won't you be my neighbor? Using an ecological approach to examine the impact of community on revictimization. J Interpersonal Viol 24:38–53. https:// doi.org/10.1177/0886260508314933
- Peterman A, Potts A, O'Donnell M et al (2020) Pandemics and violence against women and children. Center for Global Development Washington, DC
- Piquero AR, Jennings WG, Jemison E et al (2021) Domestic violence during the COVID-19 pandemic-Evidence from a systematic review and meta-analysis. J Crim Justice 74:1–10. https://doi. org/10.1016/j.jcrimjus.2021.101806
- Raosoft (2004) Sample Size Calculator by Raosoft, Inc. http://www. raosoft.com/samplesize.html. Accessed 20 Dec 2022

- Staggs SL, Riger S (2005) Effects of intimate partner violence on low-income women's health and employment. Am J Community Psychol 36:133–145. https://doi.org/10.1007/s10464-005-6238-1
- Toprak Ergönen A, Biçen E, Ersoy G (2020) Domestic violence in the COVID-19 pandemic. Bull Jud Med 25:48–57. https://doi.org/10. 17986/blm.2020.v25i.1408
- Turhan E, Inandi T, Cahit Ö, Akoğlu S (2011) Substance use, violence and some psychological characteristics in university students. Turkish J Public Health 9:33–44. https://doi.org/10.20518/tjph. 173053
- Vukadin IK, Škarica D (2021) Obiteljsko nasilje u vrijeme pandemije COVID-19: Stavovi hrvatskih studenata. Temida 24. https://doi. org/10.2298/tem2101025k
- Wanqing Z (2020) Domestic violence cases surge during COVID-19 epidemic. In: Sixth Tone. https://www.sixthtone.com/news/ 1005253/domestic-violence-cases-surge-during-covid19-epide mic. Accessed 26 Dec 2022
- Yıldız G, Erbil N (2022) COVID-19 pandemic and domestic violence against women. Androl Bull 24:228–233
- Yılmaz E, Doğan RA (2021) The effect of social isolation due to the Covid-19 pandemic on domestic and violence against women. Unika J Health Sci 1:39–48
- Zhang H (2020) The influence of the ongoing COVID-19 pandemic on family violence in China. J Fam Violence 1–11. https://doi.org/ 10.1007/s10896-020-00196-8

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