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EVALUATION OF STIGMATIZATION AND PERCEPTION OF STIGMATIZATION REGARDING COVID-19 IN SOCIETY

ABSTRACT

Purpose: Social isolation has increased in society due to the rapid transmission of the COVID-19 disease. Although social isolation reduces the risk of spreading the disease, it may cause people to have internalized stigmatization towards themselves and stigmatize others. This study aimed to evaluate whether people stigmatize others and themselves about COVID-19 in society during the COVID-19 period.

Method: In this study conducted to evaluate the perception of stigmatization of people about COVID-19 towards others and themselves in society, statements on stigmatization were prepared by utilizing the stigmatization scales built previously. Two different forms were used to assess the perception of stigmatization toward others (Form A) and towards themselves (Form B). The statements in the present study were in the form of a 6-point Likert. The form was applied online. In this study, 416 (223 female, 193 male) individuals aged 18 and over were reached online. The data obtained were analyzed with SPSS 24.0 package program. Total reliability regarding Cronbach's α values were α=0.83 for Form A in total and 0.91 and 0.89 for sub-dimensions of Form A, respectively. α values were 0.80 for Form B in total, and 0.79 and 0.44 for its sub-dimensions, in order.

Results: In this study, no significant difference was found between the two genders regarding stigmatization towards themselves and others. However, significant differences were only observed among age groups, in "social stigmatization" and "discriminatory behavior towards others" sub-dimensions; among the places of residence in "stigmatization towards others" and "social stigmatization" sub-dimensions; and finally among education status in "social stigmatization towards others" "social stigmatization" and "perception of social stigmatization towards others" sub-dimensions.

Conclusion: During epidemics and infectious diseases, people may stigmatize themselves and others or be exposed to stigmatization. Stigma may have a negative impact on the treatment of the disease and the seeking of help. In this study, it was observed that various demographic characteristics had impacts on the stigma related to COVID-19, especially in stigmatization towards others. Thus, it would be useful to consider demographic characteristics in the management of the perception of stigma in society and in studies investigating the stigmatization of COVID-19.

Keywords: COVID-19, pandemic, stigmatization, being stigmatized, perception, society.

1. INTRODUCTION

The first case of Coronavirus was seen towards the end of 2019 in Wuhan, China. This disease is named COVID-19 since it is caused by the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) virus. Due to its rapid spread worldwide, it was declared a pandemic by the World Health Organization in March 2020 (WHO, 2020). By July 2021, 191 million people worldwide were infected with COVID-19, and about four million of them died (Wikipedia).

Since there was not much information about the disease at the beginning, many people experienced intense anxiety and fear (Başterzi, Cesur, Güvenç, Taşdelen and Yılmaz, 2020; Kılınçel, Kılınçel, Muratdağı, Aydın and Usta, 2021; Cassiani-Miranda et al., 2020). Due to the rapid person-to-person transmission, long incubation period and some asymptomatic symptoms, the virus was perceived as highly contagious, deadly and uncontrollable among people, triggering their fears (Tian, et al., 2020; World Health Organization, 2020; Wu and McGoogan, 2020; Cassiani-Miranda et al., 2020). Due to the rapid spread of the disease and its threatening nature, people had to stay away from each other not to be infected. However, although social isolation reduced the risk of transmission, it resulted in the stigmatization of people and places (Johnson, 2019; Reluga, Smith and Hugles, 2019). Thus, people with the disease faced the problem of stigmatization and social discrimination in society (Cassiani-Miranda et al., 2020; Yuan et al., 2021).

Goffman (2009), defined stigma as a feature or quality representing negative reactions or undesirable effects for the person carrying it (as cited in Cassiani-Miranda et al., 2020). These components have been defined as (1) labeling of human differences, (2) dominant cultural beliefs that describe people with undesirable traits and

harmful stereotypes, (3) the position of those labeled in different categories (the discrimination between them and us), (4) discrimination and loss of status experienced by stigmatized persons, and (5) the application of the difference in economic, political and social power that characterizes the stigmatization process. Van Daalen, Cobain, Franco and Chowdhury (2021), evaluated social stigma as a risk factor affecting the fight against COVID-19. Stigma may negatively affect people's life quality. Furthermore, stigma is a public health problem that should be considered a stressor with the potential to cause harm as much as depression and other mental symptoms (Tuncay, Koyuncu and Özel, 2020; Duan, Bu and Chen, 2020). Cassiani-Miranda et al. (2020) found that discrimination related to COVID-19 is high and that discrimination is associated with the fear of COVID-19 in their study of the Colombian population. Yuan et al. (2021), compared the individuals who survived after infection with COVID-19 with the healthy group and found that survivors of COVID-19 experienced more stigma and social rejection in general. In addition, in the same study, they found that financial insecurity, internalized shame and social isolation were higher in people who survived after COVID-19 infection. Surviving after COVID-19, having family members infected with COVID-19, or being married, economic loss and depressive symptoms had higher positive correlations with stigma (Yuan et al., 2021). The COVID-19 pandemic has affected people in different ways regarding the perception of exposure to stigmatization and stigmatizing worldwide. Studies on stigmatization have mostly been conducted on people who have had COVID-19 or on healthcare workers (Yuan et al., 2021; Bana, 2020; Malas and Malas, 2021; Imran et al., 2020). To our knowledge, there is no study evaluating the perceptions of people who have not had COVID-19 about the disease in the community. Thus, cross-sectional studies in different societies can reveal the behavioral differences in the perception of stigmatization and exposure to stigmatization regarding COVID-19 in detail.

This study aimed to evaluate people's perception of stigmatization towards others and themselves in society during the COVID-19 process through a survey. It is mentioned that the stigma is internal and interpersonal (Logie, James, Tharao and Loutfy, 2011). Previously, studies on stigmatizing and the perception of being stigmatized have been conducted on healthcare workers having tasks related to COVID-19 and people who have had the disease before (Bana, 2020; Imran et al., 2020; Malas and Malas, 2021). To evaluate the perception of stigma in the general population, Cassiani-Miranda et al. (2020) examined the relationship between fear of COVID-19 and stigmatization. However, they did not assess the people's perception of stigma towards themselves and others in the general population. There are very few studies that have covered the general population in the investigation of the relationship between COVID-19 and stigmatization. Hence, studies investigating the relationship between COVID-19 and stigma in different societies are needed. This study aims to reveal the perception of stigmatization towards the individuals themselves, as well as the discrimination, prejudice and negative attitudes in society during COVID-19, with scientific data. In addition, this study also investigates whether there is a difference in negative attitudes regarding stigmatization according to demographic characteristics.

Research questions are as follows: (1) what are the attitudes of the general population regarding the perception of stigmatization towards them during the pandemic period? (2) What are the attitudes of the general population regarding stigmatizing others during the pandemic period?

2. MATERIAL and METHOD

2.1. Participants

The research form was applied to the volunteer participants online in this study. This cross-sectional study was conducted online between June and August 2020, during the COVID-19 pandemic. In this study, 416 (223 women (54%) and 193 men (46%)) individuals aged between 18 and 70 were reached. As the exclusion factor, voluntary participation, not having a COVID-19 history, being over 18 years old, filling out the entire questionnaire, and not being a healthcare worker were considered.

2.2. Data Collection Tools

Participants in the present study were informed by a preliminary text explaining the purpose of the survey, what the data obtained would be used for, and that the participation is on a voluntary basis. The authors of this study prepared the statements used in this study, and Google Forms were used to answer the questions of the survey (https://www.google.com/forms/about/). Thus, the data were obtained in a digital environment.

The survey consisted of three parts. In the first part, demographic information was asked of the participants. Besides the demographical information, the participants were asked questions, such as whether they had received psychological support before, whether there was a healthcare worker among their first-degree relatives, whether they know someone around them with a positive COVID-19 test, whether there was a relative who died due to COVID-19, and whether they had a chronic illness.

The second and third parts consisted of statements to evaluate the participants' behaviors of stigmatizing others and stigmatization of themselves by others regarding COVID-19. Participants were asked to respond to the

statements in both sections using a 6-point Likert Scale in the range of "5-strongly agree, 1-strongly disagree" and 0-no idea. Miranda et al. (2020) developed a study-specific COVID-19 stigmatization scale to evaluate stigmatization related to COVID-19, based on the tuberculosis-related stigma scale. No scale exists in the field to measure the stigmatization of self and others related to COVID-19. Because of this, a questionnaire was prepared by the authors to evaluate the stigmatization related to COVID-19 towards self and others. The statements in this research, prepared to evaluate stigmatization and being stigmatized, were built by taking inspiration from the statements used in the previous stigmatization scales against HIV and mental diseases (Bilge & Çam, 2008; Bozkurt & Turan, 2020). Utilizing the information in the literature, 24 and 19 statements were created in two separate forms to evaluate the individuals' attitudes of stigmatization towards themselves and others regarding COVID-19 (Table 1, Table 2). Among the 24 statements in the first form (Table 1, Form A), there were statements about how the participant's thoughts and feelings would be if someone else experienced a disease, complaint, or treatment process related to COVID-19. The second form (Table 2, Form B), regarding 19 statements, included expressions on how his feelings and thoughts would be if the participant experienced a disease, complaint, or treatment process related to COVID-19.

Table 1: Statements about how the participants' feelings and thoughts would be if someone else experiences a disease, complaint, or treatment process related to COVID-19 (FORM A).

FORM A	
A1	I would think that someone who has a positive COVID-19 test has not taken/complied with the necessary precautions.
A2	Someone who has been diagnosed with COVID-19 disturbs me.
A3	Individuals who have received treatment for COVID-19 may need further treatment in the future.
A4	I do not believe that COVID-19 can be cured completely.
A5	I am afraid that the person with a positive COVID-19 test will infect me as well.
A6	I hesitate to build friendships with an individual with COVID-19.
A7	Recovery from COVID-19 is not possible, no matter how well it is treated.
A8	Someone with a diagnosis of COVID-19 is also responsible for infecting his/her environment.
A9	Someone with a COVID-19 diagnosis should stay away from others.
A10	I wouldn't like to use the stuff of someone with a COVID-19 diagnosis.
A11	Someone with a COVID-19 diagnosis has not taken adequate precautions.
A12	Someone diagnosed with COVID-19 is ostracized by their neighbors where they live.
A13	I think that the close friends of someone diagnosed with COVID-19 also have COVID-19.
A14	I would think that someone who has complaints, such as fever, cough, inability to smell and weakness, related to COVID-19 is COVID-19 positive.
A15	The productivity of someone who has received COVID-19 treatment in the work environment is quite low.
A16	Someone diagnosed with COVID-19 thinks other people will be afraid of him/her and escape.
A17	Someone diagnosed with COVID-19 may feel intense anger and a desire to hurt those around them.
A18	Someone diagnosed with COVID-19 tends to blame themselves.
A19	Someone diagnosed with COVID-19 must deny or hide the illness to avoid discrimination.
A20	Someone diagnosed with COVID-19 feels hopeless.
A21	People with chronic diseases should take precautions regarding COVID-19.
A22	Healthcare workers are more likely to have COVID-19.
A23	Someone who has come from abroad or met someone from abroad is likely to have a positive COVID-19 test.
A24	Children and teenagers can be latent carriers of COVID-19.

Table 2: Expressions about how the participant feels and thinks about himself/herself if he/she has a disease complaint or undergoes treatment process during the COVID-19 process (FORM B).

FORM B	
B1	I am worried about going to the hospital due to COVID-19.
B2	I would feel bad if others knew that I had built a close friendship with an individual who had previously received treatment for COVID-19.
B3	The existence of someone who has a positive COVID-19 test around disturbs me.
B4	It disturbs me to work with someone who has tested positive for COVID-19, where I work.
B5	If I have disease complaints related to COVID-19, I will hesitate to apply to a doctor or health institution.
B6	If I test positive for COVID-19, I would like to hide it from others.
B7	If I get a COVID-19 diagnosis, I will worry about what my boss, friends, and others will think about me.
B8	If I get a COVID-19 diagnosis, I will be afraid of infecting people in my close circle.
B9	If I get a COVID-19 diagnosis, I should stay away from others.
B10	If I'm diagnosed with COVID-19, others will think that I haven't taken enough precautions.
B11	If I am diagnosed with COVID-19, I will be ostracized by my neighbors where I live (in the apartment or the neighborhood).
B12	If I am diagnosed with COVID-19, it is thought that my close friends are also sick.
B13	If I have complaints, such as fever, cough, weakness and inability to smell, related to COVID-19, people around me will think I am COVID-19 positive.
B14	I blame myself if I get a COVID-19 diagnosis.
B15	Since I don't have a chronic disease, I don't think that COVID-19 will harm me.
B16	If I am diagnosed with COVID-19, I may feel intense anger or a desire to hurt those around me.
B17	If I get a COVID-19 diagnosis, I will feel hopeless and helpless.
B18	If I get a COVID-19 diagnosis, everyone around me turns away from me.
B19	If I have complaints, such as fever, cough, weakness and inability to smell, I will think I have COVID-19 and hesitate to seek treatment.

2.3.　Data Analysis

The data obtained from both forms (Form A and Form B) were analyzed with the SPSS 24.0 package program. Analyses performed were exploratory factor analyses, t-tests and analysis of variance (ANOVA). In the normality tests for the variables, for the decision of the selection of parametric and non-parametric tests, Kolmogorov-Smirnov and Shapira-Wilk values were used. The statistical significance level was 0.05. The internal consistency of both questionnaires was evaluated with Cronbach's α coefficient.

3.　RESULTS

In this study, 416 people (223 women (54%) and 193 men (46%)) participated voluntarily. The demographic information of the participants is shown in Table 3. Regarding the age ranges of the participants, 74 of the individuals (%18) were between 18-25 years old, 166 (40%) were between 26-40, 158 (38%) were 41-60, 16 (3.5%) were 61-70 and 2 (0.5%) were over 71. Among the participants, 279 people (67%) lived in the metropolitan area, 69 people (16%) lived in the city, and 68 people (16%) lived in the county. Regarding the educational status, 61(15%) of the participants graduated from primary school, 80% (19%) graduated from high school, 207 (50%) from university, 45 (11%) had postgraduate education and 23 (5%) were at the level of doctorate/specialist.

The results of the questions asked of the participants other than their demographic information are as follows: 73 of the participants (17%) had previously received psychological support. There were 135 (32%) people who had first-degree relatives from healthcare workers. In addition, 181 (43%) people who participated in the present study had relatives diagnosed with COVID-19 and 76 (18%) of the participants lost their relatives due to COVID-19. There were 79 (19%) respondents with chronic diseases (Table 3).

Table 3: Demographic variables of the participants

Gender	N	%	Place of Living	N	%
Female	223	54	Metropol	279	67
Male	193	46	City	69	17
			County	68	16
Total	416	100	**Total**	416	100

Age	N	%	Education Status	N	%
18-25	74	18	Primary Education	61	15
26-40	166	40	High School	80	19
41-60	158	38	University	207	50
61-70	16	4	Masters	45	11
71 and over	2	0.5	PhD/Specialist	23	5
Total	416	100	**Total**	416	100

Additional Demographical Questions	Answer	N	%
Have you ever received psychological support for any reason?	Yes	73	17
	No	343	83
Do you have any first-degree relatives who are healthcare workers?	Yes	135	32
	No	281	68
Do you know someone who has tested positive for COVID-19?	Yes	181	43
	No	235	57
Do you know someone who died with the diagnosis of COVID-19?	Yes	76	18
	No	340	82
Do you have any chronic diseases?	Yes	79	19
	No	337	81

In the factor analysis, it was determined that the statement groups among the expressions regarding "stigmatization towards others" in Form A and "stigmatization towards self including self-stigmatization" in Form B consisted of 2 sub-dimension factors in both groups (Tables 4, 5). The statements numbered "1, 2, 3, 5, 6, 11, 12, 13, 14, 15, 16, 22, 23, 24" in the Form A group were the sub-dimension of "social stigmatization" (discriminatory behavior towards others) (Factor A1), while the statements numbered "4, 7, 8, 9, 10, 17, 18, 19, 20, 21" were "perception of social stigmatization towards others" sub-dimension (Factor A2) (Table 4). Cronbach's α coefficients were 0.79 and 0.59, respectively. The Cronbach's α value of 24 statements in the Form A group was 0.83. The mean and standard deviation of the Form A group were 75.01±13.89.

Table 4: Factor analysis results of "social stigmatization" (discriminatory behaviors against others) and "perception of social stigmatization towards others" sub-dimensions of the statements group in Form A.

Name of factor		STATEMENTS	The weight of the factor	Reliability	Mean
Social stigmatization (discriminatory behaviors against others)	A1	I would think that someone who has a positive COVID-19 test has not taken/complied with the necessary precautions.	0.740	0.794	46.20
	A11	Someone with a COVID-19 diagnosis has not taken adequate precautions.	0.684		
	A2	Someone who has been diagnosed with COVID-19 disturbs me.	0.623		
	A6	I hesitate to build friendships with an individual with COVID-19.	0.615		
	A5	I am afraid that the person with a positive COVID-19 test will also infect me.	0.603		
	A22	Healthcare workers are more likely to have COVID-19.	0.569		
	A13	I think that the close friends or relatives of someone diagnosed with COVID-19 also have COVID-19.	0.546		
	A3	Individuals who received treatment for COVID-19 once may need treatment again in the future.	0.531		
	A12	Someone diagnosed with COVID-19 is ostracized by their neighbors where they live (in an apartment or neighborhood).	0.488		
	A16	Someone diagnosed with COVID-19 thinks that other people will be afraid of and escape from him/her.	0.482		
	A24	Children and teenagers can be latent carriers of COVID-19.	0.475		
	A14	I would think that someone who has complaints, such as fever, cough, inability to smell and weakness, related to COVID-19, is COVID-19 positive.	0.471		
	A15	The productivity of someone receiving COVID-19 treatment in the work environment is quite low.	0.435		
	A23	Someone who has come from abroad or met someone from abroad is likely to have a positive COVID-19 test.	0.419		
Perception of social stigmatization towards others	A9	Someone with a diagnosis of COVID-19 should stay away from others.	0.742	0.599	30,36
	A10	I wouldn't want to use the stuff of someone with a COVID-19 diagnosis.	0.667		
	A21	People with chronic diseases should take precautions regarding COVID-19.	0.642		
	A8	Someone with a diagnosis of COVID-19 is also responsible for infecting his/her environment.	0.632		
	A7	Recovery from COVID-19 is not possible, no matter how well it is treated.	0.611		
	A4	I do not believe that COVID-19 can be cured completely.	0.596		
	A17	Someone diagnosed with COVID-19 may feel intense anger and desire to hurt those around them.	0.576		
	A18	Someone diagnosed with COVID-19 tends to blame themselves.	0.567		
	A20	Someone diagnosed with COVID-19 feels hopeless.	0.566		
	A19	Someone diagnosed with COVID-19 must deny or hide the illness to avoid being discriminated.	0.479		
		Total		0.838	
		Kaiser-Meyer-Olkin Test	0.846		
		Barlett Sphericity Test			
		Chi-square	2963.401		
		Standard Deviation	276		
		p	<0.000		

In the present study, the statements numbered "2, 3, 4, 7, 10, 11, 12, 13, 14, 15, 17, 18" in the Form B group were determined as the sub-dimension of "Self-directed discriminatory comments" (false cognitive assessment) (Factor B1), while the group of statements numbered "1, 5, 6, 8, 9, 16, 19" were named "negative self-perception" sub-dimension (Factor B2) (Table 5). The Cronbach's α values of the sub-dimensions were 0.79 and 0.44, respectively. The Cronbach's α value of the 19 social stigma statements in the Form B group was 0.79. The values obtained as the results of the analysis of all statements used in this study are shown in Tables 4 and 5. The mean and standard deviation values regarding Form B were 55.35 ± 10.50.

Table 5: Factor analysis of the statements in the "self-directed discriminatory comments" (false cognitive assessment) sub-dimension and the "negative self-perception" sub-dimension of the Form B group

The name of the Factor		STATEMENTS	The Weight of the Factor	Reliability	Mean
Self-directed discriminatory comments (false cognitive assessment)	B3	The existence of someone who has a positive COVID-19 test around disturbs me.	0.795	0.796	**35,98**
	B4	It disturbs me to work with someone who has tested positive for COVID-19 where I work.	0.788		
	B15	Since I do not have a chronic disease, I do not think that COVID-19 will harm me.	0.681		
	B18	If I get a COVID-19 diagnosis, everyone around me turns away from me.	0.637		
	B11	If I am diagnosed with COVID-19, I will be ostracized by my neighbors where I live (in an apartment or in the neighborhood).	0.614		
	B13	If I have complaints, such as fever, cough, weakness, and inability to smell, related to COVID-19, people around me will think I am COVID-19 positive.	0.603		
	B10	If I'm diagnosed with COVID-19, others will think I haven't taken enough precautions.	0.557		
	B17	If I get a COVID-19 diagnosis, I feel hopeless and helpless.	0.518		
	B7	If I receive a COVID-19 diagnosis, I will worry about what my boss, friends, and others will think of me.	0.469		
	B14	I blame myself if I get a COVID-19 diagnosis.	0.464		
	B12	If I am diagnosed with COVID-19, it is thought that my close friends are also sick.	0.463		
	B2	Someone who has been diagnosed with COVID-19 disturbs me.	0.410		
Negative self-perception	B8	If I am diagnosed with COVID-19, I am afraid of infecting people in my close circle.	0.730	0.445	**19,37**
	B9	If I get a COVID-19 diagnosis, I should stay away from others.	0.671		
	B5	If I have disease complaints related to COVID-19, I hesitate to apply to a doctor or health institution.	0.636		
	B6	If I test positive for COVID-19, I would like to hide it from others.	0.562		
	B19	If I have complaints, such as fever, cough, weakness, and inability to smell, I will think I have COVID-19 and hesitate to seek treatment.	0.544		
	B1	I worry about going to the hospital due to COVID-19.	0.528		
	B16	If I am diagnosed with COVID-19, I may feel intense anger or a desire to hurt those around me.	0.427		
		Total		0.802	
		Kaiser-Meyer-Olkin Test	0.787		
		Barlett Sphericity Test			
		Chi-square	2443.375		
		Standard Deviation	171		
		p	<0.000		

The distribution of the responses given to the statements of group A about their feelings and thoughts about the people who experienced a complaint or treatment process related to COVID-19 are shown in Table 6. Distribution of the answers given to the questions in Form B, about the feelings and thoughts of the participants if they experienced a disease, complaint, or treatment process related to COVID-19 are shown in Table 7.

Table 6: "n" number and percentage distribution (n (%)) of the responses given to the questions in Form A, about the feelings and opinions of the participants on other people, if those people have a complaint or treatment process related to COVID-19.

	No idea	Strongly disagree	Disagree	Partially agree	Agree	Strongly Agree
A1	16(3.8)	30(7.2)	64(15.4)	167(40.1)	96(23.1)	43(10.3)
A2	11(2.6)	28(6.7)	70(16.8)	110(26.4)	115(27.6)	82(19.2)
A3	106(25.5)	13(3.1)	42(10.1)	82(19.7)	140(33.7)	33(7.9)
A4	77(18.5)	47(11.3)	110(26.4)	92(22.1)	63(15.1)	27(6.5)
A5	2(0.5)	13(3.1)	30(7.2)	84(20.2)	159(38.2)	128(30.8)
A6	6(1.4)	29(7.0)	81(19.5)	95(22.8)	120(28.8)	85(20.4)
A7	72(17.3)	84(20.2)	177(42.5)	52(12.5)	21(5.0)	10(2.4)
A8	1(0.2)	17(4.1)	8(1.9)	37(8.9)	146(35.1)	207(49.8)
A9	1(0.2)	16(3.8)	7(1.7)	20(4.8)	102(24.5)	270(64.9)
A10	2(0.5)	17(4.1)	8(1.9)	23(5.5)	126(30.3)	240(57.7)
A11	16(3.8)	19(4.6)	61(14.7)	175(42.1)	97(23.3)	48(11.5)
A12	17(4.1)	34(8.2)	119(28.6)	114(27.4)	98(23.6)	34(8.2)
A13	15(3.6)	7(1.7)	41(9.9)	130(31.3)	170(40.9)	53(12.7)
A14	27(6.5)	16(3.8)	44(10.6)	151(36.3)	139(33.4)	39(9.4)
A15	96(23.1)	14(3.4)	74(17.8)	62(14.9)	121(29.1)	49(11.8)
A16	22(5.3)	8(1.9)	38(9.1)	71(17.1)	179(43.0)	98(23.6)
A17	104(25.0)	47(11.3)	169(40.6)	50(12.0)	38(9.1)	8(1.9)
A18	84(20.2)	24(5.8)	117(28.1)	128(30.8)	51(12.3)	12(2.9)
A19	3(0.7)	259(62.3)	115(27.6)	12(2.9)	9(2.2)	18(4.3)
A20	61(14.7)	17(4.1)	71(17.1)	148(35.6)	92(22.1)	27(6.5)
A21	0(0.0)	18(4.3)	2(0.5)	5(1.2)	86(20.7)	305(73.3)
A22	14(3.4)	4(1.0)	19(4.6)	81(19.5)	151(36.3)	147(35.3)
A23	20(4.8)	10(2.4)	63(15.1)	160(38.5)	115(27.6)	48(11.5)
A24	42(10.1)	5(1.2)	25(6.0)	90(21.6)	161(38.7)	93(22.4)

Graph 1: The number of answers (n) given to the questions in Form A on the feelings and opinions of the participant on others who have a complaint or treatment process related to COVID-19.
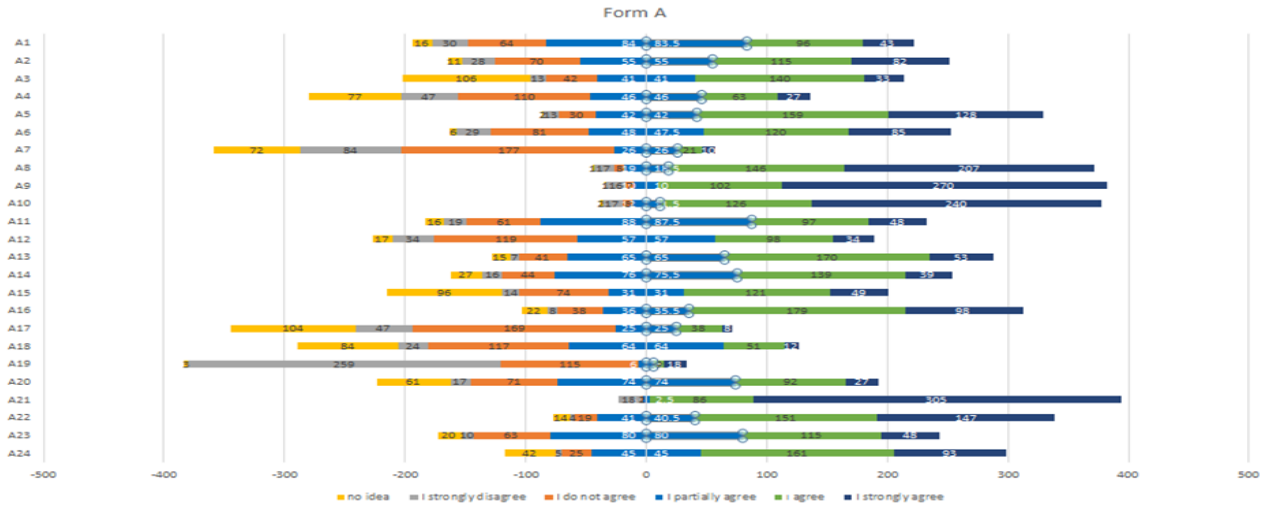

Table 7: Number and percentage distribution (n (%)) of the answers given to the questions in Form B, about the feelings and opinions of the participants in case they experience a disease, complaint, or treatment process themselves, related to COVID-19.

	No idea	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree
B1	2(0.5)	55(13.2)	80(19.2)	86(20.7)	117(28.1)	76(18.3)
B2	22(5.3)	63(15.1)	132(31.7)	77(18.5)	88(21.2)	34(8.2)
B3	6(1.4)	16(3.8)	44(10.6)	87(20.9)	157(37.7)	106(25.5)
B4	12(2.9)	16(3.8)	35(8.4)	78(18.8)	151(36.3)	124(29.8)
B5	1(0.2)	184(44.2)	158(38.0)	39(9.4)	20(4.8)	14(3.4)
B6	7(1.7)	182(43.8)	157(37.7)	31(7.5)	18(4.3)	21(5.0)
B7	12(2.9)	91(21.9)	114(27.4)	104(25.0)	73(17.5)	22(5.3)
B8	4(1.0)	13(3.1)	5(1.2)	12(2.9)	110(26.4)	272(65.4)
B9	3(0.7)	14(3.4)	2(0.5)	14(3.4)	80(19.2)	303(72.8)
B10	22(5.3)	16(3.8)	45(10.8)	139(33.4)	132(31.7)	62(14.9)
B11	41(9.9)	29(7.0)	76(18.3)	134(32.2)	99(23.8)	37(8.9)
B12	11(2.6)	9(2.2)	24(5.8)	105(25.2)	198(47.6)	69(16.6)
B13	19(4.6)	12(20.9)	29(7.0)	113(27.2)	176(42.3)	67(16.1)
B14	9(2.2)	42(10.1)	114(27.4)	141(33.9)	69(16.6)	41(9.9)
B15	31(7.5)	83(20.0)	150(36.1)	85(20.4)	51(12.3)	16(3.8)
B16	42(10.1)	145(34.9)	161(38.7)	40(9.6)	20(4.8)	8(1.9)
B17	24(5.8)	65(15.6)	130(31.3)	110(26.4)	56(13.5)	31(7.5)
B18	33(7.9)	31(7.5)	87(20.9)	128(30.8)	96(23.1)	41(9.9)
B19	10(2.4)	170(40.9)	177(42.5)	28(6.2)	19(4.6)	12(2.9)

Graph 2: The number of answers (n) given to the questions in Form B, on how the participants would feel if they experience a disease, complaint, or treatment process themselves, related to COVID-19.
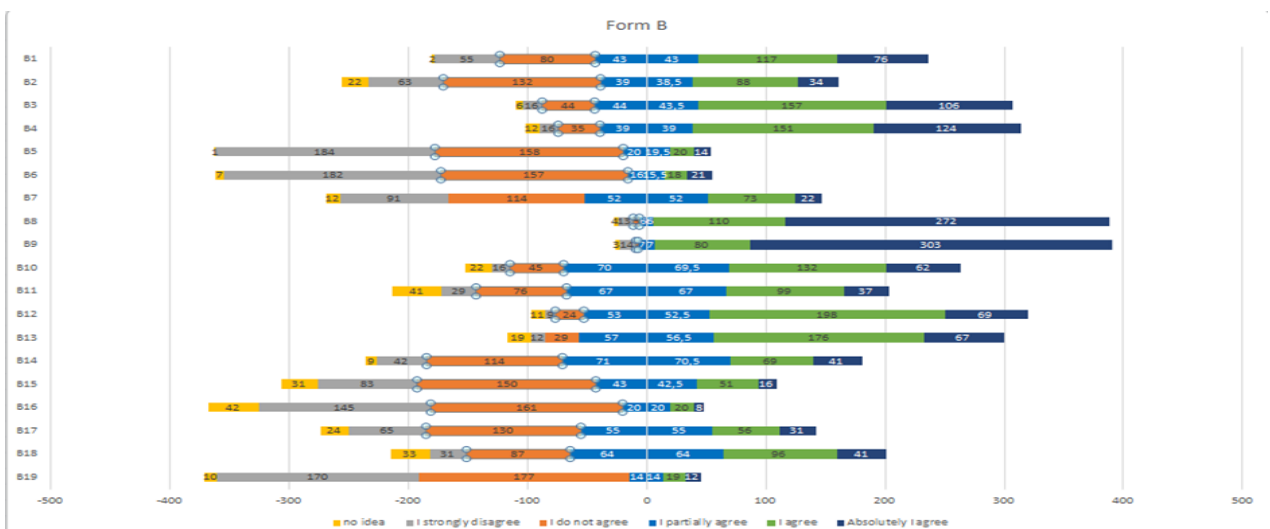
Table 8 shows the statistical results of the comparisons between the genders, places of residence, age groups, education levels and yes/no answers given by the participants to the demographic questions in total and in terms of sub-dimensions of both forms (Form A, Form B).

Table 8: Comparison of the total scores and sub-dimensions (Factor A1, Factor A2, Factor B1, Factor B2) scores obtained from Form A and Form B, between demographic groups.

	Gender -Male -Female	Age -18-25 -26-40 -41-60 -61-70	Place of Living -Metropol -City -County	Educational Status -Primary Education -High School -University -Masters -PhD/Specialist	Psychological Support -Receives -Does not receive	Do you have any first-degree relatives who are healthcare workers? -Yes -No	Do you know someone who has tested for COVID-19+? -Yes -No	Do you know anyone who died with the diagnosis of COVID-19? -Yes -No	Do you have any chronic diseases? -Yes -No
Form A									
Total	p=0.236	p=0.091	p=0.006	p=0.001	p=0.878	p=0.839	p=0.358	p=0.881	p=0.080
Factor A1	p=0.236	p=0.035	p=0.005	p=0.003	p=0.893	p=0.854	p=0.280	p=0.944	p=0.340
Factor A2	p=0.384	p=0.612	p=0.105	p=0.009	p=0.528	p=0.397	p=0.697	p=0.612	p=0.006
Form B									
Total	p=0.568	p=0.351	p=0.338	p=0.146	p=0.054	p=0.337	p=0.284	p=0.925	p=0.417
Factor B1	p=0.961	p=0.289	p=0.360	p=0.112	p=0.067	p=0.210	p=0.244	p=0.844	p=0.680
Factor B2	p=0.113	p=0.854	p=0.533	p=0.275	p=0.180	p=0.889	p=0.687	p=0.849	p=0.153

Factor A1: sub-dimension of "social stigmatization" (discriminatory behavior towards others)
Factor A2: sub-dimension of "perception of social stigmatization towards others"
Factor B1: sub-dimension of "self-directed discriminatory comments" (false cognitive assessment)
Factor B2: sub-dimension of "negative self-perception"

The statistical results of comparing the demographic data of the participants in total and regarding the sub-dimensions of both Forms (Form A, Form B) are shown in Table 8. When the answers given by the participants to the questions in Form A and Form B groups were compared in terms of gender, no significant difference was found between male and female participants regarding both total score and sub-dimensions (p>0.05, Table 8). When the age groups were compared, a significant difference was found between the age groups of 26-40 and 41-60, only in the Factor A1 sub-dimension (p<0.05, Table 8).

A significant difference was found between the places of residence of the participants regarding Form A in total and Factor A1 "social stigmatization" (discriminatory behaviors towards others) sub-dimension (p<0.01, Table 8). In addition, as shown in Table 8, a significant difference was found between the educational status groups regarding Form A in total, and the sub-dimensions Factor A1 "social stigmatization" (discriminatory behaviors against others), and Factor A2 "perception of social stigmatization towards others" (p<0.001, p<0.01, p< 0.01, respectively).

Besides the demographic characteristics, regarding the participants' answers to the questions; no significant difference was found between those who had or did not receive psychological support before, who had or did not have first-degree relatives who are healthcare workers, who had or did not have relatives with the diagnosis of COVID-19, who lost or did not lose their relatives due to COVID-19, and who had or did not have a chronic disease, regarding Form A, Form B and the sub-dimensions of both forms. (p>0.05, Table 8).

4.   DISCUSSION

COVID-19 may cause widespread psychological problems in individuals in society. Problems, such as depression, anxiety, stress and stigma, may occur (Kılınçel et al. 2021, Salari et al. 2020). Stigma means negative attitudes towards people with certain characteristics or diseases that distinguish them from other members of society (Üçok, 2007). Stigma may lead to discrimination. Problems such as stigmatization and discrimination occur during the pandemic process. People who perceive that they are stigmatized may report guilt, self-blame, self-devaluation, self-isolation, low self-esteem, and being ostracized or ignored by others. Stigma is closely associated with mental health problems, especially depression. Previous studies have found strong positive associations between stigma and depression; depression and stigma also have certain common symptoms, such as guilt, self-blame and low self-esteem (Charles et al., 2012).

Corona Virus disease (COVID-19) is closely associated with physical and mental health problems; however, little is known about the severity and details of the stigma arising from COVID-19 among individuals in the community. Studies conducted on healthy individuals who have regained their health after the disease or have never been infected will increase our experience in the perception of stigmatization during the COVID-19 pandemic. The pandemic is not yet under control worldwide. Stigmatization or being stigmatized related to COVID-19 in society is common among survivors of

COVID-19 and even in healthy individuals who did not catch the disease (Imran et al., 2020; Bagcchi, 2020). It will be very useful to investigate and evaluate the experiences of stigmatization of aggrieved people who have recovered from the disease after COVID-19 treatment and among other members of society. Appropriate psychological help, public education and anti-stigmatization campaigns and policies should be implemented to decrease stigma, especially in the vulnerable subpopulation in society (Yuan et al., 2021).

In previous studies, the findings showed that discrimination related to COVID-19 is high in the Colombian population and that discrimination and fear of COVID-19 are related (Cassiani-Miranda et al., 2020). A study in China investigating the differences between healthy controls and the individuals who recovered from COVID-19 showed that the individuals who recovered from COVID-19 were more likely to experience general stigmatization and stigma in the areas of social rejection, financial insecurity, internalized shame, and perception of social isolation (Yuan et al., 2021). In our study, the stigmatization of others and the perception of stigma on themselves in society were evaluated using a survey. The sample size consisted of 416 (223 female and 193 male) individuals can be considered one of the strengths of the questionnaire. The results of the evaluation of A and B forms as Cronbach's α values in this study showed the scale's reliability.

When the averages of the answers given to the statements in the A form in this study (Table 6) were considered, it was seen that the answers given to certain statements accumulated around a certain point. More than 50% of the participants responded as "I agree" or "strongly agree" to statements A5, A8, A9, A10, A13, A16, A21, A22, and A24. These statements are about the transmission and spread of the COVID-19 disease. The answers of the participants to these statements as "I agree" or "I strongly agree" can be interpreted as the anxiety and fear of the participants about the spread and transmission of the disease. Miranda et al. also indicate a similar relationship between fear and stigma in their study. The effects of fear on the permanency of the stigma associated with COVID-19 are reported in another study (see Logie, 2020).

Mahmud and Islam (2020) stated in their study that the feeling of trust in the treatment of COVID-19 is an important factor among the reasons for stigmatization towards others. In the same way, when the averages of the answers given to the statements in the A form (Table 6) were evaluated, it was seen that the answers given to certain statements accumulated around a certain point. In the responses given to statements A7, A17, and A19, more than 50% of the participants marked the options: "I disagree" or "strongly disagree." These statements were about the treatment of the COVID-19 disease, the inability of patients to control their anger, and their denial of the disease. The participants' answers to these statements as "disagree" or "strongly disagree" were interpreted as not having a negative perception of the disease. These results can be evaluated as society has a more positive view of the prevention and treatment processes regarding the pandemic. This result was compatible with the results of the study reporting that people's trust in treatment is an important factor among the reasons for stigmatization related to COVID-19 (Mahmud and Islam, 2020).

The fatality and rapid spread of the COVID-19 disease may cause people to experience more fear. Lack of previous knowledge about the disease and the fact that the epidemic turned into a pandemic can also be shown as a reason for people to experience more fear (Lupia et al., 2020). The effects of fear and misinformation on the formation of discrimination and prejudice are mentioned in the literature (Ren, Gao and Chen, 2020). When the averages of the answers given to the expressions in the B form are evaluated (Table 7), it is observed that the answers given to certain expressions accumulate around a certain point. In the responses given to statements B3, B4, B8, B9, B12, and B13, more than 50% of the participants marked the answers: "I agree" or "strongly agree." These statements are about the transmission of the COVID-19 disease to themselves and others. The answers of the participants to these statements as "I agree" or "I strongly agree" can be interpreted as they experience "anxiety and fear" because of the risk of infecting themselves and others with the disease. Cassiani-Miranda et al. (2020) also mention a similar relationship between fear and stigma in their study.

Similarly, when the averages of the answers given to the questions in form B (Table 6) were considered, it was seen that the answers given to certain statements again accumulated around a certain point. More than 50% of the participants marked the responses: "I disagree" or "strongly disagree" for statements B5, B6, B15, B16, and B19. These statements were about "not being able to control their anger" and "hiding and denying the disease" regarding the possibility of contracting the COVID-19 disease. The answers of the participants to these statements as "disagree" or "strongly disagree" can be interpreted as they do not have

a negative perception of their illness and do not want to hide the illness. It has been interpreted that the members of society prioritize their health in case they become sick.

The relationship between stigmatization related to COVID-19 and demographic characteristics was also evaluated in the present study. There was no significant difference between the genders in the total scores (Total A and B) and sub-dimensions (Factor A1, A2, Factor B1, B2) pertaining to the questionnaires (Form A and Form B) prepared in this study. However, different studies mention the positive effects of being a woman on stigmatization related to mental illnesses and AIDS (Bilge and Çam, 2010; Yebei, Fortenberry and Ayuku, 2008).

For the effects of the age factor on stigmatizing behavior, Bilge and Çam (2010), in their review, mention that being young has a positive effect on labeling. However, it is necessary to investigate the effects of the age factor on stigmatization with more detailed studies. When the age groups were compared in our study, a significant difference was found for the Factor A1 sub-dimension ($p<0.05$, Table 8). Differences in demographic groups were found in the Factor A1 sub-dimension between the age groups of 26-40 and 41-60 years ($p<0.05$, Table 8). This difference was found more in participants aged 41-60 in the sub-dimension of "social stigmatization towards others" (discriminatory behavior towards others). The findings showed that the younger age group stigmatized others less.

Although stigma is very common, its geographical distribution is not uniform. Gonzalez et al. (2009) found that people living in rural areas worry more about society's attitude towards AIDS, negative self-image, and being stigmatized. In the present study, a significant difference was found between the places where the participants lived regarding the total A and Factor A1 sub-dimensions ($p<0.01$, Table 8). This difference can be due to the city and county groups. While the average of the people living in the city was 76.97 ± 13.88 for the A form in total, the mean and standard deviation of the people living in the county was 71.10 ± 13.93. Also, while the mean and standard deviation of the people living in the city was 46.62 ± 9.83 for the A1 sub-dimension, the result was 42.50 ± 9.62 for the participants who reside in the county. Taşkın et al. (2006) found in their study that people living in rural areas stigmatized patients with depression more. In another study, they stated that people living in the city labeled people with AIDS less often than rural people (Yebei et al., 2008). Another study showed that internalized stigma related to AIDS was experienced more severely in less populated regions (Kalichman, Katner, Banas and Kalichman, 2017).

It is expected that people's education levels will have a positive effect on stigmatization behavior. A significant difference was found between the educational status regarding Total A, Factor A1 and A2 sub-dimensions and ($p<0.001$, $p<0.01$, $p<0.01$, Table 8, respectively). It was interpreted that as the education level increased, they stigmatized others more, regarding the "social stigmatization" (discriminatory behavior towards others) (FA1) and "perception of social stigmatization towards others" sub-dimensions (FA2). However, Bilge and Çam (2010), in their review, mention that higher education has a positive effect on stigmatization. Kipp et al. (2011) also mention in their study that there is a correlation between low education levels and stigma for AIDS. However, the opposite result was found in our study. The effects of the education factor on the stigmatization regarding COVID-19 should be examined in more detailed further studies.

In a study, the status of having survived after the recovery from COVID-19, having infected family members, being married, having economic loss, and having depressive symptoms during the COVID-19 pandemic was positively correlated with higher overall levels of being stigmatized (Yuan et al., 2021). In the present study, regarding the questions asked to the participants, besides the demographic characteristics, there was no significant difference between people who received and did not receive psychological support before, who had or did not have a first-degree relative who is a healthcare worker, who had and did not have a relative with the diagnosis of COVID-19, who lost and did not lose a relative due to COVID-19, and who had and did not have a chronic illness. These situations should be re-evaluated in different groups.

5.   LIMITATIONS

In this cross-sectional study, the opinions of a limited number of volunteer participants who could be reached online were presented, and their feedback on the relationship between COVID-19 and stigma during the pandemic period was discussed. This study aimed to evaluate the perception of the people in society about the stigmatization directed at themselves and towards others regarding COVID-19. The factors that may have an impact on the formation of the survey answers could not be comprehensively controlled. A higher number of participants in such a cross-sectional study would have provided more comprehensive results. In this study, the factors that may cause them to stigmatize themselves and others

during the COVID-19 pandemic were excluded from the scope of research and examination. The factors affecting stigmatization in COVID-19 should be investigated with further studies. It may be possible for such studies to evaluate different issues that may have an impact on the survey responses and provide more detailed findings with advanced statistical analyses. This survey was not planned as a scale study. The present study is expected to contribute to the formation of preliminary data for studies that can help further assessments with deeper findings and analyses.

6. CONCLUSION

In this study, which was conducted to evaluate the stigmatization towards others and the perception of stigmatization towards self in the process of COVID-19, it has been observed that individuals may have negative attitudes toward themselves and others. In addition, various demographic characteristics may have an impact on the stigma of COVID-19, especially in the stigmatization of others. Therefore, demographic characteristics should be considered in interventions regarding the stigmatization of COVID-19. People with stigma may be late in seeking treatment, so interventions should be developed to prevent people from stigmatizing themselves and others. Appropriate psychological help, public education and anti-stigmatization campaigns and policies will be beneficial, especially to decrease stigmatization in populations with different demographic characteristics in society.

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