The Mediating Role of Resilience in the Relationship between Fear of COVID-19 and Mental Health Continuum during the COVID-19 Pandemic Process*

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Abstract

The general purpose of this study is to determine the mediating role of resilience in the effect of fear of COVID-19 on the mental health continuum. 443 volunteer individuals who experienced the COVID-19 pandemic process in Turkey participated in this study. In data collection, The Fear of COVID-19 Scale, The Brief Resilience Scale and Mental Health Continuum Short Form were used. Data were analyzed with the two-stage Structural Equation Modeling (SEM) technique. The full mediating role of resilience has been proven in the impact of fear of COVID-19 on the mental health continuum.

Keywords: Mental Health Continuum, Mental Health, Resilience, Fear of COVID-19.

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INTRODUCTION

On March 10, 2020, the case of COVID-19 appeared for the first time in Turkey. To deal with this, some preventive steps have been taken from 12 March 2020 (T.C. Sağlık Bakanlığı, 2020a). Arrangements have been made by taking measures for people coming from abroad. The distance education process was initiated by suspending the schools. The places for social activities such as such as libraries, parks, gardens, concerts, sports halls and places of worship were temporarily suspended (T.C. Cumhurbaşkanlığı, 2020c). It was announced on May 4, 2020 that the normalization process will begin gradually (T.C. Cumhurbaşkanlığı, 2020a). As of June 1, 2020, the normalization process has begun by removing travel restrictions, opening day nursery, enabling the work shifts back to normal to return to their normal working hours and opening public areas such as sports facilities, libraries, parks, and gardens (T.C. Cumhurbaşkanlığı, 2020b). Although it was announced that the normalization process would take place gradually as of May 4, 2020,   T.R. Health Minister Dr. Fahrettin KOCA explained the importance of staying at home by saying that the motto of the process is "Life fits into home!" (T.C. Sağlık Bakanlığı, 2020b).

The COVID-19 process is a process that affects individuals' both physical and mental health in Turkey, and even if the pandemic ends, its psychological effects were thought to continue (Aşkın et al., 2020). The changing situations across the country, the measures taken and the practices implemented in this process affect the psychological status of individuals (Ekiz et al., 2020). The difficulties of the COVID-19 process and the changes in the living conditions of the individuals also affect individuals.

In the literature, there were studies showing that the COVID-19 process negatively affects the daily routines, mental health and performance of individuals (Arısoy et al., 2020; Cai et al., 2020; Huang & Zhao, 2020; Liu et al., 2020; Mamun & Griffiths, 2020; Mamun & Ullah, 2020; Qiu et al., 2020). In a study on 1715 people in Hong Kong, almost all of the participants stated that they were worried and feared about COVID-19 and their daily routines were disrupted (Kwok et al., 2020). Studies conducted during the COVID-19 process also reveal that there is a fear of COVID-19 (Mertens et al., 2020; Schimmenti et al., 2020). There were studies in the literature that show that the resilience of individuals in the COVID-19 process is an important factor in coping with the COVID-19 process and its effects (Bilge & Bilge, 2020; Çetin & Anuk, 2020; Tönbül, 2020; Yazıcı-Çelebi, 2020). Taking this situation into account, it is very important to know what level of fear of COVID-19 individuals have and to examine their mental health continuum and resilience in order to cope with the factors caused by COVID-19.

Mental Health Continuum and Fear of COVID-19

Mental health means that the individual is in effective harmony and balance with herself or himself and his or her environment (Yüksel-Şahin, 2009). Except this definition, there were also different definitions of it (Eryılmaz & Mutlu, 2016). In psychology, situations are regarded as depression and anxiety have been focused on (Myers and Diener, 1995). However, only 17% of the people in the world; on the other hand, 20% of Turkey is mentally ill. These findings show us that a large part of the society is not in the mentally ill group and is actually neglected. In addition, the definition of health by the World Health Organization is not only the absence of a diseased structure, but also the feeling of well-being physically, socially and psychologically (Demir & Türk, 2020). In line with these explanations and findings, the emergence of an approach that focuses on the strengths of the individual has become inevitable. This approach is positive psychology. In positive psychology, it is emphasized that it is not enough to reduce the psychological discomfort of the individual, but the level of happiness, life satisfaction, well-being should be increased and its development should be supported (Myers & Diener, 1995). In addition, the positive characteristics of individuals are accepted as positive mental health indicators (Seligman & Csikszentmihalyi, 2002). In fact, the mental health continuum is one of the positive indicators in this positive psychology. Mental health continuum is a structure that consists of sub dimensions "emotional flourishing, social flourishing, psychological flourishing" (Keyes & Annas, 2009) and expresses the presence (flourishing) and absence

(languishing) of mental health. While flourishing is associated with high levels of well-being, positive emotions, psychological and social functionality; languishing is associated with low levels of well-being, negative emotions, and inability in life (Keyes, 2002). In a study on 4826 people in China in the COVID-19 process, a positive significant correlation was found between mental health problems and the perceived fear of COVID-19 (Li et al., 2020). A mental health disorder or not having enough information about COVID-19 drives the individual to suicide (Dsouza et al., 2020). In many parts of the world, people have committed suicide due to COVID-19 (Goyal et al., 2020; Mamun & Ullah, 2020). The results of these studies that the mental health continuum of individuals in the process of COVID-19 is important in the way of developing in flourishing.

COVID-19 is a pandemic that limits people's interactions with others (Harper et al., 2020), requires millions of people around the world to stay at home, and has psychosocial consequences (Pakpour & Griffiths, 2020). One of the key themes common to any pandemic is fear (Xiang et al., 2020). Pandemics and measures taken for pandemics can cause fear in individuals (Zhang et al., 2020). The fear of an infectious disease is different from the fear of a degenerative disease (which factors such as trauma and tumors were not effective in its formation, caused by damage to cells). Even if degenerative diseases affect the health of the individual, the individual continues to practice his old habits as they do not pose a serious threat to his survival. The individual's fear of degenerative diseases is. However, the fear of an infectious disease threatens the life of the individual and changes his habits. So fear of infectious disease involves both cognitive processes and social learning. It is also associated with the emotional part of the brain and is an emotional response of the brain to illness (Troisi, 2020). Although seasonal flu, which is also an infectious disease, causes death of more people; the fear of COVID-19 is experienced much more severely than fear of seasonal flu (Asmundson & Taylor, 2020). There is both a fear seen in different ways at every stage of the pandemic and a virus pandemic (Sungur, 2020); because the fear of COVID-19 is due to the fact that the virus is new and there is uncertainty as to how much the current pandemic may deteriorate (Asmundson & Taylor, 2020). Schimmenti et al. (2020) argued that the fear of COVID-19 can be examined in four dimensions: bodily, cognitive, behavioral and interpersonal. In addition to all these, fear of COVID-19 varies according to the variables gender, education level and the country (Reznik et al., 2020). However, in general, with the COVID-19 pandemic , individuals are afraid of being stigmatized by the society, losing their close relationship, staying at home with social isolation and not surviving if they get sick (Ibrahim, 2020). So much so that with the fear of COVID-19, even pregnant women, chemotherapy and dialysis patients refrain from going to the hospital and continuing the treatment process (Navab & Bahramnezhad, 2020). When fear of COVID-19 is very high, it can have harmful effects on the phobia and social anxiety and on the xenophobia; on the other hand, there is an insufficient level of fear, it may still have harmful effects that can harm both the individual and the society (e.g. not following the measures taken to slow the spread of COVID-19) (Mertens et al., 2020). When considered from this point of view, it can be expected that the fear of COVID-19 should be experienced, but this fear should be at a level that enables the individual to take measures to protect both herself/himself and other individuals in society.

Resilience as a Moderator

The individual's mental health, strengths and positive aspects of his mental health status were related to resilience (Connor, 2006). While resilience was an issue that was neglected before 1970's when examining the individual's function, development, resistance, prevention of psychopathology or getting rid of pathology; it has been one of the important issues dealt with when examining the individual since the 1970s (Masten, 2011). Resilience is for an individual to be able to remain firm in the event of encountering negative experiences (Karaırmak, 2016), to continue his life and to have a intention (İnci & Boztepe, 2013). In other words, resilience is the psychological structure that helps an individual maintain his positive adaptation despite negative experiences (Luthar et al., 2000). An individual with a high level of resilience has a number of protective factors such as autonomy, self-help ability, self-efficacy, impulse control, supportive and strong family structure, positive peer relationships and social connections with others (Fayombo, 2010). Thanks to resilience, the individual can effectively use both his psychological skills and abilities and the social support system such as

family and environment to cope with the difficulties he / she faces (Friborg et al., 2003). In addition, an individual with positive personal characteristics can cope with the changes he encounters by maintaining his psychological health (Kına, 2019). However, when resilience is taken as a personal feature, it may cause perspectives that blame the individual for negative consequences (Vanderbilt-Adrience, 2006). Resilience is not only an innate personality trait of the individual, but also a structure that can be learned and developed over time (Friborg et al., 2003). The pandemic is one of the situations that cause individual to feel vulnerable and at risk due to the uncertainty it causes and makes it difficult to use coping skills (Reznik et al., 2020). The COVID-19 pandemic requires the isolation process. Therefore, an individual who is a part of the society cannot participate in an activity within the framework of a common purpose by getting together with other members of the society as in other disasters. This situation may cause unique and severe strains on the resilience of the individual (Polizzi et al., 2020). Resilience of individuals experiencing sleep problems depending on anxiety due to COVID-19 was found to be significantly low (Yazıcı-Çelebi, 2020). The result of this study is important in terms of showing the stress reaction of the individual according to the resilience level in situations such as anxiety-fear. Bulut (2016) found that individuals who could easily adapt to difficult living conditions and cope with stressful life events had high levels of resilience. As a matter of fact, participants in the study of Tönbül (2020) stated that they felt fear (9.2%) and feelings that could be associated with a sense of fear such as panic (4.1%), anxiety (72.4%) and despair (14.3%). In another study, it was found that there was a significant relationship between the psychological symptoms of individuals and their resilience during the COVID-19 process, and as the resilience of individuals increased, their functional coping levels also increased (Bilge & Bilge, 2020). As a result; in the light of these information and findings stated in the literature, it is thought that it may be important to investigate the mediating effect of resilience in this study.

While there are studies on the mental health of individuals during the COVID-19 process (Belen, 2020; Isralowitz et al., 2020; Qiu et al., 2020; Wang et al., 2020a) in the literature, a model based on the mediation of resilience in the relationship between fear of COVID-19 and mental health continuum work is limited. For this reason, it is thought that this study will contribute by forming an important basis for preventive and remedial studies to be carried out in the future. Within the scope of all this information, the general purpose of this study is to determine the mediating role of resilience in the effect of fear of COVID-19 on mental health continuum during the COVID-19 process. For this general purpose, the hypothetical model created within the framework of the related literature is presented in Figure 1.

(H1) Fear of COVID-19 negatively predicts resilience.

(H2) Fear of COVID-19 negatively predicts mental health continuum.

(H3) Resilience positively predicts mental health continuum.

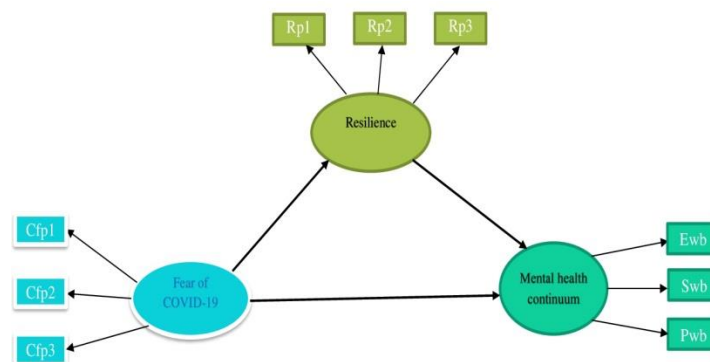(H4 Resilience has a mediating effect on the relationship between fear of COVID-19 and mental health continuum.

Figure 1. Hypothetical Model

METHODS

Participants

443 volunteer individuals [women 320 (72.2%) and 123 men (27.8%)] who experienced the COVID-19 pandemic process in Turkey participated in this study. Their ages range from 18 to 65. [Age_{Mean} =29.26, Age_{Sd} = 7.80].

Data Collection Tools

Mental Health Continuum Short Form (MHC-SF)

In this study, developed by Keyes et al. (2008), adapted to Turkish by Demirci and Akın (2015) and analyzed for reliability and validity, MHC-SF was used. MHC-SF, has 14 items and three dimensions (emotional flourishing, social flourishing and psychological flourishing). In the study of Demirci and Akın (2015), first level confirmatory factor analysis was used for construct validity and good goodness-of-fit values (x^2/df= 3.26, RMSEA= 0.07, IFI= 0.97, CFI= 0.97, NNFI= 0.96) were confirmed the structure. MHC-SF's item-total score correlations were between .51 and .68. In the study of Demirci and Akın (2015) the internal consistency coefficient was checked from the reliability analysis and .84 for the subscale "emotional flourishing", .78 for the subscale "social flourishing", .85 for the subscale "psychological flourishing", and .90 for the whole scale. In the current study, the internal consistency coefficient for MHC-SF was calculated as .78.

The Brief Resilience Scale (BRS)

In this study, BRS was developed by Smith et al. (2008), it was adapted into Turkish by Doğan (2015) and validity and reliability studies were carried out. BRS is a one-dimensional, six-item. Doğan (2015) used exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) for construct validity, and it was found that BRS had a 54.66% explained variance in the EFA results. In the CFA results, it was determined that the BRS showed good fit values (x^2/df= 1.83, RMSEA= 0.05, IFI= 0.99, CFI= 0.99, NNFI= 0.99). BRS's item-total score correlations between .49 and .66 (Doğan, 2015). In addition, in the study of Doğan (2015) the internal consistency coefficient was determined as 0.83 for BRS. In the current study, the internal consistency coefficient for BRS was detected as .78.

The Fear of COVID-19 Scale (FCS)

In this study, FCS, developed by Ahorsu et al. (2020), it was adapted into Turkish and analyzed for validity and reliability by Satıcı et al. (2020). FCS has a single factor and contains seven items. For construct validity by Satıcı et al. (2020) were used confirmatory factor analysis (CFA) and it was observed that FCS had acceptable goodness-of-fit values (x^2= 299.47, SRMR= 0.06, CFI= 0.91, NFI= 0.91, IFI= 0.91). FCS's item-total score correlations between .50 and .62. In addition, Satıcı et al. (2020) in the reliability analysis of FCS, the internal consistency coefficient was determined 0.84. In the current study, the internal consistency coefficient for FCS was calculated as 0.85.

Data analysis

In this study, normality and multicollinearity assumptions were examined as a preliminary analysis. Then, descriptive statistics and correlations of variables were examined. After the preliminary analysis, the data were analyzed with the two-step Structural Equation Modeling proposed by Kline (2015). First, the measurement model was tested. In the measurement model, it is examined whether the observed variables that make up all the latent variables represent the latent variables significantly. In the second step of the Structural Equation Modeling (SEM), the structural model was tested. In the structural model, the cause-effect relationship networks between latent variables were evaluated (Kline, 2015). At this point, paths were established between variables, the significance of these path coefficients and the model goodness of fit indices (chi-square (χ^2), χ^2 / sd ratio, NFI, CFI,

GFI, AGFI, TLI and RMSEA) were used. χ^2/sd ≤ 5; NFI, CFI, GFI, AGFI, TLI ≥ .90; RMSEA ≤ .09 the acceptable limit point was determined (MacCallum, Browne & Sugawara, 1996).

In addition, since the fear of COVID-19 scale and the brief resilience scale consisted of one dimension, item parceling was performed depending on the item-total correlation in the Structural Equation Modeling (SEM). The item parceling method contributes to the normal distribution of variables and to increase the reliability of the measurements (Alhija & Wisenbaker, 2006). Accordingly, 3 parcels were assigned for fear of COVID-19 and 3 parcels were assigned for resilience.

In addition, more than one model was tested in mediation test in SEM. To decide which model is preferable, the chi-square difference test based on the nested models strategy was examined. In addition, the model having lower model comparison fit index values (AIC and ECVI) was accepted as the best model (Schermelleh-Engel, Moosbrugger & Müller, 2003).

Finally, the significance of direct and indirect effects was examined by bootstrapping procedure. Accordingly, lower and upper limit confidence intervals in addition to bootstrap coefficient were created by performing 1000 bootstrap (resampling). In order to decide that indirect effects are significant, the lower and upper limit of the confidence intervals should not contain zero as a result of the bootstrapping process (Hayes, 2017).

RESULTS

Preliminary Analysis

In this study, normality and multicollinearity assumptions were examined as preliminary analysis. Normality assumption was evaluated with skewness and kurtosis values. It was observed that the kurtosis values varied between -.77 and .05, and the skewness values varied between -.39 and .74 (Table 1). These values were within the limits of normality assumptions suggested by Tabachnick and Fidell (2007). In addition, the multivariate normality assumption was tested and found to be 7.64. Since this value is within the limits recommended by Kline (2015), multivariate normality assumptions were met in this study.

In addition, the multicollinearity hypothesis was tested with VIF and tolerance values. VIF values were between 2.47 and 2.91, while tolerance values varied between .34 and .40. These values are accepted within the limits suggested by Kline (2015). As a result, the VIF and tolerance values in this study confirmed that there was no multiple linear connection problem.

Table 1. Preliminary Analysis Findings

Variable	1	2	3	4	5	6	7	8	9
(1) Cfp1	1								
(2) Cfp2	.71**	1							
(3) Cfp3	.71**	.70**	1						
(4) Rp1	-.33**	-.36**	-.35**	1					
(5) Rp2	-.23**	-.25**	-.21**	.72**	1				
(6) Rp3	-.30**	-.32**	-.26**	.73**	.76**	1			
(7) Ewb	-.24**	-.26**	-.19**	.43**	.48**	.41**	1		
(8) Swb	-.17**	-.12**	-.12*	.23**	.40**	.34**	.50**	1	
(9) Pwb	-.10*	-.08	-.07	.32**	.47**	.42**	.57**	.69**	1
M	8.42	4.45	4.90	6.46	6.40	6.44	8.34	10.67	18.50
SD	2.80	1.86	1.62	2.04	1.83	1.87	3.51	6.09	7.40
Skewness	.14	.74	.23	-.34	-.17	-.18	-.18	.33	-.39
Kurtosis	-.53	.05	-.09	-.32	-.20	-.06	-.77	-.63	-.74

Notes. *p<.05; *p<.001; Rp1, Rp2, Rp3= Parcels of resilience, Cfp1, Cfp2, Cfp3=Parcels of fear COVID-19.

Pwb: Psychological well-being, Ewb: Emotional well-being, Swb: Social well-being.

The Mediating Effect of Resilience

Testing the Measurement Model

The data were analyzed with two-step structural equation modeling (SEM). The first step, the measurement model, was evaluated. There were three latent variables ("Fear of COVID-19", "Resilience" and "Mental Health Continuum") and nine observed variables in the measurement model.

In the findings of the measurement model, goodness of fit values ($\chi2$/df (110.102/24) = 4.58, p=.00; RMSEA = .09; CFI = .96; TLI= .94; GFI= .95; AGFI=.90; NFI=.95) is acceptable. (Table 2). In addition, all standardized factors (.674 to .875, p<.001) were statistically significant (Table 3) as another proof that the observed variables represented the latent variables.

Table 2. Goodness of Fit Indices of the Measurement Model

Fit Indices	Values
X^2/ sd (110.102/24)	4.58
RMSEA (90% confidence interval = 0.07; 0.10)	.09
NFI	.95
CFI	.96
GFI	.95
TLI	.94
AGFI	.90

Table 3. The Measurement Model (Factor Loadings, Standard Errors, t-Values, and R^2)

Measure and variable	Unstandardized Factor Loadings	SE	Standardized Factor Loadings	t	R^2
Fear of COVID-19					
Cfp1	1.773	0.089	0.855	19.931*	0.731
Cfp2	1.157	0.059	0.841	19.674*	0.707
Cfp3	1.000	-	0.835	-	0.697
Resilience					
Rp1	1.046	0.048	0.837	21.845*	0.701
Rp2	0.975	0.042	0.872	23.042*	0.761
Rp3	1.000	-	0.875	-	0.766
Mental Health Continuum					
Ewb	0.366	0.026	0.674	14.070*	0.455
Swb	0.727	0.046	0.772	15.872*	0.596
Pwb	1.000	-	0.875	-	0.765

Notes. All *t* values were significant. *p<.001; SE: Standard Error; Rp1, Rp2, Rp3= Parcels of resilience, Cfp1, Cfp2, Cfp3=Parcels of fear COVID-19. Pwb: Psychological well-being, Ewb: Emotional well-being, Swb: Social well-being.

Table 1. (Measurement Model) Bivariate Correlations among Latent Variables

| Latent variables	1	2	3
Fear of COVID-19	-		
Resilience	-.40*	-	
Mental Health Continuum	-.19*	.57*	-

*p<.01

Testing the structural model

After the measurement model was verified, the structural model was tested. At this point, in the first structural model to reveal the relationships between fear of COVID-19, resilience and mental health continuum, the model in which resilience is the full mediator between fear of COVID-19 and mental health continuum was tested. In the full mediation model, a path was not established between the fear of COVID-19 and mental health continuum, and it was examined that the fear of COVID-19

predicted mental health continuum through resilience. When the model in which resilience is the full mediator was tested, it was seen that the results of goodness of fit indices were at an acceptable level (χ^2/df (110.642/25) = 4.42, p=.00; NFI=.95; GFI= .95; CFI = .96; TLI= .95; AGFI=.90; RMSEA = .08 (90% confidence interval for RMSEA = .07–.10). In the second structural model, the model in which resilience is a partial mediator between fear of COVID-19 and mental health continuum was tested. In the partial mediation model, the direct path from the fear of COVID-19 to the mental health continuum was been added. When the model in which resilience was a partial mediator was tested, it was seen that the results of goodness of fit indices were at an acceptable level (χ^2/df (110.102/24) = 4.58, p=.00; NFI=.95; GFI= .95; CFI = .96; TLI= .94; AGFI=.90; RMSEA = .09 (90% confidence interval for RMSEA = .07–.10), but the direct path from the fear of COVID-19 to mental health continuum was found to be insignificant (β = .04, p > .05).

Deciding whether resilience is fully mediator or partial mediator was evaluated with the chi-square difference test based on the nested models strategy. In the chi-square difference test findings, it was observed that the direct path added between fear of COVID-19 and mental health continuum did not significantly contribute to the model ($\Delta\chi2$ = 0.54, sd = 1, p > .05). Therefore, the model in which resilience was the full mediator was preferred. Additionally, considering model comparison fit indices, since the values of the full intermediary model (AIC = 150.642; ECVI = 0.341) were lower than the values of the partial intermediary model (AIC = 152.102; ECVI = 0.344), it was determined that the full intermediary model is preferable.
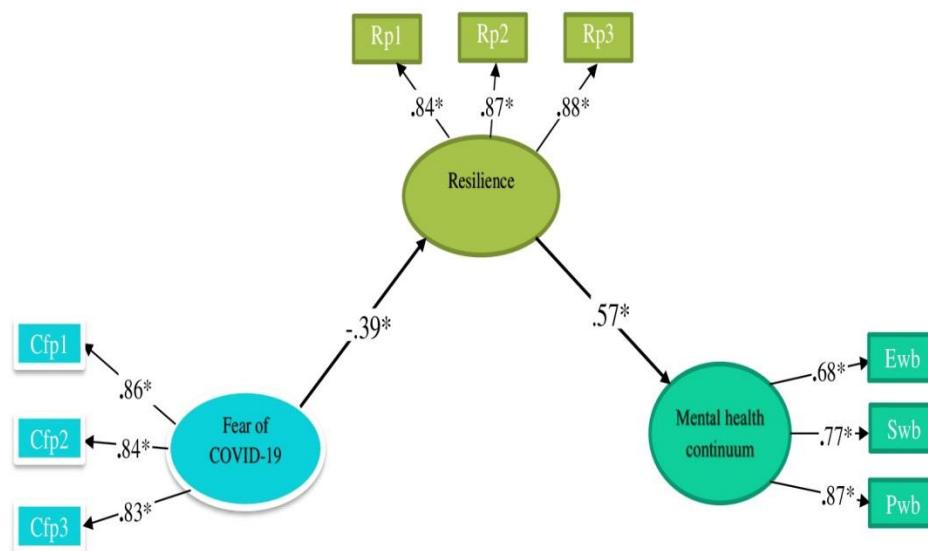
Figure 2. The Fully Mediating Role of Resilience

Notes. *p<.001; Rp1, Rp2, Rp3= Parcels of resilience, Cfp1, Cfp2, Cfp3=Parcels of fear COVID-19.

Pwb: Psychological well-being, Ewb: Emotional well-being, Swb: Social well-being.

Significance of Indirect Effects – Bootstrapping

A bootstrapping analysis was conducted to find further supporting evidence for the full mediating effect of resilience (Table 5).

Table 2. Bootstrapping Process of Fully Intermediate Model

Model pathway	Bootstrap values		Bias %95CI	
	(β)	SE	Lower	Upper
Direct effect				
Fear of COVID-19 → Resilience	-.39	.05	-.48	-.27
Resilience → Mental Health Continuum	.57	.05	.46	.65
Indirect effect				
Fear of COVID-19 → Resilience → Mental Health Continuum	-.22	.03	-.29	-.15

Note. Bootstrap is based on 1,000 resamples (Hayes, 2017). β =Standardized coefficients. *p<.05.

When the bootstrapping coefficients presented in Table 5 and the confidence intervals of these coefficients were examined, it was seen that the direct paths were significant. It has also been found that the path which the indirect effect of the fear of COVID-19 on mental health continuum was also significant (b = -.22, 95% CI= -.29, -.15).

DISCUSSION

On the one hand, pandemic is real fear focus that threatens life and needs to be feared; on the other hand, it is a structure that prevents the spread of the virus by activating behaviors such as maintaining the necessary social distance, ensuring hygiene, staying at home in the process of COVID-19 (Sungur, 2020). Fear of COVID-19 can be considered as a central structure in explaining both the individual and social consequences of the pandemic process (Mertens et al., 2020). Concordantly, fear of COVID-19 is a factor that has an impact on the mental health of individuals (Fegert et al., 2020). Mental health is considered within the mental health continuum as a biopsychosocial situation (Keyes & Grzywacz, 2005). Mental health continuum is a structure that consists of sub-dimensions "emotional flourishing, social flourishing, psychological flourishing" (Keyes & Annas, 2009), and expresses the presence (flourishing) and absence (languishing) of mental health. The individual's mental health, strengths and positive aspects of his mental health status were related to resilience (Connor, 2006). The concept of resilience, is the ability of the individual to remain strong (Karaırmak, 2016), to continue his life and to have a purpose in case of encountering negative experiences (İnci & Boztepe, 2013). In other words, resilience is the psychological structure that helps an individual maintain his positive adaptation despite his negative experiences (Luthar et al., 2000).

The results of this study, the mediating role of resilience has been proven in the impact of fear of COVID-19 on the mental health continuum. According to Mertens et al. (2020), an individual who experiences an intense fear of COVID-19 may experience various mental health problems. In addition, an individual who has negative emotions such as fear during the COVID-19 pandemic process may face mental health problems by experiencing learned helplessness, thinking that his fate is not in his own hands (Shaw, 2020). The COVID-19 pandemic triggered psychological problems such as depression, panic disorder, and anxiety (Qiu et al., 2020). In the study that investigated whether healthcare workers had psychosocial problems during the COVID-19 process, it was observed that anxiety, depression, and obsessive-compulsive symptoms were higher in healthcare workers, especially those who were in direct contact with the patient (Zhang et al., 2020). In another study conducted with university students in China, it was found that people participating in the study experienced anxiety, depression and high levels of stress in relation to the COVID-19 process (Wang et al., 2020a). In a longitudinal study conducted with 1738 people in China, a questionnaire was applied twice to examine the mental health of individuals. Comparing the results of the surveys conducted twice, while no significant change was observed in the stress, anxiety and depression scores of the individuals in the first and the second questionnaire, it was observed that there was a significant decrease in post-traumatic stress disorder scores (Wang et al., 2020b). The study conducted with 7143 undergraduate students studying at China Changzhi Medical Faculty reveals that approximately 24.9% of the students experience anxiety-fear due to the COVID-19 pandemic (Cao et al., 2020). The literature also reveals the relationship between fear of COVID-19 and mental health

(Belen, 2020; Gritsenko et al., 2020; Isralowitz et al., 2020; Kwok et al., 2020; Mamun & Ullah, 2020; Yehudai et al., 2020; Zolotov et al., 2020). Within the scope of all these studies in the literature, it can be said that the COVID-19 process affects the mental health of individuals. In addition, especially considering that there is a relationship between the fear of COVID-19 and mental health, it is important for individuals to effectively deal with the fear of COVID-19 during the COVID-19 pandemic to protect their mental health.

Individuals may encounter traumatic life events at various stages of their life and each individual is affected by these difficult life events in different ways (American Psychological Assosiation, 2012). The stress and traumatic experiences faced by the individual affect the life balance and order (Kayacı & Özbay, 2016). The COVID-19 process is one of the traumatic life events faced by the individual, too. Resilience is also one of the concepts associated with the negative experiences of the individual throughout his life (Kına, 2019). An individual with high resilience adapts more easily to difficult life events that deeply affect his life and can cope more effectively with the stressful situation that occurs (American Psychological Assosiation, 2012). In addition, resilience may refer to the state of flourishing achieved by an individual at risk, or the characteristics and mechanisms by which this flourishing state is achieved (Ungar, 2004). Thanks to resilience, the individual begins to recover and adapt to his new life after traumatic experiences (Çam et al., 2014). There were studies in the literature that reveal the relationship between resilience and mental health (Bilge & Bilge, 2020; Naem et al., 2020; Yazıcı-Çelebi, 2020), show that the resilience of individuals in the COVID-19 process is an important factor in coping with the COVID-19 process. Also there were studies (Albott et al., 2020; Çetin & Anuk, 2020; Tönbül, 2020; Yıldırım et al., 2020) in the literature that reveals the meaningful and negative correlations between fear of COVID-19 and resilience. These literature findings support the findings of the present study. It can be interpretable that resilience is an important contributor to individuals' ability to effectively deal with a fear of COVID-19.

CONCLUSION

Throughout history, people have faced numerous mass traumas. In these traumatic events, it has been observed that individuals have some problems related to their mental health (Polizzi et al., 2020). The COVID-19 pandemic is also an important event, like other mass traumas that people have faced throughout history. The COVID-19 pandemic is a dangerous risk factor for mental health continuum. The reorganization of the life of the individual, the death of relatives, the weakening of social support systems, restriction of access to health services and economic conditions are factors affecting the mental health of the individual (Fegert et al., 2020). In addition, it is known that the changes in mental health of individuals exposed to traumatic events were affected by the ways they were supported before, during and after the traumatic event. Individuals who have to deal with a traumatic event experience post-traumatic growth along with resilience (Greenberg et al., 2020). From this point of view, it is important to strengthen the resilience to protect the mental health of individuals during the COVID-19 pandemic (Polizzi et al., 2020). In this process, mental health professionals can intervene to help individuals deal with the fear of COVID-19 (Zhang et al., 2020). For example, in Singapore during the COVID-19 pandemic necessary arrangements have been made for mental health professionals to provide psychological counseling services in order to protect the mental health of individuals and to strengthen their resilience (Ho et al., 2020).

Individuals can commit suicide as a negative reaction in pandemic, in relation to their mental health conditions (Devitt, 2020). In particular, mental health disorders or not having enough information about COVID-19 is one of the main reasons that lead the individual to commit suicide (Dsouza et al., 2020). The way to prevent mental health disorders with more advanced psychopathology such as depression, anxiety and suicide is to address the uncertainties and fears associated with the fear of COVID-19 through preventive mental health counseling (Xiang et al., 2020). In addition, in order to prevent or reduce problematic behaviors such as substance use, domestic violence and crime that may occur as a result of the fear of COVID-19, mental health professionals can be trained online and informed about the interventions they can take (Reznik et al. 2020). Especially healthcare professionals were even known to have resilience, they were at the

forefront of the COVID-19 process. So, their mental health is negatively affected. It is also important to provide psychological support to healthcare professionals in order to cope more effectively with the pandemic process globally (Santarone et al., 2020). To sum up, mental health professionals can provide psychological counseling services to healthcare professionals, people diagnosed with COVID-19, COVID-19 patients and their relatives, and every individual affected by COVID-19 uncertainty in a multidisciplinary manner (Xiang et al., 2020). Finally, social media platforms, television channels and especially news media, news portals, etc. can take measures to improve the mental health continuum of individuals in combating the negative situations caused by COVID-19 (Dsouza et al., 2020).

In this study, resilience as a protective factor affecting the mental health continuum of individuals and fear of COVID-19 as an inhibiting factor, and the causal relationships between these variables were revealed by quantitative study method. In future study, qualitative study can be conducted to examine the aforementioned protective and inhibitory factors that affect the mental health continuum of individuals in more depth. In addition, in the future, when researchers plan experimental study for the protection of individuals' mental health continuum, they can use the dimensions obtained in this study in their experimental programs.

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