Fear of Covid-19 and Subjective Well-Being: The Sequential Mediating Role of Cognitive Flexibility and Psychological Resilience

Covid-19 Korkusu ve Öznel İyi Oluş: Bilişsel Esneklik ve Psikolojik Sağlamlığın Sıralı Aracı Rolü

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ÖZ

The negative relationship between fear of COVID-19 and well-being has been revealed over the last years. However, the potential variables that affect this relationship need to be studied. This study examines the sequential mediating role of cognitive flexibility and psychological resilience in the relationship between fear of COVID-19 and subjective well-being. Six hundred and eight participants (339 females and 269 males, aged between 18-79 years) completed the Fear of COVID-19 Scale, the Brief Resilience Scale, the Cognitive Flexibility Inventory, the Positive and Negative Affect Schedule, and the Satisfaction with Life Scale online. The path analysis was conducted using PROCESS macro in the study. The sequential mediation analyses show that the control dimension of cognitive flexibility and psychological resilience fully mediate the relationship between fear of COVID-19 and subjective well-being. In other words, fear of COVID-19 indirectly affects subjective well-being via the control dimension of cognitive flexibility and psychological resilience fully mediates cognitive flexibility and psychological resilience levels should be increased to enhance their well-being.

Keywords: COVID-19, well-being, psychological resilience, cognitive flexibility

COVID-19 korkusu ve iyi oluş arasındaki olumsuz ilişki son yıllarda ortaya konulmuştur. Ancak bu ilişkiyi etkileyen olası değişkenlerin araştırılması gerekmektedir. Bu çalışma, COVID-19 korkusu ile öznel iyi oluş arasındaki ilişkide bilişsel esneklik ve psikolojik sağlamlığın sıralı aracı rolünü incelemeyi amaçlamaktadır. Altı yüz sekiz katılımcı (339 kadın ve 269 erkek, 18-79 yaş aralığında) COVID-19 Korkusu Ölçeği, Kısa Psikolojik Sağlamlık Ölçeği, Bilişsel Esneklik Envanteri, Pozitif ve Negatif Duygu Ölçeği ile Yaşam Doyumu Ölçeğini çevrimiçi yoldan doldurdular. Araştırmada yol analizi, PROCESS makrosu kullanılarak gerçekleştirilmiştir. Sıralı aracılık analizleri, bilişsel esneklik ve psikolojik sağlamlığın kontrol boyutunun COVID-19 korkusu ile öznel iyi oluş arasındaki ilişkiye tam aracılık ettiğini göstermektedir. Başka bir deyişle COVID-19 korkusu, bilişsel esneklik ve psikolojik sağlamlığın kontrol boyutu aracılığıyla öznel iyi oluş üzerinde dolaylı olarak etkilemektedir. COVID-19'un olumsuz etkilerini azaltmak ve bireylerin iyilik halini artırmak için bilişsel esneklik ve psikolojik dayanıklılık düzeylerinin artırılması gerekmektedir.

Anahtar sözcükler: COVID-19, iyi oluş, psikolojik sağlamlık, bilişsel esneklik

Introduction

In 2019, with the spread of the Covid-19 virus, individuals' daily lives began to be affected in all areas. With the deterioration of daily life routines, an environment of uncertainty has been experienced for all individuals. This situation has led to changes in individuals' feelings of fear at different levels. Although uncertainties have decreased with the announcement of a pandemic by the World Health Organization and an increase in scientific research into the virus, it can be seen that the feeling of fear continues to exist. Within this context, it is estimated that the fear of Covid-19 will affect the emotional situation of individuals.

Address for Correspondence: Ezgi Ekin Şahin, Anadolu Üniversitesi, Psychological Counseling and Guidance Center, Eskişehir, Turkey E-mail: ezgiekinsahin@anadolu.edu.tr Received: 4.02. 2022 Accepted: 19.08.2022 ORCID ID: 0000-0001-7659-8078 Fear of Covid-19 is conceptualized as an emotion experienced when individuals face the probability of Covid-19 virus infection (Ahorsu et al. 2022). Since the beginning of the pandemic, there has been an increase in studies investigating how people's quality of life is affected. It can be seen that there are positive relationships between fear of Covid-19 and psychological distress, such as anxiety, depression, and stress among various cultures (Bitan et al. 2020, Lin et al. 2020, Wanberg et al. 2020, Bakioğlu et al. 2021, Di Blasi et al. 2021, Satici et al. 2021, Servidio et al. 2021, Vos et al. 2021). In other words, as the fear of Covid-19 levels of individuals increase, their psychological symptoms also increase. In addition, research showed that a higher level of Covid-19 fear is associated with increased suicidal ideation (Mamun et al. 2021). The findings of these studies show that the fear of Covid-19 significantly affects the mood of individuals.

Subjective well-being is defined as an individual's judgment of life satisfaction through cognitive assessment and an ability to feel positive emotions rather than negative ones that give individual satisfaction in life (Diener and Diener 1996). According to Diener (1984), subjective well-being has three components; negative affect, positive affect, and life satisfaction. In addition, Diener (2006) points out that subjective well-being is an umbrella term that comprises the individuals' evaluations of their lives, events that happened to them, their bodies and minds, and the conditions in which they live. These explanations represent the emotional and cognitive dimensions of the term.

Studies conducted in different countries have investigated the relationship between fear of Covid-19 and variables considered in the context of positive psychology. The results show that there are negative relationships between fear of Covid-19 and life satisfaction (Satici et al. 2021, Gündoğan 2021), positivity (Bakioğlu et al. 2021), subjective happiness, hope, psychological resilience (Satici et al. 2020), mental well-being (Satici et al. 2022), meaning in life (Karataş and Tagay 2021) and well-being (Ahuja et al. 2020, Deniz 2021, Özmen et al. 2021). In addition, studies conducted in various countries show that the fear of Covid-19 reduces the quality of life (Dymecka et al. 2020, Wanberg et al. 2020, Özmen et al. 2021). It seems that the fear of Covid-19 has an undesired effect regarding subjective well-being.

Determining the variables that play a role in the relationship between individuals' fear of Covid-19 and their subjective wellbeing will be a guide for mental health professionals. Concordantly, it has been found that there is a negative relationship between fear of Covid-19 and well-being; this relationship was weaker among people with higher scores on mindfulness, optimism, and resilience (Vos et al. 2021). In this context, another aim of this study is to present the mediating role of the fear of Covid-19 and the subjective well-being relationship. Although numerous possible variables could be examined, it was decided to investigate the psychological and cognitive factors in particular. Therefore, cognitive flexibility and psychological resilience are considered.

The ability to alter the cognitive sets to adjust to changing environmental stimuli is referred to as cognitive flexibility (Dennis and Vander Wal 2010). In another definition, the term is described as an individual's awareness of options and appropriate alternatives in any situation, volunteering to be flexible and adapt to a situation, and feeling competent to be flexible (Martin and Rubin 1995, p.623). Dennis and Vander Wal (2010) have conceptualized the term with two dimensions; Control and Alternatives. The first dimension represents the tendency to see stringent conditions as within one's control, and the second dimension represents the ability to perceive multiple different statements for conditions and the behavior of others, thereby producing different solutions to difficult circumstances. The existing literature found that cognitive flexibility is associated with a high quality of life, which is closely related to one's well-being (Yelpaze and Yakar 2019, Al-Zoubi 2020). In addition, cognitive flexibility is positively associated with mental (Demirtaş 2020), psychological (Cardom 2016, Malkoç and Kesen Mutlu 2019), and subjective well-being (Muyan Yılık and Demir 2020). Studies revealed that high levels of anxiety and depression are associated with lower cognitive flexibility (Wilson et al. 2018, Yu et al. 2020). In addition, it positively affects emotion management skills (Ochsner and Gross 2007). All of the findings show that individuals with cognitive flexibility have an advantageous position in terms of mood. On the other hand, when the two dimensions of cognitive flexibility are analyzed separately, it has been found that the alternatives correlate positively and that control correlates negatively with life satisfaction (Çıkrıkçı 2018).

The relationship between cognitive flexibility and fear of Covid-19 has been studied over the last year. One of the findings of these studies shows that the perceived threat of Covid-19 and the control dimension of cognitive flexibility has a negative correlation and that the alternative dimension has a low and positive correlation among American adults (Kalia et al. 2020). Another study shows that the dimensions of cognitive flexibility negatively correlate with perceived stress, and that the control dimension fully mediates the perceived stress and future career relationship among Iranian dentists (Afshari 2020). These results support the idea that the dimensions of cognitive flexibility have to be studied individually.

Many researchers define psychological resilience differently. For instance, Connor and Davidson (2003) see psychological resilience as the qualities individuals possess to overcome difficulties. In addition, Luthar et al. (2000) identify it as a dynamic process involving adapting positively in the face of significant challenges. Furthermore, Smith et al. (2008) describe it as the ability to bounce back or recover from stress. However, there are many definitions of the concept, Fletcher and Sarkar (2013) state that adversity and positive adaptation are common threads to all of this. In the relevant literature, there are significant positive relationships between psychological resilience and the variables that support the self, such as gratitude, self-acceptance, selfefficacy, autonomy (Kardaş and Yalçın 2021), and self-esteem (Arslan 2019). Within the context of mental health, resilience has been negatively related to mental health difficulties (Hu et al. 2015, Gloria and Steinhardt 2016, Lereya et al. 2016). On the other hand, there is a positive relationship between resilience and life satisfaction (Arslan 2019), happiness (Lü et al. 2014), and satisfaction with life (Yıldırım and Belen 2019). Additionally, the

results of these studies, which were conducted with individuals exposed to disasters, such as Hurricane Katrina or the Deepwater Horizon Oil Spill, show that resilience reduces long-term depression and posttraumatic depression rates (Shenesey and Langhinrichsen-Rohling 2015, Blackmon et al. 2017).

There is existing literature on the relationship between psychological resilience and the emotional effects of Covid-19. A study conducted in the United States during curfews, it was determined that the level of resilience was higher among individuals who perceived more social support from family, friends, and other important people, getting outside more, praying more, exercising more, and sleeping better (Killgore et al. 2020). In other studies, it has been revealed that individuals who perceive themselves as psychologically resilient experience fewer mental health problems among Israeli adults (Pijnenburg et al. 2021), Ukrainian healthcare professionals (Chaban et al. 2021), and Turkish adults (Gündoğan 2021). Additionally, individuals with a higher level of resilience have lower levels of future anxiety and report effects on subjective mental well-being (Paredes et al. 2021). Furthermore, it has been presented that psychological resilience has a mediator role in the psychological symptoms assessed before and after the pandemic among Turkish adults (Bilge and Bilge 2021). In this context, it is understood that psychological resilience has a protective function in terms of the emotional effects of the pandemic.

The first case of Covid-19 was reported on 11 March 2020 in Turkey. The government started implementing several precautionary measures immediately, such as closing schools and universities and canceling crowded activities, such as concerts. In the same year, a curfew was implemented at certain times. In March 2021, it was seen that people had spent most of their time at home over the previous year. On 3 March 2021, the first day of the data collection, the infected case number was 11,520, and the death toll was 65 in Turkey.

On the other hand, on 17 March 2021, when the last participant was involved in the study, the infected case number was 18,912, and the death toll was 73. In addition, the total number of cases was 2,930,554, and the death toll was 29,696 at that time (Saglik Bakanligi 2021). Consequently, the infected case and death toll numbers increased during the data collection.

This study was designed as a correlational study to investigate the relationship between fear of Covid-19, cognitive flexibility, psychological resilience, and subjective well-being. In the literature, some findings reveal the significant effect of emotions on cognitive flexibility. For example, Wang et al. (2017) state that *'emotional states modulate activities of anterior cingulate cortex in response to switching trials.*' In addition, Wu et al. (2021) report that cognitive flexibility has a full mediator role in the relationship between Covid-19-related Internet language (CINL) and mental health. The researchers state *'Positive emotions, which CINL triggers, can promote individuals' cognitive flexibility.*' As a result, we thought that fear of Covid-19 would decrease the cognitive flexibility levels of individuals.

Additionally, it was stated that cognitive flexibility enhances the psychological resilience levels of individuals (Genet and Siemer

2011, Aydın Sünbül 2020). Given the presented information, the purpose of the study is to test the sequential mediation role of cognitive flexibility and psychological resilience in the relationship between fear of Covid-19 and subjective well-being. Consequently, the following hypotheses are proposed: Cognitive flexibility has a mediator role between fear of Covid-19 and subjective well-being. Psychological resilience has a mediator role between fear of Covid-19 and subjective well-being. Lastly, cognitive flexibility and psychological resilience have a sequential mediator role between fear of Covid-19 and subjective well-being.

Method

Sample

The sample of this study is comprised of 696 participants above the age of 18 years. However, the data relating to 74 participants were excluded because of incorrect answers to control questions. The data relating to 13 participants were excluded due to a Mahalanobis distance analysis. Therefore, the analysis was conducted with 608 participants. The personal information of participants can be found in Table 1. 55.8% of the sample were female (N = 339), and 44.2% were male (N = 269). The participants' ages ranged from 18 to 79 years, with a mean of 34.31 years (SD = 11.08). Most participants (72.4%) held at least a Bachelor's degree. Four hundred and thirty-eight participants (72.04%) were working, 121 of them (19.9%) were students, and 25 of them (4.11%) did not work, while 24 of them (3.95%) were retired. Concerning where they resided, it is reported that 528 participants (86.84%) lived in a large metropolis, and 80 (13.16%) lived in other cities. Regarding exposure to Covid-19, 71 participants (11.7%) were diagnosed with Covid-19, while the relatives of 132 participants (21.7%) were diagnosed with Covid-19.

Table 1. Personal Information of Participants								
	Grup	f	%					
Gender	Women	339	55.8					
	Men	269	44.2					
	Total	608	100					
Education	Elementary School	6	1					
	High School	44	7.2					
	Bachelor's Degree	440	72.4					
	Master's Degree	91	15					
	Doctoral Degree	27	4.4					
	Total	608	100					
Occupation	Working	438	72.04					
	Nonworking	25	4.11					
	Retired	24	3.95					
	Student	121	19.9					
	Total	608	100					
Having Covid-19	Diagnosed	71	11.7					
	Non-diagnosed	537	88.3					
	Total	608	100					
Having Relatives with Covid-19	Diagnosed Non-diagnosed Total	132 476 608	21.7 78.3 100					

Measures

Demographic Information Form:

The demographic information of the participants, such as age, gender, education, occupation, place of residence, and exposure to Covid-19, was gathered.

The Fear of Covid-19 Scale

The scale was developed to assess the fear level of Covid-19 in individuals (Ahorsu et al. 2022). It is a unidimensional scale with seven items rated on a five-point Likert scale ranging from strongly disagree to agree strongly. Higher scores indicated the elevation of Covid-19 fear. The Turkish adaptation was carried out by Bakioğlu et al. (2021), with the Cronbach alpha of .88. The Cronbach alpha was found to be .82 in this study.

Positive and Negative Affect Schedule (PANAS)

The scale is used to evaluate the positive and negative affect (Watson et al. 1988). The scale consisted of 20 items, 10 of which assess the positive affect and the other 10 assess the negative affect. The items are rated on a five-Point Likert Type. The Turkish adaptation of this was conducted by Gençöz (2000), with the Cronbach alpha for the positive affect and the negative affect being found to be .86 and .83, respectively. The Cronbach alpha was found to be .88 for the positive affect and .87 for the negative affect in this study.

The Satisfaction with Life Scale

The instrument is a unidimensional scale comprising five items rated on a five-Point Likert ranging from completely disagree to completely agree (Diener et al. 1985). Higher scores indicated the elevation of life satisfaction. The Turkish adaptation was conducted by Dağlı and Baysal (2016), with the Cronbach alpha being reported as .88. The Cronbach alpha was found to be .87 in this study.

The Brief Resilience Scale (BRS)

The scale is used to measure the level of individual resilience (Smith et al. 2008). It is a unidimensional scale with six items rated on a five-Point Likert. Higher scores indicated the elevation of psychological resilience. The Turkish adaptation was conducted by Doğan (2015), with the Cronbach alpha being reported as .83. The Cronbach alpha was found to be .84 in this study.

The Cognitive Flexibility Inventory (CFI)

The scale is used to measure the cognitive flexibility levels of individuals in different circumstances (Dennis and Wal 2010). It is a bidimensional scale of twenty items rated on a five-Point Likert scale. The Turkish adaptation was conducted by Gülüm and Dağ (2012), with the Cronbach alpha being reported as .89 for alternatives, .85 for control, and .90 for all scales. The Cronbach alpha was found to be .87, .84 and .88, respectively, in this study.

Procedure

The Ethical Committee of Anadolu University approved the study with reference number 25757 on 03 March 2021. The participants

were contacted via an online study link, and informed consent was obtained in the first step. Participants were given information about the study's goal, anonymity, voluntariness, and the right to withdraw. Participants completed the Demographic Information Form, the Fear of Covid-19 Scale, the Cognitive Flexibility Inventory, the Positive and Negative Affect Scale, the Brief Resilience Scale, and the Satisfaction with Life Scale in a systematic order once the informed consent was approved. After completing the instruments, the participants received an automated message thanking them for their participation. Data were analyzed in an SPSS 22 Program for descriptive statistics after data collection, and the mediation analysis was done using the PROCESS macro (Hayes and Preacher 2013).

Statistical Analysis

Within the scope of the research, standard deviation, kurtosis, and skewness coefficient, Pearson Correlation Coefficient, and sequential mediation analysis were used. We tested the normal distribution assumption for each variable to test the suitability of the data for analyses. The skewness and kurtosis values were within the -1 and +1 limits, so the data was accepted as normally distributed. The significance of the relationships between the variables was tested with the Pearson correlation coefficient. Based on the literature, we designed the model on the idea that fear of covid would predict subjective well-being. In literature, some findings revealed that cognitive flexibility impacts psychological resilience. Therefore, we designed the model such that cognitive flexibility predicts resilience. Then, the sequential mediating role of cognitive flexibility and psychological resilience in the relationship between fear of Covid-19 and subjective wellbeing was tested with PROCESS macro (Hayes 2013). Finally, the bootstrapping analyses were conducted with parameter estimates based on 5000 bootstrap samples, and the bias-corrected and accelerated 95% confidence intervals were examined.

Results

Preliminary Analysis

The data was declared normal because the skewness values for all variables were between -.18 and +.10, and the kurtosis values were between -.26 and +.62. Hence, Pearson's correlation coefficient values were reported. As presented in Table 1, fear of Covid-19 is negatively associated with psychological resilience, cognitive flexibility- control dimension, cognitive flexibility, and subjective well-being (r = -.23, r = -.25, r = -.14, r = -.19, all p <.01, respectively). Psychological resilience is positively associated with all dimensions of cognitive flexibility; r = .26 for cognitive flexibility- alternative, r = .62 for cognitive flexibility- control and r = .50 for cognitive flexibility, all p < .001) and subjective wellbeing (r = .50, all p < .01). Finally, cognitive flexibility- control and cognitive flexibility- alternative and overall score of cognitive flexibility are positively associated with subjective wellbeing (r = .26, r = .41, all p < .01, respectively).

Mediation Analysis

Since the alternative dimension of cognitive flexibility was not significantly related to fear of Covid-19, all analyses were run with

only the control dimension of cognitive flexibility. As Figure 1 illustrates, the results show that the fear of Covid-19 significantly predicted the control dimension of cognitive flexibility (B = -.22, SE = .04, p < .001), and psychological resilience (B = -.07, SE = .03, p = .009). Moreover, the control dimension predicted psychological resilience and subjective well-being (B = .56, SE = .03, p < .001, B = .72, SE = .04, p < .001, respectively). Finally, psychological resilience predicted subjective well-being (B = 1.21, SE = .15, p < .001). The model explained 29% of the variance in subjective well-being ($R^2 = .29$, F (3, 604) = 81.58, p < .001).

The results support the simple mediation hypotheses and sequential mediation hypotheses (see Table 3). Specifically, the simple mediation path from fear of Covid-19 via the control dimension of cognitive flexibility to subjective well-being yielded a significant indirect effect (B = -.06, 95% CI [-.19; -.09]). Similarly, the simple mediation path from fear of Covid-19 by psychological resilience to subjective well-being yielded a significant indirect effect (B = -.03, 95% CI [-.06; -.007]). Finally, the sequential mediation effect of both the control dimension of cognitive flexibility and psychological resilience was significant (B = -.05, 95% CI [-.08; -.03]). The results indicate that total indirect effect of fear of Covid-19 on subjective well-being is significant (B = -.39, 95% CI [-.53; -.26]), however; the direct effect of fear of Covid-19 on subjective well-being is not significant (B = -.14, 95% CI [-.33; .06]). The insignificant direct effect of fear of Covid-19 shows

that the inclusion of the two mediators in the model eliminates the direct effect of fear of Covid-19 on subjective well-being.

Discussion

This present study examines whether the relationship between fear of Covid-19 and subjective well-being is sequentially mediated by cognitive flexibility and psychological resilience. The findings show that while the control dimension of cognitive flexibility has a negative relationship with fear of Covid-19, the alternatives dimension does not have a significant relationship. Sequential mediation analyses show that the control dimension of cognitive flexibility and psychological resilience fully mediate the relationship between fear of Covid-19 and subjective wellbeing.

The relationship between the fear of Covid-19 and subjective well-being has been studied from the beginning of the pandemic. We find a negative relationship between these variables in the current study, in parallel with previous studies focusing on the relationship between the fear of Covid-19 and well-being (Ahuja et al. 2020, Deniz 2021, Özmen et al. 2021, Satici et al. 2022). Fear, as a primitive feeling, causes a fight or flight response in individuals. In the case of the current pandemic, individuals have been forced to stay at home, not to come together with others, and to work or study at distance. Even when the curfew is said to



Figure 1. Sequential Mediation Model (Note: B = unstandardized coefficient, *p < .01, **p < .001)

Table 2. Correlation coefficients									
	1	2	3	4	5	6			
Fear of Covid-19	1	233*	017	246*	141*	185*			
Psychological Resilience		1	.260*	.620*	.498*	.503*			
Cognitive Flexibility- Alternatives			1	.421*	.878*	.262*			
Cognitive Flexibility- Control				1	.804*	.454*			
Cognitive Flexibility					1	.412*			
Subjective Well-Being						1			
Mean	17.63	20.09	52.99	26.31	79.30	25.15			
SD	5.01	4.16	5.48	4.42	8.37	14.19			
α	.82	.84	.89	.85	.90	-			
*p < .01									

Table 3. Direct and Indirect Effect(s) of Fear of Covid-19 on Subjective Well-being												
	Model 1 DV= Cognitive Flexibility -Control		Model 2 DV= Psychological Resilience		Model 3 DV= Subjective Well-being			Indirect Effects				
	B (SE)	p	95% CI	B (SE)	p	95% CI	B (SE)	p	95% CI	Effect	SE	95% CI
Fear of Covid-19	22 (.04)	.00	[29;15]	07(.03)	.009	[12;02]	14 (.10)	.17	[33; .06]			
Cognitive Flexibility- Control				.56(.03)	.00	[.50; .62]	.72 (.14)	.00	[.44; 99]			
Psychological Resilience							1.21 (.15)	.00	[.91; 1.5]			
FC -> CFlex-C -> SWB										06	.02	[19;09]
FC -> PRES-> SWB										03	.01	[06;007]
FC -> CFlex-C -> PRES -> SWB										05	.01	[08;03]
R-squared	.06			.39			.29					
Note. FC = Fear of Cou	vid-19, CFlex-C	= Cogni	tive Flexibility- C	ontrol, PRES =	Psycholo	ogical Resilience, S	SWB = Subjectiv	e Well-be	eing,			

CI = Confidence Interval, SE = Standard Error.

be over in Turkey, people try to maintain certain precautionary, such as wearing medical facemasks or practicing social distancing. These conditions may be unfamiliar to the participants, and there has been no space to fight viruses. Under such conditions, people have had to choose a flight. This unfamiliar lifestyle might cause a decrease in subjective well-being for the collectivist Turkish population. Consequently, the fear of Covid-19 is considered a threatening factor for individuals.

When looking at the relationship between fear of Covid-19 and subjective well-being, the control dimension of cognitive flexibility was found to be one of the mediators. The relationship between cognitive flexibility with the fear of Covid-19 (Kalia et al. 2020) and subjective well-being (Muyan Yılık and Demir 2020) has been established through studies in the literature. The results of these studies show that higher cognitive flexibility is associated with a lower fear of Covid-19 and more well-being. The results of the current study are parallel with these relationships. When the model is examined, fear of Covid-19 seems to decrease the tendency to see the situation as controllable for individuals. Within the unfamiliar lifestyle of pandemic days, people might feel anxious because of uncontrollable and unpredictable situations. The literature emphasizes that cognitive flexibility is positively associated with emotion management skills (Ochsner and Gross 2007) and problem-solving styles (Buğa et al. 2018, Kalia et al. 2019). Cognitive flexibility seems to be a desirable trait with both personal and interpersonal positive effects. However, the negative effect of fear of Covid-19 on the control dimension of cognitive flexibility seems to cause a decrease in emotion management. Consequently, a decreasing level of subjective wellbeing seems inevitable.

Another finding of the study shows that psychological resilience has a partial mediator role in the relationship between fear of Covid-19 and subjective well-being. In other words, individuals with a lower level of fear experience a high level of resilience, which protects their subjective well-being. Similar relationships have been presented in the literature. It is stated that psychological resilience leads people to adapt positively when faced with challenging situations (Luthar et al. 2000). As resilient individuals adapt more quickly to the pandemic, they may not experience a higher level of fear. This situation may result in an optimistic prediction of subjective well-being. In parallel with this assumption, the level of worry regarding Covid-19 is lower among individuals with higher resilience (Killgore et al. 2020). In this respect, psychological resilience may take a protective role for individuals concerning fear of Covid-19.

The result of this study shows that the effects of the fear of Covid-19 on subjective well-being are sequentially mediated by the control dimension of cognitive flexibility and psychological resilience. In addition, there is a positive relationship between the mediators. This finding seems to be in parallel with studies in the literature that present that cognitive flexibility enhances the psychological resilience level of individuals (Genet and Siemer 2011, Aydın Sünbül 2020).

This study has certain limitations. First of all, the data collection process was carried out with self-report. One of the most crucial problems of self-reporting studies is social desirability (van de Mortel 2008). Although social desirability can be controlled with items in an instrument, it was not controlled in the present study. The second limitation is the way of data collection. Because of the high dropout rate in internet studies (Hoerger 2010), potential participants can be lost. The third and final limitation is the sample. Although most of the participants were employed adults, the sample was non-probabilistic. In addition, the current research was carried out in Turkey. Hence the generalization of the results can be problematic considering the non-probabilistic sample and cultural differences.

This study is one of the first to test the mediator role of cognitive flexibility and psychological resilience in the relationship between the fear of Covid-19 and subjective well-being. Therefore, there is still a need to test the mediator role of those factors to validate the findings of this study. Future studies can investigate this relationship using self-reporting instruments and by conducting interviews. In addition, researchers can investigate this relationship among different cultures to generalize the results.

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