Empirical Article

The role of covid-19 anxiety and intolerance of uncertainty in predicting resilience

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Resilience is one of the protective factors for mental health. The aim of this study is to reveal the role of COVID-19 anxiety and intolerance of uncertainty in predicting resilience in adulthood. To this end, data were collected from 533 adults (359 women-174 men). A hierarchical regression analysis was performed, controlling for the effects of gender and presence of a chronic disease on the prediction of resilience. Results showed that intolerance of uncertainty and COVID-19 anxiety were statistically significant predictors of resilience. Gender and presence of a chronic disease were not statistically significant in predicting resilience. These results indicate that intolerance of uncertainty plays an important role in explaining resilience.

Key words: COVID-19 anxiety, intolerance of uncertainty, pandemic, resilience.

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INTRODUCTION

COVID-19, which has spread rapidly around the world from China since the last months of 2019, has caused a global pandemic and was declared a pandemic in March 2020 (World Health Organization [WHO], 2020a). This virus causes a course that requires intensive treatment and even death (Fu, Wang, Yuan *et al.*, 2020). To protect public health and stop the spread of the virus, countries have taken measures such as isolation, quarantine, and closures (WHO, 2020b). Changes such as the high rate of spread of the disease, restrictions due to the measures taken, lifestyle changes (Haleem, Javaid & Vaishya, 2020), economic problems (Qian & Fan, 2020) have also negatively affected the mental health of individuals (Khan, Mamun, Griffiths & Ullah, 2020). During the pandemic, symptoms such as insomnia (Pappa, Ntella, Giannakas, Giannakoulis, Papoutsi & Katsaounou, 2020), depression, anxiety (Choi, Hui & Wan, 2020; Hyland, Shevlin, McBride *et al.*, 2020) and Post-traumatic stress disorder (Wang *et al.*, 2020) increased. Stress is predicted to increase the longer the pandemic lasts, leading to depression, anxiety, and uncertainty about the future (De Souza, Mohandas & Javed, 2020).

The pandemic COVID-19 brought financial and moral losses for many people. Financial, psychological, and physiological difficulties have arisen mainly due to people's worries about getting sick and losing their relatives. It has been observed that people's reactions to challenging life events such as pandemics vary widely. While some people are intimidated, others are able to accept the situation and bounce back in a short period of time. This underscores the importance of examining the factors that can protect mental health during the COVID-19 (Magson, Freeman, Rapee, Richardson, Oar & Fardouly, 2021). Indeed, it has been observed that individuals who are able to cope with the stress caused by the pandemic show fewer such symptoms

(Arıkan, 2021). The ability of individuals to adapt quickly in response to such stressful life experiences is defined as resilience (Gürgan, 2006). These such traits can be learned and improved, which enable individuals to survive and overcome existing difficulties despite difficult life conditions (Gürgan, 2006; Higgins, 1994). Some individuals are able to survive and successfully continue their normal lives despite encountering a problem (Gürgan, 2006; Masten, 2001). This is an important issue with regard to psychological problems during and after the pandemic COVID-19 (Killgore, Taylor, Cloonan & Dailey, 2020).

Resilience is one of the protective factors that enable overcoming these difficulties (Naeem, Irfan & Javed, 2020; Polizzi, Lynn & Perry, 2020) and plays an important role in protecting mental health both during and after the pandemic (Killgore *et al.*, 2020). Resilience involves recovering quickly in the face of challenging events and emerging stronger from stressful and stressful events (Henderson, 2012; Jackson, Firtko & Edenborough, 2007). Resilient individuals not only adapt to difficulties, but also strive to improve by improving (Jakovljevic, 2018). During the COVID-19 pandemic, people's resilience may have decreased while their vulnerability to external factors increased (Sadati, Lankarani & Bagheri Lankarani, 2020).

There is a negative relationship between resilience and mental health (Huang, Wu, Wu, Yang, Zheng & Wu, 2020), and resilience is found to be a protective factor for mental health (Reyes, Constantino, Cross, Tan, Bombard & Acupan, 2019). On the other hand, the fact that the pandemic has been ongoing for almost two years, the recent increase in the transmission rate due to viral mutations, the lack of a definitive treatment method, the incompleteness of vaccine trials, the uncertainty of when the pandemic will end, especially the information about the epidemic and vaccines have reached the public. Factors such as the rapid spread of uncertainty are a source of fear, anxiety, and worry for

people who inherently avoid uncertainty and want to know about their future, and avoid risk. COVID-19 and the COVID-19 process triggered by the pandemic have made this uncertainty unbearable. Many people experience uncertainty about the present or the future in their lives (Sarıçam, 2014). Studies have shown that people with high intolerance of uncertainty perceive these uncertainties as fear, anxiety, and worry (Belge, 2019; Dugas, Gosselin & Ladouceur, 2001; Dugas, Hedayati, Karavidas, Buhr, Francis & Phillips, 2005; Karataş & Uzun, 2018; Kilit, Dönmezler, Erensoy & Berkol, 2020; Öz-Ceviz, Tektaş, Basmacı & Tektaş, 2020; Yıldız & Güllü, 2018). The increase in the value of intolerance of uncertainty predicts the increase in the level of anxiety (Yüksel, 2014). It is known that as intolerance of uncertainty increases, effective coping strategies for stress decrease (Coşkun, 2019). The fact that unexpected events are a risk factor for resilience (Weick & Sutcliffe, 2007) makes it important to assess resilience during the COVID-19. The uncertainty created by this unexpected process can be managed with intolerance of uncertainty. Uncertainty is a psychological state of unpredictability (Kuang & Wilson, 2017). Intolerance of uncertainty is defined as a cognitive bias that affects how a person perceives, interprets, and responds to uncertain situations, and increases anxiety (Dugas *et al.*, 2005; Fergus & Bardeen, 2013). According to Sexton, Norton, Walker and Norton (2003) intolerance of uncertainty has been shown to have an affect on anxiety and generalized fear. Also intolerance of uncertainty; it is also associated with psychological problems (Smith, Twohy & Smith, 2020), mood states such as anxiety and sadness (Meeten, Dash, Scarlet & Davey, 2012), depression, health anxiety, and maladaptive coping strategies (Rettie & Daniels, 2020). In the study of Sarıçam, Deveci and Ahmetoglu (2020), there is a negative relationship between intolerance of uncertainty and resilience. It was observed that the uncertainties in the COVID-19 have negative effects on people's mental health (Ornell, Schuch, Sordi & Kessler, 2020). In this context, it can be said that intolerance of uncertainty is a predictor of COVID-19 related worries (Voitsidis, Gliatas, Bairachtari *et al.*, 2020).

During the pandemic, individuals started to feel COVID-19 anxiety, with triggers including fear of getting sick and uncertainty (Lee, 2020). COVID-19 anxiety, coronaphobia (Asmundson & Taylor, 2020), and fear of COVID-19 (Ahorsu, Lin, Imani *et al.*, 2020), which are all associated with mental health problems (Fitzpatrick, Carson & Weisz, 2021), such as depression, anxiety, and stress (Satici, Gocet-Tekin, *et al.*, 2020). Fear of infection COVID-19 may increase the likelihood of developing mental health problems (Dsouza, Quadros, Hyderabadwala & Mamun, 2020). Management strategies and other means are very important to deal with this anxiety (Allen, Tsao, Seidman, Ehrenreich-May & Zeltzer, 2012). The previous studies stated that resilience and COVID-19 anxiety are related (Satici, Kayis, *et al.*, 2020), and resilience is considered as a protective factor (Vos, Habibović, Nyklíček, Smeets & Mertens, 2021).

It is found that as intolerance of uncertainty increases, individuals experience problems in their lives (Geçgin & Sahranç, 2017) and their anxiety levels increase (Rettie & Daniels, 2020). As a result of all these studies, it is inevitable that uncertainty has negative effects on individuals' psychological well-being. All these findings highlight the relationship between intolerance of uncertainty and resilience.

Global pandemics have occurred throughout history. In the last 20 years in particular, we can speak of SARS and influenza pandemics as infectious diseases (Preti, Di Mattei, Perego *et al.*, 2020). In addition to research on the physical and psychological effects of infectious diseases such as SARS (Wu, Chan & Ma, 2005), 3,166 articles dealing with pandemics requiring quarantine such as SARS, Ebola, H1N1 influenza, Middle East Respiratory Syndrome (MERS), and equine influenza, it has been observed that negative psychological effects such as casualties, inadequate information and stigmatization (Brooks *et al.*, 2020). The results of previous pandemics have shown that the impact on mental health lasts longer than the pandemic itself, its prevalence is higher and calculating the psychological impact is quite difficult (Shigemura, Ursano, Morganstein, Kurosawa & Benedek, 2020). For this reason, it is important to determine the protective factors related to people's resilience during the pandemic COVID-19 in order to promote people's mental health both in the short term and after the pandemic.

As suggested in previous studies, based on the association between psychological symptoms, unexpected life events, and resilience in the COVID-19 process (Huang *et al.*, 2020), we hypothesized that both COVID-19 anxiety and intolerance of uncertainty would have predictive value for resilience. Similarly, we expected that gender and presence of a chronic disease would predict resilience, as previously suggested (Bonanno, Galea, Bucciarelli & Vlahov, 2007). Resilience was hypothesized to reduce COVID-19 anxiety and to be associated with lower intolerance of uncertainty.

METHODS

Procedure

The study has taken place during the COVID-19 pandemic. The study began after the college ethics committee approval. The scales were created in Google form and sent to participants via Whatsapp and other social media.

Participants

In order to reach the participants, the data collection tool prepared in Google form was shared on WhatsApp and Instagram social media. Snowball sampling method was used while collecting the participants. Data were collected for 4 weeks from individuals aged 18 and over who voluntarily participated in the study. Participants consisted of 673 individuals over the age of 18, 471 women and 202 men. While determining the study group, criterion sampling was used and the participants were limited according to the following criteria:

- having been diagnosed with COVID-19,Presence of a chronic disease and being hospitalized (Bolig & Weddle, 1988; Hobfoll & Lerman, 1988; Wells & Schwebel, 1987);
- being quarantined in the process of the COVID-19 pandemic;
- negative life events (Masten, Best & Garmezy, 1990; Masten, Best & Garmezy, 1999; Masten, Neemann & Andenas, 1994);
- losing one or both parents in an earlier period (Dryfoos, 1990; Rutter, 1980);
- disease (Dryfoos, 1990; Rutter, 1980); and

- having parents who live apart or divorced or living with a single parent (Grych & Fincham, 1997; Hetherington & Stanley-Hagan, 1999; Mulholland, Watt, Philpott & Sarlin, 1991).The study group took its final form as 533 individuals, 359 women and 174 men, over the age of 18. The minimum sample size for the study is "50 + 8 m" as suggested by Tabachnick and Fidell (2013). In this study, m (number of independent variables) is 2. In this regard, the minimum number for the study sample was found to be 66.

Demographic information: in the study, a personal information form was used and demographic information including age, gender, education level, job, marital status and having or not having children were obtained. The form, consisting of 11 items in total, also covers questions related to the inclusion criteria.

Coronavirus anxiety: Coronavirus Anxiety Scale was developed by Lee (2020) so as to measure disruptive anxiety cases and anxiety symptoms in individuals during the COVID-19. The scale, which consists of five items and a single factor is a five-point Likert type scale. In the original form of the scale, the Cronbach alpha coefficient was found to be 0.93. The adaptation studies of the scale into Turkish were performed by Akkuzu, Yumuşak, Karaman, Ladikli, Türkkan and Bahadır, (2020). In the study, the Cronbach alpha internal consistency coefficient was calculated as 0.81. Within the scope of this study, the Cronbach alpha internal consistency coefficient obtained from the Coronavirus Anxiety Scale was found to be 0.76.

Intolerance of uncertainty: the Intolerance of Uncertainty Scale (IUS-12), developed by Carleton, Norton and Asmundson (2007), is a scale enabling adults to evaluate themselves. It is a five-point Likert type scale and consists of 12 items in total. It has two sub-dimensions as Prospective Anxiety and Inhibitory Anxiety. In IUS-12, item numbered 1 is reverse coded. The highest and lowest scores that can be obtained from the scale range from 12 to 60. A high score indicates a high degree of intolerance of uncertainty. The internal consistency coefficient was found to be 0.91. The adaptation of the scale into Turkish was carried out by Sarıçam, Erguvan, Akın and Akça (2014). Internal consistency was 0.88; and it was found to be 0.84 for Prospective Anxiety and 0.77 for Inhibitory Anxiety.

Resilience: the Adult Resilience Scale was developed by Ryan and Caltabiano (2009) to measure the resilience levels of individuals in adulthood. The scale, which consists of 25 items, has five sub-dimensions. These are as follows: Factor I: Self-efficacy, Factor II: Family and Social Networks, Factor III: Perseverance, Factor IV: Internal Locus of Control, Factor V: Coping and Adaptation. It is a five-point Likert-type scale and includes reverse-coded items. After the items numbered 3, 5, 6, 10, 13, 20, 22, and 23 are reversely coded, all the items are added together to give the total resilience score. Cronbach's alpha value was found to be 0.87. The adaptation of the scale into Turkish was conducted by Savi-Çakar, Karataş and Çakır (2014). The internal consistency coefficient obtained from the adaptation study was calculated as 0.71. TheCronbach alpha coefficient for this study was found to be 0.77.

Data statistics

First, normality assumptions were tested. Group differences were tested on was performed on the variables of age and chronic disease. Hierarchical regression was performed to determine the roles of intolerance of uncertainty and COVID-19 anxiety in predicting resilience. In the analysis, first of all, the variables of gender and presence of a chronic disease were taken as control variables in the first model. In the second stage, COVID-19 anxiety and then finally the intolerance of uncertainty variable were added to the model.

With the purpose of determining the suitability of the data for hierarchical regression analysis, VIF and tolerance values were examined to determine the problem of multicollinearity between the variables. Having tolerance values above 10 and VIF values below 10 indicate that there is no multicollinearity problem (Pallant, 2011).

Considering the variables of gender and presence of a chronic disease, VIF value was found to be 1.003 in the first model and the tolerance value was 0.99 for both variables. In the second model, in which the COVID-19 anxiety was included, VIF value varied between 1.00–1.04, while the tolerance value was between 0.96 and 0.99. Finally, in the third model, which included intolerance of uncertainty, VIF value varied between 1.00–1.09 and the tolerance value varied between 0.91 and 0.99.

RESULTS

The mean, standard deviation and bivariate correlations of the variables are shown in Table 1. In order to test whether there is a difference between the means according to gender, independent groups *t*-test was performed. Gender has a statistically significant effect on COVID-19 anxiety (t[533] = 4.433, $p < 0.05$). Women (x̄= 1.90) are more concerned about COVID-19 than men (x̄ = 0.96). There was no statistically significant effect of gender on the variables of resilience and intolerance of uncertainty. Before hierarchical regression analysis, correlations between variables were examined. There was a low negative (r = −0.19, $p < 0.05$) relationship between resilience and COVID-19 anxiety and a moderately negative (r = −0.62, $p < 0.01$) relationship between resilience and intolerance of uncertainty.

While the hierarchical multiple regression results (Table 2) do not contribute significantly to the gender regression model in the first model (β = 0.03, $p > 0.05$), they do make a significant contribution to the presence of a chronic disease model (β = 0.09, $p > 0.05$). This model explains 10% of resilience ($F_{[2,530]}$ = 2.63, $p < 0.005$). The gender variable, which had no effect in the first model, did not make a significant contribution in the second model either (β = 0.07, $p > 0.05$). The COVID-19 anxiety included in the second model is a significant (β = −0.20, $p > 0.001$) predictor ($F_{[3.529]}$ = 9.59, $p < 0.005$), explaining 5% of the change in resilience.

Presence of a chronic disease, which was significant in the first two models, contributed significantly to the third model (β = 0.06, $p > 0.05$), while the gender variable did not contribute significantly to this model (β = 0.02, $p > 0.05$). The intolerance of uncertainty variable added in the last model is a significant predictor of the model (β = −0.60, $p > 0.001$) and explains 39% of the change in resilience ($F_{[4,528]}$ = 85.52, $p < 0.005$). In the light of these findings, it can be said that intolerance of uncertainty has a full mediator effect between COVID-19 anxiety and resilience.

TABLE 1. *Means, standard deviations and correlations between the variables of the study*

	1.	2.	3.	4.	Mean	SD
1. Resilience	1.00	−0.62**	−0.19*	0.09*	67.79	10.02
2. Intolerance of uncertainty		1.00	0.21**	−0.05	40.40	9.21
3. COVID-19 anxiety			1.00	0.00	1.60	2.34
4. Presence of a chronic disease				1.00	1.89	0.30

*p < 0.05,
**p < 0.01.

TABLE 2. *Results of hierarchical regression analyses regressing resilience*

Predictors	Model 1	Model 2	Model 3
Presence of a chronic disease	0.09	0.09	0.06
Gender	0.03	0.07	0.02
COVID-19 anxiety		−0.20*	−0.07
Intolerance of uncertainty			−0.60*
ΔR^2	0.01	0.05	0.39*
Total adjusted R^2	0.00	0.04	0.38*

*$p < 0.01$.

DISCUSSION

Considering the results of the study, intolerance of uncertainty and fear of COVID-19 negatively predict resilience. Resilience affects COVID-19 anxiety both directly and through intolerance of uncertainty. Based on this result, a person with high resilience can be expected to have less COVID-19 anxiety. This result is consistent with previous findings (e.g., Kasapoğlu, 2020). Another finding of the study is that resilience negatively predicts intolerance of uncertainty and COVID-19 anxiety. It was found that intolerance of uncertainty has a higher predictive value. One of the most important findings of this study is that intolerance of uncertainty fully mediates the relationship between resilience and COVID-19 anxiety. Previous studies showed that intolerance of uncertainty, fear of COVID-19 and mediation studies with different variables. Intolerance of uncertainty was found to play a mediating role in the relationship between fear of COVID-19 and positivity (Bakioğlu, Korkmaz & Ercan, 2020). Deniz (2021) examined the mediating role of intolerance of uncertainty and fear of COVID-19 in the relationship between self-concept and well-being. It has been shown that individuals with higher self-concept related to intolerance of uncertainty have lower fear of COVID-19.

There is some evidence showing the relationship between resilience and intolerance of uncertainty (DiTrani, Mariani, Ferri, De Berardinis & Frigo, 2021) and the relationship between resilience, and COVID-19 anxiety (Labrague & De Los Santos, 2020). There is also a study in which COVID-19 anxiety predicts resilience (Karataş & Tagay, 2021). Based on the negative relationship between resilience and intolerance of uncertainty in the pre-pandemic period (Lee, 2019; Mitmansgruber, Smrekar, Rabanser, Beck, Eder & Ellemunter, 2016), it can be said that this relationship is independent of the COVID-19. Given the protective role of resilience to negative and unexpected life events such as COVID-19 (Naeem *et al*., 2020) and given the role of COVID-19 anxiety, studies of resilience, and intolerance of uncertainty should be conducted to support the mental health of individuals' post-pandemic.

This study examined the predictive role of intolerance of uncertainty and COVID-19 anxiety in predicting adult resilience levels during the COVID-19. In addition, resilience, intolerance of uncertainty and COVID-19 anxiety were assessed by gender and the presence of a chronic disease. Women were found to experience more COVID-19 anxiety.

In the study, COVID-19 anxiety was found to be more prevalent in women. Considering similar findings in different cultures (Hyland *et al*., 2020; Lee, 2020; Miguel-Puga, Cooper-Bribiesca, Avelar-Garnica *et al*., 2020; Öz-Ceviz *et al*., 2020; Solomou & Constantinidou, 2020), it is reasonable to assume that this is independent of culture. Furthermore, this situation is thought to be related to women being more vulnerable to stress-related disorders such as post-traumatic stress disorder and anxiety disorders (Li & Graham, 2017). In the literature, there are studies showing that men have higher levels of resilience (Bonanno *et al*., 2007; Masood, Masud & Mazahir, 2016) as well as studies indicating that there is no difference between genders (Isaacs, Mota, Tsai *et al*., 2017; Karataş & Tagay, 2021; Ünver & Güloğlu, 2021). In general, women are physically weaker, have lower immunity and are potentially more likely to get sick, but they adapt better to environmental conditions and live longer (Overfield, 2018). Gender roles are another factor that can be discussed in this finding. Because women are perceived in society as weaker, in need of protection and fragile, they are in a culturally acceptable position to seek help and treatment. Since men need to look stronger, be brave and take on the role of protector, the duration of disease may be longer as they experience a delayed process while seeking help (Bakioğlu *et al*., 2020). Resilience is thought to be related to difficult life events rather than gender. Resilience can be considered as a force that occurs after traumatic life events such as death, chronic disease, divorce, natural disasters or epidemic diseases, rather than a situation that occurs or is triggered during daily life events (Yazıcı-Çelebi, 2020).

The COVID-19 pandemic is the most important health problem in our country and in the whole world. In particular, people over 60 years of age, cancer, diabetes, heart, hypertension, chronic liver, and kidney diseases, obesity, Parkinson's disease, MS patients, chronic lung diseases, bronchitis or asthma, people receiving immuno suppressive therapy, and people with immunodeficiency are among the risk groups (Sofulu, Uran, Avdal & Tokem, 2020). Examining the literature; studies on resilience and chronic disease, resilience and depression, anxiety, somatization, heart disease, etc., highlight the negative relationship between mental and physical disease (Cal, De Sá, Glustak & Santiago, 2015; Toukhsati, Jovanovic, Dehghani, Tran, Tran & Hare, 2017). On the contrary, even in vulnerable populations such as adults with chronic diseases, it is observed that individuals can show resilience or increase their existing level of resilience in pandemic conditions such as COVID-19 (Davis, McElroy-Heltzel, Lemke *et al*., 2021).

On the other hand, there is no difference between genders in the variables of resilience and intolerance of uncertainty. The literature mentions gender differences in resilience, intolerance of uncertainty and COVID-19 anxiety. However, in this study, the presence of a chronic disease did not significantly affect resilience. The reason why there is no relationship between presence of a chronic disease and resilience in this study, contrary to the literature, is that the selected sample was not resilience prone and the group that was not resilience prone was eliminated at the beginning of the study and a homogeneous group was studied with a homogeneous group that experienced negative life events (COVID-19 disease, being hospitalized, presence of a chronic disease, etc.) could be. However, as resilience develops over time and events, the individual's past experiences may be

effective in increasing or decreasing resilience in future life stages (Gheshlagh, Ebadi, Dalvandi, Rezaei & Tabrizi, 2017). In this regard, the increase in age of the individuals participating in the study leads to the belief that the relationship between presence of a chronic disease and resilience is also increasing.

Limitations and future directions

This study has some limitations. Although COVID-19 has been an ongoing process for more than a year, the data were collected within the first six months of the COVID-19 period. Due to the fact that the data were collected online, rural areas without internet access could not be reached. This data has limited generalizability because it was only collected from individuals who have a technology background and use the Internet. Furthermore, our study is a cross-sectional study. This represents one of the limitation of the study, because it is predicted that the pandemic COVID-19 will be a long and dynamic process and that both physical and psychological effects will occur over a long period of time. For this reason, longitudinal studies are needed to investigate the problem thoroughly. The fact that resilience is a protective factor suggests that related variables should be studied in depth, so future studies that incorporate qualitative data in groups of different ages and socioeconomic levels will contribute to the literature.

This study was conducted on adults over 18 years of age. By conducting research with school-aged individuals affected by the pandemic, it is possible to examine how intolerance of uncertainty and COVID-19 anxiety predict the level of resilience of these individuals. This study examined individuals between the ages of 18 and 65 years, indicating that there was no homogeneous group to be obtained in terms of life task characteristics. Although the age of 18 is legally recognized as an adult, it is believed that resilience in particular makes a difference between the experiences of an 18-year-old and a 65-year-old. In this regard, it is predicted that work will have a more homogeneous structure in periods suitable for developmental tasks. The variables intolerance of uncertainty and COVID-19 anxiety can be considered in efforts to increase or protect the resilience of individuals during and after the pandemic.

Studying with a sample in which the criteria for resilience related to negative life events were determined only in the context of COVID-19 may be beneficial for specific results. At the same time, the variable age has been reported in the literature as both a protective and a risk factor.

This study discusses variables that are expected to negatively affect resilience. Considering the many negative emotional and behavioral consequences of COVID-19 anxiety and intolerance of uncertainty for individuals, preventive studies should be conducted to protect the spiritual and mental health of society during the pandemics. To this end, both studies that prevent negative effects and studies that support individuals' strengths should be also taken into consideration.

CONCLUSIONS

Intolerance of uncertainty has a full mediator effect between COVID-19 anxiety and resilience. While there is no gender difference in the resilience and intolerance of uncertainty variables, women seem to experience higher COVID-19 anxiety.

As a highly contagious disease, COVID-19 was recognized as a pandemic worldwide (WHO, 2020a). Delays in diagnosing and treating the disease and people's anxiety about returning to their daily lives have created an environment of uncertainty. In short, the increase in COVID-19 anxiety leads to an increase in intolerance of uncertainty (Kasapoğlu, 2020). This is because it is not easy to regulate emotions when there is intolerance of uncertainty (Deniz, 2021). Resilience, on the other hand, is considered a protective factor for all these experiences and ensures that individuals with resilience are more positive and tolerant of uncertainty COVID-19.

There is no difference between genders in the variables of resilience and intolerance of uncertainty. Women experience higher COVID-19 anxiety. Intolerance of uncertainty and COVID-19 anxiety are predictive factors for resilience. Intolerance of uncertainty has a full mediator effect between COVID-19 anxiety and resilience.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in [repository name e.g "figshare"] at http://doi.org/[doi], reference number [reference number].

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