

Intolerance of Uncertainty in the Covid-19 Outbreak: A Study on Social Work Students in Konya ¹

Demet Akarçay Ulutaş ¹ | Dilara Ustabaşı Gündüz ²

¹ Assoc. Prof., KTO Karatay University, Konya/Türkiye

ORCID: [0000-0001-5872-2549](https://orcid.org/0000-0001-5872-2549)

E-Mail:

demetakarcay@gmail.com

² Assist. Prof. Dr., KTO Karatay University, Konya/Türkiye

ORCID: [0000-0002-8184-8446](https://orcid.org/0000-0002-8184-8446)

E-Mail:

dilara.ustabasi@karatay.edu.tr

Corresponding Author:

Demet Akarçay Ulutaş

September 2022

Volume:19

Issue:49

DOI: [10.26466/opusjsr.1144519](https://doi.org/10.26466/opusjsr.1144519)

Abstract

In addition to being a health problem, the Covid-19 epidemic also causes fundamental problems in areas such as the economy, social, political, and education at the global level. People continue to live daily with fears such as getting sick or losing their loved ones and exposure to severe traumatic effects. Social work students are among the negatively affected groups in this uncertain and risky environment. The definitions of social work students regarding the psychosocial outcomes of the pandemic process due to the education they receive will be able to emphasize a more specific point. This study aims to reveal the perceptions and attitudes of the students studying in the social work departments of universities in Konya towards the epidemic and their intolerance of uncertainty. Research results indicate that individuals show avoidance behavior because they cannot fully understand the causes of the disease. On the other hand, the perception that it is impossible to prevent the disease indicates a cognitive structure that it is not possible to avoid the disease. In addition, the importance of obtaining information about the disease and its prevention during the pandemic has emerged. Uncertainty in matters such as spread, contamination, and risk related to the disease is an important finding that increases anxiety. With this research, our leading suggestions are that medical social service authorities should take an active role in the context of public health and that the correct information should be delivered to young people through new generation media tools.

Keywords: Attitude towards Covid-19, Intolerance of Uncertainty, Social Work.

Öz

Covid-19 salgını bir sağlık sorunu olmanın yanında küresel boyutta ekonomi, sosyal, politik, eğitim gibi alanlarda da önemli sorunlara yol açmaktadır. İnsanlar hastalığa yakalanma, sevdiklerini kaybetme gibi korkularla günlük yaşamlarını sürdürmeye devam etmekte ve ciddi travmatik etkilere maruz kalmaktadırlar. Bu belirsizlik ve risk ortamında sosyal hizmet öğrencileri de olumsuz etkilenen gruplar arasında yer almaktadır. Sosyal hizmet öğrencilerinin aldıkları eğitim gereği pandemi sürecindeki psikososyal etkilere ilişkin tanımlamaları daha belirgin bir noktayı vurgulayabilecektir. Bu çalışmada Konya'daki üniversitelerin sosyal hizmet bölümlerinde öğrenim gören öğrencilerin salgına yönelik algı ve tutumları ile belirsizliğe tahammülsüzlüklerine dair durumlarını ortaya konmak amaçlanmıştır. Araştırma sonuçları, bireylerin hastalığın nedenlerini tam olarak anlamlandıramadıkları için kaçınma davranışı gösterdiklerine işaret etmektedir. Diğer yandan, hastalığı önlemenin imkansız olduğu algısının hastalıktan da kaçınmanın mümkün olmadığı yönünde bir bilişsel yapıyı gösterdiği anlaşılmaktadır. Ayrıca, çalışmamızda pandemi sürecinde hastalığa ve hastalıktan korunmaya dair bilgi edinmenin önemi ortaya çıkmıştır. Hastalıkla ilgili yayılma, bulaima, risk gibi konularda meydana gelen belirsizliğin ise kaygıyı artırdığı önemli bulgulardandır. Bu araştırma ile tıbbi sosyal hizmet otoritelerinin halk sağlığı bağlamında aktif rol alması ve gençlere doğru bilginin yeni nesil medya araçlarıyla ulaştırılması gerektiği temel önerilerimizdir.

Anahtar Kelimeler: Covid-19'a Yönelik Tutum, Belirsizliğe Tahammülsüzlük, Sosyal Hizmet.

Citation:

Akarçay-Ulutaş, D. and Ustabaşı-Gündüz, D. (2022). Intolerance of uncertainty in the Covid-19 outbreak: A study on social work students in Konya. *OPUS- Journal of Society Research*, 19(49), 738-750.

¹ This study's preliminary findings (abstract) were presented as an oral presentation at the 23rd National Social Work Symposium.

Introduction

Covid-19, the global health crisis of our age, has caused 6.3 million people to die worldwide (World Health Organization Coronavirus Dashboard, 2022). Since March 11, 2020, when Turkey had the first Covid-19 case, it has infected more than 15 million people, and 99 thousand 15 people have died (Ministry of Health COVID-19 Information Platform, 2022). The Covid-19 pandemic is a problem that brings multiple disadvantages beyond public health, which negatively affects society in many ways, such as social, economic, healthy, and educational issues. Measures such as physical distancing, curfew, remote working, and distance education introduced to slow the spread of the pandemic have significantly changed the course of daily life. This process has been quite challenging for those with the disease and those who do not. With the protective and preventive measures taken together with the economic losses, people restricted in the movement are forced to stay away from their social contacts. Besides, their loneliness, the complex treatment process of individuals caught in Covid-19, the losses experienced, and the uncertainty about when the pandemic will end have increased their anxiety. Anxiety about getting sick has brought questions about the well-being of individuals. They are also adversely affected by situations such as the inability to access services and programs, whether they will be able to perform daily life activities again, the functionality of treatment opportunities, and fear of death (Emiral et al., 2020; Baltacı & Coşar, 2020; Ustabaşı Gündüz et al., 2021; Aydın & Kaya, 2022; Balcı et al., 2021). Questions such as how long the pandemic, which covers a significant period in human life, will last, the damage to vulnerable groups, and the reparability of the damage caused by the material and moral losses experienced, often affect thoughts and social well-being in the face of uncertainty.

The environment of uncertainty created by the Covid-19 epidemic all over the world has weakened people's coping experiences. In this environment of uncertainty, individual and social question marks about how people express their reactions and create plans become a psychological

burden. Intolerance of uncertainty refers to the general tendency of individuals to react to situations that threaten future events and contain high levels of uncertainty. The reactions of individuals with an intolerance to uncertainty are cognitive (threat perception), emotional (anxiety, stress, well-being), and behavioral (devotion to preventive measures) (Bavolar et al., 2021). It makes it possible to understand aggressive behaviors through intolerance to uncertainty, rumination, and post-traumatic stress disorder seen in individuals during the pandemic. However, considering the relationship of socioeconomic stressors with aggression and post-traumatic stress disorder in addition to health-related measures reveals the need to evaluate the effects of the pandemic together with its biopsychosocial dimensions (Celik et al., 2021). It seems possible that these reactions, which vary according to an individual's personality traits, living conditions, spiritual evaluations, and how they make sense of their experiences, can be associated with the uncertainty brought by the pandemic process. Therefore, it is essential to understand the stress of uncertainty, considered one of the main reasons for some mental variables during the pandemic process, by concentrating on individuals' variables. Cancer patients show signs of stress and anxiety by having to struggle with uncertainties such as the ways of virus transmission and its effect on health (Hill et al., 2021) are examples of individual variables. In addition, the outcomes of being young and female regarding the stress of uncertainty can constitute another example. Accordingly, intolerance to uncertainty, anxiety and depressive symptoms are more intense in younger individuals and women, while intolerance to uncertainty increases the perception of threat and anxiety (Bavolar et al., 2021; Del-Valle et al., 2022). In this study, although no direct inference was aimed at individuals' interpretations of life dynamics, it is thought that revealing the relationship between the reflections of illness perception among young people and the stress of uncertainty will be a vital output in evaluating the psychosocial effects of the pandemic.

In the early stages of the pandemic, the interruption of the life patterns of people in their usual flow and the inadequacy of predictions about how long this situation can last are factors that point to uncertainty. Currently, the youth is the most disadvantaged group by the measures to suspend education in many countries. The stress of uncertainty they experience due to concerns about catching or being seriously affected by the disease makes it difficult for young people to focus on their studies. Transformation of less productivity and effort into cyberloafing behaviors in young people is the adverse behavioral outcome of this uncertainty, stress, and illness anxiety (Reizer et al., 2022). In addition, it brings to mind the reliability of information sources about the disease of individuals who spend more time at home, have less social interaction and find themselves in a forced digitalization with measures related to the pandemic. As the stress of uncertainty increases, individuals who need more information about the disease use more internet resources. However, as their search for information and contradictory information in internet resources increases, their fear of the disease also increases. In such a process, individuals with increased fear and anxiety tend to apply the physical distance rules more harshly by forcing themselves to spend more time in closed environments such as home (Baerg & Bruchmann, 2022).

The perception that individuals cannot manage their environmental dynamics causes anxiety with the stress of uncertainty brought about by the pandemic. However, experiencing the physical effects of catching the disease also affects these variables, thus restricting individuals' ability to cope with uncertainty (Saulnier et al., 2021). As one of the most prominent processes of adequate access to health services, this pandemic period shows the importance of empowering individuals against the stress of uncertainty. Social work comes from the human aid professions in the most needed occupational groups during the pandemic, after the health professionals. The reason for the existence of social work is to respond to the multidimensional problems arising from the public social/health field (Amadasun, 2020). This profession requires competence in many areas, such as proactive decision-making in the face of

unexpected situations such as disasters and crises, managing crises, and meeting needs and resources in an environment of risk and uncertainty such as a pandemic. Tuncay (2004) states that social workers provide a wide range of services, from planning legal regulations in crises and disasters to combating psychosocial problems experienced in the process. Social workers, whose basic idea is to ensure the well-being of people, have essential duties in an environment of uncertainty and the pandemic that affects society in health, socioeconomic, psychosocial, and spiritual aspects. The investigation of social work students' attitudes towards the pandemic and the uncertainty of their experiences while still in their education can facilitate the arrangements to strengthen their competencies in processes such as solid decision-making and management. Based on this motivation, we aimed to reveal the perceptions and attitudes of the social work students of universities in Konya towards the pandemic and their intolerance of uncertainty.

Methods

The method of this study was designed following the quantitative research procedure. In the study, the relational screening model (Thomas, 2021) was used to examine the relationship between the perceptions and attitudes of the social work department students in Konya and their level of intolerance to uncertainty and to determine the relationship with the dependent variables. Within the framework of this primary purpose, the hypotheses tested within the scope of the research are as follows:

H1. Perception and attitude levels of students toward the Covid-19 differ statistically significantly according to sociodemographic variables.

H2. Students' levels of intolerance to uncertainty differ statistically significantly according to sociodemographic variables.

H3. There is a statistically significant relationship between students' score levels of the total and dimensions of the perception and attitude scale regarding the Covid-19 epidemic and their intolerance to uncertainty.

Sampling design

The study universe consists of students studying in the social work departments of universities in Konya. We conducted the research with 341 social work students studying in the fall semester of the 2021-2022 academic year and across the province. 22.9% of the students are studying in the first grade, 28.7% in the second, 22.9% in the third, and 25.5% in the senior year. We reached the students through the online survey link shared in the groups digitally. Every student who attends active classes is included in the online groups since there are groups where announcements about the department are made in the students' classes. Since the universe is relatively clear, this method was preferred. Each participant in the universe had the opportunity to participate in the research voluntarily by preventing the online survey for the second time. We tried to prevent bias and errors that may occur in the sample selection (Kılıç, 2013).

Data collection process

While collecting data during the research process, we used two measurement tools and questions containing the personal information of the participants. In the personal information section, which constitutes the first part of the questionnaire, questions were asked about students' class, university, catching Covid-19, being in quarantine due to contact, loss of a relative due to illness, getting counselor support due to concerns about the process and accessing information.

Perceptions and Attitudes towards COVID-19 Pandemic Questionnaire; The tool developed by Çırakoğlu (2011) to measure the perception and attitude toward the swine flu epidemic, and Artan, Karaman, Atak, and Cebeci (2020) adapted it for the Covid-19. The measurement tool consists of four dimensions: general perception, perception of reasons, perception of control and avoidance behaviors, and 53 items. The original paper accepts each dimension independently. The general perception dimension, also expressed as the

perception of illness consists of two dimensions: dangerousness and contagiousness. The perception of reasons consists of three dimensions: conspiracy, environment, and belief. The perception of control consists of three dimensions: macro-control, personal control, and inevitability, and avoidance behaviors consist of three dimensions: cognitive avoidance, avoidance of common areas, and avoidance of personal contact. The dimensions' reliability values (Cronbach's Alpha) vary between 0.65 and 0.85. Expressed between "strongly disagree" and "strongly agree" for the measurement tool's disease, control, and causes perception dimensions. For the avoidance behaviors dimension, 5-point Likert-type grading is used, which is stated as "I have never done this behavior" and "I have done this behavior very often."

Intolerance of Uncertainty Scale; The measurement tool developed by Carleton, Norton, and Asmundson (2007) was adapted into Turkish by Sarıçam et al. (2014). The measurement tool has two dimensions: future anxiety and inhibitory anxiety, consisting of 12 items. The Cronbach Alpha internal consistency coefficient was 0.88 for the whole scale, 0.84 for the prospective anxiety sub-dimension, and 0.77 for the inhibitory anxiety sub-dimension.

Findings and Results

Table 1 presents participants' descriptive statistics with frequency and percentage values. Of the 341 students who participated in this research, who are studying in the Social Work Departments of universities in Konya, 89.9% are women, 24.3% were infected with coronavirus, and 30.2% remained in quarantine due to close contact with a Covid-19 patient. Findings also reveal that 49.3% of participants had lost a relative due to Covid-19, 2.9% received consultancy support during the Covid-19 pandemic, and more than half (51.6%) experienced anxiety about accessing information during the Covid-19 pandemic.

Table 1. Participants' descriptive statistics

Variable	Frequency		Percentage (%)
Gender	Female	303	89.9
	Male	38	11.1
Infected with coronavirus	Yes	83	24.3
	No	258	75.7
Quarantined due to close contact with a Covid-19 patient	Yes	103	30.2
	No	238	69.8
Lost a loved one due to Covid-19	Yes	168	49.3
	No	173	50.7
Received psychological support during the Covid-19 pandemic	Yes	10	2.9
	No	331	97.1
Experienced anxiety about accessing information on the Covid-19 pandemic	Yes	176	51.6
	No	165	48.4
Total		341	100

Table 2. Pearson r Pairwise correlations among the scales and dimensions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Disease perception	1.000						
(2) Causes perception	0.164**	1.000					
(3) Control perception	0.181**	0.140**	1.000				
(4) Avoidance attitude	0.035	0.085	-0.032	1.000			
(5) Prospective anxiety	0.079	0.099	0.039	-0.076	1.000		
(6) Inhibitory anxiety	-0.053	0.097	-0.004	0.226**	-0.106	1.000	
(7) Intolerance to uncertainty	-0.024	0.130*	0.010	0.192**	0.257**	0.934**	1.000

According to Table 2, there is a weak but statistically significant positive linear relationship between intolerance to uncertainty and avoidance attitude ($r=0.192$). Also, there is a weak but statistically significant positive correlation between the intolerance to uncertainty and the causes perception ($r=0.130$). In this respect, as individuals' intolerance to uncertainty increases, their perceptions of the factors causing the disease increase. However, they may develop disease avoidance behavior with the burden of uncertainty. The causes perception that leads individuals to feel anxious and strengthen with the increase in the burden of uncertainty is also explained by making a connection with the perceptions regarding the factors in the spread of the disease. The analysis results reveal that there is a positive relationship between preventive anxiety and avoidance attitude ($r=0.226$) indicating that as the anxiety about the disease being a hindering factor in the individual's life increases, the belief of individuals that it is not possible to be protected from the disease gets stronger. The findings also

suggest that there are significant positive linear relationships between the dimensions of the perception of the disease, i.e., the general belief of the person about the disease, the belief in the factors that cause the disease, the perception of control, and the belief that one can avoid the disease (Artan et al., 2020). A significant positive linear relationship was found between prospective anxiety and inhibitory anxiety, which are the two dimensions of intolerance of uncertainty ($r=0.257$).

Table 3. Results of one sample t test

	Mean difference	SD	df	t	p
Disease perception	0.220	0.381	340	10.669	<0.001
Causes perception	-0.136	0.524	340	-4.798	<0.001
Control perception	-0.365	0.559	340	-12.055	<0.001
Avoidance attitude	-0.168	0.707	340	-4.397	<0.001
Prospective anxiety	0.018	0.358	340	0.906	0.365
Inhibitory anxiety	0.203	0.970	340	3.865	<0.001
Intolerance to uncertainty	0.110	0.499	340	4.082	<0.001

Test value = 3.00

Individuals' perception of the coronavirus disease is significantly higher than the test value ($t_{340}=10.669$, $d=0.577$, $p<0.001$), which indicates the neutral degree of the 5-point Likert scale. According to Cohen's d measure for single group designs (Goulet-Pelletier and Cousineau, 2018), the effect size of the difference is medium. In terms of causes and control perceptions, the analysis reveals that the means of these variables show a lower level of significant difference. In addition, the differences have a small effect size in causes perceptions ($t_{340}=-4.798$, $d=0.260$, $p<0.001$), medium effect size in control perceptions ($t_{340}=-12.055$, $d=0.653$, $p<0.001$) and small effect size in avoidance attitude ($t_{340}=-4.397$, $d=0.238$, $p<0.001$). While no significant difference was found in prospective anxiety, which is one of the two dimensions of intolerance of uncertainty ($p<0.05$), in the inhibitory anxiety dimension ($t_{340}=3.865$, $d=0.237$, $p<0.001$) and intolerance to uncertainty ($t_{340}=4.082$, $d=0.220$, $p<0.001$) have positive and small effect sized differences.

Table 4. Independent sample t test by being quarantined due to close contact with a Covid-19 patient

	Mean difference	SD	df	t	p
Disease perception	-0.119	0.045	339	-2.674	0.008
Causes perception	-0.081	0.062	339	-1.313	0.190
Control perception	-0.096	0.046	238.965	-2.101*	0.037
Avoidance attitude	-0.066	0.077	232.664	-0.849*	0.397
Prospective anxiety	-0.001	0.042	339	-0.032	0.974
Inhibitory anxiety	-0.305	0.107	223.406	-2.853*	0.005
Intolerance to uncertainty	-0.153	0.058	339	-2.623	0.009

Note. Independent variable: Being quarantined due to close contact with a Covid-19 patient

* Welsch test is reported because Levene's test indicated that the homogeneity of variance assumption is not met for this variable.

According to the independent sample t-test results performed with the variables of disease perception, causes perceptions, control perception, avoidance attitude, and intolerance to uncertainty and its dimensions, there is no significant difference between those who have and have not been infected with the novel coronavirus ($p > 0.005$). On the other hand, the test results reveal that the disease perception levels of males are higher than females ($t_{339} = -2.969$, $p = 0.003$). However, individuals quarantined due to close contact with a Covid-19 patient more increased intolerance of uncertainty ($t_{339} = -2.623$, $p = 0.009$), and a higher level of inhibitory anxiety ($t_{223.406} = -2.853$, $p = 0.005$). According to these results, it is seen that the inhibition concerns about the effects of the disease in the society at the point of measures such as social distance and quarantine for the pandemic have deepened. On the other hand, according to the analysis results, the disease perceptions ($t_{339} = -2.674$, $p = 0.008$) and control perception ($t_{238.965} = -2.101$, $p = 0.037$) of the individuals who have been quarantined are higher than the ones have not been quarantined.

Table 5. Independent sample t test by having lost a loved one due to Covid-19

	Mean difference	SD	df	t	p
Disease perception	-0.082	0.041	339	-2.001	0.046
Causes perception	-0.025	0.057	339	-0.443	0.658
Control perception	-0.098	0.046	339	-2.149	0.032
Avoidance attitude	0.110	0.077	339	1.436	0.152
Prospective anxiety	-0.021	0.039	339	-0.547	0.585
Inhibitory anxiety	0.036	0.105	339	0.347	0.729
Intolerance to uncertainty	0.008	0.054	339	0.140	0.888

Note. Independent variable: Having lost a relative due to Covid-19

According to the analysis results shown in Table 5, the disease perception ($t_{339} = -2.001$, $p = 0.046$) and control perception ($t_{339} = -2.149$, $p = 0.032$) of individuals who have lost a loved one due to Covid-19 are significantly higher than whom have not. These results suggest that individuals who have lost a loved one due to Covid-19 perceive the disease as more dangerous and contagious.

Table 6. Independent sample t test by having received psychological support during the Covid-19 pandemic

	Mean difference	SD	df	t	p
Disease perception	-0.201	0.122	339	-1.648	0.100
Causes perception	-0.209	0.168	339	-1.245	0.214
Control perception	-0.148	0.049	15.169	-3.024*	0.008
Avoidance attitude	0.277	0.227	339	1.219	0.224
Prospective anxiety	-0.224	0.064	10.996	-3.496*	0.005
Inhibitory anxiety	0.347	0.311	339	1.116	0.265
Intolerance to uncertainty	0.062	0.160	339	0.384	0.701

Note. Independent variable: Having received psychological support during the Covid-19 pandemic

* Welsch test is reported because Levene's test indicated that the homogeneity of variance assumption is not met for this variable

According to the analysis results shown in Table 6, the control perception ($t_{339} = -3.024$, $p = 0.008$) and prospective anxiety ($t_{339} = -3.496$, $p = 0.005$) of individuals who received psychological support regarding their concerns about Covid-19 were significantly lower than those who did not receive.

Table 7. Independent sample t test by having experienced anxiety about accessing the information on the Covid-19 pandemic

	Mean difference	SD	df	t	p
Disease perception	-0.041	0.041	339	-1.002	0.317
Causes perception	0.031	0.057	339	0.540	0.590
Control perception	-0.062	0.046	330.610	-1.368*	0.172
Avoidance attitude	0.429	0.073	339	5.871	<0.001
Prospective anxiety	-0.021	0.039	339	-0.547	0.585
Inhibitory anxiety	0.276	0.104	339	2.648	0.008
Intolerance to uncertainty	0.127	0.054	339	2.370	0.018

Note. Independent variable: Having experienced anxiety about accessing the information on the Covid-19 pandemic

* Welsch test is reported because Levene's test indicated that the homogeneity of variance assumption is not met for this variable

According to the analysis results shown in Table 7, individuals who experienced anxiety

about accessing the information on the Covid-19 pandemic have significantly higher inhibitory anxiety ($t_{339}=2.648$, $p=0.008$), intolerance to uncertainty ($t_{339}=2.370$, $p=0.018$), and avoidance attitude ($t_{339}=5.871$, $p<0.001$). These results indicate that having difficulty in accessing the information about Covid-19 causes more robust attitude towards avoiding the disease. The analysis findings also support that the individuals may think that it would be better to avoid meeting with people instead of being adequately protected from the disease.

Table 8. Multiple linear regression analysis

	B	SE	β	t	p
Constant	2.601	0.298		8.733	<0.001
Disease perception	-0.067	0.071	-0.051	-0.943	0.346
Causes perception	0.115	0.052	0.121	2.228	0.027
Control perception	0.010	0.064	0.008	0.153	0.878
Avoidance attitude	0.130	0.038	0.184	3.445	0.001
R-square	0.052				
Adjusted R-square					
F	4.639				
p	0.001				

Dependent variable: Intolerance to uncertainty

According to the multiple linear regression analysis presented in Table 8, which was performed to determine to what extent the independent variables, i.e., disease perception, causes perception, control perception, and avoidance attitude, predict the level of intolerance to uncertainty. The analysis result suggests a good fit with an R-square value of 0.052 ($F_{4,336}=4.639$, $p=0.001$). This value shows that 5.2% of the total variance in the level of intolerance to uncertainty is explained by the independent variables. Additionally, among these independent variables, causes perception ($\beta=0.121$, $p<0.027$) and avoidance attitude ($\beta=0.184$, $p=0.001$) have a significant effect on intolerance to uncertainty. Therefore, as individuals' perception of causes of the disease and avoidance behaviors increase, their intolerance to uncertainty also increases.

Table 9. Analysis of covariance

	Sum of squares	Df	F	p	Eta-square
Corrected model	19.770	2	22.222	<0.001	0.116
Intercept	38.384	1	86.288	<0.001	0.203
Intolerance to uncertainty	4.067	1	9.143	0.003	0.026
Anxiety state	13.490	1	30.325	<0.001	0.082
Error	150.354	338			
Total	2904.224	341			
Corrected total	170.124	340			

Dependent variable: Avoidance attitude

The analysis of covariance (ANCOVA) examines the impact of extraneous factors on a dependent variable while removing the effect of the covariate factors (Porter & Raudenbush, 1987). In our model, avoidance attitude is the dependent variable, intolerance to anxiety is the covariate factor, and the anxiety state is the extraneous factor. According to the results of ANCOVA presented in Table 9, there are statistically significant differences ($F_{2,338}=22.222$, $p<0.001$) in avoidance attitude between the groups of individuals who experienced anxiety about accessing the information on the Covid-19 pandemic and did not when adjusted for intolerance for anxiety. For the individuals who are anxious about accessing the information on the Covid-19 pandemic, the effect of intolerance of uncertainty on their avoidance attitude is more substantial than those who were not. The results also indicate that these variables explain 11.6% of the variance in the avoidance attitude ($\eta^2=0.116$).

Discussion and Conclusion

This research aims to examine the relationship between intolerance to uncertainty and the perceptions related to Covid-19, avoidance attitudes, and anxiety about access to the information on Covid-19, loss of a loved one due to Covid-19, and attitudes to psychological counseling. These constructs indicate the psychological repercussions of Covid-19 in individuals. Although the analysis did not show statistically significant results for every variable, presented implications will allow estimating the emotional and mental reflections of Covid-19 induced the uncertainty environment on individuals. The results suggest that the perceived uncertainty should be discussed along with

individuals' explanations on the sources that caused the spread and emergence of the Covid-19 pandemic. In addition, the increasing environmental uncertainty due to the inability to understand the causes of the disease leads to avoidance behavior in individuals. Avoidance behavior can be regarded as cognitive and contact avoidance (Artan et al., 2020). Accordingly, individuals tend to avoid news related to Covid-19 by denying the existence of the pandemic in their cognitive pattern, while they may be in an attitude of avoiding contact environments and conditions that will lead to the transmission of the disease. This result can be supported by the evidence that avoidance behavior affects the weakening of social networks, triggers social withdrawal, and increases anxiety (Mallett et al., 2021). Therefore, our research suggests that individuals exhibit their avoidance behavior not to pay attention to the precautions to be followed to prevent the transmission of the disease, but to ignore the presence of the disease and perceive it as a cognitive threat.

Bavolar et al. (2021) expressed that the relationship between intolerance of uncertainty and threat perception leads to increased anxiety. Since it is associated with avoidance behavior, an example can be given as a result of similar research in which the behavior of adhering to preventive measures is weak in individuals. The stress (Bottesi et al., 2021) felt with the intense perception of the uncertainty about the disease puts individuals in a passive position in accepting the condition. They see struggling as meaningless, or they learn helplessness due to their failures at the point of struggle based on their own experiences. However, although they cannot fully accept the disease, we can predict that they cannot wholly ignore its effects or the potential to affect it with the return of uncertainty. Concerning our research, decreasing interaction weakens cognitive constructions about the emergence and spread of the disease. With the increasing perception that it is impossible to prevent the disease in terms of individual or access to health services, the weakening of the avoidance attitude strengthens the thought that it is related to cognitively developing learned helplessness.

Individuals' anxiety in an environment of uncertainty and their attitudes towards the inability to protect themselves from the disease take on a triggering task. Although such a concern is related to access to adequate information about the disease, indirect reflections of the measures taken during the pandemic can be predicted. It is seen that starting an isolated life, especially with home quarantines, increases the feelings of loneliness, panic, fear, aggression, and intolerance due to communication and movement limitations (Gavriliuță et al., 2022). The transformation of long-term quarantines at home into a prison perception, fears of loneliness and isolation due to the inability to see their loved ones, and fears arising from financial difficulties and loss of livelihood make the psychological outcomes of individuals more understandable. Individuals who have anxiety about physical distance can make their depressive symptoms more intense by feeling their anxiety about the disease more intensely and catastrophizing the perceived situations. In particular, individuals with specific disease symptoms are more concerned about being infected and physical distance (Fedorenke et al., 2021). The behaviors of individuals to avoid contact with others against the risk of transmission of the disease are associated with not accessing sufficient information about the disease. The study of Wang et al. (2022) supports this result. It emphasizes that the stress burden caused by uncertainty is higher in individuals who do not have sufficient information about Covid-19 and who do not leave their homes unless it is compulsory or at all during quarantine. Individuals can develop attitudes other than expectations to cope with the psychological stress that comes with this anxiety. Individuals use social participation to cope with the stress of uncertainty caused by social isolation and disconnection from social networks due to pandemic measures (Wang et al., 2022). Shiloh, Peleg, and Nudelman (2022) studied the relationship between anxiety, perceived stress, and adverse effects related to the pandemic. They used health locus of control, self-efficacy, optimism, and intolerance to uncertainty as predictors in this model. Accordingly, it seems that intolerance to uncertainty raises more

concerns regarding the Covid-19 pandemic. To minimize the negative impact of this relationship on the individual, it is predicted that we should strengthen the optimism and self-efficacy capacities of the individuals (Shiloh et al., 2022). Despite the implementation of the measures taken, the perception of failure in the struggle seen in individuals can be an element of anxiety. In this way, the ability of individuals to regulate their life dynamics with a positive perspective is a protective factor against Covid-19 stress. In an environment where individuals care for themselves and raise awareness about problems, their fears about Covid-19 decrease, and their well-being indicators increase. However, individuals can enhance their ability to accept themselves, their situation, and their coping skills by improving self-awareness. This way, the study results support a decrease in the indicators of intolerance to uncertainty (Deniz, 2021).

Our research has determined that individuals who are tired of following the news or announcements about the disease and think that they cause more anxiety can turn away from this news and close their way of obtaining information about the disease. The fact that individuals are interested in this process by closely following the information about the spread of Covid-19 negatively affects the ability to tolerate uncertainty and increases health anxiety and the perception of threats originating from the disease (Wheaton, Messner, & Marks, 2021). However, the presence of physical uncertainty perception seems to affect individuals in situations that require physical contact, such as the use of public areas. Therefore, by avoiding following news sources, individuals may create a more risky situation for themselves while escaping the pressure created by the news. The significant effects of the anxiety of knowing about Covid-19 on the intolerance of uncertainty and avoidance attitude point to the importance of obtaining clear and convenient information about the disease. The difficulties experienced in obtaining information or the anxiety experienced by individuals who are not sure about accessing the correct information cause them to see the disease as more contagious and dangerous. However, individuals who have problems accessing information sources about the disease or

are worried about the accuracy of the information they have accessed push individuals to avoid news about the disease, ignore the disease, and avoid common areas and individual contacts. Although the obtained finding does not directly reveal the stress of uncertainty, it also explains the uncertainty about the disease with a dimension of the anxiety experienced at the point of accessing information. In this respect, measures that reduce social-environment interaction increase anxiety and lead individuals to social participation in various ways. Individuals who want to cope with uncertainty in a way can seek ways to communicate with their environment. Obtaining more detailed information on disease-related issues by utilizing environmental experiences is presumed to be the reason for this search. According to the results of the covariance analysis, the fact that the uncertainty stress of the individuals who are anxious at the point of obtaining information has a more substantial effect on the avoidance attitude can be explained in one dimension with the disconnection from social networks. According to Duru et al. (2022), intolerance to uncertainty and Covid-19 anxiety are statistically significant predictors of resilience. The increase in Covid-19 anxiety makes it difficult to tolerate uncertainty, and this makes it difficult to control emotions. Having resilience in all these negativities enables individuals to be more favorable toward Covid-19 and tolerant of uncertainty. Research emphasizes the need to provide psychosocial support, improve information channels during the pandemic, and develop social risk awareness among the public to provide psychological well-being and resilience (Dominelli, 2020; International Federation of Social Workers, 2022; Wang et al., 2022).

There may be different aspects of the fact that there is no significant difference in the intolerance of uncertainty of individuals with and without Covid-19. Khorrami et al. (2022) emphasize that while intolerance to uncertainty is an indicator of anxiety risk, it is also a factor in predicting negative emotions toward Covid-19. Similarly, another study emphasizes that individuals who have had the disease before or have had the disease make the level of intolerance to uncertainty predictable. However, the high level of hope associated with

the dynamics of life establishes a relationship that strengthens the resilience of individuals against the challenging conditions brought by the pandemic process. These relationships indicate that individuals feel the stress load more intensely when they cannot control and predict (Karatas & Tagay, 2021). On the other hand, intolerance to uncertainty as an individual factor can enable individuals to develop their awareness of body perceptions to identify health-threatening sources that improve their perceptions of control and predictability. In this respect, a relationship between the emotional risk assessments of Covid-19 (such as fear of contracting the disease or dying from Covid-19) and health anxiety is not extant in situations where the intolerance to uncertainty is high and is related to the risk of contracting or dying from Covid-19. The increased anxiety is sufficient to further predict the adverse outcomes associated with having a disease. For this reason, the possibility of catastrophic results associated with the disease and the intensity of the anxiety states of the individual's environment create an effect that increases the anxiety of the disease. Although there was no relationship between health anxiety and risk assessments related to Covid-19 in the study, these assessments were related to the level of intolerance to uncertainty, which also increased health anxiety (Tull et al., 2020).

Our study demonstrates that the intolerance of uncertainty, perception of illness, and perception of control are increased in individuals who had been in quarantine due to close contact with a Covid-19 patient. Those who go into quarantine by getting away from their routine life patterns due to being in contact with a Covid-19 patient have to cope with effects such as stress, exhaustion, and intolerance caused by being closed for a long time in the same environment (Bilgin & Diğ̃er, 2021). Death is a traumatic event for people on its own. Moreover, families who lost their relatives in the intensive care unit most of the time, except for a "normal" death, such as Covid-19, have to face this situation in a more isolated manner from other families due to the inability to perform funeral rituals, and this triggers the development of traumatic stress. (Montauk & Kuhl, 2020;

Firouzkouhi et al., 2021). In addition, individuals who lost their relatives due to Covid-19 perceive the disease as highly contagious, dangerous, and incidents related to Covid-19 as highly uncontrollable. Those who receive psychosocial counseling during the pandemic process may have lower perceptions of control and future anxiety than those who do not receive counseling. Studies emphasize the positive effect of a high sense of control in protecting mental health (Senan et al., 2022). People's belief protected from Covid-19 is high, and their fears about the future are low. It would not be wrong to say that the low perception of control about the pandemic constitutes a protective role for individuals against mental health.

Limitations, recommendations, and directions for future research

One of the significant limitations of the research is associated with the research sample. The fact that social work students know the importance of the counseling process, especially in coping with psychological stress, may prevent the findings from being definitive predictors. Therefore, the explanation of illness anxiety and avoidance behavior may vary in a larger sample with sociodemographic differences. Another limitation in connection with the research results is the lack of measurement to explain the threat dimensions of the disease. A more in-depth investigation of the threat dimensions will make the psychosocial burden created by the uncertainty brought about by this disease, whose effects, sources, and ways of coping have been newly defined in the world.

Based on our research outputs, two leading suggestions come to the fore. Firstly, due to the importance of obtaining information about the disease, new media tools should communicate sources of access to information for young people. Young people, who are more inclined to follow social media and remarkable visuals in digital environments rather than traditional communication tools, can be reached more easily through these tools. In this case, it is recommended to use the social work perspective in preparing the content for the information that will keep the

psychological well-being of the young people who will perform the social work profession strong. In addition, the fact that information sources are open access and easily accessible can also be one of the emphases that can prevent anxiety.

Our second recommendation is that it is essential to make predictions, as uncertainties about the disease's danger, risk, spread, and contamination increase anxiety. It is recommended that national authorities, especially in medical social work, gather their predictions about the psychosocial effects of the disease and its possible future reflections on society. Making predictions of the disease based on the current situation assessment will also reduce the anxious and avoidant behavior and thinking styles, as it can distract individuals from the point of uncertainty. Considering that social work students can work in situations of uncertainty and risk, it is clear that it is important and necessary to ensure their psychological resilience. Based on our research outputs, the importance of crisis and disaster management in social work education is understood. Since the psychosocial processes affecting individuals differ in each crisis and disaster, the change in individuals must also be manageable. Therefore, updating social work education with practices that can direct individual and social change in the mentioned processes is essential.

References

- Amadasun, S. (2020). Social work and COVID-19 pandemic: An action call. *International Social Work*, 63(6), 753-756.
- Artan, T., Karaman, M., Atak, I., Cebeci, F. (2020). Covid-19 salgınına yönelik algı ve tutumları değerlendirme Ölçeği'nin değerlendirilmesi. *Sosyal Çalışma Dergisi*, 4(2), 101-107.
- Aydın, A. & Kaya, Y. (2022). Post-traumatic growth experiences of individuals having completed treatment for coronavirus: A qualitative study, *Cyprus Turkish Journal of Psychiatry & Psychology*, 4(1), 23-33.
- Baerg, L., Bruchmann, K. (2022). COVID-19 information overload: Intolerance of uncertainty moderates the relationship between frequency of internet searching and fear of COVID-19. *Acta Psychologica*, 224, 1-6.
- Balcı, A., Akarçay Ulutaş, D., & Ustabaşı Gündüz, D. (2021). Nefroloji hastalarının Covid-19 sürecine ilişkin psikososyal değerlendirmeleri: Erzincan Örneği. Mehmet Fahri Bulduk, Sevde Köksal (Ed.) 23. *Ulusal Sosyal Hizmet Sempozyumu Bildiri Özet Kitabı*, p.22-23).
- Baltacı, N. N., & Coşar, B. (2020). COVID-19 pandemisi ve ruh beden ilişkisi. içinde B. Coşar (Ed.), *Psikiyatri ve COVID-19* (p.1-6). Türkiye Klinikleri.
- Bavolar, J., Kacmar, P., Hricova, M., Schrötter, J., Kovacova-Holevova, B., Köverova, M., & Raczova, B. (2021). Intolerance of uncertainty and reactions to the COVID-19 pandemic. *The Journal of General Psychology*, 1-29. <https://doi.org/10.1080/00221309.2021.1922346>.
- Bilgin, R., & Diğer, H. (2021). Küresel salgın (Covid-19) sürecinde evde yaşam tatmini. *Alternative Politics/Alternatif Politika*, 13(2), 409-438. <https://doi.org/10.53376/ap.2021.14>.
- Bottesi, G., Marino, C., Vieno, A., Ghisi, M., & Spada, M. M. (2021). Psychological distress in the context of the COVID-19 pandemic: the joint contribution of intolerance of uncertainty and cyberchondria. *Psychology & Health*, 1-18. <https://doi.org/10.1080/08870446.2021.1952584>.
- Celik, D., Alpya, E. H., Celebi, B., & Turkeli, A. (2021). Intolerance of uncertainty, rumination, post-traumatic stress symptoms and aggression during COVID-19: A serial mediation model. *European Journal of Psychotraumatology*, 12(1), 1-11.
- Del-Valle, M. V., Lopez-Morales, H., Andres, M. L., Yerro-Avincetto, M., Trudo, R. G., Urquijo, S., & Canet-Juric, L. (2022). Intolerance of COVID-19-related uncertainty and depressive and anxiety symptoms during the pandemic: A longitudinal study in Argentina. *Journal of Anxiety Disorders*, 86, 1-8.
- Deniz, M. E. (2021). Self-compassion, intolerance of uncertainty, fear of COVID-19, and well-being: A serial mediation investigation. *Personality and Individual Differences*, 177, 1-5.
- Dominelli, L. (2020). *Surviving COVID-19: Social work issues in a global pandemic* (Child protection and welfare, social care). Stirling: Stirling University.

- Duru, Y. B., Gunal, V., Agaoglu, C. Y., & Tatlı, C. (2022). The role of covid-19 anxiety and intolerance of uncertainty in predicting resilience. *Scandinavian Journal of Psychology*, 63(5), 522-529.
- Emiral, E., Çevik, Z. A., & Gülümser, Ş. (2020). COVID-19 pandemisi ve intihar. *ESTÜDAM Halk Sağlığı Dergisi*, 5(COVID-19 Özel Sayısı), 138-147.
- Fedorenko, E. J., Kibbey, M. M., Contrada, R. J., Farris, S. G. (2021). Psychosocial predictors of virus and social distancing fears in undergraduate students living in a US COVID-19 "hotspot". *Cognitive Behaviour Therapy*, 50(3), 217-233.
- Firouzkouhi, M., Alimohammadi, N., Abdollahimohammad, A., Bagheri, G., & Farzi, J. (2021). Bereaved families views on the death of loved ones due to COVID 19: an integrative review. *OMEGA-Journal of Death and Dying*, 1-16. <https://doi.org/10.1177/00302228211038206>.
- Gavriliuță, C., Dalban, C. M., & Ioan, B. G. (2022). Educational, Emotional, and Social Impact of the Emergency State of COVID-19 on Romanian University Students. *International Journal of Environmental Research and Public Health*, 19(7), 1-20. <https://doi.org/10.3390/ijerph19073990>.
- Goulet-Pelletier, J. C., Cousineau, D. (2018). A review of effect sizes and their confidence intervals, Part I: The Cohen's d family. *The Quantitative Methods for Psychology*, 14(4), 242-265.
- Hill, E. M., Frost, A., Martin, J. D. (2021). Experiences of women with ovarian cancer during the COVID-19 pandemic: Examining intolerance of uncertainty and fear of COVID-19 in relation to psychological distress. *Journal of Psychosocial Oncology*, 39(3), 399-415.
- International Federation of Social Workers. (2022). Updated Information on IFSW and Covid-19. <https://www.ifsw.org/covid-19/>.
- Karatas, Z., Tagay, Ö. (2021). The relationships between resilience of the adults affected by the covid pandemic in Turkey and Covid-19 fear, meaning in life, life satisfaction, intolerance of uncertainty and hope. *Personality and Individual Differences*, 172, 1-7.
- Khorrami, K. J., Manzler, C. A., Kreutzer, K. A., Gorka, S. M. (2022). Neural and Self-report Measures of Sensitivity to Uncertainty as Predictors of COVID-Related Negative Affect. *Psychiatry Research: Neuroimaging*, 319, 1-6.
- Kılıç, S. (2013). Örneklem yöntemleri. *Journal of Mood Disorders*, 3(1), 44-46.
- Mallett, R., Coyle, C., Kuang, Y., Gillangers, D. Y. (2021). Behind the masks: a cross sectional study on intolerance of uncertainty, perceived vulnerability to disease and psychological flexibility in relation to state anxiety and wellbeing during the covid 19 pandemic. *Journal of Contextual Behavioral Science*, 22, 52-62.
- Ministry of Health COVID-19 Information Platform. (2022). General Coronavirus Chart. <https://covid19.saglik.gov.tr/TR-66935/genel-koronavirus-tablosu.html>.
- Montauk, T. R., & Kuhl, E. A. (2020). Covid-related family separation and trauma in the intensive care unit. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S96. <https://doi.org/10.1037/tra0000839>.
- Porter, A. C., & Raudenbush, S. W. (1987). Analysis of covariance: Its model and use in psychological research. *Journal of Counseling Psychology*, 34(4), 383.
- Reizer, A., Galperin, B. L., Chavan, M., Behl, A., Pereira, V. (2022). Examining the relationship between fear of COVID-19, intolerance for uncertainty, and cyberloafing: A mediational model. *Journal of Business Research*, 145, 660-670.
- Sarıçam, H., Erguvan, F. M., Akın, A., & Akça, M. Ş. (2014). The Turkish short version of the intolerance of uncertainty (IUS-12) scale: The study of validity and reliability. *Route Educational and Social Science Journal*, 1(3), 148-157.
- Saulner, K. G., Kosciński, B., Volarov, M., Accorso, C., Austin, M. J., Suhr, J. A., Allan, D., Allan, N. (2021). Anxiety sensitivity and intolerance of uncertainty are unique and interactive risk factors for COVID-19 safety behaviors and worries. *Cognitive Behaviour Therapy*, 51(3), 217-228.
- Senan, S., Halbrook, Y., Kornbrot, D. E., & Msetfi, R. M. (2022). Depression symptoms and the perception of public health restrictions during the COVID-19 pandemic in Saudi Arabia: The protective effect of sense of control. *Preventive Medicine Reports*. 28, 1-6. <https://doi.org/10.1016/j.pmedr.2022.101836>.

- Shiloh, S., Peleg, S., Nudelman, G. (2022). Core self-evaluations as resilience and risk factors of psychological distress during the COVID-19 pandemic. *Psychology, Health & Medicine*, 1-15.
<https://doi.org/10.1080/13548506.2022.2030480>.
- Thomas, C. G. (2021). *Research Methodology and Scientific Writing*. 2nd Edition. Springer.
- Tull, M. T., Barبانo, A. C., Scamaldo, K. M., Richmond, J. R., Edmonds, K. A., Rose, J. P., Gratz, K. L. (2020). The prospective influence of COVID-19 affective risk assessments and intolerance of uncertainty on later dimensions of health anxiety. *Journal of Anxiety Disorders*, 75, 1-8.
- Tuncay, T. (2004). *Afetlerde sosyal hizmet: 1999 Yılı Marmara ve Bolu- Düzce Depremleri sonrasında gerçekleştirilen sosyal hizmet uygulamaları*. Özbay Ofset Publishing.
- Ustabaşı Gündüz, D., Ayhan, D., & Akarçay Ulutaş, D. (2021). Sosyal hizmet bakış açısıyla pandemi yönetiminin değerlendirilmesi. İçinde İlknur Ekiz Atateş, Bilge Afşar (Ed), *Covid-19 Pandemisine Disiplinlerarası Bakış* (p.243-277). Ekin Publishing.
- Wang, J., Guo, C., Wu, X., & Li, P. (2022). Influencing factors for public risk perception of COVID-19-perspective of the pandemic whole life cycle. *International Journal of Disaster Risk Reduction*, 67, 1-13.
- Wheaton, M. G., Messner, G. R., Marks, J. B. (2021). Intolerance of uncertainty as a factor linking obsessive-compulsive symptoms, health anxiety and concerns about the spread of the novel coronavirus (COVID-19) in the United States. *Journal of Obsessive-Compulsive and Related Disorders*, 28, 1-6.
- World Health Organization Coronavirus Dashboard. (2022). <https://covid19.who.int/>. Erişim tarihi: 01.06.2022.