

THE IMPACT OF INTOLERANCE TO UNCERTAINTY ON UNEMPLOYMENT ANXIETY IN NURSING STUDENTS DURING PANDEMIC: ROLE OF RESILIENCE

PANDEMİ SIRASINDA HEMŞİRELİK ÖĞRENCİLERİNDE BELİRSİZLİĞE TAHAMMÜSÜZLÜĞÜN İŞSİZLİK KAYGI ÜZERİNE ETKİSİ: PSİKOLOJİK SAĞLAMLIĞIN ROLÜ

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ABSTRACT

This study aims evaluating the mediating role of psychological resilience in the effect of intolerance to uncertainty on unemployment anxiety, particularly in terms of nursing, other departments of health sciences, and social sciences. Data of this descriptive/cross-sectional study was collected between October and December 2020 via online survey method with intolerance to uncertainty scale, brief resilience scale, unemployment anxiety scale. Totally 634 students participated. Data were analysed with SmartPLS SEM software. Descriptive statistical analysis, confirmatory factor analyzes, structural equation modeling, mediation, and reliability analyses were performed. The positive and significant relationship was found between intolerance to uncertainty and unemployment anxiety and the negative and significant relationship was determined between these two variables and psychological resilience. University students were examined according to the departments; the positive impact of psychological resilience on unemployment anxiety was higher in nursing students compared to the others. Psychological resilience appears to be important for managing anxiety-related problems such as intolerance of uncertainty and unemployment anxiety. It can be thought that educational content should be created in a way that will increase the psychological resilience of other students as well as nursing students. This research differs from similar descriptive studies in order to evaluate the role of resilience in intolerance to uncertainty and unemployment anxiety among nursing students and students in other departments.

Keywords: COVID-19, Intolerance to uncertainty, Nursing students, Undergraduate students, Unemployment anxiety, Psychological resilience.

ÖZET

Bu araştırma, belirsizliğe tahammülsüzlüğün işsizlik kaygısı üzerindeki etkisinde psikolojik sağlamlığın aracılık rolünü, özellikle hemşirelik, sağlık bilimlerinin diğer bölümleri ve sosyal bilimler açısından değerlendirmeyi amaçlamaktadır. Tanımlayıcı/kesitsel tipte olan bu araştırmanın verileri, Ekim-Aralık 2020 tarihleri arasında çevrimiçi oluşturulan bir anket linki üzerinden belirsizliğe tahammülsüzlük ölçeği, psikolojik sağlamlık ölçeği ve işsizlik kaygısı ölçeği ile toplanmıştır. Araştırmaya toplam 634 öğrenci katılmıştır. Veriler SmartPLS SEM yazılımı ile analiz edilmiştir. Tanımlayıcı istatistiksel analizler, doğrulayıcı faktör analizleri, yapısal eşitlik modellemesi, aracılık ve güvenilirlik analizleri yapılmıştır. Belirsizliğe tahammülsüzlük ile işsizlik kaygısı arasında pozitif ve anlamlı ilişki, bu iki değişken ile psikolojik sağlamlık arasında negatif ve anlamlı ilişki tespit edilmiştir. Üniversite öğrencileri öğrenim gördükleri bölümler açısından incelenmiş olup; hemşirelik öğrencilerinde psikolojik sağlamlığın işsizlik kaygısı üzerindeki olumlu etkisi diğer sağlık bilimleri bölümleri ve sosyal bilimler öğrencilerine göre daha yüksek bulunmuştur. Psikolojik sağlamlık, belirsizliğe tahammülsüzlük ve işsizlik kaygısı gibi kaygıyla ilgili sorunları yönetmek için önemli görünmektedir. Eğitim içeriğinin hemşirelik öğrencilerinin yanı sıra diğer öğrencilerin de psikolojik sağlamlıklarını artıracak şekilde oluşturulması gerektiği düşünülebilir. Bu araştırma belirsizlik ve işsizlik kaygısının hemşirelik öğrencileri ve diğer bölümlerdeki öğrenciler arasındaki farkında psikolojik sağlamlığın rolünü değerlendirmesi amacıyla benzer tanımlayıcı çalışmalardan ayrılmaktadır.

Anahtar kelimeler: COVID-19, Belirsizliğe tahammülsüzlük, Hemşirelik öğrencileri, İşsizlik kaygısı, Lisans öğrencileri, Psikolojik dayanıklılık.

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INTRODUCTION

With the detection of COVID-19 cases in the world, many uncertainties and changes have occurred. Many sectors have been influenced negatively by the pandemic, and the priorities of people have changed (Rajkumar, 2020). Small and medium-sized businesses have had to close down or downsize as the group that is affected the most (Blustein et al., 2020). The unemployment rates have increased especially in developing countries in the pandemic period. According to the International Labor Organization (ILO) data, 114 million jobs were lost in 2020.

One of the sectors affected by the pandemic the most has been healthcare services, but the need for staff has increased in contrast to other sectors, and the capacities of the hospitals and healthcare professionals have become unable to meet the increased and increasing workload. These impacts on these sectors have been dependent on vitally important issues and out of the control of people such as when the disease will be controlled, whether a treatment will be found, and access to vaccinations and their effect level (Maduke et al., 2021). The pandemics experienced in the history of the world and information about the corona virus have enabled people to draw a draft roadmap. However, insufficient updates for the effect of the current pandemic on various dimensions of daily life such as economy, social life, health issues and restriction measures has led to a big uncertainty (Inter-Agency Standing Committee, 2020). Individuals have a certain level of tolerance to so many uncertainties, and when the uncertainty reaches a level that is too high for individuals to tolerate, mental effects emerge. Intolerance of uncertainty (IU) has been defined as 'the inability to withstand the aversive response triggered by an individual's lack of specific, key, or sufficient information and sustained by the resulting perception of uncertainty associated with this lack of knowledge' (Carleton, 2016; Carleton, Desgagné, Krakauer ve Hong, 2019). In a study conducted, it was found that the fear of COVID-19 had a mediating role in the relationship between IU and mental well-being (Satici et al., 2020). It is seen in the literature that intolerance to uncertainty is negatively associated with cognitive flexibility (Güvenç, 2019) and psychological resilience (Saatçı, 2020), while it is positively associated with anxiety disorders (Belge, 2019; Tantan Ulu & Yaka, 2020). IU was initially associated with anxiety disorders based on the observation that anxiety included uncertainty about a potential threat (Carleton, 2016; Jensen et al., 2016). Anxiety, which is one of the most basic emotions and has a function that completely aims for survival, has many types specific to situations such as exam anxiety, separation anxiety, performance anxiety, and unemployment anxiety. Unemployment anxiety (UA) is usually observed in young professional candidates and emerges as experiencing severe anxiety about not being able to find a job.

Youth unemployment, which was one the most serious problems in the world before the pandemic, has been much more important in this period. Adverse employment conditions in workplaces also affect the students' expectations of finding a job after graduation. Another factor that affects expectations of finding a job is the rate of the probability of the students working in jobs related to their field of study at the university. When some examples are examined in terms of employment rates of the study fields in Turkey, it is seen that the rate of nursing students finding a job within the first year of their graduation is 74.3%, while this rate is 78.6% for physiotherapy graduates, 61.9% for nutrition and dietetics graduates, 63.9% for economics graduates, 55.9% for business administration graduates, 55.9% for labor economics graduates, 58.4% for communications graduates, and 57.3% for sociology graduates. According to this picture, the probability of being employed in the field of healthcare and working in one's field is higher compared to social science-based departments. Moreover, the percentage of working in one's own field in the healthcare field reaches above 75%, while this rate is as low as 35% in social science fields (Presidential Human Resources Office, 2021).

Besides, increased unemployment rates, closing down or restricting the activities of businesses have also negatively affected the university students who are receiving education for their profession in terms of their psychology (Ployhart et al., 2021; Achdut & Refaeli, 2020).

While the unpredictable course of the current pandemic and the emerging problems cause individuals to feel a great deal of anxiety, psychological resilience has a strong effect on being able to manage these anxieties. Psychological resilience (PR) is the ability of a person to successfully overcome and adapt to these adverse conditions, despite very difficult conditions. Although it is defined as a talent and a psychological quality, psychological resilience has some features such as contributing to the maintenance of healthy development and being able to struggle with a negative situation when faced with it (Öz & Bahadır Yılmaz, 2009). In studies, it has been reported that psychological resilience has positive effects such as life satisfaction and psychological well-being (Altuntaş & Genc, 2018; Rudwan

& Alhashimia, 2018) in addition to being protective against mental disorders related with stress, anxiety, and depression (Karaşar & Canlı, 2020). The initial studies conducted on mental responses to the pandemic present evidence about the psychological distress caused by the COVID-19 pandemic (Rajkumar, 2020). Artar et al. (2020) In their study during COVID-19, they found that resilience had a negative relationship with anxiety. In another study conducted with healthcare professionals, it was reported that intolerance to uncertainty and psychological resilience had an explanatory effect on ruminative thinking, a concept that is highly related to anxiety. (Aydın & Ersoy Özcan, 2021). In a study conducted in China, it was determined that psychological stress symptoms were less prevalent in the Chinese workforce in the COVID-19 pandemic period, and that working positively affected mental health (Tan et al., 2020).

In the present study, the uncertainty experienced along with the pandemic, intolerance to this uncertainty, increased unemployment, and unemployment anxiety that loss of jobs may create in university students and their level of psychological resilience, which has an important role in terms of these two variables, were examined. The mediating role of psychological resilience in the effect of intolerance to uncertainty on unemployment anxiety was evaluated, particularly in terms of nursing, other departments related to healthcare sciences (Nutrition and dietetics, physiotherapy and rehabilitation, health management), and some departments (Economics, labor economics and industrial relations, international relations) of social sciences.

MATERIALS AND METHODS

Design and Participants of the Study

This study was formed in descriptive and cross-sectional design. The data for the scope of the study were obtained by the online survey method. The method for collecting the data of the study is survey method. Data were collected online between October and December 2020. An online survey link has been emailed to Nursing, Health Sciences, and Social Science students. In this context, 634 students filled out the survey. There are no missing or incorrectly filled out survey results. In accordance with the literature and the generally accepted ten-times rule, a sample size of more than ten times the variables in the SEM was obtained in the study (Barclay et al, 1995; Chin, 1998). In addition, a sample size of over 200 is sufficient to keep study from weak path coefficient and estimation errors (Chin & Newsted, 1999).

Data Collection Tools

There are sixty questions in survey form. There are sixteen questions for the demographic view such as age, gender, department educational & academic level in the first section. The second part of the survey includes the following scales.

Intolerance to uncertainty scale: Carleton et al., (2007) developed the intolerance to uncertainty scale and Sarıçam et al., (2014) adapted to Turkish. There are two sub-dimensions as Prospective Anxiety (PA), and Inhibitory Anxiety (IA) of the intolerance of uncertainty scale to measure a temper tendency to act negatively to uncertain events, regardless of the incidence of those events with twelve questions. Cronbach's alpha internal consistency coefficient was 0.88 for the whole scale in the adaptation study; It was found 0.84 for the prospective anxiety sub-dimension and 0.77 for the inhibitory anxiety sub-dimension. In this study Cronbach's alpha internal consistency coefficient was 0.767 for prospective anxiety sub-dimension and 0.854 for the inhibitory anxiety sub-dimension.

Unemployment anxiety scale: Tekin (2015) developed the unemployment anxiety scale with the Likert-type scale consists of twenty-six questions and four sub-dimensions: personal pessimism and lack of self-confidence (5 items), environmental and social pressure (8 items), qualitative lack of knowledge and skills (4 items), and difficulties in employment (8 items). In this study, the total score of the scale was taken into account, and as the score increases, unemployment anxiety increases. Cronbach's alpha internal consistency coefficient was 0.900 for the whole scale in the adaptation study. In this study Cronbach's alpha internal consistency coefficient was 0.930.

Brief resilience scale: Smith et al. (2008) developed the brief resilience scale was by and Doğan (2015) adapted to Turkish by in order to measure the resilience of individuals with the Likert-type scale consists

of six questions and self-report-style measurement tool. After the reverse coded items in the scale were translated, high scores indicate high psychological resilience. In the adaptation study, the internal consistency reliability coefficient of the scale was found to vary between .80 and .91. In this study Cronbach's alpha internal consistency coefficient was 0.725.

Data Analysis

SmartPLS Structural Equation Model (SEM) software used in small sample groups where normal distribution was not expected, has been preferred for the analysis of the study (Ringle et al., 2015; Sarstedt et al., 2017). SmartPLS examines the validity and reliability of the scales used for the determined variables and models, as well as the degree of relationship and significance level between the variables. We chose the PLS-SEM method because of its success in small samples, as well as its usefulness in prediction and exploratory research for complex and hierarchical models (Ringle, et al, 2012). In this study, after descriptive analysis, confirmatory factor analysis (CFA) of the variables in the measurement model were performed. After the CFA and validity reliability tests, mediation and SEM were analyzed in the structural model.

Ethical Permission

The research was carried out in accordance with the Declaration of Helsinki and ethical approval was obtained from a university Social and Human Sciences Ethics Committee with the decision dated 18/06/2020 and numbered 2020-3.

Research Model and Hypotheses

Figure 1 shows the theoretical research model of the study containing its hypotheses.

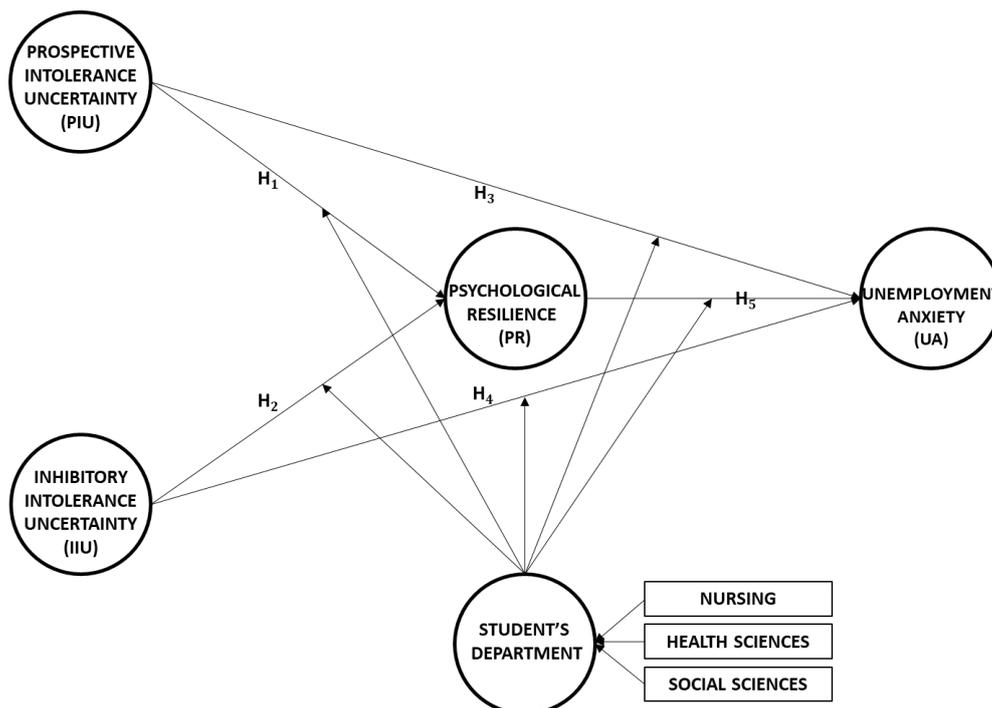


Figure 1. Proposed model for hypotheses tests

According to the research model, five hypotheses are suggested;

H₁: There is a statistically significant negative relationship between prospective intolerance to uncertainty and psychological resilience.

H₂: There is a statistically significant negative relationship between inhibitory intolerance to uncertainty and psychological resilience.

H₃: There is a statistically significant positive relationship between prospective intolerance to uncertainty and unemployment anxiety.

H₄: There is a statistically significant positive relationship between inhibitory intolerance to uncertainty and unemployment anxiety.

H₅: There is a statistically significant negative relationship between psychological resilience and unemployment anxiety.

In addition to the above hypotheses, this study also examines the mediating role of psychological resilience in the relationship between prospective and inhibitory intolerance to uncertainty and unemployment anxiety. According to this aim, two hypotheses are suggested;

H₆: Psychological resilience has a mediating effect on the relationship between prospective intolerance to uncertainty and unemployment anxiety.

H₇: Psychological resilience has a mediating effect on the relationship between inhibitory intolerance to uncertainty and unemployment anxiety.

This study also scrutinizes the moderating role of faculty departments of students in the PLS model. According to this aim, sub hypotheses of H₈ are;

H_{8a}: The effect of prospective intolerance to uncertainty on psychological resilience varies among nursing students, health sciences, and other faculty students. (Not supported)

H_{8b}: The effect of inhibitory intolerance to uncertainty on psychological resilience varies among nursing students, health sciences, and other faculty.

H_{8c}: The effect of psychological resilience on unemployment anxiety varies among nursing students, health sciences, and other faculty.

H_{8d}: The effect of prospective intolerance to uncertainty on unemployment anxiety varies among nursing students, health sciences, and other faculty.

H_{8e}: The effect of inhibitory intolerance to uncertainty on unemployment anxiety varies among nursing students, health sciences, and other faculty.

RESULTS

Table-1 shows the demographic information within the scope of descriptive statistics.

Table 1. Demographic Characteristics of Sample Group (n=634)

Groups	Frequency	%	Groups	Frequency	%
Education			Age		
Undergraduate	216	34.1	Under 20	230	36.3
Graduate	408	64.4	21-25	378	59.6
Postgraduate	10	1.5	26-30	18	2.8
Total	634	100	31 and above	38	1.3
			Total	634	100
Gender					
Male	125	27.6			
Female	459	72.4			
Total	634	100			

As a result of the Kolmogorov-Smirnov normality test via SPSS software, the scales within the study did not meet the normality assumption. ($p < 0.05$). Since the data were not normally distributed, the PLS-SEM method and SmartPLS software were used. The structure of the higher orders and the hypotheses were tested, respectively, and then the estimation of the correlation coefficients that maximize the R² value of the dependent. We used the bootstrapping and Multilevel Group Analysis technique with 5,000 resamples for calculating the t statistics to measure the significance of the model's coefficients. In the analysis, some of the items under variables were removed for their "factor loadings" are below 0.5 according to Hair et al. (2017) for enabling the convergent validity. The factor loadings of all variables' exceed 0.7 after reprediction process during measurement model for understanding the relationships were significant. Composite reliability values of all constructs according to Bagozzi & Yi (1988) those are bigger than 0.70 (Table 2).

Factor loadings of variables are higher than 0.6 (Bagozzi & Yi, 1988; Sarstedt et al., 2017) and the T values indicates that these all loadings are significant at 0.01 according to Table 2.

Table 2. Measurement Model Statistics (n=634)

Factors	Questions	Outer Loadings	Composite Reliability	Cronbach's Alpha
PROSPECTIVE ANXIETY (PA)	IUS01	0.747	0.843	0.767
	IUS02	0.712		
	IUS04	0.721		
	IUS05	0.624		
	IUS06	0.786		
INHIBITORY ANXIETY (IA)	IUS08	0.786	0.895	0.854
	IUS09	0.823		
	IUS10	0.823		
	IUS11	0.813		
	IUS12	0.724		
PSYCHOLOGICAL RESILIENCE (PR)	PR01	0.636	0.837	0.725
	PR02	0.849		
	PR06	0.883		
UNEMPLOYMENT ANXIETY (IA)	UAS02	0.642	0.939	0.930
	UAS04	0.676		
	UAS05	0.722		
	UAS07	0.721		
	UAS08	0.731		
	UAS09	0.630		
	UAS10	0.822		
	UAS11	0.639		
	UAS12	0.789		
	UAS15	0.643		
	UAS16	0.624		
	UAS18	0.702		
	UAS24	0.655		
UAS25	0.843			
UAS26	0.809			

According to The Average Variance Extracted (AVE) values must be greater than 0.50 for the proposed model to be a valid model (Hair et al., 2010; Hair et al., 2014). According to when the values in the Table 3 are examined, the square root of the AVE values of the relevant variable is greater than the correlation coefficients in the same column (Fornell & Larck 1981).

Table 3. Construct correlations and the squared roots of AVE

Factors	AVE	Fornell-Larcker Criterion			
		(1)	(2)	(3)	(4)
(1) Inhibitory Anxiety	0.631	0.795			
(2) Prospective Anxiety	0.519	0.649	0.720		
(3) Psychological Resilience	0.635	-0.454	-0.396	0.797	
(4) Unemployment Anxiety	0.509	0.433	0.385	-0.313	0.714

For proving the discriminant validity of latent variables, heterotrait-monotrait (HTMT) correlations are shown on Table 4. The HTMT of the correlations should be under 0.9 (Henseler et al., 2015).

Table 4. Heterotrait-Monotrait Ratio (HTMT)

Factors	(1)	(2)	(3)	(4)
(1) Inhibitory Anxiety	-			
(2) Prospective Anxiety	0.800	-		
(3) Psychological Resilience	0.533	0.485	-	
(4) Unemployment Anxiety	0.479	0.444	0.341	-

According to these results in terms of reliability, convergent and discriminant validity, the structural model analysis has been initiated. t-statistics evaluate significance of all paths in the structural model. If the T-Statistic of the associated path is greater than 1.96, then the path is significant in the model otherwise not. The path coefficients of the structural model varies between 1 and +1 in SmartPLS. As the path coefficients approach +1, which means the positive significance in the same direction, while it approaches 0, the relationships between variables become less significant. If the path coefficients is negative, there should be an inverse relationship between the variables. The predicted Structural model's path coefficients, t-statistics, and R² values are shown on Figure 2.

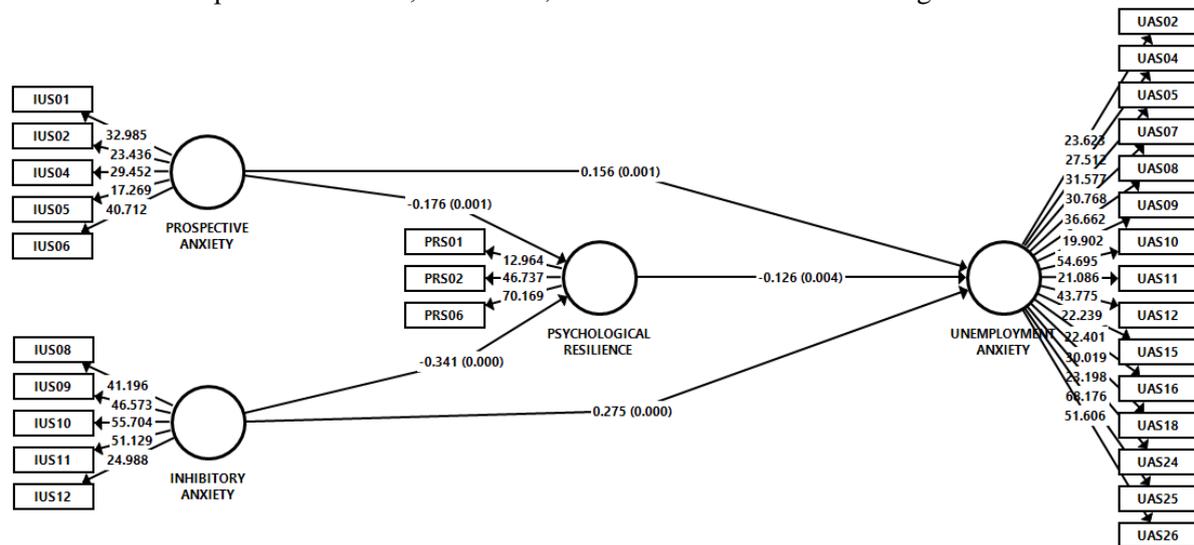


Figure 2. Path coefficients and T-Statistics of Structural Model

The Paths between exogenous and endogenous variables are significant (Figure 2). PA and IA significantly affect PR negatively (R²: 0.224). The effect of PA and IA on UA is examined respectively, it significantly affects positively CA (R²: 0.219). When r² values for endogenous latent variables in the structural model are 0.75, 0.50, and 0.25, these values are substantial, moderate, or weak. Both R² values of the study indicate that the endogenous latent variables are weakly explained. For all hypotheses as direct effects, the path coefficient is significant at the p<0.05 level, and so all hypotheses of the research are supported. Table 5 shows the structural model analysis results.

Table 5. Hypotheses testing for the direct relationship

H	Paths	Path Coefficients	Standard Error	T Statistics	P Values	Conclusion
H ₁	PA → PR	-0.176	0.052	3.362	0.001	Supported
H ₂	IA → PR	-0.341	0.051	6.624	0,000	Supported
H ₃	PA → UA	0.156	0.049	3.216	0.001	Supported
H ₄	IA → UA	0.275	0.052	5.284	0,000	Supported
H ₅	PR → UA	-0.126	0.045	2.796	0.005	Supported

In the second stage, the structural model has been tested by including psychological resilience as a mediator variable for the significance of the path coefficients of the mediated model. SmartPLS only indicates the significance of a mediator in mediational analysis, it does not interpret the extent of the mediation effects. This study uses a decision tree for interpretation of mediation analysis, to explain the mediator role of PR on sub-dimensions of intolerance to uncertainty and UA. According to the results both the direct and the indirect effect of PA and IA on UA are significant. The mediation of PR is therefore complementary and partial. Table 6 shows the analysis results.

Table 6. Hypotheses testing for a mediated relationship

H	Predictor →	Path Coefficients	T Statistics	Mediation Type	P Values	Conclusion
	Mediator → Criterion					
H ₆	PA → PR	Direct	0.156	3.216	Complementary (partial mediation)	0.032
	→UA	Indirect	0.022	2.154		
H ₇	IA → PR →	Direct	0.275	2.478	Complementary (partial mediation)	0.013
	UA	Indirect	0.043			

The last hypothesis in the research model is related to the moderator role of the departments where students are educated in the direct effects of the model. For this purpose, the study uses Smart PLS multi-group analysis (MGA) whether the research model differs according to the department the students' study. The department of education as the categorical variable n = 204 for nursing students, n = 155 for health sciences students, n = 275 for Social Sciences students. Table 7 shows the analysis results regarding the moderator variable role of the student's department in the relationships for the structural model.

According to Table 7, while the effect of PA on PR is significant in Nursing students and Health Sciences students, it is non-significant in other department students. On the other hand, the effect of IA on PR is significant for all students. While PA has a significant effect on UA in Nursing and Health Sciences students, there is no significant effect on the students of other departments. While IA has a significant effect on PA for nursing and other departments students, there is no effect for health science students. While PR has a significant effect on UA in nursing and health sciences students, there is no significant effect on other students. Table 7 presents the path coefficients of each relationship in terms of the departments students study and the significance of these coefficients. However, although the path coefficients of all three groups are significant, there may be a significant difference between the coefficients. Table 8 shows the differences between the path coefficients and the analysis results regarding the significance levels of these differences.

Table 7. Hypotheses testing for moderation relationships

H	Paths	Path Coefficients			T Statistics			P Values		
		N	HS	O	N	HS	O	N	HS	O
H _{8a}	PA → PR	-0.222	-0.274	-0.138	2.483	2.77	1.743	0.013	0.006	0.081
H _{8b}	IA → PR	-0.366	-0.335	-0.318	3.715	3.581	4.268	0.000	0.000	0.000
H _{8c}	PA → UA	0.117	0.149	0.156	1.252	1.371	2.301	0.211	0.171	0.021
H _{8d}	IA → UA	0.235	0.143	0.345	3.011	1.106	4.468	0.003	0.269	0.000
H _{8e}	PR → UA	-0.274	-0.226	-0.076	4.002	2.298	1.182	0.000	0.022	0.237

Notes: N = Nursing Students; HS = Health Sciences Students; O = Other Students, p-values < 0.05

According to Table 8, there are differences between the path coefficients in terms of the departments of the students only in the H_{8e} hypothesis. And since this difference is significant between nursing students and other students, only this hypothesis is supported. Accordingly, the effect of psychological resilience on unemployment anxiety is bigger in nursing students than in other students. On the other hand, according to Table 8, in other hypotheses, there is no significant difference according to the department students read.

Table 8. Hypotheses Results for moderation relationships

H	Paths	Path Coefficients-diff		T Statistics		P Values		Conclusion
		N – HS	N – O	N vs HS	N vs O	N vs HS	N vs O	
H _{8a}	PA → PR	0.052	-0.084	0.39	0.703	0.697	0.483	Not Supported
H _{8b}	IA → PR	-0.031	-0.048	0.226	0.39	0.821	0.697	Not Supported
H _{8c}	PA → UA	0.093	-0.11	0.616	1.001	0.539	0.318	Not Supported
H _{8d}	IA → UA	-0.032	-0.039	0.225	0.338	0.822	0.736	Not Supported
H _{8e}	PR → UA	-0.048	-0.198	0.401	2.12	0.689	0.035	Supported

Notes: N = Nursing Students; HS = Health Sciences Students; O = Other Students, p-values < 0.05

DISCUSSION

Along with the COVID-19 pandemic, changes in the lifestyle of all humanity have occurred, and while issues such as the transmission of the infection, the effects of the disease, and death rates led to anxiety in the early periods of the pandemic, secondary problems such as disrupted health needs, psychiatric disorders, economic losses, decrease in income, and increased unemployment due to the pandemic have come to the fore in the recent period. As a result of the variants of the virus and the remittent course of the pandemic, uncertainty about the future and intolerance to this situation are on the increase, and it is thought that university students, whose educational and social lives have been negatively affected by the pandemic, may experience unemployment anxiety due to the increasing unemployment problem and economic losses (Ployhart et al., 2021; Achdut, & Refaeli, 2020). In the present study, university students' intolerance to uncertainty and unemployment anxiety levels and their levels of psychological resilience, which has an important role in terms of these two variables, were determined, and the mediating effects of these variables between each other were analyzed.

The first five hypotheses of the study were established on the relationships between intolerance to uncertainty and psychological resilience, and as a result of the analyses, these hypotheses were accepted. While there is significantly positive relationship between intolerance to uncertainty and unemployment anxiety, a negative and significant relationship was found between these two variables and psychological resilience. In a study in which nursing students' levels of intolerance to uncertainty and psychological resilience were examined, a negative relationship between intolerance to uncertainty and psychological resilience was found (Lee, 2019). In a study conducted on adult individuals in Turkey, it was determined that intolerance to uncertainty negatively and significantly predicted psychological resilience (Karataş & Tagay, 2021). In another study, senior university students' levels of anxiety about finding a job and intolerance to uncertainty were examined, and a positive relationship was determined between these variables (Bıkmaz & Yağan, 2020). In yet another study, it was determined that psychological resilience directly, significantly, and negatively affected intolerance to uncertainty (Kasapoğlu, 2020). According to the study, the findings are consistent with the literature. Uncertainty for future happenings may lead to anxiety, worry, and even dysfunction. It has been stated that in case of intolerance to uncertainty, the existing uncertainty paves the way for negative emotions and biased expectations, and causes individuals to display inflexible responses in the face of uncertainty such as not being able to find a job (Gu et al., 2020). It has been reported that psychological resilience is a positive competence that develops as a result of being able to overcome challenging situations and that it has a positive relationship with cognitive emotional regulation (Altuntaş & Genç, 2018). Considering that high psychological resilient individuals are cognitively, emotionally, and behaviorally more successful in coping with unexpected and unpredicted events and that intolerance to uncertainty creates a cognitive susceptibility for pathological anxiety, it can be claimed that the decrease in psychological resilience is an expected situation while intolerance to uncertainty and unemployment anxiety are increasing.

In line with the sixth and seventh hypotheses it was determined that psychological resilience had a partial mediating impact during the relation between intolerance to uncertainty and unemployment anxiety. In a study in which individuals who continued to work in the pandemic period were examined in terms of mental health and work attitude, the most important risk factor for mental health was found to be unemployment anxiety, and the primary protective factors were identified as psychological resilience and optimism (Song et al., 2020). In a study conducted with the participation of research assistants, it was found that high-level stress resulting from uncertainty was strongly related with psychological resilience at low level, and it was expressed those efforts to increase intolerance to uncertainty and resilience would offer an opportunity to reduce depression and burnout (Simpkin et al., 2020). In line with the study findings, it can be assumed that if an individual has high psychological resilience, that is, if the responses s/he gives to stressful situations are positive, then his/her anxiety level will be lower, and this situation is in compliance with the literature (Petzold et al., 2020; Kararımak, 2006). It was also determined in the study that psychological resilience negatively affected intolerance to uncertainty, and that there was a significant positive relation between intolerance to uncertainty and unemployment anxiety. As levels of intolerance to uncertainty individuals' decrease, their levels of unemployment anxiety also decrease. Accordingly, as the intolerance to uncertainty of individual's increases, his/her showing positive responses as a result of high psychological resilience in managing the stress caused by uncertainty can reduce unemployment anxiety (Bıkmaz & Yağan, 2020; Polayhart

et al., 2021; Kasapoğlu, 2020; Lee, 2019). On the other hand, the focus of individuals who cannot tolerate uncertainty on uncertain results may lead to the continuation of anxiety such as not being able to find a job to be experienced in the future (Dugas et al., 2001). In this context, it can be stated that an uncertain situation that can transform into a more challenging process such as being employed or unemployed can be managed more effectively with the mediating impact of psychological resilience.

It was determined in the study that the effect of psychological resilience on unemployment anxiety was higher in nursing students in comparison to the students of other departments. Psychological resilience has been defined as an individual's adaptation process, the power to hold himself/herself together, or the ability to successfully overcome disasters in the face of important sources of stress such as a trauma, a threat, serious health problems, and workplace-related and financial problems (Karairmak, 2006). When the psychological resilience and intolerance to uncertainty levels of individuals who struggled against a disease were compared with healthy individuals, it was determined that while intolerance to uncertainty levels were at the same level, psychological resilience levels of sick individuals were higher than those of healthy individuals (Mitmansgruber et al., 2016). In a systematic qualitative analysis on psychological resilience levels of nursing students, five main themes that explained psychological resilience were identified. These themes were having relations that are important for the individual, knowing sources and power, reframing destructive experiences, adjusting the frames for learning, and accepting uncertainty (Amsrud et al., 2019). When it is considered that past experiences are determinant in terms of managing anxiety and uncertainty, and that transforming destructive experiences into a development tool by reframing them is a component of psychological resilience, it can be stated that its having a mediating effect in tolerating uncertainty and managing unemployment anxiety is a natural outcome. It can be claimed that the nursing students, in contrast to other students analyzed within the scope of the study, overcoming the experiences that they encounter in clinical practices and their managing a complicated process such as patient care may have helped to increase their psychological resilience (Yun et al., 2020), and that this situation contributed to their managing an anxiety-based problem such as unemployment anxiety more effectively and their dealing with the stress that this uncertainty created more easily.

Limitations

Along with its advantages, this study had some limitations. The research was conducted with students from a university. In addition, the representative power of the research is limited to the group in which it was conducted and cannot be generalized. In this context, multicenter studies can be planned. In addition, this research is cross-sectional and longitudinal studies are recommended to better understand the subject.

CONCLUSION

According to the result of the research, the intolerance to uncertainty and unemployment anxiety were positively related, that both variables were negatively correlated with psychological resilience, and that psychological resilience had a partial mediating effect in the relationship between intolerance to uncertainty and unemployment anxiety. When the university students were examined according to the departments they studied, it was determined that the impact of psychological resilience on unemployment anxiety was higher in nursing students compared to the other students. When it is considered that psychological resilience, which is an important skill for managing anxiety-related problems like intolerance to uncertainty and unemployment anxiety, is acquired with growing through challenging experiences in one's past life, it can be thought that this effect may have resulted from nursing students' clinical practices and patient care experiences. It is recommended that further studies should be carried out for university students to develop their competence for managing intolerance to uncertainty and unemployment anxiety.

Relevance for Clinical Practice

In a clinical environment with many stressors and uncertainties, the high psychological resilience of nurses compared to other healthcare professionals will also positively affect clinical problem solving and patient care.

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Conflict of Interest

The authors report no actual or potential conflicts of interest.

Author Contributions

Plan, design: DA, HSÖ, UB; **Material, methods and data collection:** DA, HSÖ, UB; **Data analysis and comments:** DA, HSÖ, UB; **Writing and corrections:** DA, HSÖ, UB.

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