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Perceived Stress and Psychological Well-Being in Adult Individuals during COVID-19: The Mediating Role of Coping Strategies

Covid 19 Sürecinde Yetişkin Bireylerde Algılanan Stres ve Psikolojik İyi Oluş: Başa Çıkma Tutumlarının Aracılık Rolü

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ABSTRACT

The purpose of this study was to explore the role of coping strategies in the relationship between adult individuals' perceived stress levels and their psychological well-being during the COVID-19 pandemic. The study data was collected by administering the measurement tools to 259 adult individuals between May 1, 2020, and May 30, 2020, the dates when the quarantine measures were strictly implemented in Turkey during the COVID-19 pandemic. Perceived Stress Scale, the COPE Inventory, and Psychological Well-Being Scale were used for data collection. The model created to determine the direct and indirect relationships between the study variables was tested with path analysis. According to the analysis, the model has a good fit with the data (χ 2=43.554, p=.126>.05, df=34, χ 2/sd=1.281, RMSEA=.033, SRMR=.0358, CFI=.993, TLI=.964), and perceived stress was significantly predicted by some of the coping strategies and psychological well-being. In addition, coping strategies had a mediating effect between perceived stress and psychological well-being. The findings showed that while stress is a trigger factor that supports new personal development for some, it can have a compelling effect on others. The way stress is perceived and the coping strategies employed as a result affect the well-being of individuals.

Article Information

Keywords

COVID-19, stress, psychological well-being, coping strategies

Anahtar Kelimeler

COVİD-19, stres, psikolojik iyi oluş, başa çıkma tutumları

Article History

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ÖZET

Bu araştırmada Covid 19 Pandemi sürecinde yetişkin bireylerin algıladıkları stres düzeyleri ile psikolojik iyi oluşları arasındaki ilişkide başa çıkma tutumları rolünün belirlenmesi amaçlanmıştır. Araştırma verileri Covid 19 pandemi sürecinde Türkiye'de karantina uygulamalarının yoğun olarak yaşandığı 1-30 Mayıs 2020 tarihleri arasında 259 yetişkin bireye uygulanarak elde edilmiştir. Araştırmada Algılanan Stres Ölçeği, Başa Çıkma Tutumları Ölçeği ve Psikolojik İyi Olma Ölçekleri uygulanmıştır. Araştırmada yer alan değişkenler arasındaki doğrudan ve dolaylı ilişkileri saptamak için oluşturulan model, yapısal eşitlik modeli yöntemlerinden biri olan yol analizi ile test edilmiştir. Analizler sonucunda modelin verilerle iyi uyum sağladığı (χ2=43.554, p=.126>.05, df=34, χ2/sd=1.281, RMSEA=.033, SRMR=.0358, CFI=.993, TLI=.964), algılanan stresin başa çıkma tutumları ve psikolojik iyi oluş üzerinde anlamlı etkisi olduğu sonucuna ulaşılmıştır. Ayrıca algılanan stres ile psikolojik iyi oluş arasında bazı başa çıkma stratejilerinin aracılık etkisi olduğu tespit edilmiştir. Stres kimi için yeni bireysel gelişimi destekleyen bir tetikliyici unsur iken kimisi için zorlayıcı etkiye sahip olabilmektedir. Stresin algılanış biçimi ve bunun sonucunda devreye sokulan baş etme stratejileri bireylerin iyi oluş biçimlerini etkilemektedir.

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Ethical Statement: The study was approved by the Zonguldak Bülent Ecevit University Human Research Ethics Committee on 07/07/2020 (Protocol no: 830).

INTRODUCTION

Noticed as an agent causing pneumonia in Wuhan, China in December 2019, Coronavirus is one of the viruses among the CoV virus group that developed serious outbreaks such as the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) since 2002 (Nokhodian et al., 2020). The World Health Organization (WHO) announced that this new disease can be characterized as a pandemic in March, 2020 (WHO; 2020b). A pandemic is an epidemic occurring across a large region, transcending international borders, and generally affecting a large number of people (Porta, 2014). Measures such as curfews, suspension of formal education activities, ending all meetings and activities bringing people together and travel restrictions were taken against the COVID-19 pandemic in Turkey (T.C. Ministry of Interior, 2020). The measures taken against COVID-19 changed the lifestyle people were used to. The crisis stemming from the COVID-19 pandemic has been generating stress in the world's population (WHO; 2020a). Stress is considered by the WHO as one of the important triggering factors affecting human health in the 21st century. Recently, COVID-19 pandemic affected the world as a powerful stress stimulus.

The concept of stress is defined as the body's non-specific response to any demand (Selye, 1975). The concept of stressor refers to the stimulus causing a stress response (Everly & Lating, 2019). Emphasizing the relationship between the individual and the environment in the definition of stress, Lazarus and Folkman (1984) defined psychological stress as the individual's assessment that the relationship between the individual and his/her environment exceeds or strains his/her strength and jeopardizes his/her being. The primary and secondary appraisals about the situation made by the individual who is exposed to the psychosocial stress stimulus (Lazarus & Folkman, 1984; Everly & Lating, 2019) show that the source of the response to the stressful situation is related to the perception of stress, namely its cognitive content (Fink, 2016). Primary appraisals are assessments of what environmental demands are and what their consequences will be. Three main consequences are identified: (1) irrelevant if the situation has no effect on the individual, (2) bening-positive if the situation is perceived as positive for the individual, and finally (3) stressful (Lazarus and Folkman, 1984). When the situation is perceived as stressful, the secondary appraisal comes to play. In the secondary appraisal, the individual intervenes in the situation by making an assessment of his or her available options for coping. Depending on the result of the secondary appraisal, harm/loss, threat, and challenge stress types may develop. Appraisal of the stress factor as harm/loss and/or threat causes distress, which is the typical form of stress. On the other hand, challenge appraisal leads to a different form of stress called eustress. In the challenge appraisal, the situation is still considered as challenging (potentially exceeding capacity and therefore being stressful), but it also involves seeing the effort and behavior pattern as an opportunity to gain benefit, positively motivating (Lazarus & Folkman, 1984; Fink, 2016). According to the basic prediction of Lazarus and Folkman's (1984) theory and other stress appraisal theories, individuals who regard stress as a challenge rather than a threat and who believe that stress may increase and facilitate the pursuit of goals will be able to cope more effectively with stress and exhibit better results (Hagger, Keech, & Hamilton, 2020). Depending on how stress is perceived, the strategies used to cope with the situation also vary.

When people encounter a stressful situation, they try to cope with stress by using one or more of the cognitive, affective, and behavioral ways in order to maintain their physical and psychological well-being and to reduce or control stress. Any stressful event, even an ordinary daily encounter, may have different meanings for each person. Depending on the meanings attributed to events, solutions differ from person

to person (Folkman & Lazarus, 1988). Coping strategies play an important role in the physical and psychological well-being of the individual. Coping is defined as the ever-changing cognitive and behavioral efforts of the individual to overcome certain demands leading to the perception that their internal and/or external resources are depleted (Lazarus & Folkman, 1984). Coping strategies may directly affect the health outcomes of the individual, as well as indirectly affect the well-being of the individual by facilitating adaptation to medical interventions. Coping strategies may mitigate or cushion the health effects of stress (Aldwin, 2007).

The studies conducted by Lazarus and Folkman (1984) stand out among the studies on stress management and coping strategies. According to their cognitive model regarding stress and coping, there are two types of coping strategies, namely problem-focused coping strategies and emotion-focused coping strategies. Most of the scales developed to measure coping include the dimensions of problem-focused coping strategies and emotion-focused coping strategies (Parker & Endler, 1992). Problem-focused coping aims to solve the problem or do something to change the source of stress, such as learning new skills, removing challenges, and finding alternative solutions. Emotion-focused coping aims to reduce or manage situation-related or situation-based emotional distress, such as social comparison, emotional support, and imaginary thoughts (Lazarus, 1993). Studies put forth that most people use both problem-focused and emotion-focused coping strategies when dealing with stressful events, and that a particular action may often reflect both strategies (Lazarus, 1996). Also, according to the literature, avoidance is defined as the third basic dimension of coping. Avoidance strategies may be related to avoidance from the task orientations in problem-focused coping strategies, as well as avoidance from the personal orientations in emotion-focused coping strategies (Parker & Endler, 1992).

The positive and negative emotions experienced when faced with a stressful event are the reflections of the person's instantaneous appraisal of their well-being (Lazarus & Folkman, 1984). It is possible that psychological well-being (Ryan & Deci, 2001), which is associated with the individual's functionality as a whole, may be affected when faced with any stress stimulus. There are studies showing that psychosocial stress stimuli (Everly & Lating, 2019) that are activated through cognitive assessments when faced with a stressful situation/event directly or indirectly affect the psychological well-being of the individual (Essex et al., 1999). Psychological well-being refers to revealing the potential of the individual during the process of self-realization (Ryff, 1989). According to the psychological well-being model of Ryff, in order for a person to experience the highest levels of well-being, they must exhibit the six positive dimensions of mental health at the highest levels. The six dimensions mentioned in the model are self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989; Ryff & Singer, 1996).

Stress causes feelings of fear and anxiety and may have devastating effects on our emotional and physical health (Fink, 2016). Psychological responses in pandemics were found to be anxiety, fear, depression, anger, guilt, grief and loss, post-traumatic stress and stigma, as well as compassion for others, and a greater sense of empowerment (Chew et al., 2020). Negative psychological responses such as post-traumatic stress symptoms, confusion, and anger were reported as the psychological effects of quarantine measures imposed to prevent COVID-19. Stress sources resulted from long quarantine periods, fear of infection, frustration, boredom, insufficient material, insufficient information, financial losses, and stigmatization (Brooks et al., 2020). Worldwide research on the psychological effects of COVID-19 revealed that people are negatively affected by COVID-19, albeit at different levels, and revealed the

psychological stress they experience (Cao et al., 2020; Roy et al., 2020; Rehman et al., 2021; Sønderskov et al., 2020; Park et al., 2020).

Pandemic is a condition that is associated with psychosocial stress factors and involves health threats to people and their loved ones. Psychological responses to pandemics include maladaptive behavior, emotional stress, and defensive reactions (Taylor, 2019). The fact that people do not give the same response to similar stress stimuli and/or that they have different response levels seems to be associated with the stress they perceive. The interaction of the cognitive-affective domains that happens when encountering stressful stimuli represents how stress factors are perceived, and this critical integrated perception represents the determination of whether psychosocial stimuli become psychosocial stress factors. Cognitive interpretation of the situation/event plays a role in adaptation to the stress factor and serves to increase or decrease the resulting stress response (Everly & Lating, 2019). Although the relationships between perceived stress level, psychological well-being, and coping strategies were examined separately in different studies, it is believed that it was necessary to reveal the role of coping in the relationship between perceived stress and psychological well-being. This study is important in terms of being the first attempt to provide a quantitative model determining the relationship between the perceived stress level, psychological well-being, and coping strategies of adults in Turkey when faced with psychosocial stress stimuli. Determining what kind of coping strategies are used in stressful situations and whether these coping strategies are functional or not is very important in terms of identifying whether the individual endangers his/her physical and mental health (Hagger, Keech, & Hamilton, 2020). At this point, it is believed that determining the mediating effect of coping strategies in the relationship between perceived stress level and psychological well-being will contribute to the structuring of intervention programs and psychological counseling practices.

Within the scope of main purpose, first, the relationships between variables were examined, and then a model was created to examine the direct and indirect relationships between the variables. In line with this model, the following hypotheses were tested. During the COVID-19 pandemic,

- There are direct relationships between adult individuals' perceived stress levels and their psychological well-being.
- There are direct relationships between adult individuals' perceived stress levels and their coping strategies.
- There are direct relationships between adult individuals' coping strategies and their psychological well-being.
- Coping strategies have a mediating role between adult individuals' perceived stress levels and their psychological well-being levels.

METHOD

Within the framework of the study purpose, the study employed the descriptive relational design. Relational research designs are used in order to determine the existence of a relationship between two or more variables and the level of this relationship. For this reason, the study data were collected through scales. The data were collected between May 1, 2020 and May 30, 2020, the dates when the quarantine measures were strictly imposed in Turkey during the COVID-19 pandemic.

Study Group

The scales for collecting the data were developed in a format that could be viewed online on Google Form, and the generated link was sent to researchers' students, colleagues, and other people from their circle, and they were asked to send the form to their own circles. The study purpose and the fact that they did not need to give their names were explained on the first page to the people that this link was given, and the participants were asked to fill in the scales online. Repeated entries from the same computer were blocked. For the study, the necessary approval was obtained from the Zonguldak Bülent Ecevit University Human Research Ethics Committee (Protocol No: 830).

200 females and 59 males participated in the study. Being over the age of 18 was taken as a criterion while determining the adult individuals that would be included in the study group. Participants' ages ranged from 18 to 72. Of the participants, 133 were single, 107 were married, and 19 were widows or divorced. 136 of the participants lived in a metropolitan city, 60 in a city, 50 in a district, and 13 in a village. 106 of the participants were in the 18-25 age range, 39 in the 25-34 age range, 58 in the 35-44 age range, 44 in the 45-54 age range, nine in the 55-64 age range, and three in the 64-72 age range. Eight of the participants were tested for COVID-19. 14 of the participants were diagnosed with COVID-19 themselves or had a relative who tested positive. Before the application, research ethics committee approval was obtained from the institution where the researchers worked.

A cross-sectional survey was conducted with 259 people. While working with very large sample groups in structural equation models causes data loss, small sample groups lead to unreliable results. Therefore, it is necessary to determine the adequate sample size in structural equation model studies. Although there is no definite consensus about the sample size in these studies, many researchers emphasize that there should be at least 200 participants (Kline, 2015; Hoe, 2008). Based on these assessments, it was concluded that the number of participants in the study was adequate.

Data Collection Tools

Personal Information Form. Personal Information Form included information on participants' age, sex, and whether or not they were tested for COVID-19.

Perceived Stress Scale (PSS). Developed by Cohen, Kamarck, and Mermelstein (1983), PSS was adapted to Turkish by Eskin et al. (2013). As a result of the construct validity test done using exploratory factor analysis, a two-factor structure, "perceived insufficient self-efficacy" and "perceived stress/distress", was obtained. The scale is a five-point Likert-type scale in which the responses range from zero (never) to four (very often). The scale consists of 14 items which are similar to "In the last month, how often have you been upset because of something that happened unexpectedly?". The internal consistency coefficient of the scale was calculated as .84 and the test-retest reliability coefficient as .87. The 14-item two-factor structure in the scale explained 46.5% of the total variance. In this study, the 14-item two-factor structure of the scale was confirmed, and goodness of fit values were obtained within the desired ranges [χ2=51.682, df=33, χ2/sf=1.566, p=.020, RMSEA=.047, SRMR=.050, CFI=.977, TLI=.968]. Also, the Cronbach's alpha internal consistency coefficient for the whole scale was calculated as .87, .82 for "perceived insufficient self-efficacy", and .78 for "perceived stress/distress".

The COPE Inventory. Developed by Carver, Scheier, and Weintraub (1989), the COPE Inventory was adapted into Turkish by Ağargün et al., (2005). The inventory is a four-point Likert-type scale consisting of 60 items with 15 sub-dimensions. These sub-dimensions are positive reinterpretation and growth, mental disengagement, focus on and venting of emotions, use of instrumental social support, active

coping, denial, religious coping, humor, behavioral, restraint, use of emotional social support, substance use, acceptance, suppression of competing activities, and planning. Each of these sub-dimensions indicates a different coping strategy. In the present study, ten of these dimensions (religious coping, substance use, humor, denial, focus on and venting of emotions, acceptance, suppression of competing activities, planning, active coping, positive reinterpretation, and growth) were from the original form of the scale. It was found that some items were also related to different dimensions. In this study, the items of the restraint coping subscale were excluded because the item values of the restraint coping subscale were not adequately high (Cronbach's alpha internal consistency coefficient was .35) and the items were distributed among other dimensions. Similarly, Carver (1997) stated in his study that the Restraint Coping subscale did not have a significant effect as in their first study and that they excluded the items from the scale because the items could be explained with different dimensions. Also, items of the use of instrumental social support and use of emotional social support dimensions were gathered under one single dimension, and the items of the mental disengagement and behavioral disengagement were gathered under one single dimension, too. Since the items in use of instrumental social support and use of emotional social support dimensions were related to the use of social support, this dimension was named as "use of social support", and since the items in mental disengagement and behavioral disengagement dimensions were related to the disengagement, this dimension was named as "disengagement". As a matter of fact, in the original scale study, researchers (Carver, Scheier, and Weintraub, 1989) expressed that these variables are variations of each other. Therefore, it was decided to combine these two dimensions in this study. Although two items were found to be sufficient for each dimension in the shortened versions of the scale in different countries, this study did not include a subscale consisting of two items. However, due to the low item load values of some items, one item was removed from each of the subscales. For this study, the reliability of the scale was ensured by calculating Cronbach's alpha internal consistency coefficients for the scale's sub-dimensions and the whole scale. Cronbach's alpha internal consistency coefficients for the whole scale was .87 (with 48 items), for "religious coping" .96 (with 3 items), for "substance use" .90 (with 4 items), for "humor" .87 (with 4 items), for "denial" .83 (with 3 items), for "focus on and venting of emotions" .82 (with 4 items), for "acceptance" .75 (with 3 items), for "suppression of competing activities" .73 (with 3 items), for "planning" .83 (with 3 items), for "active coping" .84 (with 3 items), for "positive reinterpretation and growth" .76 (with 3 items), for "use of social support" .86 (with 8 items), and for "disengagement" .67 (with 7 items). In this study, the goodness of fit values of these thirteen sub-dimensional form of the scale was obtained within the desired ranges [χ 2=902.897, df=570, χ 2/sd=1.584, p=.000 RMSEA=.048, SRMR=.0659, CFI=.934, TLI=.923].

Psychological Well-Being Scales (PWBS). Developed by Ryff (1989), PWBS was adapted to Turkish by Akın (2008). The 84-item 6-point Likert type scale consists of six sub-dimensions, namely autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Confirmatory factor goodness of fit values of the scale were RMSEA=.072, NFI=.97, IFI=.98, RFI=.97, CFI=.98, GFI=.93, and SRMR=.062. As a result of CFA in this study, the dimensions of Autonomy, Positive Relations with Others, Personal Growth, and Environmental Mastery were under separate dimensions as in the original form. However, items from the Self-Acceptance and Purpose in Life dimensions were gathered together under the same factor. These two dimensions, the dimension of Self-Acceptance, which involves exhibiting a positive attitude towards oneself by accepting oneself and life as it is, and the dimension of Purpose in Life, which involves finding meaning in the difficulties

experienced by the person, were taken as a single dimension since they were interrelated. As a result, the PWBS was used as a five-dimensional scale in this study. In the present study, the Cronbach's alpha internal consistency coefficient for the dimension of Autonomy was .81, .76 for Positive Relations with Others, .80 for Personal Growth, .80 for Environmental Mastery, .88 for Self-Acceptance and Purpose in Life, and .91 for the whole scale. The goodness of fit values of the five-dimensional form of the scale were within the desired ranges [χ 2=346.384, df=196, χ 2/sd=1.767, p=.000, RMSEA=.055, SRMR=.060, CFI=.918, TLI=.903].

Data Analysis

Before performing structural equation modeling, whether the data collected for analysis provided the necessary assumptions for analysis was tested. Single and multiple outliers were examined, and all scores were converted into standard scores. Although two outliers were found in the collected data, these data were not excluded from the analysis. There was no missing data in the study. The normality of distribution was tested, and it was concluded that the kurtosis skewness coefficients were obtained within the range of between +1 and -1. Whether there was multicollinearity and singularity which refers to the relationship between independent variables was tested with the Pearson product-moment coefficient (Table 1). Tolerance values (higher than 0.10) and variance inflation factor (lower than 10) were obtained within the desired range (Pallant, 2005). After these assessments, the measurement model and the structural equation modeling were tested. Since the model fit values were obtained within the desired ranges, the mediation test was performed. Direct, indirect, and total effect values among the latent variables were calculated. The bootstrap method was used to test the mediation effect. The bootstrap method reveals statistically stronger results, especially in mediation analysis performed with small sample groups (Shrout & Bolger, 2002). The results were obtained by using the Monte Carlo parametric bootstrap method at a 95% confidence interval consisting of a sample of 1000 and the maximum likelihood method. SPSS 20 and AMOS 20 programs were used to analyze the data.

In the study, structural equation modeling was used in order to test the compatibility of the proposed model with the data. The information about the fit between the model and the data is tested with the chi-square ($\chi 2$) test. As with many research techniques, the results obtained with chi-square distributions are affected by the sample size. In studies where the sample size is 150 and above, the $\chi 2$ test tends to be significant (Bagozzi & Yi, 2012). The $\chi 2$ test being significant indicates that the model does not fit well. In order to solve this problem, some goodness of fit values other than the $\chi 2$ significance are examined. In this study, RMSEA (root mean square error of approximation), SRMR (standardized root mean square residual), CFI (comparative fit index), and TLI (Tucker-Lewis Index) values are presented in addition to the chi-square value (Bagozzi, 2010; Bagozzi & Yi, 2012). In order to conclude that the fit between the model and the data is at a good level, the values of $\chi 2$ / df ≤ 2 , p $\geq .05$, RMSEA $\leq .06$, SRMR $\leq .07$, CFI $\geq .95$, and TLI $\geq .95$ were taken as criteria.

Path Analysis. Employed using the observed variables, path analysis is an analysis under the framework of structural equation modeling. The direct and indirect relationships between the variables are determined with a model created by the researcher (Kline, 2015). In the study, first, whether perceived stress and coping strategies significantly predicted psychological well-being was explored using path analysis. Then, the mediating effect of coping strategies between perceived stress and psychological well-being was determined.

RESULTS

Descriptive Statistics

First, whether there was a significant relationship between the variables included in the study was determined by Pearson product-moments correlation coefficients. According to Table 1, there were both negative and positive relationships between the sub-scales of the Perceived Stress Scale and the sub-dimensions of the COPE Inventory, and the sub-dimensions of the Psychological Well-Being Scale.

Structural model

Before proceeding to the structural equation modeling and mediation test, all variables in the model were tested with the measurement model. The values obtained for the measurement model [x2=77.307, df=39, x2/sd=1.982, RMSEA=.062, SRMR=.0485, CFI=.972, TLI=.876] indicated that the model fit the data well. The direct and indirect relationships between the variables in the study were tested using path analysis, taking into account the theoretical framework and literature.

Table 1. Correlation Values Regarding the Variables

	1.1.	1.2.	2.1.	2.2.	2.3.	2.4.	2.5.	2.6.	2.7.	2.8.	2.9.	2.10.	2.11.	2.12.	3.1.	3.2.	3.3.	3.4.	3.5.
1.1.	-	.392**	.001	.196**	.121	025	.295**	.015	130*	.000	.110	.040	.295**	.260**	185**	381**	.116	.073	185**
1.2.		-	360**	.017	001	.085	.158*	.053	375**	358**	123*	150*	.158*	.241**	423**	345**	194**	080	423**
2.1.			-	.232**	.134*	119	015	032	.416**	.566**	.339**	.338**	015	111	.413**	.235**	.369**	.230**	.413**
2.2.				-	037	.111	.309**	.174**	.091	.073	.214**	.108	.025	.334**	.045	106	024	.012	.045
2.3.					-	197**	100	.201**	068	.094	.096	.094	.100	.125	181**	057	.001	032	.041
2.4.						-	.169**	.259**	021	063	004	055	.142*	.278**	192**	218**	196**	204**	064
2.5.							-	.242**	.092	.107	. 149**	.179**	.027	.204**	.128*	006	.044	039	.128**
2.6.								-	265**	116	.033	.029	.107	.413**	289**	248**	277**	188**	107
2.7.									-	.580**	325**	.199**	118	336**	.332**	.272**	.369**	.182**	.371**
2.8.										-	.299**	.303**	051	364**	.301**	.170**	.370**	.204**	.312**
2.9.											-	.192**	.111	.080	047	.093	.262**	.332**	.133*
2.10.												-	.275**	.060	206**	199**	.091	.045	060
2.11.													-	.0301**	.069	.026	.233**	.102	.254**
2.12.														-	415**	469**	308**	308**	319**
3.1.															-	.513**	.366**	.233**	.179**
3.2.																-	.188**	.277**	.356**
3.3.																	-	.529**	.472**
3.4.																		-	.302**
3.5.																			-

 Mean
 15.208
 6.984
 9.420
 7.590
 12.247
 5.057
 8.115
 6.799
 9.324
 9.038
 8.189
 14.957
 8.115
 13.559
 22.166
 18.305
 20.521
 19.949
 22.166

 SD
 4.744
 2.934
 1.918
 2.234
 3.669
 2.246
 2.401
 1.569
 2.037
 2.114
 2.019
 3.288
 2.401
 3.708
 4.706
 5.352
 3.246
 3.164
 4.706

Note. 1.1.: PSS-Perceived Insufficient Self-Efficacy, 1.2.: PSS-Perceived Stress/Distress, 2.1.: COPE- Positive Reinterpretation and Growth, 2.2.: COPE- Acceptance, 2.3.: COPE- Religious Coping, 2.4.: COPE- Substance Use, 2.5.: COPE- Humor, 2.6.: COPE- Denial, 2.7.: COPE- Planning, 2.8.: COPE- Active Coping, 2.9.: COPE- Suppression of Competing Activities, 2.10.: COPE- Use of Social Support, 2.11.: COPE- Focus on and Venting of Emotions, 2.12.: Disengagement 3.1.: PWBS- Autonomy, 3.2.: PWBS- Environmental Mastery, 3.3.: PWBS- Personal Growth, 3.4.: PWBS- Positive Relations with Others, 3.5.: PWBS- Self Acceptance and Purpose in Life

The final model indicates that the model fit to the data reasonably well (χ 2=43.554, p=.126>.05, df=34, χ 2/sd=1.281, RMSEA=.033, SRMR=.0358, CFI=.993, TLI=.964). Since the present study was a mediation model made using the data obtained by the cross-sectional survey method, another alternative model was investigated. In the alternative model, COPE was taken as an exogenous variable, and the mediating effect of Perceived Stress between Coping Strategies and Psychology Well-being was tested. Although the data fit the alternative model at an acceptably good level [χ 2=53.495, p=.018 <.05, df=34,

 χ 2/sd=1.573, RMSEA=.047, SRMR=.0446, CFI=.986, TLI=.927], considering both models tested, the initial model seemed to fit to the data much better. For this reason, the initial model was preferred in the study. The paths between the variables in the first model are given in Figure 1. In order to follow the paths between variables more easily, only significant paths are shown in the figure.

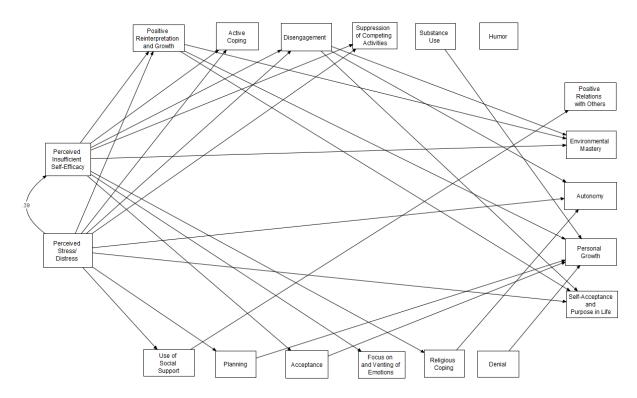


Figure 1. Structural Equation Modeling Path Graph

Findings Regarding the Direct Relationships between Perceived Stress Levels, Psychological Well-Being, and Coping Strategies

Before testing the mediating effect of coping strategies in the relationship between perceived stress and psychological well-being, findings on the direct relationships between all variables in the study are presented. First, the path coefficients between Perceived Stress and Coping Strategies were examined. The coping strategy of Humor was not associated with any variable. As seen in Table 2, the variable of Perceived Stress/Distress negatively and significantly predicted the variables of Positive Reinterpretation and Growth (β = -.433), Active Coping (β = -.425), Planning (β = -.383), Suppression of Competing Activities (β = -.197), Use of Social Support (β = -.196). However, the Perceived Stress/Distress variable predicted the Disengagement (β = .218) variable positively and significantly. In addition, the variable of Perceived Insufficient Self-Efficacy positively and significantly predicted the variables of Focus on and Venting of Emotions (β = .275), Acceptance (β = .223), Suppression of Competing Activities (β = .187), Positive Reinterpretation and Growth (β = .171).), Active Coping (β = .166), Disengagement (β = .148), and Religious Coping (β = .144).

Then, the path coefficient between the perceived stress and psychological well-being variables was examined. Again, as seen in Table 2, the variable of Perceived Stress/Distress positively and significantly predicted the variable of Autonomy (β = .177), whereas it negatively and significantly predicted the

variable of Self-Acceptance and Purpose in Life (β = -.234). In addition, the Perceived Insufficient Self-Efficacy variable negatively and significantly predicted the Environmental Mastery variable (β = -.267).

The direct relationships between the dimensions of the COPE Inventory and the dimensions of the Psychological Well-Being Scale were as follows: Positive Reinterpretation and Growth strategy positively and significantly predicted the variables of Self-Acceptance and Purpose in Life (β = .250), Personal Growth (β = .179), and Environmental Mastery (β = .178). The strategy of Disengagement negatively and significantly predicted the Environmental Mastery (β = -.411), Autonomy (β = -.314), and Self-Acceptance and Purpose in Life (β = -.173) variables.

While Use of Social Support strategy positively and significantly predicted the variable of Positive Relations with Others (β = .295), Religious Coping strategy negatively and significantly predicted Autonomy variable (β = -.176). While Personal Growth was predicted by the strategies of Substance Use (β = -.131), Acceptance (β = -.119), and Denial (β = -.173) negatively and significantly, Planning strategy positively and significantly predicted it (β = .157).

Table 2. Direct Effect Values between the Variables

Path	β	SH	Lower	Upper
Direct Effect		011	201101	СРРСІ
PSS-Perceived Stress/Distress → COPE- Positive Reinterpretation and Growth	433***	.052	533	334
PSS-Perceived Stress/Distress → COPE- Active Coping	425***	.064	547	300
PSS-Perceived Stress/Distress → COPE- Planning	383***	.066	515	256
PSS-Perceived Stress/Distress → COPE- Suppression of Competing Activities	197**	.069	326	062
PSS-Perceived Stress/Distress → COPE- Use of Social Support	196*	.074	327	039
PSS-Perceived Stress/Distress → COPE- Disengagement	.218***	.083	.057	.373
PSS-Perceived Stress/Distress → PWBS- Self-Acceptance and Purpose in Life	234**	.061	345	106
PSS-Perceived Stress/Distress → PWBS- Autonomy	.177*	.067	.044	.299
PSS-Perceived Insufficient Self-Efficacy → COPE-Focus on and Venting of Emotions	.275**	.068	.138	.400
PSS-Perceived Insufficient Self-Efficacy → COPE-Acceptance	.223**	.075	.065	.356
PSS-Perceived Insufficient Self-Efficacy → COPE-Suppression of Competing Activities	.187**	.069	.058	.317
PSS-Perceived Insufficient Self-Efficacy → COPE-Positive Reinterpretation and Growth	.171**	.058	.065	.296
PSS-Perceived Insufficient Self-Efficacy → COPE-Active Coping	.166**	.060	.047	.285
PSS-Perceived Insufficient Self-Efficacy → COPE- Disengagement	.148*	.066	.015	.273
PSS-Perceived Insufficient Self-Efficacy → COPE-Religious Coping	.144*	.063	.019	.264
PSS-Perceived Insufficient Self-Efficacy → PWBS-Environmental Mastery	267**	.055	374	161
COPE-Positive Reinterpretation and Growth → PWBS-Self-Acceptance and Purpose in Life	.250***	.067	.119	.390
COPE-Positive Reinterpretation and Growth → PWBS-Personal Growth	.179*	.076	.018	.321
COPE-Positive Reinterpretation and Growth → PWBS-Environmental Mastery	.178**	.066	.049	.309
COPE- Disengagement → PWBS-Environmental Mastery	411**	.073	553	261
COPE- Disengagement → PWBS-Autonomy	314**	.072	445	159
COPE- Disengagement → PWBS-Self-Acceptance and Purpose in Life	173*	.075	315	019
COPE-Use of Social Support → PWBS- Positive Relations with Others	.295***	.080	.048	.466
COPE-Religious Coping → PWBS-Autonomy	176**	.061	295	047
COPE-Substance Use → PWBS-Personal Growth	131*	.067	273	004
COPE-Acceptance → PWBS-Personal Growth	119*	.063	246	007
COPE-Denial → PWBS-Personal Growth	173*	.076	316	019
COPE-Planning → PWBS-Personal Growth	.157*	.069	.014	.294

Note. PSS: Perceived Stress Scale; PWBS: Psychological Well-Being Scale; COPE: The COPE Inventory BC interval: Error corrected %95 confidence interval

p<.05; p<01**; p<.001***

As a result of the final model, the squared multiple correlation coefficients, which shows the extent to which the external variables are explained by the internal variables, were examined. The Perceived Stress sub-dimensions explained 15.8% of the Positive Reinterpretation and Growth, 15.3% of the Active Coping, 14.1% of the Planning, 9.5% of the Disengagement, 8.9% of the Focus on and Venting of

Emotions, 4.5% of the Suppression of Competing Activities, 4.2% of the Acceptance, and 3.4% of the Use of Social Support variances.

Findings Regarding the Mediating Role of Coping Strategies in the Relationship between Perceived Stress Level and Psychological Well-being

According to the direct, indirect, and total effect values in Table 3, Positive Reinterpretation and Growth, and Disengagement were full mediators between the Perceived Stress/Distress and Environmental Mastery. Also, Positive Reinterpretation and Growth, and Planning were full mediators between the Perceived Stress/Distress, and Personal Growth. Lastly, Use of Social Support was a full mediator between the Perceived Stress/Distress and Positive Relations with Others. While Positive Reinterpretation and Growth, and Disengagement coping strategies were partial mediators between the Perceived Stress/Distress and Purpose in Life, Disengagement coping strategy was a partial mediator between the Perceived Stress/Distress and Autonomy. There was not any full or partial mediator between Perceived Insufficient Self-Efficacy and Psychological Well-Being sub-dimensions.

Table 3. Direct, indirect, and total effects in the model

Exogenous Variables	Endogenous Variables	Direct Effect	Indirect Effect	Total Effect
PSS- Perceived Stress/Distress	PWBS- Self-Acceptance and Purpose in Life	234**	182**	416**
	PWBS-Environmental Mastery	082	151**	233***
	PWBS-Personal Growth	064	219**	283***
	PWBS- Positive Relations with Others	.028	156**	128
	PWBS- Autonomy	.177*	231***	054
PSS- Perceived Insufficient Self-	PWBS- Self-Acceptance and Purpose in Life	069	.046	023
Efficacy	PWBS-Environmental Mastery	267**	026	292**
	PWBS-Personal Growth	.160	.067	.227**
	PWBS- Positive Relations with Others	.074	.049	.123
	PWBS- Autonomy	019	041	060

PSS: Perceived Stress Scale; PWBS: Psychological Well-Being Scale; COPE: The COPE Inventory BC interval: Error corrected %95 confidence interval p<.05; p<01***; p<.001***

As a result of the final model, squared multiple correlation coefficients-R2 values, which shows at what level the exogenous variables are explained by endogenous variables and mediating variables, were calculated. The entire structural model explained 38.8% of the Environmental Mastery variance, 33.3% of the Personal Growth variance, 31.9% of the Autonomy variance, 31.3% of the Self-Acceptance and Purpose in Life variance, and 19.9% of the Positive Relations with Others variance. These values indicate that all five exogenous variables have a medium effect size in terms of the variance levels explained (Cohen, 1992).

DISCUSSION

In the study, the mediating effect of coping strategies on the relationship between adult individuals' perceived stress and their psychological well-being during the COVID-19 pandemic was tested on a model. It was concluded that there were significant relationships between some of the tested variables, and the model created by taking into account the literature fit well with the study data. Some coping strategies mediated between perceived stress and psychological well-being. The findings obtained as a result of the study showed similar results to the studies examining the fear, anxiety, and stress levels of individuals during the COVID-19 pandemic and how they were affected psychologically (APA, 2020; Brooks et al., 2020; Charles, 2020; Kirman, 2020; Qiu et al., 2020; Park et al., 2020; Rehman et al., 2021; Rodriguez et al., 2020; Sønderskov et al., 2020).

The study findings revealed that the variable of Perceived Stress/Distress negatively and significantly predicted the variables of Active Coping, Positive Reinterpretation and Growth, Planning, Suppression of Competing Activities, Use of Social Support, while it positively and significantly predicted the variable of Disengagement. In other words, individuals who felt intense discomfort due to the stress they experienced during the pandemic and who thought that the problems accumulated so much that they could not overcome, had much more difficulty in coping with the problems they experience. The individuals' perception of the stressful event as a weakening situation cognitively and emotionally affects them (Crum et al., 2017; Everly & Lating, 2019). During the pandemic, these individuals have difficulty in looking at events with a new perspective, adapting to existing conditions, maintaining their ties with other areas of their lives, and getting support by activating their social relationships (Brooks et al, 2020). At the same time, these individuals tend to ignore the problem instead of effectively solving the existing problem and fulfilling their life plans. As a matter of fact, individuals with high Perceived Stress/Distress tend to have a low level of Self-Acceptance and Purpose in Life, and a high level of Autonomy. Individuals who experience negative emotions due to the stress they experience during the pandemic and who are intensely distressed because of this situation have difficulty in exhibiting positive attitudes towards themselves and making an assessment of their past and present lives as meaningful and with purpose. According to another finding, individuals with a high perception of Perceived Stress/Distress tended to behave more autonomously. However, Disengagement coping strategy is a mediator variable between Perceived Stress/Distress and Autonomy. Disengagement coping strategy prevents the individual from facing the existing problem. Mental and behavioral disengagement makes it easier for the person to get away from the anxiety caused by the stressor by keeping them busy. Sometimes, Disengagement may be a behavior displayed as an indicator of desperation (Carver, Scheiver, & Weintraub, 1989). This may prevent the individual from acting particularly autonomously. Indeed, individuals using a high level of Disengagement coping strategy tend to be less autonomous. According to another finding of the study, the mediation of Disengagement, and Positive Reinterpretation and Growth coping strategies between Perceived Stress/Distress and Self-Acceptance and Purpose, and Environmental Mastery, indicated that individuals who are aware of the virus and shape their behavior accordingly may behave more autonomously, but individuals who feel desperate against the problem and unable to reorganize their perspectives limit their autonomy and have difficulties in adapting to the environment, accepting themselves and forming new life goals. Furthermore, Planning, and Positive Reinterpretation and Growth coping strategies, which mediated between Perceived Stress/Distress, and Personal Growth, also showed the important effect of functional coping strategies on the individual's self-development by making new inferences from stressful events.

The variable of Perceived Insufficient Self-Efficacy, another dimension of the Perceived Stress Scale positively and significantly predicted the variables of Focus on and Venting of Emotions, Acceptance, Suppression of Competing Activities, Positive Reinterpretation and Growth, Active Coping, Disengagement, and Religious Coping. This finding showed that, during the pandemic, some individuals were worried that they would not be able to cope with the psychological, physiological, sociological, and economic stress caused by the virus, they did not trust themselves to control this anxiety and they felt insufficient. The interesting result was that some of these individuals had a high tendency to use functional coping strategies such as acceptance, positive reinterpretation and growth, and active coping rather than avoiding the problem. These individuals tried to overcome the stress they experienced by either expressing their feelings or exhibiting behaviors aimed at solving the problem. The fact that the

regression coefficient was positive indicated that individuals who felt insufficient to cope with the situation at the time of stress exhibited more constructive behaviors to interpret the event differently and to reduce their anxiety. Individuals who had perceived insufficient self-efficacy perception during the pandemic tended to use their existing potential, improve themselves, and see the process they went through as a learning process. Although the generally destructive effects of stress are known, it also has a feature that motivates some people, helps them to cope with the existing problem, directs them to positive stimuli, and increases cognitive flexibility (Crum et al., 2017; Hagger, Keech and Hamilton, 2020). While moderate levels of fear or anxiety motivate people to cope with health threats, severe stress prevents coping (Taylor, 2019).

As Perceived Insufficient Self-Efficacy increased, Religious Coping, and Disengagement tendency increased and Environmental Mastery decreased. In line with the study findings, it was concluded that different coping strategies had significant effects on psychological well-being. The Autonomy tendencies of the individuals who used the Disengagement and Religious coping strategies to overcome the stress they experienced during the pandemic were lower. Individuals who attributed the problem to a supreme being independent of themselves in order to reduce the situation that gave anxiety to them tended to think and act dependent on traditions, while individuals who thought that their fate was not in their own hands and that what happened to them depended on external factors tended to behave less autonomously. In uncertain and uncontrollable situations, some individuals take refuge in their religious beliefs as a coping strategies (Karataş & Baloğlu, 2019). In her study on how people perceive the pandemic and to what they attribute what is happening, Kirman (2020) concluded that religiously oriented discourses, thoughts, and religiosity are partially revived. The quarantine measures taken to minimize the infection possibility during the pandemic suggest that psychological well-being would adversely affect a society like Turkey where the majority of individuals have a relational self-construal (Kağıtçıbaşı, 2000). As a matter of fact, one of the study findings was that the individuals who used the Use of Social Support coping strategies had a higher tendency to exhibit Positive Relations with Others.

Also, the present study concluded that individuals who displayed dysfunctional coping behaviors such as denial and substance use showed a low level of Personal Growth. However, individuals who made plans and continued their lives by reinterpreting the stressful situation tended to display more Personal Growth. Avoidance strategies negatively affect well-being differently in problem-focused or emotion-focused coping strategies (Parker & Endler, 1992). A study conducted by APA (2020) stated that approximately half of Americans were worried about being infected by the coronavirus, 62% of them worried about their loved ones getting a coronavirus diagnosis, and 59% of them believed that coronavirus has a serious impact on their daily lives. 19% of the participants expressed that they had trouble sleeping, and 8% of them consumed more alcohol or drugs. About a quarter (24%) of the respondents stated that they had trouble concentrating on other things because they thought about the coronavirus. In another study conducted with the participation of university students in the United States, the psychological symptoms, perceived stress levels, and alcohol use levels of students before and after the pandemic were compared. It was determined that students experienced more symptoms of mood disorders and used more alcohol after the pandemic compared to before the pandemic (Charles, 2020). Perceived threat and psychological stress during the pandemic process trigger the amount of alcohol use (Rodriguez et al., 2020). Although such avoidance behaviors make the person feel good for a while, they are not effective in solving the problem in the long term (Stone, 2020).

In addition, Positive Reinterpretation and Growth coping strategies positively and significantly predicted psychological well-being's dimensions of Self-Acceptance and Purpose in Life and Environmental Mastery. On the contrary, Disengagement coping strategies predicted these variables negatively and significantly. This finding showed that individuals who improved by reinterpreting and making sense of the event they experienced had a higher tendency to accept their past and present selves, to realize their life goals, and to reveal their existing potentials. This finding also showed that individuals who were able to make plans for the future despite their uncertainty about their present had a higher tendency to accept themselves as they were, to determine their goals in life, to improve them, to use their potential, and had the capacity to reorganize their environment. On the other hand, people who ignored the event and found themselves other occupations and avoided them had trouble improving themselves, setting new life goals, and adjusting their environment to the existing situation. However, there are many variables affecting the well-being of individuals during the pandemic. In a study comparing the subjective wellbeing of the elderly (over 65) and adults (35-46 years) during the SARS pandemic of 2003, it was observed that the subjective well-being levels of the elderly living in areas where the pandemic was intense was significantly lower and that the younger sample remained within the normative range. Having a chronic disease, being female, low educational status, and unemployment were listed as the other variables affecting subjective well-being (Lau et al., 2008). That is why, in the interventions to be addressed, it is necessary to assess the context and conditions of the individuals well.

Implication

The impact of the COVID-19 pandemic has been continuing, and many factors such as anxiety about losing health, avoiding social relationships, economic difficulties, difficulties in meeting basic needs, anxiety about not being able to access health services stress people (Cao et al., 2020; Qiu et al., 2020; Rehman et al., 2021). However, while some may activate their coping strategies more effectively in this process, for others these strategies are insufficient (Fink, 2016). For some, stress is perceived as a new learning process, while for others, intense anxiety, fear, and stress bring many psychosocial difficulties into their lives. Accordingly, the well-being levels of individuals differed from each other. These findings may be interpreted as an indication that the stress experienced in a way forces the individuals to adapt to the new situation and directs them to cope with anxiety by functionally reducing stress and to create new learning processes. Although stress includes unpleasant situations, stress also has some positive motivations for some people. What makes this difference is the meanings people attach to events (Vestre & Burni, 1987). Kobasa (1979) stated that individuals who deal with stress effectively tend to see events not as a threat, but as an opportunity to improve them, struggle to gain experience rather than escape or exhibit hostile attitudes, and seek more meaning. In this context, the participants with high Perceived Insufficient Self-Efficacy scores overcame the events by using more constructive coping strategies. Individuals who used more functional coping strategies to manage stress, as a result, could make decisions with their own free will without being dependent on other people.

The fact that individuals with high levels of Perceived Insufficient Self-Efficacy used more functional coping strategies compared to individuals with high Perceived Stress/Distress is believed to stem from these individuals differently assessing events. The findings obtained as a result of the mediation test confirmed this. Participants with high Perceived Stress/Distress had difficulty in gaining different perspectives by reinterpreting events, making plans accordingly, and using social support while doing so. Hence, their individual growth was interrupted. In addition, they had difficulty accepting them and

determining a purpose for their lives. These individuals needed to make plans and address the stressful situation with a new perspective in order to feel good by acting more autonomously, use social support resources by increasing internal and external adaptation. Their ability to receive social support depends on establishing positive relations with others. However, individuals with high Perceived Stress/Distress find it difficult to use these coping strategies and as a result, their psychological well-being is low. Individuals with more social support networks are expected to focus on social relations, higher interactions with other people, and improve depending on the quality of the support they receive. Getting social support makes it easier for people to stay strong in the face of many negative situations and to overcome the problems experienced (Beedie & Kennedy, 2002). Social isolation or social distance experienced during the pandemic becomes a risk factor for some individuals in terms of mental health. In a study conducted in Turkey, Bilge and Bilge (2020) stated that the majority of the participants were "negatively affected" and got bored "much" and "too much" from staying at home. Again, in the same study, 28% of the participants stated that they were "much" and "too much" concerned about being infected by the virus, 61% of from the result of the infection, and 73.4% of from infecting someone else. The study results revealed that individuals who have low psychological resilience, who use a dysfunctional coping strategies with stress, and who have negative perceptions and attitudes towards COVID-19 social isolation are more vulnerable to protect their psychological health against the pandemic and feel the need for psychological help more (Bilge & Bilge, 2020). People's contact with each other decreased due to the fear of harming loved ones over the age of 65, infecting others, and getting infected. The quarantine practices, which were imposed to prevent the transmission and spread of the disease during the pandemic, especially affected relationship-oriented individuals and vulnerable individuals who did not want to be alone when they needed it most (Brooks et al., 2020).

Defensive responses such as the denial of the stressful event and substance use prevent individuals from confronting reality, exhibiting functional behaviors, and taking their own life responsibilities (Taylor, 2019). During a pandemic, the individual is not only responsible for his own health. Maintaining social distance is mandatory due to the high infection rate. However, in Turkey, although there are people who show due diligence to social distancing, wearing masks, and hygiene, there also people who exhibit the opposite. Especially celebrations, religious festivals, religious activities, and intercity trips for holidays without wearing a mask and without maintaining social distance increase people's contact with each other. From this point of view, the fact that there are individuals who deny the existence of the virus indicates that they are not concerned about infecting themselves and others because the denial mechanism is about denying the reality of the event (Carver et al., 1989; Carver & Scheier, 1994; Ağargün et al., 2005). Examining especially the behavioral responses of individuals with a Denial coping strategy towards the virus and the emotions, beliefs, and behaviors underlying this denial mechanism may be a helpful factor in developing interventions against this strategy.

Stress affects each individual differently. The meaning attributed to events by each individual is not the same. Depending on this, their reactions also differ (Everly & Lating, 2019). Some individuals are much more affected in moments of stress. This is an important factor for the deterioration of individuals' physical and mental health. Sometimes, moments of stress can be a trigger of a mental disorder or cause an existing mental problem to worsen. The coronavirus is a deadly, uncontrollable virus that cannot be seen. This affects individuals' potential to use their coping strategies (Fink, 2016). Cognitive interpretation of challenging situations and assessment of ongoing coping mechanisms are important in understanding the behavioral and emotional effects of these situations (Kopp et al., 2010). The psychological damage

of the virus is also devastating just like its damage to people's physical integrity. During pandemics, even if there is a treatment for the disease, many people from all age groups are psychosocially negatively affected at the end of this process (Lau et al., 2008). For this reason, important responsibilities fall to many people working in the field of mental health. Each individual experiencing stress does not perceive the event in the same way, uses different coping strategies, and, accordingly, their well-being varies. Some may feel much stronger at the end of the process by gaining features such as developing new relationships, creating new interests, or feeling stronger spiritually (Roberts, 2005).

Limitation

Although the present study provided important data on the relationships between perceived stress, psychological well-being, and coping strategies during the Covid-19 pandemic, it has some limitations. The sample size being limited to 259 participants, most of the participants being female, the collection of data using self-report scales, and the collection of data only through online means (which may be limiting for those who do not have internet access and/or do not know how to use computers or phones) may be listed among the study's limitations

REFERENCES

- Ağargün, M. Y., Beşiroğlu, L., Kıran, Ü. K., Özer, Ö. A., & Kara, H. (2005). COPE (Başa çıkma tutumlarını değerlendirme ölçeği): Psikometrik özelliklere ilişkin bir ön çalışma [The psychometric properties of the COPE inventory in Turkish sample: A preliminary research]. *Anadolu Psikiyatri Dergisi, 6*(4), 221-226.
- Akın, A. (2008). Psikolojik İyi Olma Ölçekleri: Geçerlik ve güvenirlik çalışması [The scales of psychological wellbeing: a study of validity and reliability]. *Kuram ve Uygulamada Eğitim Bilimleri, 8*(3), 721-750.
- Aldwin, C. M. (2007). Stress, coping, and development: An integrative perspective (2nd Ed.). Guilford Press.
- American Psychiatric Association. (2020, March 25) New Poll: COVID-19 Impacting Mental Well-Being. https://www.psychiatry.org/newsroom/news-releases/new-poll-covid-19-impacting-mental-well-being-americans-feeling-anxious-especially-for-loved-ones-older-adults-are-less-anxious
- Bagozzi, R. P. (2010). Structural equation models are modelling tools with many ambiguities: comments acknowledging the need for caution and humility in their use. *Journal of Consumer Psychology, 20*(2), 208-214.
- Bagozzi, R. P, & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8-34
- Beedie, A., & Kennedy, P. (2002). Quality of social support predicts hopelessness and depression post spinal cord injury. *Journal of Clinical Psychology in Medical Settings*, 9(3), 227-234.
- Bilge, Y., & Bilge, Y. (2020). Koronavirüs salgını ve sosyal izolasyonun psikolojik semptomlar üzerindeki etkilerinin psikolojik sağlamlık ve stresle baş etme tarzları açısından incelenmesi [Investigation of the effects of coronavirus and social isolation on psychological symptoms in terms of psychological resilience and coping styles]. Klinik Psikiyatri Dergisi, 23. https://doi.org/10.5505/kpd.2020.66934
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet, 395*(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934, 1-5. https://doi.org/0.1016/j.psychres.2020.112934
- Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66*(1), 184–195. https://doi.org/10.1037/0022-3514.66.1.184
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267–283. https://doi.org/10.1037/0022-3514.56.2.267
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100. https://doi.org/10.1207/s15327558ijbm0401.6
- Charles, N. E., Strong, S. J., Burns, L. C., Bullerjahn, M. R., & Serafine, K. M. (2021). Increased mood disorder symptoms, perceived stress, and alcohol use among college students during the COVID-19 pandemic. *Psychiatry research*, 296, 113706. https://doi.org/10.1016/j.psychres.2021.113706
- Chew, Q. H., Wei, K. C., Vasoo, S., Chua, H. C., & Sim, K. (2020). Narrative synthesis of psychological and coping responses towards emerging infectious disease outbreaks in the general population: practical considerations for the COVID-19 pandemic. *Singapore Med J*, 61(7), 350-356. https://doi.org/10.11622/smedj.2020046
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159. https://doi.org/10.1037//0033-2909.112.1.155
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. https://doi.org/10.2307/2136404

- Crum, A. J., Akinola, M., Martin, A., & Fath, S. (2017). The role of stress mindset in shaping cognitive, emotional, and physiological responses to challenging and threatening stress. *Anxiety, Stress, & Coping, 30*(4), 379-395. https://doi.org/10.1080/10615806.2016.1275585
- Eskin, M., Harlak, H., Demirkıran, F., & Dereboy, Ç. (2013). Algılanan stres ölçeğinin Türkçeye uyarlanması: Güvenirlik ve geçerlik analizi [The Adaptation of the perceived stress scale into Turkish: a reliability and validity analysis]. *Yeni Symposium Journal*, 51(3), 132-140.
- Essex, E. L., Seltzer, M. M., & Krauss, M. W. (1999). Differences in coping effectiveness and well-being among aging mothers and fathers of adults with mental retardation. *American Journal on Mental Retardation*, 104(6), 545-563. https://doi.org/10.1352/0895-8017
- Everly, G. S., & Lating, J. M. (2019). The Concept of Stress. In: A Clinical Guide to the Treatment of the Human Stress Response (4th Ed.). Springer. https://doi.org/10.1007/978-1-4939-9098-6 1
- Fink, G. (2016). Stress: Concepts, Cognition, Emotion, and Behavior. Elsevier Academic Press.
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(3), 466–475. https://doi.org/10.1037/0022-3514.54.3.466
- Hagger, M. S., Keech, J. J., & Hamilton, K. (2020). Managing stress during the COVID-19 pandemic and beyond: Reappraisal and mindset approaches. *Stress and Health.* 36(3), 396–401. https://doi.org/10.1002/smi.2969
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of Applied Quantitative Methods*, 3(1), 76-83.
- Kağıtçıbaşı, Ç. (2000). Kültürel psikoloji kültür bağlamında insan ve aile. Evrim Yayınevi.
- Karataş, K., & Baloğlu, M. (2019). Tevekkülün psikolojik yansımaları [The psychological reflections of tawakkul]. *Çukurova Üniversitesi İlahiyat Fakültesi Dergisi, 19*(1), 110-118.
- Kirman, F. (2020). Sosyal medyada salgın psikolojisi: Algı, etki ve başa çıkma. Dünya İnsan Bilimleri Dergisi, 2, 11-44.
- Kline, R. B. (2015). Principles and Practice of Structural Equation Modeling (4th Ed.). Guilford Press.
- Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37(1), 1–11. https://doi.org/10.1037/0022-3514.37.1.1
- Kopp, M. S., Thega, B. K., Balog, P., Stauder, A., Salaveez, G., Rózsa, S., Purebl, G., & Ádám, S. (2010). Measures of stress in epidemiological research. *Journal of Psychosomatic* Research, 69(2), 211-225. https://doi.org/10.1016/j.jpsychores.2009.09.006
- Lazarus, R. S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, *55*(3), 234–247. https://doi.org/10.1097/00006842-199305000-00002
- Lazarus, R. S. (1996). The role of coping in the emotions and how coping changes over the life course. In C. Maletesta-Magni & S. H. McFadden (Eds.), *Handbook of Emotion, Adult Development, and Aging* (pp. 289–306). Academic Pressb.
- Lazarus, R. S., & Folkman, S. (1984). Stress, Appraisal, and Coping. Springer.
- Lau, A. L. D., Chi, I., Cummins, R. A., Lee, T. M. C., Chou, K.-L., & Chung, L. W. M. (2008). The SARS (Severe Acute Respiratory Syndrome) pandemic in Hong Kong: Effects on the subjective wellbeing of elderly and younger people. *Aging & Mental Health*, 12(6), 746–760. https://doi.org/10.1080/13607860802380607
- Pallant, J. (2005). SPSS survival manual. Allen & Unwin
- Nokhodian, Z., Ranjbar, M. M., Nasri, P., Kassaian, N., Shoaei, P., Vakili, B., Rostami, S., Ahangarzadeh, S., Alibakhshi, A., Yarian, F., Javanmard, S. H., & Ataei, B. (2020). Current status of COVID-19 pandemic; characteristics, diagnosis, prevention, and treatment. *Journal of research in medical sciences: The official journal of Isfahan University of Medical Sciences*, 25(101), 1-14. https://doi.org/10.4103/jrms.JRMS 476 20

- Park, C. L., Beth S. Russell, B. S., Fendrich, M., Finkelstein-Fox, L., Hutchison M., & Becker, J. (2020). Americans' COVID-19 stress, coping, and adherence to CDC guidelines. *Journal of General Internal Medicine*, 35(8), 2296-2303. https://doi.org/10.1007/s11606-020-05898-9
- Parker, J. D. A., & Endler, N. S. (1992). Coping with coping assessment: A critical review. *European Journal of Personality*, 6(5), 321–344. https://doi.org/10.1002/per.2410060502
- Porta, M. (2014). A dictionary of epidemiology. (6th Ed.). Oxford University Press.
- Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General Psychiatry*, 33(2), e100213. https://doi.org/10.1136/gpsych-2020-100213
- Rehman, U., Shahnawaz, M. G., Khan, N. H. Kharshiing, K. D., Khursheed, M., Gupta, K., Kashyap, D., & Uniyal, R. (2021). Depression, anxiety and stress among Indians in times of covid-19 lockdown. *Community Mental Health Journal*. 57(1), 42-48. https://doi.org/10.1007/s10597-020-00664-x
- Roberts, A. R. (2005). Bridging the past and present to the future of crisis intervention and crisis management. In A. R. Roberts (Ed.) *Crisis intervention handbook: Assessment, treatment, and research* (3rd Ed., p. 3-34). Oxford University Press.
- Rodriguez, L. M., Litt, D. M., & Stewart, S. H. (2020). Drinking to cope with the pandemic: The unique associations of COVID-19-related perceived threat and psychological distress to drinking behaviors in American men and women. *Addictive Behaviors*, 110, 106532. https://doi.org/10.1016/j.addbeh.2020.106532
- Roy, D., Tripathy, S., Kar, S., Sharma, N., Verma, S., & Kaushal, V. (2020). Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. *Asian Journal of Psychiatry*, 51, 102083. https://doi.org/10.1016/j.aip.2020.102083
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudemonic well-being. *Annual Review of Psychology* 52, 141–166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069
- Ryff, C. D., & Singer, B. H. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 65(1), 14-23. https://doi.org/10.1159/000289026
- Selye, H. (1975). Confusion and controversy in the stress field. *Journal of Human Stress*, 1(2), 37–44. https://doi.org/10.1080/0097840X.1975.9940406
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–445. https://doi.org/10.1037/1082-989X.7.4.422
- Sønderskov, K. M., Dinesen, P.T., Santini, Z. I., & Østergaard, S. D. (2020). The depressive state of Denmark during the COVID-19 pandemic. *Acta Neuropsychiatrica*, 32(4), 226-228. https://doi.org/10.1017/neu.2020.15
- Stone, L. (2020). Coping during a pandemic. Australian Journal of General Practice. 49(19), 1-2. https://doi.org/0.31128/aigpcovid-19
- T.C. Ministry of Interior, (2020, March 3). 81 il valiliğine coronavirüs tedbirleri konulu ek bir genelge daha gönderildi. https://www.icisleri.gov.tr/81-il-valiligine-koronavirus-tedbirleri-konulu-ek-genelge-gonderildi
- Taylor, S. (2019). The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease. Cambridge Scholars Publishing.
- Vestre, N. D., & Burnis, J. J. (1987). Irrational beliefs and the impact of stressful life events. *Journal of Rational Emotive Therapy*, 5(3), 183-188. https://doi.org/10.1007/BF01080526

- World Health Organization [WHO], (2020a, July 27). WHO Coronavirus Disease (COVID-19) https://www.who.int/health-topics/coronavirus#tab=tab_1
- World Health Organization [WHO], (2020b, March 18). Mental health and psychosocial considerations during the COVID-19 outbreak. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf?sfvrsn=6d3578af_2

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Author Contribution

This study was conducted by both authors working together and cooperatively. Both authors substantially contributed to this work in each step of the study.

Conflict of Interest

Both authors reported that there is no conflict of interest

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Ethical Statement

The study was approved by the Zonguldak Bülent Ecevit University Human Research Ethics Committee on 07/07/2020. (Protocol no: 830).

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