

Summary

Investigating Depression and Anxieties of Individuals in Terms of Various Variables in the Process of Coronavirus Outbreak

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COVID-19 is an infectious disease caused by a newly discovered coronavirus ("WHO", n.d.-a). This virus, which emerged in Wuhan province of China in December 2019 for an unknown reason, has spread rapidly to many countries such as Iran, Italy and South Korea in a short time after China. The coronavirus appears to have wide-ranging impacts on daily life of people (Haleem, & Javaid, 2020) and have had negative social and economic consequences for the world (Cal-Kayitmazbatir, 2021). In the studies carried out; epidemic process appears to trigger many psychological problems such as post-traumatic stress disorder (PTSD), anxiety, and depression (Lebel, MacKinnon, Bagshawe, Tomfohr-Madsen, & Giesbrecht, nd; Odriozola-González, Planchuelo-Gómez, Irurtia-ricz, & Luis- García, 2019; Tang et al., 2020; Wang et al., 2020).

In a study conducted in China on psychological effects of COVID-19 by participation of 57,730 people, it was reported that 35 percent of the participants experienced psychological distress (Qiu et al., 2020). In a meta-analysis study, depression, anxiety, and stress were reported to be common psychological responses to the coronavirus outbreak (Ravi Philip Rajkumar, 2020). (Qiu et al., 2020). In addition to these, some demographic characteristics may also be risk factors for psychological disorders during the epidemic process. In a study conducted during the epidemic process, when the demographic characteristics of those who were psychologically affected by the epidemic such as gender, age and education are examined; psychological stress levels were found to be higher in individuals with a higher education level than in individuals with a lower education level. It has been reported that individuals under the age of 18 are the least affected group by stress, and individuals aged 18-30 and over 60 are the age groups most affected by stress (Qiu et al., 2020).

In the countries struggling with the epidemic, it is very important to examine the psychological effects as well as the negative physical effects that the epidemic may cause. There are few international studies (Huang & Zhao, 2020; Li et al., 2020; Wang et al., 2020) on the mental health effects of Covid-19, and the number of these studies need to be increased in countries struggling with the epidemic (Ravi Philip Rajkumar, 2020). Thus, current research aimed to examine the predictors of depression and anxiety during Covid-19 outbreak in Turkey and to see the influence of perceived social support, awareness of healthy life and emotion regulation on depression and anxiety.

Method

Participants

The study involved 563 participants aged over 18 living in Turkey. 353 of the participants (62.7%) are female and 210 (37.3%) of them are male. The average age of the participants is 35.64.

Materials

Demographic Form

In this form, information about the age, gender, education level of the individuals and their personal situations during the coronavirus isolation process was obtained. Questions such as the participants' concerns about Covid-19 contamination, whether there are individuals from the risky group at home or not and whether a solution will be found for the epidemic are also aimed at identifying their personal situation in the coronavirus epidemic process.

Emotion Regulation Scale

Emotion Regulation Scale was developed by Gross

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and John in 2003 (Gross & John, 2003). The scale, which consists of 10 items in total, measures the way individuals use emotion regulation strategies. The Turkish adaptation study of the questionnaire was carried out by Eldeleklioğlu and Eroğlu in 2015 (Eldeleklioğlu & Eroğlu, 2015). Internal reliability coefficients were found to be .78 for the cognitive reappraisal sub-dimension and .73 for the suppression sub-dimension.

Healthy Life Awareness Scale

The scale was developed to measure the awareness levels of individuals about healthy living (Özer & Yılmaz, 2020). The scale consists of 15 items and has 4 sub-dimensions. These dimensions are expressed as the dimension of change, dimension of socialization, dimension of responsibility and dimension of nutrition. The Cronbach Alpha internal consistency coefficient was calculated as .81.

Multidimensional Scale of Perceived Social Support (MSPSS)

It was developed by Zimet et al. in 1988 (Zimet, Dahlem, Zimet, & Farley, 2016). It has 3 sub-dimensions consisting of 12 items. In the Turkish adaptation study of the scale, 3 sub-dimensions were found like in Western culture (Eker, Arkar, & Yaldız, 2001). The Cronbach Alpha reliability coefficient for the overall scale was found to be .89.

The Generalized Anxiety Disorder Questionnaire (GAD-7)

It is a brief self-report scale developed by Spitzer et al to assess general anxiety according to DSM-IV criteria (Spitzer, Kroenke, Williams, & Löwe, 2006). The scale consists of 7 questions. Turkish adaptation, validity and reliability study of the scale was conducted by Konkan et al. in 2011. The Cronbach Alpha value of the scale was found to be .85. When the construct validity of the scale was evaluated, a single factor structure emerged (Konkan, Şenormancı, Güçlü, Aydın, & Sungur, 2013).

Beck Depression Inventory

It is a self-report scale consisting of 21 questions in total. The aim of the scale is to express the degree of depression of individuals in numbers (Beck, 1961). Turkish adaptation, validity and reliability study was carried out by Hisli in 1989 (Hisli, 1989). In studies conducted in the West, it is seen that the reliability coefficients of the Beck Depression Inventory vary between .60 and .87.

Procedure

The surveys were prepared by the researchers in a web-based program and shared on various platforms

such as Facebook, Instagram, whatsapp, e-mail. It takes an average of 15 minutes to complete 1 demographic form and 5 questionnaires.

Results

Two linear multiple regression analyzes were conducted to find the predictors of depression and anxiety experienced during the coronavirus outbreak. The variables were determined as predictors of depression and anxiety according to correlation analysis. According to this; the predictors of depression were determined as gender, age, presence of someone in the risky group at home, anxiety about infecting with the virus, whether thinking a solution for the epidemic or not, health awareness, cognitive reappraisal strategy and social support. According to the results of the regression analysis for depression, the model was found to be significant and the predictors explained 30% of the depression ($F(8,556) = 29.71, p < 0.001, R = 0.55, R^2 = 0.30$). The predictors of anxiety were determined as age, whether thinking a solution for the epidemic or not, cognitive reappraisal and social support. According to the results of the regression analysis for anxiety, the model was found to be significant and the predictors explained 15% of the anxiety ($F(4,562) = 23.59, p < 0.001, R = 0.38, R^2 = 0.15$).

By applying the stepwise regression method, variables that significantly contributed to the prediction of depression level and the contribution of each of these variables to the total variance explained in the prediction of depression were determined. In the application of this method, the total variance explained in depression was reached at the end of the seven-stage model. Perceived social support in the first level was entered into the regression equation and 10% of the variance in depression was explained by the perceived social support variable ($R = .31, R^2 = .10$). In other words, the strongest predictor of depression was determined as the perceived social support variable. The negative (-) direction of the Beta value indicates that there is an inverse relationship between depression and perceived social support. It shows that as the perceived social support increases, depression decreases.

By applying the stepwise regression method, the total variance explained in anxiety was reached at the end of the four-step model. In the first step, cognitive reappraisal was entered into regression equation and 8% of the variance in anxiety was explained by the cognitive reappraisal variable ($R = .29, R^2 = .08$). In other words, the strongest predictor of anxiety was determined as cognitive reappraisal. The direction of the beta value being negative (-) indicates that there is an inverse relationship between anxiety and cognitive reappraisal; shows that

the higher the cognitive reappraisal strategy, the lower the anxiety.

Discussion

In this study, it was aimed to determine the predictors of depression and anxiety during the coronavirus epidemic. According to the results, the predictors of depression are gender, age, presence of someone from the risky group at home, anxiety about spreading the virus to the individual, whether thinking a solution for the epidemic or not, cognitive reappraisal and perceived social support. The predictors of anxiety were found age, cognitive reappraisal, perceived social support, and whether thinking a solution for the epidemic or not. Being young, having a low level of cognitive reappraisal and perceived social support, and the thought that there is no solution to the epidemic are risk factors for both anxiety and depression. Being a woman, presence of someone in the risky group at home and the anxiety about infecting with the virus were also found to be risk factors for depression in addition to other variables.

It was observed that the variable that predicted depression most was perceived social support, and the variable that predicted anxiety at the highest rate was cognitive reappraisal. This result is also in line with the literature and is an expected result (Roohafza et al., 2014; Sepúlveda-Vildósola, Romero-Guerra, & Jaramillo-Villanueva, 2012; Yasin & Dzulkifli, 2010). In a study conducted with healthcare professionals during the coronavirus epidemic process, it was found that individuals who received social support had lower anxiety levels, similar to the findings of our study (Xiao et al., 2020). Based on this, it is considered that conducting awareness studies on social support mechanisms for individuals, creating intervention programs in order to enable individuals to use the cognitive reappraisal strategy effectively can be beneficial during the Coronavirus pandemic and after Coronavirus outbreak.

In this study, the variables determined significantly explain 30% of depression and 15% of anxiety, and there is a rate of 70% for depression and 85% for anxiety, which need to be explained. In this context, it is considered that conducting future studies by taking the epidemic and changing conditions of daily life and into consideration is important in terms of protecting the mental health of individuals.

Collecting research data online and the fact that most of the participants are people with a high socio-economic level are among the limitations of the study and these can reduce generalizability.