

Received : 07.10.2020 Received in revised from : 27.10.2020 Accepted : 05.12.2020 Eryilmaz, A. & Başal, A. (2021). Student and teacher perspectives: developing the scale of coping strategies for pessimism and subjective well-being model based on coping strategies for COVID-19 and goal striving. *International Online Journal of Education and Teaching (IOJET)*, 8(1). 546-563.

STUDENT AND TEACHER PERSPECTIVES: DEVELOPING THE SCALE OF COPING STRATEGIES FOR PESSIMISM AND SUBJECTIVE WELL-BEING MODEL BASED ON COPING STRATEGIES FOR COVID-19 AND GOAL STRIVING

Research Article

Ali Eryilmaz (Corresponding Author)

Yildiz Technical University, İstanbul, Turkey

erali76@hotmail.com

Ahmet Başal 📵

Yildiz Technical University, İstanbul, Turkey

ahmetbasal@gmail.com

Ali Eryilmaz is a full Professor in the Department of Psychological Counselling at Yildiz Technical University. His research interests include motivation and adolescent subjective well-being.

Ahmet Başal is an Associate Professor in the Department of Life Long Learning and Adult Education at Yildiz Technical University in Turkey. His research interests include teacher education, curriculum development, CALL and engagement.

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# STUDENT AND TEACHER PERSPECTIVES: DEVELOPING THE SCALE OF COPING STRATEGIES FOR PESSIMISM AND SUBJECTIVE WELL-BEING MODEL BASED ON COPING STRATEGIES FOR COVID-19 AND GOAL STRIVING

Ali Eryilmaz erali76@hotmail.com

Ahmet Başal ahmetbasal@gmail.com

#### **Abstract**

This study aims to investigate coping strategies that activate pessimism in the context of COVID 19. To this end, two sub-studies were conducted. In the first study, an exploratory factor analysis of coping with pessimistic events scale was conducted on 209 university students. It was found that students use strategies such as self-control, coping with spirituality, problem solving, optimistic thinking, social support, denial, putting distance and protecting self-value while dealing with events that activate pessimism. In the second study, a limited subjective well-being model with coping with COVID 19 and striving for goals was tested on 201 teachers. Based on the results, it is found that it has been not enough for teachers to strive for goals to increase their subjective well-being, but it has been also necessary to use strategies to cope with COVID-19 that activates pessimism.

Keywords: Coping strategies, pessimism, COVID-19, well-being, goal striving

### 1. Introduction

Individuals make positive or negative deductions about their future based on what they live (Scheier & Bridges, 1995). Considering the negative, the concept of pessimism comes to the fore. Pessimism, viewed as "a cognitive variable" (Ginevra et al., 2017, p.189), might be described as a generalized negative outcome expectancy (Peterson & Seligman, 1984) and affects one's health both psychologically (Chang et al., 1997; Scheier et al., 2001) and physically (Finan et al., 2008).

Numereous studies have investigated the relationship between pessimism and physical well-being of the individuals. For instance, pessimism disrupts individuals' DNA structures (O'Donovan et al., 2009), pessimistic older people exhibit more symptoms of osteoarthritis, which are joint diseases (Luger et al., 2008) and pessimistic individuals exhibit more symptoms of heart disease (Bennet & Elliot, 2005). Similarly, pessimists who experience brain cancer have a shorter life span than optimists (Allison et al., 2003) and spouses of individuals with liver cancer have been found to exhibit more pessimism and symptoms of depression (Pinquart & Duberstein, 2005). In addition, as the pessimism levels of individuals increase, their immune systems become more weakened (Peterson & Seligman, 1987). Also, highly pessimist patients with rheumatoid arthritis were found to experience more pain and anxiety (Finan et al., 2008).

Interesting conclusions have also been reached in studies that examine the relationship between pessimism and mental health. Pessimistic individuals show more symptoms of depression than optimists (Sweeny et al.,1986). Similarly, pessimistic women were found to



show more symptoms of anxiety before and after pregnancy (Fontaine & Jones, 1997). It also has influences on life satisfaction, stress and depression (Chang, 2001). In addition, it was found that pessimists had lower levels of life satisfaction (Chang & Farrehi, 2001) and self-esteem (Scheier et al., 2001). Pessimism has also been found to be associated with poor performance in the workplace of the individual, academic failure, and failure in sports (Lin & Peterson, 1990). Pessimistic individuals also have more unemployment problems and are more suspicious of themselves (Scheier & Carver, 1985).

Based on the pessimism and coping studies, it is generally seen that pessimism is considered as an extension of mental disorders (Barnett et al., 2018). Depressed individuals are reported to have pessimistic thoughts (Fernández-Abascal, et al., 2018). These individuals cope with pessimism through strategies such as self-control, distancing and avoidance (Showers & Ruben, 1990). There have been studies on defensive pessimism and coping (Cantor & Norem, 1989) in the literature. Physical diseases also produce pessimistic thoughts. These thoughts have been reported to have seen in patients with open-heart surgery (Ben-Zur et al., 2000), cancer (Thieme et al., 2017), arthritis (Benyamini, 2005), and chronic pain Ramírez-Maestre et al., 2012). COVID-19 is also considered as a physical illness. Individuals have pessimistic thoughts particularly about the risk of Corona Virus Infection (Raude, et al. 2020). COVID-19 causes the emergence of pessimistic thoughts not only in terms of disease, but also in economic and social terms (Sułkowski, 2020). Applying methods of coping offers long and short-term positive contributions for both physical and mental health of individuals (Lazarus & Folkman, 1984). Although there are studies on determining the pessimism levels of individuals (Burke, et al., 2000; Maruta, 2002) and scales to help this determination (Beck, et al., 1974; Dember, et al., 1989), there are no scale studies in the literature on how individuals cope with pessimistic events and situations. First of all, this study aims to reveal the strategies used in coping with pessimistic events.

### 2. Study 1: Creating Eight Factors Coping Strategies for Pessimism Activated Events Scale

### 2.1. Method

This study aims to develop a scale that can measure coping with the events and situations that cause pessimism. To this end, the preparation of the items was discussed, and also statistical analyzes of reliability and validity was conducted in the context of scale development.

Preparation of Items: In the preparation scale items, interviews were conducted with 30 female and 30 male university students. In the interviews, the following two open-ended questions were asked following the explanation of Pessimism is the expectation of negative outcome. Consider an event that you have experienced in the last week reducing your optimism and generating pessimistic feelings and thoughts

- a) Could you express this event or situation in a sentence?
- b) How did you cope with this event or situation?

Then, content analysis was applied to the responses of both open-ended questions. The events and situations that led university students to produce pessimistic thoughts and emotions based on the analysis of first question is shown in Table 1 below:



Table 1. Events and situations that activate pessimism

Category	Example Expression	n	f
Having a physical health problem	I learned that I have a heart disease My injury while playing football increased my pessimism My mother's cancer	15	25
Conflict with	I got angry with a person I loved	14	23
friends	Arguing with my house-mate about the bills.  Abuse of my good will by my friends		
Conflict with parents	My mom caught me talking with my boyfriend I had fight with my family because of my choices. My mom doesn't care about me.	10	16
Conflict with the loved one	I had a fight with my darling I argued with my girlfriend. I had a fight with my boyfriend	8	13
Having problems with the school	I had problems with the school I got a bad grade from Math I am in the phase of getting used to the university	6	10
Requests not fulfilling	I couldn't win the lotter.  My work is not going well as I wanted.  I can to the job that I am responsible	3	5
Having financial problems	My mother didn't give me pocket money I couldn't pay my credit card and I am now in debt	2	4
Other events and situations	I couldn't decide which course to go. I couldn't go home for the holiday.	2	4
	Total	60	100

Content analysis was also applied to the replies to the second question. A total of 34 statements were reached. The statements were gathered around several categories. These expressions have been converted to scale items. These 34 items were examined in terms of form, expression and participation indicator by two faculty members from counseling psychology, and assessment and evaluation fields and necessary corrections were made. As a result of their evaluations, all field experts made suggestions to keep the items in the scale without significant changes.

### 2.2. Study Group

The reliability and factor structure of the scale were performed on students studying in a university. Volunteering students between the ages of 18 and 25 studying at the Faculty of Education, Science, Literature, Engineering, Health Sciences and Medicine were included in the study. The study consisted 108 females (51.7%) and 101 males (48.3%) totaling 209 university students. The average age of the individuals participating in the study is 21.78.

### 2.3. Data Collection Tools

Positive Future Expectation Scale: The Positive Future Expectation Scale (OPSS) aims to measure the level of affirmation of individuals' expectations for their future. This scale has five items and was developed by İmamoğlu and Güler-Edwards (2007). The reliability value



of the scale was found to be 0.92. In this study, the internal consistency coefficient of the scale was found as .831.

Life Orientation Test: Life Orientation Test (LOT) was developed by Scheier and Carver (1985). The scale evaluates individuals' optimism levels. The scale is one-dimensional, and also adapted to Turkish by Aydın and Tezer (1991). In the adaptation study, the reliability coefficient of the scale was found to be 0.77. In this study, the internal consistency coefficient of the scale was found as .817.

Beck Depression Scale: Beck Depression Scale (BDS) was developed by Beck et al. (1961) to measure the extent to which individuals show depression symptoms. The scale was adapted to Turkish by Hisli (1988). The reliability coefficient of the scale was found to be 0.80.. In this study, the internal consistency coefficient of the scale was found as .886.

Ways of Coping with Stress Scale: This scale was developed by Moss (1993). The scale consists of two parts, avoidance and approach responses, and a total of eight dimensions. Only part of the scale (approach responses) and four dimensions (logical analysis, positive assessment, guidance and support seeking, problem solving) were used in the study. Cronbach Alpha reliability values of the sub-dimensions of the original scale ranged from 0.60 to 0.74. The scale is a five-point Likert type scale. The scale was adapted to Turkish by Ballı and Kılıç (2016). Cronbach Alpha reliability value of the total score of the scale was found to be 0.91. Cronbach Alpha reliability values of the sub-dimensions of the scale ranged from 0.73 to 0.91. In this study, the internal consistency coefficient of the scale was found as .876.

### 2.4. Findings

# **2.4.1.** Findings Related to the Validity of Coping with Events and Situations Activating Pessimism Scale

Factor Structure: In this study, firstly, the appropriateness of data set for analysis in terms of sample size was examined. To this end, analysis has been conducted with Kaiser-Meyer-Olkin and Bartlett Ball Test. As a result of the analysis, the KMO value was found to be  $(\chi 2 = 4818, 000; p = 0,000)$ . These results showed that the data set is suitable for factor analysis (Field, 2005). Then, to analyze the factor structure of the Coping with Events and Situations that Activate Pessimism Scale, analysis was performed based on the Principal Component Analysis on the data obtained from 209 participants. It is important to determine the factor analysis technique to be used in the analysis. In studies conducted in psychology, it is stated that psychological structures are related to each other and oblique rotation techniques are recommended for factor analysis for related structures (Field, 2005). At this point, the sub-dimensions in the scale developed were thought to be related positive structures. Therefore, it was decided to perform factor analysis using Direct Oblimin technique. Exploratory factor analysis started with 34 items. Factor load values of 0.30 and above were included in the factor structure in determining the factor structure. According to the first analysis, eleven factors with an eigenvalue above 1 have been reached. However, when analyzing the graph for the distribution of factors, it was concluded that the eigenvalues decreased after the eighth factor. Findings regarding both the eigenvalues and the distribution graph of the factors (Field, 2005) supported the eight-factor solution. According to the results of the analysis conducted in this direction, a 28-item scale with a variance of 65.501% was obtained (Table 2).



Table 2. Scale Dimensions, Disclosed Variances, Eigan Values, Factor Loading and Items

Think about an incident that you have downplayed, reduced your optimism, and produces pessimistic thoughts in the previous week. Express this event in a sentence and write it in the space below

...... Below are various expressions to deal with the above-mentioned event. Read each statement carefully and evaluate it accordingly.

Eigan Value (EV) & Explained variance % (V)	Dimensions	Items	Factor Loadin g
		1 I avoided quarreling and saying bad words.	.835
EV: 5,910		I thought it would be better for me to remain silent in	.773
V: 21,107 %	Calf control	the face of tense situation.	7.65
	Self-control	3 I tried to be calm in the face of the incident.	.765
		I was patient because I thought that my smallest	.686
	Coning	<ul><li>mistake would have great consequences.</li><li>I prayed.</li></ul>	.894
EV: 2,659	Coping with	6 I turned to spirituality.	.868
V: 9,498 %	spirituality	7 I worshiped.	.817
<b>v</b> . 2,420 70	Problem	8 I tried to be objective in the face of the incident.	.820
EV:2,387	solving	I looked for ways that would not upget myself and	
V: 8,524 %	Sorring	others.	.770
· · · · · · · · · · · · · · · · · · ·		10 I tried to guide by giving advice without getting angry.	.767
		11 I warned calmly those who make mistakes	.596
	Optimistic	12 I thought the future would be better	.822
	thinking	I thought that those days will pass and I will lough at	015
EV: 1,753		the past when I remember those days.	.815
V: 6,259 %		I thought about the positive situations, events, people I	.661
		love, and my family.	.001
		I found the good side of the event and acted	
		accordingly.	.516
	Social	16 I chose to talk to my loved ones / relatives.	.811
EV: 1,655	support	17 I talked to my friends.	.767
V: 5,910 %		I did not think much and consulted experienced people close to me.	.640
		19 I spent time with my loved ones.	.568
EV: 1,554	Denial	20 I did not think much about this issue.	.883
V: 5,548 %		21 I tried to ignore this existing negative situation.	.861
		22 I pretended there was nothing that upset me.	.683
EV: 1,283	Protecting	23 I gave myself pep talk like "I love myself".	.801
V: 4,581 %	self-value	24 I brought to my mind that I am important.	.797
		25 I was good to myself	.699
EV: 1,141	Putting distance	Instead of thinking about the event, I gave myself to other things	.723
V: 4,074 %		I moved away from the environment I didn't want to be	.723
		in.  28 I refrained from thinking negatively	614
	 n Value: V: Va		.614

<sup>\*</sup> Ev: Eigan Value; V: Variance



Table 3. Intercorrelations of the Dimensions of the Scale

Factors	1	2	3	4	5	6	7	8	9
1.Self-control	1	.243*	.385*	.165* *	.192* *	.139*	.151*	.245* *	.587* *
2. Coping with spirituality		1	.301*	.296*	.257* *	.011	.095	.174* *	.532* *
3.Problem solving			1	.254*	.260*	.190*	.221*	.270*	.661* *
4.Optimistic thinking				1	.245*	.123	.312*	.344*	.585* *
5.Social support					1	.119	.325*	.209*	.567* *
6.Denial						1	.332*	.258*	.466* *
7.Protecting self-value							1	.368*	.580* *
8. Putting distance								1	.590* *
9.Total point									1

<sup>\*</sup> p<.05; \*\* p<.01

In Table-3, the scale total score of the factors and their relationships with each other were examined by Pearson Correlation technique. According to the results of the analysis, it is seen that there are moderate and positive relationships between the factors. These findings also show that there is no multi collinearity between factors.

### 2.4.2. Concurrent Validity

Beck Depression Scale, Positive Future Expectation Scale and Life Orientation Test were used to test the concurrent validity of the Coping with Events and Situations that Activate Pessimism Scale. The results of the whole scale and the other sub-scales and the Pearson Moments Product correlation are given in Table-4. When Table 4 is analyzed, the Coping Events and Situations that Activate Pessimism Scale is positively and moderately correlated with optimism and positive future orientation; it appears to be negatively and lowly associated with depression.

Table 4. Concurrent Validity Results of the Coping Scale with Events and Situations That

### Activate Pessimism

Factors	1	2	3	4	5	6	7	8	9
Life Orientation Test	.260*	.127*	300**	360**	359**	212**	408**	351**	.511**
Positive future expectations	.236*	.214*	.269**	.376**	.330**	.256*	.409**	.349**	.501**
Depression	112	058	206**	163**	164**	141*	306**	197**	288**

<sup>\*</sup> p<.05; \*\* p<.01; 1. Self-control 2. Coping with spirituality 3. Problem solving; 4.Optimistic thinking;



<sup>5.</sup> Social support; 6. Denial; 7. Protecting self-value; 8. Putting distance; 9. Total point

Concurrent validity of the scale was also performed with the Stress Coping Pathways Scale (Moss, 1993). The relationship between the Pearson Correlation Analysis and the scales was found as 0.615 (p <.01). This finding shows that the scale is similar to the scale of ways to deal with stress, but it is not scales that measure the same things.

### 2.4.3. Findings on the Reliability of Coping with Events and Situations that Activate Pessimism Scale

Internal Reliability Coefficients were calculated on the data obtained from 209 participants within the scope of the reliability studies of the Coping with the Events and Situations Activating Pessimism Scale and the scale was applied to 60 participants at two-week intervals. The findings are presented in Table 4. When Table 5 is examined, it can be seen the reliability values of the scale has sufficient reliability values.

Table 5. Internal Consistency Coefficients and Test-Repeat Correlation Coefficients of the Scale

	N of Items	Item Range	α	trt
Dimensions			n=255	n=60
1.Self-control	4	.6885	.80	.87**
2. Coping with spirituality	3	.8189	.88	.82**
3.Problem solving	4	.5982	.79	.85**
4.Optimistic thinking	4	.5182	.73	.87**
5. Social support	4	.5681	.71	.84**
6.Denial	3	.6888	.80	.83**
7.Protecting self value	3	.6980	.75	.86**
8.Putting distance	3	.6172	.60	.89**
9.Total point	28		.86	.87**

\*trt: Test-Retest

## 3. Study 2: Teachers' Subjective Well-Being Model: Coping Strategies for COVID-19 and Goal Striving

Subjective well-being, expressing the positive aspect of individuals' mental health, is a concept characterized by high number of positive emotions, low level of positive emotions and life satisfaction (Diener, 1984; Koivumaa-Honkanen et al., 2005). Subjective well-being has high positive effects both individually and socially (Diener & Ryan, 2009; Diener & Seligman, 2018). Teachers are one of the professions that will provide positive contributions to both themselves and other individuals by having high subjective well-being (Suldo et al., 2009).

There have been many factors that affect the subjective well-being of teachers. Features such as personality traits can be evaluated among individual factors (Eryılmaz, 2014). Striving for goals is seen as one of the individual factors. Striving for goals is considered as the implementation of intentions (Achtziger et al., 2008) and as one of the personal resources that increase subjective well-being (Diener & Fujita, 1995). There are several models that *striving for goals* increases subjective well-being of individuals. One of them is the self-concordance model. Longitudinal and cross-sectional studies based on this model show that striving for goals increases subjective well-being of individuals (Sheldon & Elliot, 1999; Smith et al., 2007). In particular, striving for goals increases the subjective well-being of teachers (Eryilmaz & Kara, 2019).

Tools are needed to strengthen the relationship between *striving for goals* and *subjective well-being*. Various models have been developed in the literature describing this tool. One of



these models is the coping model of Lazarus and Folkman (1987). According to this model, tackling for goals is seen as individual resources and causal precursors in coping. Pessimism and anxiety in individuals such as COVID-19 event are evaluated in the context of environmental barriers. Individuals implement an intermediary process after evaluating these causal precursors. Elements of this intermediary process are primary evaluation, secondary evaluation and the use of coping strategies depending on these evaluations. The use of coping strategies has short and long term positive and negative effects on the individual. In the context of short-term effects, changes occur in the person's body, feelings and behavior. In the context of long-term effects, changes in subjective well-being, social functionality, disease and health of the individuals are encountered. However, all this information is based on theoretical explanations. Empirical testing of these explanations can contribute to subjective well-being literature.

Teachers are teaching agents that make significant contributions to the socialization, learning, academic success, attachment to school, subjective well-being and development of younger generations (Eryilmaz, 2014; García-Moya et al., 2015; Prasertcharoensuk et al., 2015). There are studies in which subjective well-being of teachers is handled with personal and environmental variables (Eryılmaz & Kara, 2019; Moe, 2016). However, in the context of COVID-19, which activates pessimism, there seems to be no studies on subjective well-being of teachers.

All countries in the world are faced with a wide-ranging crisis situation. COVID-19 is seen as an important pandemic event that causes pessimistic thoughts to occur in individuals. As in the case of people all over the world, the people in Turkey also stay in their homes for preventing the transmission of the virus to other people. This pandemic event creates anxiety, depression and stress in individuals (Xiao et al., 2020; Wang et al., 2020). In other words, it affects subjective well-being levels of individuals negatively. In these conditions, models that increase subjective well-being levels are needed in order to make individuals' mental health more positive. In conclusion, this study aims to investigate the mediating effect of coping strategies for COVID-19 in the relationship between subjective well-being of teachers and their striving for goals.

### 3.1. Method

The purpose of the second study is to test a subjective well-being model for teachers in the context of COVID-19. In the study, the data were analyzed with the structural equation model (Kline, 1998). Accordingly, while the dependent variable of the study is the subjective well-being of teachers, the independent variables are coping strategies with COVID-19 and goal striving. In the study, the following hypotheses were established:

- a) Striving for goals has a positive effect on subjective well-being of teachers,
- b) The coping strategies for COVID-19 have a positive effect on subjective well-being of teachers and,
- c) Coping strategies for COVID-19 have a significant mediator effect on the relation between subjective well-being and striving for goals.

In the study, since COVID-19 is a physical disease, the denial dimension in the coping strategies for pessimism activated events scale was not included in the analysis. Coping this disease with denial strategy will lead to failure to take precautions against the disease and protecting one's self and thus to decrease the well-being of individuals. In the study, some exclusion criteria were also determined. As exclusion criteria, working as a teacher in public schools and not having any psychiatric diagnosis were applied. The data in the study were collected online.



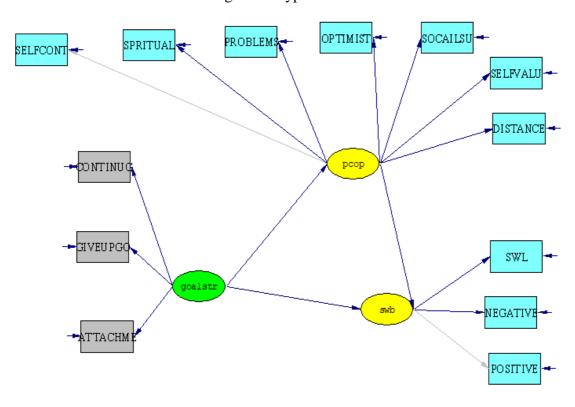


Figure 1: Hypothetical model

Figure 1. Hypothetical model

Note: goalstvr: Goal striving; swb: Subjective well-being; pcop: coping strategies for COVID-19

### 3.2. Measures

**Positive** – **Negative** Affect Scale (PANAS): The PANAS scale was developed by Watson et al. (1998). There are 20 emotional expressions in the scale; 10 positive and 10 negative. Adaptation of the scale into Turkish was carried out by Gençöz (2000). Reliability values of the scale were found between 0.83 and 0.86. In this study, the internal consistency coefficient of the positive affect dimension of the scale was .814 and the internal consistency coefficient of the negative affect dimension was found as .840.

Satisfaction with Life Scale (SWL): The SWL scale is used to measure individuals' satisfaction with life. SWL is a one-dimensional and 5-item, 7-point Likert type scale (Diener et al., 1985). This scale was adapted to Turkish by Yetim (1993). Cronbach Alpha reliability value of the scale was found to be 0.76. In this study, the internal consistency coefficient of the scale was found as .891.

Striving for Goals Scale: This scale is a three-dimensional scale: goal attachment, continue striving and goal give up. The scale, a 5-item Likert-type scale with 17 items, was developed by Eryilmaz (2015). There are 5 items in the sub-dimension of continuing striving of the scale, 6 items in the goal attachment dimension and 7 items in the dimension of goal give up. Reliability values of the scale were examined by the internal consistency method (Eryilmaz, 2015). The internal consistency coefficient of the goal attachment sub-dimension was 0.88, the internal consistency coefficient of the goal give up dimension was 0.86, and the



internal consistency coefficient of the *continue striving* sub-dimension was 0.86. The reliability coefficients analyzed with the test-retest method were found to be 0.82 for *goal attachcment*, *goal give up* 0.87 and *continue striving* 0.85. Criterion validity was examined with the Oxford Happiness Scale (Doğan & Çötok, 2011). As a result, the scale was found to be a valid and reliable measurement tool. In this study, the internal consistency coefficients of the sub-dimensions of the scale were found as .865, .851 and .891.

Coping Strategies for Pessimism Activated Events Scale: Another scale used in the study was The Coping Strategies for Pessimism Activated Events Scale. This scale is a 28 item scale. In the use of the scale for COVID-19, the following explanation was made at the beginning of it: "Some situations that we live or encounter push us to pessimism such as the death of one of our relatives, earthquakes we experienced, etc. We are currently facing one of these disasters. The corona virus produces pessimistic feelings and thoughts in us. Below are some expressions about what you do when you deal with this process. The purpose of these statements is to reveal how you approached the process". In this his study, the internal consistency coefficient of the scale was found as .919.

### 3.3. Participants

In the study, a total of 201 teachers, 37 males and 164 females aged between 23-64 were included. The average age of the teachers in the study was 34.88. One hundred twenty-one (60.2%) of the teachers in the study were undergraduate graduates. In the study, 63 teachers (31.3%) were MA graduates and 17 teachers (8.5%) PhD. The study included teachers from 12 different branches (such as mathematics teacher, English teacher, philosophy group teacher, classroom teacher, social studies teacher). The order according to the branches of teachers was as follows: class teachers (n=32), English teachers (n=27), and philosophy teachers (n=23 people). Teachers in other branches come after these branches.

### 3.4. Findings

According to the research findings, the hypothetical model proposed was statistically confirmed. According to the structural equation model analysis, the model is within acceptable limits ( $\chi 2 = 131.01$ ; df = 62; RMSEA = 0.075). Goodness of fit indexes of the model is given in Table 6 below.

Table 6. Fit Indexes

Fit Indexes	Values
$X^2$ / sd (131.01/62)	2.11
NFI	.91
NNFI	.94
CFI	.95
IFI	.95
GFI	.91
AGFI	.87



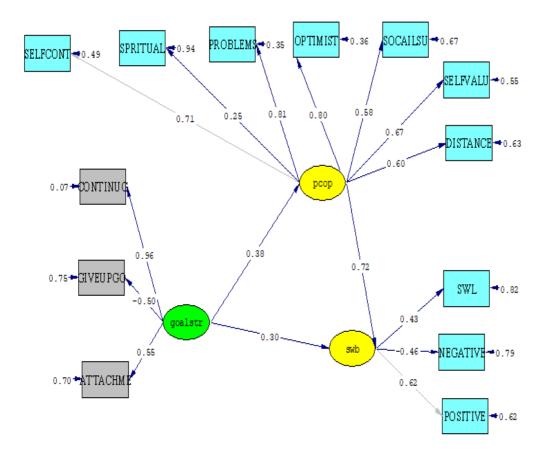


Figure 2. Subjective well-being model in the context of coping strategies for COVID-19 and goal striving

**Note:** goalstvr: Goal striving; swb: Subjective wellbeing; pcop: coping strategies for COVID-19

According to the results of the structural model analysis, it was found that *striving for goals* (t = 3.15; p <.01) and *coping with COVID-19* (t = 6.14; p <.01) positively affected the subjective well-being of teachers. Moreover, the striving for goals positively affected coping with COVID 19 (t = 4.54; p <.01). According to these results, one unit increase in the striving for goals increases the subjective well-being of teachers by  $\beta$  = 0.30 units (p <0.01). Similarly, one unit increase in coping with COVID-19 increases the subjective well-being of teachers as  $\beta$  = 0.72 (p <0.01). In addition, a one-unit increase in striving for goals increases teachers' coping with COVID-19 by  $\beta$  = 0.38 (p <0.01). In the relationship between teachers' subjective well-being and striving for goals, COVID-19's mediating effect was found to be  $\beta$  = 0.27 (p <0.01). It was concluded that the total effect size of striving for goals on teachers' subjective well-being was  $\beta$  = 0.57 (p <0.01). While interpreting the effect size was determined according to Kline (1998) high if the standardized coefficient is greater than 0.50; medium if it is less than 0.30 and small if it is less than 0.10. It is seen that the total effect of both Coping with COVID-19 and striving for goals has a high level of effect size.

### 4. Discussion and Conclusion

This study examines how university students deal with situations and events that activate pessimism. To this end, the coping with the events and situations that activate pessimism scale was developed. It can be concluded that the scale is reliable and valid.



When the dimensions of coping with the events and situations that activate pessimism scale are examined, it is seen that there are eight important dimensions. It was concluded that the dimensions of self-control, problem solving, social support, denial and putting distance were similar to the stress coping model put forward by Lazarus and Folkman (1984). On the other hand, it was concluded that the existence of dimensions of spirituality, optimistic thinking, and the protecting self-value differ from the model of Lazarus and Folkman (1984) in dealing with the events and situations that activate pessimism, suggesting that coping with events and situations that activate pessimism is somewhat like coping with stress, to a certain extent, it has its own-original coping methods.

The study findings show that the process of dealing with events and situations that activate pessimism is similar to the process of dealing with stress. There are theoretical explanations in the literature for this similarity. For instance, it has been stated that individuals have increased stress levels in the face of events that activate pessimism and individuals react to coping with these events (Chang, 2002).

In the literature, individuals' statements about the future negatively affect their physical and mental health (Szalma, 2002), prevent them from coping (Scheier & Carver, 1985), and cause more negative emotions (Patton et al., 2004). Despite these findings, there has been little information and findings in the literature on how individuals cope with pessimistic events and situations. At this point, the findings of the current study contributed to the literature.

In the negative predictions of individuals for the future, it is important to understand the nature and importance of the events. There are three important factors in understanding the nature and importance of events later. One of them is predictability. The fact that individuals think about the possibility of a consequence means predictability. The second is the perception of necessity. The perception of necessity includes our perceptual tendencies that the outcome of the past events is inevitable. The third is distorted memory. The distorted memory includes our tendencies to recall wrongly (Wann et al., 2008). Conducting research in the future on the relationship between events activating pessimism and predictability, necessity and distorted memory might contribute to the literature.

In this study, a subjective well-being model was also tested in the context of coping strategies for COVID-19 in order to increase subjective well-being of teachers and striving for goals. The results of the study showed that it is important for teachers to strive for goals, but it is not sufficient alone. It was concluded that the use of coping strategies for COVID-19 together with striving for goals brings subjective well-being of teachers to a more positive position.

It can be said that this study has contributed to the literature as it first tested the assumptions of various theories. First of all, this study supported the assumptions of the self-concordance model to striving for goals (Sheldon & Elliot, 1999; Smith et al, 2007). According to this theory, when individuals choose goals in harmony with themselves and try to realize them, their well-being levels increase. Besides all these, this study confirmed the assumptions of transactional theory (Lazarus & Folkman, 1987). According to this model, using coping strategies positively affects the subjective well-being levels of individuals in the short and long term. However, this study has a different aspect from the theoretical approaches mentioned. It was carried out in the context of coping with pessimism activated by events and circumstances (COVID-19).

Some suggestions can be developed based on the results of the study. First of all, the study findings can be used to deal with COVID-19 psychologically. At this point, training programs on the subject of coping, especially for teachers and students, can be organized. These training programs can be expanded with online applications. In the context of psychological support, psycho-education programs can be prepared for both teachers and



students. In addition, these coping strategies can be taught to individuals at the stages of psychological counseling and psychotherapy, both individually and in groups. This study was carried out specifically for teachers. Conducting a similar study, especially on health workers struggling with COVID-19 can be an important tool to increase their subjective well-being.

### 5. Conflict of Interest

The authors declare that there is no conflict of interest.

### **6. Ethics Committee Approval**

The authors confirm that the study does not need ethics committee approval according to the research integrity rules in their country.



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