

Negative Life Events Associated with COVID-19 and Psychological Distress: The Role of Sense of Helplessness and Existential Well-Being

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This cross-sectional study was conducted to investigate potential mechanisms that take an active role in the association between COVID-19-related adverse life events and psychological distress. Three hundred seventy-six volunteers (55.6% women and 44.4% men) aged 18 and over from Turkey were recruited (age range = 18-64). The mean age of the participants was 31.1. Questionnaires were administered to examine existential well-being (EWB), COVID-19-associated negative life events (NLEs), sense of helplessness and demographic variables, and psychological distress. The current findings provide evidence that while the EWB acts as a cognitive resilience factor in the relationship between COVID-19-related NLEs and psychological distress, the sense of helplessness functions as a mediating variable. Furthermore, the present study suggests that the indirect relationship between COVID-19-related NLEs and psychological distress through the sense of helplessness is stronger for women. These findings highlight that interventions to strengthen an individual's sense of meaning and purpose can play an important role in combating the negative effects of COVID-19 on psychological health and that helplessness may be an important treatment target, particularly for interventions aimed at women.

Key words: COVID-19, negative life events, a sense of helplessness, existential well-being, psychological distress

The COVID-19 crisis, which has affected the whole world in a short time, has threatened not only the physiological health of individuals but also their physical and psychosocial health. The pandemic has caused the death of many people worldwide due to their direct

exposure to the virus. It has also resulted in an increase in the incidence of symptoms of psychological distress in many people due to their exposure to various negative life experiences, such as being isolated from other people, limiting their social relationships,

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suffering financial losses, closing their workplaces, and being laid off. Previous studies have shown that the pandemic has negative effects not only physically but also economically, socially, and psychologically (Arslan, 2021; Brooks et al., 2020). Research conducted by the Organization for Economic Co-operation and Development (OECD) countries has shown that the rates of anxiety and depression increased in 2020 compared to previous years. For example, while the anxiety rate was between 5% and 19% before the pandemic, it seems to have risen to between 12.8% and 50% in 2020. Similarly, while the rate of depression before the pandemic varied between 3% and 10.8%, this rate went up to between 10% and 30% in 2020 (OCED, 2021). While the findings of the above studies emphasize the direct impact of the COVID-19 pandemic on people's psychological health, we need to understand which intermediate mechanisms are effective in this process. Therefore, identifying the intermediary mechanisms that play a role in the psychological impact of COVID-19 can provide important information to the clinicians working in intervention programs and implementation processes to be developed to help individuals who have difficulties in this process. The current study aims to examine some potential mediating and protective mechanisms that may play a part in the relationship between COVID-19-related adverse life events (e.g., the loss of a loved one, unemployment, difficulty accessing basic food, social exclusion due to infection, etc.) and psychological distress.

The COVID-19 pandemic is a phenomenon that appears suddenly, is unavoidable, and creates feelings of helplessness (El-Zoghby et al., 2020), ineffectiveness (Taylor & Asmundson, 2021), and guilt (Cavalera, 2020). Measures such as isolation and quarantine to prevent the effects of a pandemic may cause people to experience a sense of loss

of control over their lives and accompanying helplessness. The fact that the Coronavirus epidemic is called a "Pandemic" by the World Health Organization shows that the problem is on a global scale and has far reaching effects. The epidemic has affected many areas, from health to education, tourism to the economy, and even communication. The sudden intrusion of the pandemic into people's lives, creating changes in their lifestyles, limiting the ability of people to work in the face of the epidemic, and increasing uncertainties may have caused people to lose effective control over their lives, making them more likely to experience a sense of helplessness.

Helplessness is defined as a low-arousal, anticipatory emotional response to the perception that one has little control over future negative events (Geiger et al., 2021; Gelbrich, 2009). Helpless people feel that a negative situation cannot be changed in the future (Geiger et al., 2021). Previous studies have suggested that helplessness contributes to psychological distress and functionality (Amerio et al., 2020; Khan et al., 2020; Kara, 2021; Lifshin et al., 2020). Earlier findings showed that the prevalence of helplessness during the pandemic period ranged from 45.2% to 83.2%. (Amerio et al., 2020; Al Dhaheri et al., 2021; El-Zoghby et al., 2020; Misra & Kumar, 2021). Similarly, recent evidence has suggested that feeling of helplessness was positively associated with anxiety (Lifshin et al., 2020), depression (Amerio et al., 2020), and stress (Kara, 2021). Briefly, given the unpredictable nature of COVID-19, which can contribute to the sense of uncertainty, the sense of helplessness may be a key mechanism that could clarify the relationship between COVID-19-related adverse life events (NLEs) and psychological distress. Previous studies have supported the mediating role of feelings of helplessness (Bargai, Ben-Shakhar, & Shalev, 2008; Mills, Azizoddin, Gholizadeh, Racaza, & Nicassio, 2018). For ex-

ample, according to the multiple-mediation analysis results, Mills, Azizoddin, Gholizadeh, Racaza, and Nicassio (2018) report that helplessness fully mediated the relationship between pain (predictor variable) and anxiety, depression, and stress. Given these findings, it can be expected that a sense of helplessness plays a similar role in the relationship between COVID-19 related negative life events (NLEs) and psychological distress. Therefore, individuals who cannot cope with negative life events can be expected to experience a high sense of helplessness, and the rising sense of helplessness can negatively affect their psychological health.

The epidemic does not affect everyone in the same way. Previous research has shown that despite similar environmental conditions, people are affected differently by this pandemic. (Geçer, Yıldırım, & Akgül, 2020). For example, recent studies have shown that people with high resilience adapt to the pandemic more easily and are less affected by it (Arslan & Yıldırım, 2021; Zhang et al., 2020). These findings can be interpreted as individual differences among people affected by the pandemic. Another important variable as a protective factor in the pandemic may be existential well-being. Existential well-being arises from the notion of spiritual well-being that reflects what extent a person lives in coherence with him/herself, with others, nature, and the transcendent (National Interfaith Coalition on Aging, 1975). Existential well-being is defined as the subjective feeling of living a life that includes meaning, purpose, and value resulting from the harmony between an individual's worldview and his/her experiences of the world itself (Edmondson et al., 2008). The meaning of life, harmony, and purpose are the main themes of existential well-being (Edmondson et al., 2008). Individuals who are more optimistic, frame their experiences more positively, are at peace with themselves,

and have inner harmony, meaning, and purpose in their lives may be more successful in overcoming the difficulties they encounter in daily life. Previous findings supported this assumption. Edmondson et al. (2008) reported that existential well-being was the strongest predictor of mental health. Previous evidence has suggested that existential well-being is negatively associated with psychological distress such as anxiety (Sleight et al., 2020), depression (Brown et al., 2015), hopelessness, and suicidal ideation (Taliaferro et al., 2009), and positively correlated with hope and coping sources (Brown et al., 2015). Sleight et al. (2021) found that existential well-being moderated the association between anxiety and physical well-being. Gonzalez-Sanguino et al. (2020) reported that existential well-being was the key variable in predicting psychological distress, such as anxiety, depression, and post-traumatic disorders during COVID-19. In summary, considering the above findings, it can be concluded that the sense of inner integrity and meaning may function as a coping strategy. If this is the case, the sense of inner integrity, purposefulness, and meaning may play an effective role in reducing the impact of negative life events on the individual's psychological health; in other words, it may function as a protective mechanism in the relationship between these variables.

Current Study

The current study aims to determine the possible factors that a) make the psychological health of an individual vulnerable to the negative effects of COVID-19 and b) protect against the negative effects of COVID-19 by examining the relationships between adverse life events associated with COVID-19, sense of helplessness, existential well-being (EWB), and psychological distress. Based on the above theoretical explanations and research

findings, we will first test the mediating role of the feeling of helplessness. Next, we will test whether the effect of negative life events (NLEs) related to COVID-19 on psychological distress changes depending on the level of existential well-being. Finally, previous studies have shown that a) the impact of COVID-19 on psychological distress, b) the level of helplessness, and c) existential well-being differ by gender. Earlier evidence indicated that women reported more problems with mental health issues such as depression and anxiety (Bermejo-Franco et al., 2022; Vloo et al., 2021), high level of helplessness (Kiefer, 1990; Rubinstein, 2004), and existential well-being (Coppola et al., 2021; Lawler-Row & Elliott, 2009). This evidence may suggest that gender will impact the relationship between COVID-19-related negative life events, helplessness, existential well-being, and psychological distress. Therefore, we will test whether the direct and indirect effect of the pandemic on psychological distress differs by gender.

Specifically, the following hypotheses will be addressed:

Hypothesis 1: A sense of helplessness would mediate the relationship between COVID-19-related NLEs and psychological distress (Figure 1a).

Hypothesis 2: EWB would moderate the direct effect of COVID-19-related NLEs on psychological distress (Figure 1b).

Hypothesis 3: The indirect predictive effect of COVID-19-related NLEs on psychological symptoms would differ depending on gender (Figure 1c).

Method

Participants

Three hundred seventy-six volunteers (55.6% of women and 44.4% of men) aged 18 and over from Turkey were recruited (age range = 18-64). The mean age of the participants was 31.16 ($SD = 10.07$). A cross-sectional survey

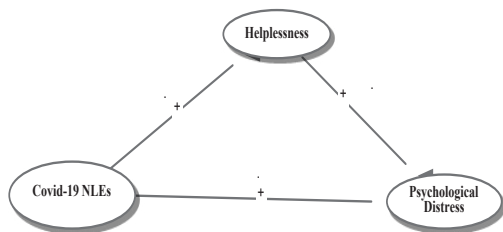


Figure 1a Proposed mediation model

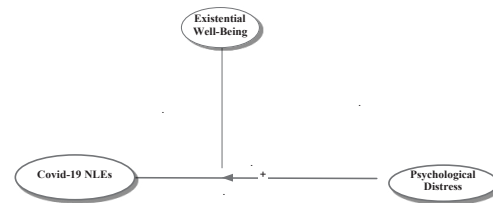


Figure 1b Proposed moderation model

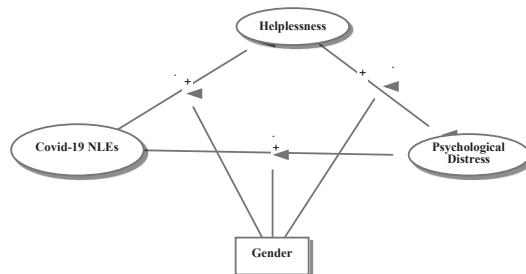


Figure 1c The proposed moderated mediation model

was conducted using an online platform (doc.google.com/forms) available online from June 26, 2021 to December 14, 2021. The online collection of data and low participation lengthened the data collection period. We used professional and our networks to share and disseminate the survey via social media (e.g., email, WhatsApp). We provided a standardized general description of research in email and messaging/social media posts. We asked the participants to read the instruction and give an informed consent. We informed them that participation in this study is not mandatory and that they could leave it anytime and for any reason.

Measurements

Psychological Distress

The General Health Questionnaire-12 (GHQ-12, Goldberg & Williams, 1988) is used to assess participants' levels of distress. The GHQ is a 12-item self-report questionnaire designed to identify mental health problems encountered in the community and clinical settings other than psychiatry. Participants were asked to rate each item using a 4-point Likert scale (from 0 to 3) to indicate the extent to which they had experienced each symptom over the past few weeks (e.g., "Did you feel unhappy and depressed over the past few weeks?"). Kılıç (1996) examined the psychometric properties of the GHQ-12 for the Turkish sample and reported that it had good psychometric properties (Cronbach's alpha = .74). Kılıç, Rezaki, Rezaki, Kaplan, Özgen, Sağduyu, and Öztürk (1997) report that the factor structures of the 12- and 28-item versions of the GHQ are consistent with the original studies. In this study, the internal consistency of the GHQ-12 is reported as 0.78 and GHQ-28 as 0.92. Both forms of GHQ are frequently used by researchers to evaluate gen-

eral psychopathology and to screen possible cases (Bademli, Lök, & Çinkılıç, 2022; Özdemir & Rezaki, 2007). The internal reliability (α) estimate for the current study was .94.

Helplessness

The helplessness subscale of the Hopelessness and Helplessness Scale (Duru & Balkis, 2021) is used to determine participants' feelings of helplessness. The Hopelessness and Helplessness Scale is a 12-item self-report measure. The helplessness subscale consists of 6 items. Participants were asked to rate each item using a 5-point Likert scale (1 = almost never, 5 = almost always) to indicate the frequency of experiencing a feeling of helplessness during the pandemic. (e.g., "I feel cornered when I encounter a problem"). The inter-item consistency was satisfactory (Cronbach's alpha = .95). The internal reliability (α) coefficient for the current study was .93.

Existential Well-Being (EWB)

We used the Spiritual Well-Being Scale (SpWBS, Arslan & Yıldırım, 2021c) to evaluate the EWB level of participants. The SpWBS is a self-report questionnaire that includes 5 items to measure a sense of meaning, peace, harmony, and purpose in life (e.g., "I feel a sense of purpose in my life"). Participants were asked to rate each item using a 5-point Likert scale (0 = not at all, 4 = very much). Arslan and Yıldırım (2021c) reported that SpWB has good psychometric properties to measure the spiritual well-being of Turkish people (Cronbach's alpha = .85). The internal reliability (α) estimate for the current sample was .82.

COVID-19 Related Negative Life Events

We used the COVID-19 Related Negative Life Events Checklist (NLEsCL, Balkis & Duru, 2021)

to determine the number of adverse life events participants were exposed to during the pandemic. The NLEsCL on COVID-19 includes 23 items with two response options from 0 (no) to 1 (yes) to identify adverse life events experienced by participants during the COVID-19 period. We asked participants to report the number of adverse life events they were exposed to during the COVID-19 period (e.g., the loss of a loved one, unemployment, difficulty accessing basic food, social exclusion due to an infection, etc.) The internal reliability (α) coefficient for the current sample was .81.

Data Analyses

All analyses in the current study were made using the SPSS 22.0, AMOS 22.0, and PROCESS macro 3.5 (Hayes, 2017) in a three-step analytic process. We calculated all variables' mean and standard deviation in the first step and checked the normality assumption using the skewness and kurtosis score. Next, we performed a correlation analysis to test for associations between COVID-related NLEs, psychological distress, helplessness, and existential well-being. In the second step, we conducted the structural equation model (SEM) analysis to examine the role of helplessness in the relationship between COVID-19-related NLEs and psychological distress. We preferred the SEM analysis as it allows the analysis of mediation with latent variables. Little et al. (2022) noted that when compared to other common methods, such as sums or averages of indicators, latent constructs provide ample flexibility to correct for measurement error, make minimal psychometric assumptions, establish factorial invariance across time and groups, evaluate model fit, and carry out confirmatory modeling. In the third step, we conducted a moderation analysis to examine the moderating role of EWB in the relationship

between COVID-19-related NLEs and psychological distress using Hayes' PROCESS macro (Model-1). Hayes et al. (2017) argued that "it can be difficult to trust a model which involves estimating latent variable interactions because it is difficult to determine whether the resulting estimates of interactions are reasonable" (p. 80). Therefore, we preferred the PROCESS macro for moderation analysis in order to provide an explicit argument for moderation when the moderator is continuing rather than dichotomous. Finally, we tested whether the predicted indirect power of COVID-19-related NLEs for psychological distress via helplessness differs across gender. For this purpose, we used a two-stage structural equation model. In the first step, we performed multi-group confirmatory analysis (MGCFA) to test the equivalence of the measurement pattern for men and women. In the second stage, we conducted multiple group SEM analysis (MGSEM) to test whether the mediation and moderation models differ across gender. The findings from the SEM using the most recommended model-data fit statistics and decision rules are as follows: Comparative fit index (CFI) Tucker-Lewis index (TLI) $\geq .90$ = acceptable and $\geq .95$ = good model fit; root mean square error (RMSEA) and standardized root mean square (SRMR) and $\leq .08$ = acceptable and $\leq .05$ = good model fit (Kline, 2011).

Results

Preliminary Analysis

Table 1 presents the means, standard deviations, skewness, and kurtosis of the variables. We performed a post hoc power analysis to estimate power via G*Power 3 (Faul et al., 2007). Power analysis indicated that a sample size of 376 has .81, .99, and 1.0 power for small, medium, and large effect sizes, respec-

Table 1 *Correlations and descriptive statistics (N = 376)*

	1	2	3	4
1-Negative Life Events	-	.51**	.38**	-.35**
2-Psychological Distress		-	.51**	-.52**
3-Helplessness			-	-.60**
4-Existential Well-Being				-
Mean	8.25	22.13	14.62	12.77
Standard Deviation	4.48	8.83	6.52	4.16
Skewness	.13	-.10	.52	-.43
Kurtosis	-.53	-.44	-.49	-.10

Note. ** $p < .001$

tively. The finding from the correlation analysis indicated that psychological distress was positively related to COVID-19-related NLEs and a sense of helplessness and was negatively associated with EWB. EWB was negatively correlated with COVID-19-related NLEs and a sense of helplessness.

The Mediating Role of Helplessness

Measurement Model

We examined the role of the sense of helplessness within the framework of SEM analyses by following a two-step procedure. Initially, we examined the relationship between latent variables via the measurement model. Next, we tested the structural model (Table 2).

We determined the latent structure of the feeling of helplessness by using the items. We created three and four parcels, respectively, to identify latent constructs of psychological distress and COVID-19-related adverse life events. Compared with data at the item level, the parcel level provides psychometric strengths (higher reliability, greater indicator communality, higher common-to-unique factor variance ratio, lower likelihood of distributional violations, and tighter and more equal

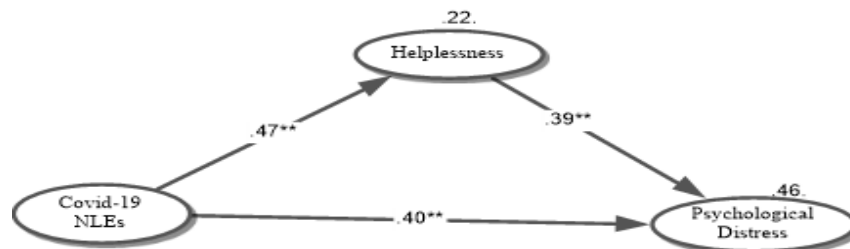
intervals) and model estimation benefits (lower indicator to sample size ratio, the likelihood of correlated residuals, the likelihood of dual factor loadings, reduced sources of sampling error, and sources of parsimony error) in the model (Little et al., 2022).

We performed the measurement and structural models (SEM) via three latent and 13 observed variables. The findings from the measured model indicated an acceptable model-data fit ($\chi^2 = 178.429$, $df = 61$, $\chi^2/df = 2.925$, $p < .001$, $CFI = .97$, $TLI = .96$, $RMSEA = .07$, $95\% CI [.06, .08]$, $SRMR = .05$).

Structural Model

We conducted structural equation models to test the mediating role of a sense of helplessness in the association between COVID-19-related NLEs and psychological distress. Findings from SEM analyses provided good data-model fit statistics ($\chi^2 = 178.429$, $df = 61$, $\chi^2/df = 2.925$, $p < .001$, $CFI = .97$, $TLI = .96$, $RMSEA = .07$, $95\% CI [.06, .08]$, $SRMR = .05$).

The results from SEM analyses indicated that a) COVID-19-related NLEs were positively associated with a sense of helplessness ($p < .001$) and psychological distress ($p < .001$), b) a sense of helplessness was positively associated with psychological distress ($p < .001$),



Note. Standardized regression coefficients were reported. Bootstrap sample size = 10.000.

Figure 2 The Mediating role of helplessness

and c) COVID-19 related NLEs was also indirectly associated with psychological distress via a sense of helplessness ($\beta = .18$, 95% $CI = [.13, .25]$, $p < .001$). Finally, COVID-19-related NLEs accounted for 22% of the variance in the sense of helplessness. Both COVID-19-related NLEs and a sense of helplessness accounted for 46% of the variance in psychological distress (Table 2 and Figure 2).

Gender-Comparison Analysis for the Mediation Model

We followed a two-step procedure to test whether the mediation model differed by gender. In the first stage, we utilized a series of tests of measurement invariance, such as configural, metric, and scalar, to test whether the measurement model was invariant across gender.

We conducted a multi-group confirmatory factor analysis (MGCFAs) to assess the configural, metric, and scalar invariants of the measurement model. Chen (2007) recommended using ΔCFI , $\Delta RMSEA$, and $\Delta SRMR$ to test whether the equality constraints were upheld because the chi-square statistic is sensitive to sample size. Based on fit measures recommended by Chen (2007), findings from MGCFAs suggest that configural, metric and

scalar invariances for the measurement model could be accepted (Table 3).

In the second stage, we performed MGSEM analysis to test the gender differences in the mediation model. MGSEM analyses provided a good fit to data: $X^2(122, N: \text{men} = 167, \text{women} = 209) = 264.525$ and $p < .001$. Furthermore, ($X^2/df = 2.168$), $RMSEA = .06$ [.05-.07], $SRMR = .06$, $CFI = .96$, $TLI = .95$.

For women, MGSEM analysis indicated that COVID-19-related NLEs were positively associated with a) a sense of helplessness ($p < .001$) and psychological distress ($p < .001$), b) a sense of helplessness was positively associated with psychological distress ($p < .001$), and c) COVID-19 related NLEs was also indirectly associated with psychological distress via a sense of helplessness ($\beta = .21$, 95% $CI = [.13, .30]$, $p < .001$). Finally, COVID-19-related NLEs accounted for 21% of the variance in the sense of helplessness. Both COVID-19-related NLEs and a sense of helplessness accounted for 44% of the variance in psychological distress.

For men, MGSEM revealed that COVID-19-related NLEs were positively associated with a) a sense of helplessness ($p < .001$) and psychological distress ($p < .001$), b) a sense of helplessness was positively associated with psychological distress ($p < .001$), and c) COVID-19

Table 2 Unstandardized parameters estimate of mediation of analyses

	Total Sample (N = 376)			Males (N = 167)			Females (N = 209)		
	Direct effect	Indirect effect 90% CI	Total effect	Direct effect	Indirect effect 90% CI	Total effect	Direct effect	Indirect effect 90% CI	Total effect
NLEs→Helpless	.47[.36 .56]**		.47**	.50[.34 .64]**		.50**	.45[.31.58]**		.50**
Helpless→PD	.39[.28 .49]**		.39*	.29[.14 .44]**		.29**	.45[.31.58]**		.29**
NLEs→PD	.40[.29 .50]**	.18[.13 .26]**	.59**	.52[.37 .66]**	.15[.07 .26]**	.67**	.32[.18 .46]**	.21[.13 .30]**	.53**

Note. NLEs negative life events, Helpless helplessness, PD psychological distress. Unstandardized regression coefficients were reported. Bootstrap sample size = 10,000.
**p < .001

Table 3 Fit indices for the multi-group confirmatory factor analysis (N = 376)

Measurement model	χ^2 (df)	p	χ^2 /df	CFI	RMSEA 90% CI	SRMR	$\Delta\chi^2$ (df)	p	Δ CFI	Δ RMSEA	Δ SRMR
Configural	264.525 (122)	.000	2.168	.958	.056 [.047 - .065]	.061					
Metric	277.887 (135)	.000	2.058	.958	.053 [.044 - .062]	.065	13.362(13)	.42	.000	.003	-.004
Scalar	281.849 (138)	.000	2.042	.958	.053 [.044 - .062]	.063	17.324(16)	.37	.000	.000	.002

related NLEs was also indirectly associated with psychological distress via a sense of helplessness ($\beta = .15$, 95% CI = [.07, .26], $p < .001$). Finally, COVID-19-related NLEs accounted for 25% of the variance in the sense of helplessness. Both COVID-19-related NLEs and a sense of helplessness accounted for 51% of the variance in psychological distress.

The moderating role of the EWB

We performed moderation analyses to examine the moderating role of EWB in the relationship between COVID-19-related NLEs and psychological distress using Hayes' (2017) SPSS PROCESS macro (Model-1). We included

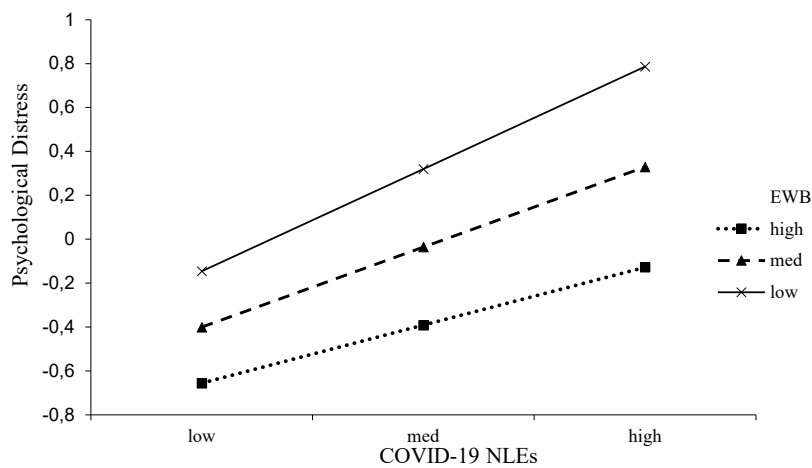


Figure 3 The moderating role of existential well-being (EWB)

Table 4 Moderation role of existential well-being (N = 376)

Predictor variables	Outcome: Psychological Distress			
	B	SE	t	Model R ²
Negative life events	.72[.56, .89]	.08	8.54***	.40**
Existential well-being	-.82[-1.0, -.64]	.09	-8.92***	
NLEs x EWB	-.04[-.08, -.003]	.02	-2.10*	
Conditional direct effect analysis		Outcome: Psychological distress		
Existential well-being	b	Boot SE	Boot CI	
Low	.89	.11	[.66 – .1.12]	
Med	.72	.08	[.55 – .89]	
High	.55	.11	[.32 – .78]	

Note. Unstandardized regression coefficients were reported. Bootstrap sample size = 5000.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 Unstandardized parameters estimate of moderated moderation analysis

Predictor variables	Outcome: Psychological Distress			
	B	SE	t	Model R ²
Negative life events (NLEs)	.52 [.29, .73]	.11	4.56***	.43**
Existential well-being (EWB)	-1.04[-1.30, -.79]	.13	-8.20***	
NLEs x EWB	-.01[-.06, .04]	.02	-.44 ^{ns}	
Gender	-2.60[-4.07, -1.133]	.75	-3.48*** ^s	
NLEs x Gender	.43[.10, .76]	.17	2.58*	
EWB x Gender	.39[.04, .74]	.18	2.17* ^s	
NLEs x EWB x Gender	-.07[-.14, .01]	.04	-1.71 ^{ns}	

gender as a covariate variable in the model. The finding from moderation analysis, controlling for gender, indicated that psychological distress was associated with COVID-19-related NLEs ($p < .001$), EWB ($p < .001$), and their interaction ($B = -.05$, $SE = .02$, $\Delta R^2 = .01$, $p = .004$). These results indicated that the predictive power of COVID-19-related NLEs for psychological distress varied depending on the level of EWB (Table 4 and Figure 3). Conditional analyses indicated that this effect was strengthened when the level of EWB was low ($b = .94$ [.74, 1.14]) rather than medium ($b = .74$ [.59, .88]) and high ($b = .53$ [.33, .73]).

Additional Analysis

Finally, we conducted a moderated moderation analysis to examine whether the interaction effect of COVID-19-related NLEs and EWB differs depending on gender (Figure 3, Table 5). The findings from moderated moderation analyses indicated that the interaction effect of COVID-19-related NLEs, EWB, and gender was not significant ($B = -.07$, $t(7, 368) = -1.713$, $SE = .04$, $\Delta R^2 = .005$, $p = .08$).

Discussion

The current findings reveal that COVID-19-related negative life events (e.g., the loss of a

loved one, unemployment, difficulty accessing basic food, social exclusion due to infection, etc.) are associated with a higher level of psychological distress, a sense of helplessness, and a lower level of EWA. Especially, a sense of helplessness mediates the link between COVID-19-related NLEs and psychological distress, while EWA moderates this link. Furthermore, the indirect predictive effect of COVID-19-related NLEs on psychological distress via a sense of helplessness differs across gender.

Regarding the first hypothesis, the present findings show that COVID-19-related NLEs were associated with a greater level of helplessness, which in turn is related to greater level of psychological distress. The present findings align with previous studies showing that helplessness mediates the link between negative life events and mental health (Madubata et al., 2018; Mills et al., 2018). Madubata et al. (2018) found that helplessness fully mediated the relationship between adverse life events (racial discrimination) and depression. Similarly, Mills et al. (2018) reported that helplessness mediated the relationship between adverse life events (pain) and anxiety, depression, and perceived stress. The current findings are in accord with recent studies reporting a higher level of feeling of

helplessness during the pandemic (Amerio et al., 2020; Mishra & Kumar, 2021). As in many events and situations that cause psychological trauma, pandemics occur suddenly and cannot be avoided. The sudden intrusion of COVID-19 into people's lives, the changes in their lifestyles, the limited ability of people to act in the face of the epidemic, and the excess of uncertainties may have caused people to lose effective control over their lives, thus experiencing a sense of helplessness. Moreover, measures such as isolation and quarantine to prevent the pandemic may also cause people to experience a loss of control over their lives and the accompanying sense of helplessness, which may facilitate the development of psychological distress. Consistent with the present findings, Mulkiner (1994) suggested that the feeling of helplessness was associated with depression, anxiety, and psychological functioning. Similarly, some research indicated that feeling of helplessness was associated with a high level of psychological distress like anxiety (Lifshin et al., 2020), depression (Khan et al., 2020), and stress (Kara, 2021) during the COVID-19 pandemic. Briefly, the current findings suggest that helplessness may be a spontaneous cognitive defense that arises in response to COVID-19-related NLEs, thereby increasing the risk of developing symptoms of psychological distress. Therefore, one could argue that helplessness is an important cognitive appraisal mediating variable which should be considered when investigating the negative impact of COVID-19-related NLEs on psychological distress. In other words, the findings support the notion that the sense of helplessness functions as a mediating variable that indirectly increases the negative impact of COVID-19-related NLEs on psychological distress.

Concerning the second hypothesis, current findings suggest that NLEs related to COVID-19 are associated with higher levels

of psychological distress. In comparison, EWB is associated with a lower level of psychological distress. The present findings indicate that EWB mitigates the devastating impact of COVID-19-related NLEs on psychological health. These findings agree with the previous studies showing that psychological distress is highly correlated with COVID-19-related adverse life events (Maher et al., 2021; Rosi et al., 2020) and low-level EWB (Gonzalez-Sanguino et al., 2020; Sleight et al., 2021). These results are also in line with previous findings reporting on the moderating role of EWB (Arslan & Yildirim, 2021; Eisenbeck et al., 2021). Individuals, who are more optimistic frame their experiences more positively, are at peace with themselves, and have inner harmony, meaning, and purpose in their lives may be more successful in overcoming the difficulties they encountered during the pandemic. Previous evidence emphasized that people with a high level of EWB reported lower levels of psychological distress (Gonzalez-Sanguino et al., 2020) and a higher level of optimism during the pandemic (Arslan & Yildirim, 2021). As important components of existential well-being, a greater sense of purpose and meaning in life, higher satisfaction with life, more adaptive personality traits such as optimism, and lower anxiety may function as a mechanism that facilitates coping with the pandemic. For example, some authors in the current literature emphasize that existential well-being functions as an internal coping mechanism that people use to cope with negative situations and increase their psychological well-being (Brown et al., 2015; Edmondson et al., 2008; Ownsworth & Nash, 2015).

Regarding gender differences, the present findings indicate that the direct and indirect relationship between COVID-19-related NLEs, sense of helplessness, and psychological distress differ across gender. The current findings

suggest that, for male participants, the direct positive association between COVID-19-related adverse life events and psychological distress is higher and that COVID-19-related negative life events and feelings of helplessness together accounted for the higher portion of the variance in psychological distress. However, these findings suggest that the indirect predictive power of COVID-19-related NLEs for psychological distress is stronger for women. Gender differences in the direct and indirect relationship of COVID-19-related NLEs to psychological distress may be related to differences in the experiences of men and women, in other words, their attribution processes. For example, men may perceive negative life events and the helplessness they experience as external, situational, and temporary. In contrast, women may perceive them as internal, stable, and related to their inadequacies. Johnson (1992) found that the interaction effect of attribution style (i.e., stable and global) and daily life stress predicted the change in hopelessness score for women. The fact that women experience higher levels of helplessness than men may also be related to gender roles. Preliminary data suggest that investigating gender and gender role-related factors may be important in understanding the effects of the COVID-19 pandemic on both genders (Spagnolo, Manson, & Joffe, 2020). Women comprise a high percentage of caregivers in some sectors and the home. For example, Spagnolo, Manson, and Joffe (2020) point out that a large proportion of frontline health workers, such as nurses, community health workers, and health technicians, are women at higher risk of infection, illness, and death due to their occupation. Therefore, concerning gender roles, working in higher risk and stressful environments may make it easier for women to experience helplessness. Increasing feelings of helplessness may also negatively affect women's mental health.

Similarly, earlier evidence suggested that helplessness in women is strongly associated with dysphoria (Clements & Sawhney, 2000) and depression (Kiefer, 1990). Consistent with the present findings, Bargai et al. (2007) found that helplessness mediated the relationship between violence and psychological distress (depression and PTSD) for women. These findings suggest that helplessness may be an important treatment target, particularly for interventions aimed at women. Findings indicate that the feeling of helplessness may function as an ineffective coping strategy in processes associated with negative life events such as the pandemic in women. Therefore, clinicians should focus on understanding the experiences of female clients in the face of negative life events and acknowledge what they do, what they think, and what they feel in this process. Thus, it may be easier to understand the main triggers and dynamics of female clients' high sense of helplessness.

Finally, we conducted additional analysis to examine whether or not the moderating role of existential well-being (EWB) in the relationship between COVID-19-related NLEs and psychological distress differs across gender. Although current findings show that the moderator role of EWB in the relationship between COVID-19-related NLEs and psychological distress differs by gender, this difference was not significant at the .05 level.

The findings of this study should be interpreted with caution due to its limitations. First, given the cross-sectional nature of the data, the relationships between variables limit their interpretation within the framework of cause-effect relationships. Longitudinal studies are needed to better understand the direction of the relationships between variables. Therefore, future studies would benefit from investigating the role of adverse life events, helplessness, and EWB on psychological distress symptoms using longitudinal modeling.

Finally, although the sample showed significant psychological distress symptomatology, recruiting a non-clinical community sample limits the generalizability of the study. Accordingly, future studies would benefit from investigating the effect of adverse life events on psychological distress through helplessness in a clinical sample.

Despite the limitations mentioned above, the current study highlights the cruciality of psychological resources, such as the sense of helplessness and existential well-being, in understanding why some people are vulnerable to the negative impact of COVID-19-related adverse life events and others are hardy. The current findings contribute to relevant literature on the interrelationships between COVID-19-related NLEs, sense of helplessness, EWB, and psychological distress by documenting how and when COVID-19-related NLEs have a detrimental impact on psychological health. The present study suggests that a sense of helplessness acts as a mediating factor in the destructive relationships between COVID-19-related NLEs and psychological health, while EWB functions as a protective factor. Although helplessness is a mediating factor in the relationship between COVID-19-related NLEs and psychological health, there may be other possible mediating variables between these two variables. For example, the sense of hopelessness may be another potential mediating variable in the relationship between COVID-19-related NLEs and psychological health. Previous studies have reported that hopelessness is related to anxiety and depression (Amendola et al., 2021), fear of COVID-19 (Saricali et al., 2020), stress from COVID-19 (Olah & Ford, 2021), and well-being (Sønderskov et al., 2020). Parada-Fernández et al. (2021) emphasized that negative attributions made by the individual to their experiences during the pandemic could deepen the hopelessness experi-

enced by the same individual. In other words, an individual may fall into despair due to the adverse life events experienced during the pandemic, and a high level of hopelessness can cause the deterioration of his or her mental health. Moreover, EWB may be an internal and structural mechanism related to psychological resilience that protects the individual's mental health. If so, existential well-being may function as a durable psychological construct and trait. These points should be taken into account in the counseling process, and the client should be strengthened in this respect.

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