



## The Association of Emotional Intelligence and Functional Coping Strategies with Depression, Anxiety, and Stress during the COVID-19 Pandemic: Evidence from Turkey

Wise, R. M., & Mengüç, L.

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**Abstract:** The COVID-19 global pandemic has worsened mental health outcomes for individuals throughout the world, especially in developing and emerging economies with less access to vaccines and support services. Accordingly, the current study attempted to identify protective factors that could limit the effects of pandemic-related stressors and promote mental and emotional wellbeing. Specifically, the purpose was to investigate the role of emotional intelligence and coping strategies on depression, stress, and anxiety during the pandemic among young adults in Turkey. Non-random convenience sampling generated a sample of 321 emerging adults living in Istanbul, with data collected during a second wave of COVID-19 in 2021. Three findings emerged. Multiple regression analyses indicated that coping strategies were predictive of participants' levels of the three measured mental health outcomes, with significant positive contributions from functional coping approaches, especially optimism, and negative contributions from dysfunctional strategies. Males and females engaged in similar levels of functional coping and reported similar levels of emotional intelligence. No significant differences were recorded between those who had tested positive for COVID-19 or not. Results suggest the importance of developing coping strategies among young adults to promote wellbeing and develop emotional intelligence, especially during the pandemic and its aftermath.

**المخلص:** أدت جائحة كوفيد-19 العالمية إلى تفاقم نتائج الصحة النفسية للأفراد في جميع أنحاء العالم ، خصوصاً في الدول النامية والصاعدة التي تقل فرص الحصول على اللقاحات وخدمات الدعم. وفقاً لذلك ، حاولت الدراسة الحالية تحديد العوامل الوقائية التي يمكن أن تحد من آثار الضغوط المرتبطة بالجائحة وتعزز الرفاهية النفسية والعاطفية. على وجه التحديد ، كان الهدف هو التحقق من دور الذكاء العاطفي واستراتيجيات التكيف في أعراض الاكتئاب والتوتر والقلق أثناء الجائحة بين الشباب في تركيا. وقد أخذت العينات الملائمة بطريقة غير عشوائية من عينة قوامها 321 من البالغين الناشئين الذين يعيشون في إسطنبول ، مع البيانات التي تم جمعها خلال الموجة الثانية من (كوفيد-19) COVID-19 في عام 2021. وظهرت ثلاث نتائج. أشارت تحليلات الانحدار المتعددة إلى أن استراتيجيات التكيف كانت تنبؤية لمستويات المشاركين في نتائج الثلاث مقاييس للصحة العقلية ، مع مساهمات إيجابية كبيرة من أبعاد التكيف الوظيفي، وخاصة التقاؤل ، والمساهمات السلبية من الاستراتيجيات غير الوظيفية. انخرط الذكور والإناث في مستويات مماثلة من التكيف الوظيفي، ومستويات مماثلة من الذكاء العاطفي. لم تسجل فروق ذات دلالة إحصائية بين أولئك الذين كانت نتيجة اختبارهم إيجابية لـ COVID-19 أو سلبية. كما أشارت النتائج إلى أهمية تطوير استراتيجيات التكيف بين الشباب لتعزيز الرفاهية وتنمية الذكاء العاطفي، خاصة أثناء الجائحة وما بعدها.

**Keywords:** emotional intelligence; coping; depression; anxiety; stress; COVID-19; Turkey; culture



**About the Authors:** Ryan Macey Wise, Ph.D., (Email: [rmw13244@gmail.com](mailto:rmw13244@gmail.com)) is a professor at Istanbul Bilgi University (Istanbul, Turkey), where he teaches courses in developmental and evolutionary psychology. His research focuses on wellbeing, adolescent and young adult autonomy, as well as intergenerational relationships. Recently (2021), he published an article examining wellbeing among television and movie set workers. Prof. Wise received his graduate degrees from Syracuse University (USA). Lal Mengüç (Email: [lal.menguc@bilgi.edu.net](mailto:lal.menguc@bilgi.edu.net)) graduated from the department of psychology at Istanbul Bilgi University, and is a clinical psychologist working in non-governmental organizations (NGOs) in Istanbul, Turkey.

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**Depression, anxiety, and stress are all various** forms of emotional distress (Ülev, 2014). Depression is an adverse affective condition that interferes with everyday life, ranging from unhappiness and frustration to a sense of sadness, pessimism, and despondency. Moreover, in depression, negative physical, cognitive, and social changes often co-occur (Kanter et al., 2008; LeMoult, 2020). Depressive disorders are among the most frequently reported. The Middle East and North Africa region (MENA) reported rates of depression ranging between 15% and 30%, depending on sample characteristics and measurement tools (Razzak et al., 2019). Similar rates are found in surrounding countries (e.g., Turkey) (Özdin & Bayrak Özdin, 2020). A common co-occurring disorder with depression is anxiety (Couwenbergh et al., 2006), a natural reaction to a perceived threat that causes tension and apprehension. It usually arises from concerns about the future and represents a disorganized form of thinking (Lazarus & Folkman, 1984; Sariçam, 2018; Yilmaz et al., 2017). Stress includes changes that affect physical, emotional, mental, and behavioral well-being (Deniz & Yilmaz, 2005). Excessive levels can impair coping skills, lead to physical disease, compromise positive psychological functioning, and undermine successful adjustment to difficult experiences (Polizzi et al., 2020).

### Positive Psychology

Positive psychology is a field of psychology that focuses on the predictors of psychological well-being; rather than taking a deficit approach to understanding psychological states of being, it focuses on identifying, as Maslow (1971) said, the farther reaches of human flourishing (Bar-on, 2010). While contemporary psychology has often focused on identifying and remediating states of ill-being, starting primarily in the 1960s with thinkers such as Rollo May, Erich Fromm, Viktor Frankl, and through various approaches in psychotherapy (e.g., Freudian, cognitive-behavioral therapy), there developed a trend in moving beyond such limited conceptions of human functioning towards how individual psychology can not only be improved, but the predictors of positive well-being expounded upon.

Today, the field of positive psychology is systematically empirical in nature and focused on the investigation of meaning (Seligman, 2008; Steger, 2012), states of flow (Csikszentmihalyi, 2008), positive relationships (Birch et al., 2019), and positive psychological interventions (Gander et al., 2016; Proyer et al., 2016) used to generate a host of positive results, like better health (Mughal,



2019), learning (Morgan & Simmons, 2021) and economic (Asebedo et al., 2021) outcomes as examples. Generating, maintaining, and sustaining over time the experience of positive emotions is a critical aspect of subjective wellbeing and life satisfaction (Fredrickson, 2004) and makes emotional intelligence a particularly important skill for individuals to learn (Sánchez-Álvarez et al., 2016).

Although the concept of emotional intelligence has various conceptualizations involving a focus on different emotion-related components (e.g., empathy, self-regulation, and optimism), one commonality across theories and models is that emotional intelligence is seen as intimately related with wellbeing and flourishing (Chang, 2008; Kern et al., 2015). In the PERMA model (positive emotions, engagement, relationships, meaning, and accomplishment) developed by Seligman (2012), a key component is the cultivation of positive emotions, partly accomplished through emotion regulation and coping, which contribute to overall wellbeing and the minimization of illbeing (Salovey et al., 2009).

### Emotional Intelligence and Coping Strategies

Popularized with the publication of *Emotional Intelligence* by Daniel Goleman in 1995, emotional intelligence is the ability to think, evaluate, and interpret events and emotions by recognizing and attending to our own and others' emotions (Goleman, 1995; Mayer et al., 2008; Mayer & Salovey, 1997). It is a multidimensional concept incorporating different elements related to cognition and affect (Austin, 2009; Tatar & Tok, 2017; Türkmen, 2020). The ability to apply these elements in order to engage in thoughts and activities shows our emotional intelligence and is related with positive adaptation to stressors and the reduction of maladaptive behavioral responses (Mayer & Salovey, 1993) across a range of contexts (Rahman & Haleem, 2018; Sánchez-Álvarez et al., 2020; Zysberg, 2018).

Evidence suggests that individuals who are capable of expressing and understanding emotions can assign meaning to emotional experience and regulate their feelings; they also demonstrate better adjustment, both psychologically and socially (Mayer et al., 2008). Emotional intelligence has emerged as a protective element in managing and limiting the experience of emotional and psychological distress and for promoting physical wellbeing (Lombas et al., 2014; Trejo, 2016; Yeşilyaprak, 2001). Emotional intelligence does not represent the entirety of positive psychological states of being, but as an integral component related with a wide array of positive outcomes, it has been integrated into studies of both coping and adjustment as well as in understanding happiness and positive wellbeing (Ghahramani et al., 2019).

Another aspect of emotion management involves coping, the active process of dealing with situations that are potentially stressful, threatening, and challenging (Atkinson et al., 1996; Moradi et al., 2011) and which involve behavioral and mental efforts that focus on controlling internal reactions to external stressors by either expanding or limiting one's resources (Savcı & Aysan, 2014). A distinction between functional and dysfunctional coping strategies helps to clarify differential outcomes in stress responses. Functional coping involves strategies to minimize both negative affect and stress responses, as well as promote wellbeing, while dysfunctional or maladaptive coping strategies fail to reduce stress and anxiety, and often serve as a means of escape and denial (Chao & Wang, 2013). Examples of functional coping include: seeking social support from friends and family, and exercising; dysfunctional coping includes alcohol and substance use, rumination, and engaging



in distractions (Erschens et al., 2018). The type of coping approach individuals employ is related to personality, temperament, previous experiences, social support systems, and cultural values (Amirkhan, 1994; Anglim et al., 2020; Connor-Smith & Flachsbart, 2007; Kara & Açikel, 2012).

One approach to conceptualizing different coping strategies is derived from Lazarus and Folkman's (1984) stress and coping paradigm model, which proposes that stress occurs when the perceived demands of a situation (stressors) outpace the personal perceived resources available to handle situational demands (Biggs et al., 2017). Resources may include internal resources, such as emotional strengths, and external material resources, such as social support (Blum et al., 2012). A key element is the distinction between problem- and emotion-focused coping strategies. Problem-focused coping, derivationally related with functional coping, includes cognitive and interpersonal efforts made to resolve a problem or stressor, or positively change situations (Bhagat et al., 1995; Lazarus & Folkman, 1984). Emotion-focused coping includes distancing, self-control, seeking social support, avoidance, taking responsibility, and positive re-evaluation (Aldwin & Park, 2004; Folkman, 2011; Lazarus & Folkman, 1984), all of which involve efforts to internally manage one's stress responses and regulate emotional reactions (Folkman & Moskowitz, 2007).

Research suggests that individuals assuming an emotion-focused approach show less successful coping outcomes than individuals adopting a problem-focused approach (Avşaroğlu & İdayeva, 2020). Moradi et al. (2011) revealed a significant relationship between emotional intelligence and type of coping strategy. Individuals high in emotional intelligence were found to use problem-focused coping strategies and seek social support, engage in cognitive evaluation, and were more somatically and emotionally inhibited when dealing with stressors. Problem-focused coping strategies are also positively associated with measures of wellbeing, while emotion-focused coping approaches show a negative relationship (Bamonti et al., 2019; Ogoma, 2020; Shin et al., 2014).

Studies show that males and females differ in their preferences for engaging in coping strategies (Eschenbeck et al., 2007; Gačić et al., 2021; Meléndez et al., 2012; Prowse et al., 2021). Males seem to use more dysfunctional coping strategies, including substance use (Prowse et al., 2021) and avoidant methods (Eschenbeck et al., 2007), while females are more likely to seek social support from friends and family (Böke et al., 2019) and recently, show a greater prevalence of coping via time spent on social media (Flynn et al., 2020). These differences have been more pronounced during the pandemic, especially among adolescents and young adults, as stressors have increased in magnitude and prevalence (Rahman et al., 2021). While evidence demonstrates differences in coping strategies across gender, less consistent findings characterize gender differences in emotional intelligence, which are often influenced by cultural and social factors (Ahmad et al., 2009; Harrod & Scheer, 2005; Meshkat & Nejati, 2017; Salguero et al., 2012).

### **The COVID-19 Pandemic**

A coronavirus (COVID-19) emerging at the end of 2019 led to major changes in living experiences across the world. Due to its rapid spread and negative effects on physical health, governments enacted restrictions to slow infection rates and minimize deaths. Despite limitations on social mobility (e.g., curfews) and the imposition of health-related behaviors (e.g., masks), nearly four million people have died. The pandemic has been a stressful experience for many, with a significant



and negative impact on global mental health (Shuja et al., 2020). The World Health Organization (WHO) reports that the psychological effects from the pandemic have led to heightened levels of stress and anxiety (Liu et al., 2020). In the MENA region, Al Dhaher et al. (2021) reported that over 40 percent of respondents had experienced increased stress and over 30 percent experienced more serious forms of psychological and psychiatric outcomes. Similar results have been found in Turkey (Öğütli, 2020), with widespread psychological distress and future predictions of an increased prevalence of PTSD.

One factor exacerbating the situation is the limited distribution of vaccines in certain regional countries, including Turkey, and resulting diplomacy that has seen vaccine distribution become a factor in political calculations (Sabahelzain et al., 2021). As vaccine penetration in some areas has lagged, stress and anxiety increased (Gramacho & Turgeon, 2021). Additionally, religious factors were also associated with vaccine hesitation in some areas: although religious leaders stressed the importance of getting vaccinated and its acceptability during Ramadan, many remained hesitant (Ali et al., 2021). Further, in some MENA and surrounding regions, there is distrust in official announcements and healthcare systems. For example, in Turkey, there is distrust of COVID-19 statistics for daily infections and deaths, partly owing to a Ministry of Health decision to only include in official infection tallies individuals who had been hospitalized, which severely under-reported the extent of the virus in the country (Yörük et al., 2020). Other regional nations had transparent reporting, high vaccine rollout rates and low death rates, with some already fully re-opening economies and resuming social life thanks to successful early responses (Solís Arce et al., 2021).

Research in Turkey, a Muslim society sharing many characteristics with the MENA region, has shown high levels of depression, stress, and anxiety, possibly owing not only to the pandemic, but to a corresponding economic downturn that characterized the Turkish economy from 2019 to 2021 (Xiong et al., 2020). Benke et al. (2020) found that higher levels of restrictions due to lockdown measures were associated with more loneliness, higher psychosocial distress, and lower life-satisfaction. Greater anxiety and depression among respondents have been reported in those who avoided thinking about the pandemic or were unsure of how to cope (Kar et al., 2021). More generally, studies done on emotional intelligence during this time showed a positive relationship between emotional intelligence and successful coping and wellbeing (Abdel-Fattah, 2020; Persich et al., 2021; Sadovyy et al., 2021; Sanchez-Ruiz et al., 2021; Soto-Rubio et al., 2020; Zysberg & Zysberg, 2020). Individuals employing more functional coping strategies and higher in emotional intelligence were previously reported to have maintained more positive emotions during the pandemic compared to those low in these resources (Prasath et al., 2021).

### **The Present Study**

The current study investigated emotional intelligence and coping strategies as predictors of depression, stress, and anxiety, and sought to determine the value of emotional intelligence in the mitigation of negative outcomes among emerging adults in Istanbul (Turkey) during the COVID-19 pandemic. We predicted that (1) problem-focused coping strategies, a form of functional coping, and emotional intelligence would be associated with lower levels of distress measured by depression, stress, and anxiety and (2) lower levels of emotional intelligence and a reliance on emotion-focused (dysfunctional) coping strategies would be associated with higher levels of emotional distress.



Further, considering research suggesting a gender difference in coping strategies and emotional intelligence (Eschenbeck et al., 2007), as well as the impact of a COVID positive test on coping, the following research questions guided our study:

1. What is the relationship between emotional intelligence, coping strategies (functional and dysfunctional) and psychosocial wellbeing (depression, stress, and anxiety)?
2. How do males and females differ in their coping strategies and emotional intelligence?
3. Does testing positive for COVID relate with coping strategy, emotional intelligence, and psychosocial outcomes?

## Method

### *Participants*

Participants were selected using a non-random convenience sampling technique and recruited through an announcement shared across university departments. After obtaining ethical approval from the responsible university committee, participants were asked to complete an informed consent sheet that indicated their participation was voluntary and responses anonymous. Data collection was started and completed during the spring of 2021, amidst a second wave of COVID-19 infections. The final sample included 321 participants, with 24% of the sample male (N=77) and 76% female (N=244), aged 18-25 years (M=21.99, SD=2.76).

### *Procedure*

This study was conducted in the spring of 2021. Data collection was done online to facilitate access to the study given the ongoing COVID-19 pandemic. A survey link was sent to participants using an online survey link (Google Forms) that was distributed in several undergraduate courses. Participants did not receive extra credit or incentives for taking part. To eliminate differences in external conditions, participants were requested to be alone while answering the questions.

### *Measures*

The modified version of the *Schutte Emotional Intelligence Scale* (SEIS; Austin, 2004) consists of three subscales measuring optimism, use of emotions, and evaluation of emotions. It was previously translated to Turkish and validated in Turkish samples (Tatar et al., 2011; Tatar & Tok, 2017). Scores can either be calculated for each subscale to assess categories of emotional intelligence or summed for a global measure. Previous research using the Turkish translation showed acceptable levels of reliability and a demonstrated applicability to Turkish-speaking participants (Koç et al., 2019). Reliability analysis indicated an internal reliability coefficient in the current study for total scale scores approaching conventional standards,  $\alpha = .514$ . In the current study, the total scale was used as a measure of global emotional intelligence.

The *Coping with Stress Scale* (CSS; Folkman & Lazarus, 1980) measures participants' coping strategies. A shortened form suitable for Turkish-speaking participants was created by Şahin and Durak (1995) and includes 30 items evaluated on a 4-point Likert-style scale, with two dimensions: functional and non-functional coping strategies. There are five sub-dimensions that focus on three positive coping strategy approaches: self-confidence, optimism, and social support-seeking, and two



ineffective coping strategies, i.e., helpless and submissive approaches. Cronbach's alphas in the current study for the CSS ranged from .57 to .89.

The *Depression, Anxiety, and Stress Scale* (DASS-21; Lovibond & Lovibond, 1995) consists of 21 items measuring depression, stress, and anxiety. The scale was adapted by Sarıçam (2018) for use with a Turkish-speaking population. Scale responses are on a 4-point Likert scale with a response range from 0 to 3, with higher scores indicating greater levels of distress across the three components. Previous research in Turkey indicates acceptable levels of reliability, with Cronbach alphas ranging from .81 to .87 in clinical samples (Akçor, 2019; Sarıçam, 2018; Seçilmiş, 2019). In this study, reliability coefficients were acceptable ranging from .79 to .88.

## Results

According to the result of a power analysis using G\*Power (Faul et al., 2007), the minimum sample size needed to reach a conventional power level (.80) was 91. The alpha level used for all analyses in the study was  $p = .05$ . The power analysis for this study revealed the statistical power exceeded .99 for the detection of a moderate to large effect (Cohen, 1977).

### Research Question 1

The first analysis tested whether emotional intelligence and coping strategies were related to depression. The results of the regression analyses indicated the six predictors explained 63% of variance ( $R\ square = .635$ ,  $F(11,293) = 46.365$ ,  $p < .01$ ). An analysis of the regression model and the predictors indicated that the submissive approach ( $\beta = .10$ ,  $t = 2.01$ ,  $p < .05$ ), helpless approach ( $\beta = .13$ ,  $t = 1.98$ ,  $p < .05$ ), and emotional intelligence ( $\beta = .19$ ,  $t = 2.44$ ,  $p < .05$ ) were significant (see Table 1).

**Table 1**

### Regression analysis for depression

Model	B	SE	Beta	T	p
Self-Confident Approach	.000	.003	-.011	-.155	.877
Helpless Approach	.005	.002	.126	1.978	.049*
Submissive Approach	.004	.002	.102	2.013	.045*
Seeking Approach	-.002	.002	-.061	-1.26	.207
Emotional Intelligence	.650	.266	.187	2.446	.015*

$R\ square = .635$ ,  $F(11,293) = 46.365$ ,  $p < .05$ , \* $p < .05$



The second analysis examined whether emotional intelligence and coping strategies significantly predicted participants' anxiety. The result of the regression indicated the six predictors explained 56% of the variance ( $R\ square = .568, F(10,294) = 38.584, p < .01$ ). An analysis of the regression model and the predictors indicated that the helpless approach ( $\beta=.22, t=3.16, p<.05$ ) and optimism ( $\beta=.16, t=2.06, p<.05$ ) were significant (see Table 2).

**Table 2**

*Regression analysis for anxiety*

	B	SE	Beta	t	p
Optimistic Approach	.005	.002	.161	2.060	.040*
Helpless Approach	.007	.002	.215	3.155	.002*
Submissive Approach	.002	.002	.051	.927	.355
Seeking Approach	-.001	.002	-.025	-.477	.634
Emotional Intelligence	-.232	.262	-.073	-.884	.377

$R\ square = .568, F(10,294) = 38.584, p < .05, *p < .05$

**Table 3**

*Regression analysis for stress*

Model	B	SE	Beta	T	p
Self-Confident Approach	-6.23	.002	-.002	-.029	.977
Optimistic Approach	-.011	.002	-.327	-5.196	.000*
Helpless Approach	.010	.002	.295	5.059	.000*
Submissive Approach	.000	.002	-.006	-.100	.920
Seeking Approach	-.002	.002	-.070	-1.366	.173
Emotional Intelligence	-.275	.334	-.085	-.823	.411

$R\ square = .322, F(9,295) = 15.553, p < .05, *p < .05$





The third analysis tested if emotional intelligence and coping strategies predicted stress. The result of the regression indicated the six predictors explained 32% of the variance ( $R\ square = .322$ ,  $F(9,295) = 15.553$ ,  $p < .01$ ) (see Table 3). An analysis of the regression model and the predictors indicated that the helpless approach ( $\beta=.33$ ,  $t=5.20$ ,  $p>.00$ ) and optimism ( $\beta=.30$ ,  $t=5.60$ ,  $p<.05$ ) were significant (see Table 3).

### Research Question 2

An independent groups t-test with gender as the grouping variable indicated that males ( $M = 72.91$ ,  $SD = 16.00$ ) reported significantly higher use of the self-confident approach than females ( $M = 66.48$ ,  $SD = 19.66$ ),  $t(319) = 2.61$ ,  $p < .05$ . Further, males ( $M = 58.31$ ,  $SD = 16.22$ ) reported significantly higher optimistic approaches than females ( $M = 51.70$ ,  $SD = 18.57$ ),  $t(319) = 2.800$ ,  $p < .05$ . There was no significant gender difference with the helpless approach, submissive approach, and seeking for social support. There were also no significant gender differences in depression, anxiety, stress and emotional intelligence (see Table 4).

**Table 4**

### Gender differences in coping strategies and emotional intelligence

	Male		Female	
	M	SD	M	SD
Helpless Approach	47.37	17.57	49.57	17.00
Submissive Approach	30.00	16.60	28.65	15.86
Seeking Approach	67.05	17.34	66.36	17.04
Self-Confident Approach	72.91	16.00	66.48	19.66
Optimism	58.31	16.22	51.70	18.57
Emotional Intelligence	3.06	.22	3.06	.18
Depression	.96	.67	.95	.63
Anxiety	.84	.60	.89	.57
Stress	1.09	.59	1.19	.60

### Research Question 3

An independent t-test analysis showed that participants who had tested positive for COVID-19 ( $M = 34.63$ ,  $SD = 15.30$ ) scored higher on the submissive approach subscale than those having tested negative ( $M = 28.24$ ,  $SD = 16.02$ ),  $t(319) = 1.925$ ,  $p < .05$ . Those who tested negative ( $M =$



49.47,  $SD = 17.12$ ) reported significantly higher endorsement for the helpless approach than those who tested positive ( $M = 44.35$ ,  $SD = 16.92$ ),  $t(319) = -1.503$ ,  $p < .05$ ). There was no significant difference between positive and negative COVID-19 test positivity in measures of self-confident approach, optimistic approach, seeking for social support approach, emotional intelligence, depression, anxiety or stress (see Table 5).

**Table 5**

*COVID-19 Test result, coping strategy, and emotional intelligence*

	Yes		No	
	M	SD	M	SD
Self-confident approach	67.88	22.96	68.03	18.66
Optimistic Approach	53.56	17.67	53.27	18.32
Seeking Approach	69.17	14.69	66.28	17.29
Emotional Intelligence	3.08	.28	3.06	.18
Depression	.91	.68	.96	.64
Anxiety	.78	.57	.89	.58
Stress	1.14	.63	1.17	.59

### Discussion

The objective of this study was to contribute to an understanding of emotional intelligence and coping related to depression, stress and anxiety among young adults during the COVID-19 pandemic in Turkey. Results of the first research question indicated that emotional intelligence and coping strategies significantly predicted participants' distress among the three components measured, confirming our prediction. Emotional intelligence scores were significantly related to depression, supporting previous research (Batool & Khaïd, 2009; Downey et al., 2008; Tannous & Matar, 2010). Emotional intelligence serves to protect and improve mental health, with this finding supported by prior studies of wellbeing during the COVID-19 pandemic (Moron & Biolik-Moron, 2020). Related to functional coping strategies, problem-focused coping approaches exhibited a negative relationship with mental health distress, primarily through the dimension of optimism, while emotion-focused coping strategies generally predicted greater levels of distress, especially in regard to the helpless approach. Results showed that the helpless approach had the largest influence on both anxiety and stress. Feeling of helplessness represents a dysfunctional coping strategy and has been previously related with depression (Henkel et al., 2002).

The feeling of being helpless was exacerbated during the COVID-19 pandemic, as individuals experienced not only the continued threat of infection, but were exposed to its associated



upheavals including unemployment, curfews, social distancing and limitations on mobility. A recent study (Hacimusalar et al., 2020) in two samples of Turkish adults showed that participants exhibited high scores on measures of distress, including helplessness and economic hardship. Regionally, similar results were found by Al Dhaheri et al. (2021) reporting that 45% of participants from the MENA region indicated feeling helpless, and over 60% reporting feeling apprehensive and horrified during the pandemic.

It may be that social disruptions had a more severe and longer-lasting effect in less developed and lower-income countries compared to high income countries, and among lower socio-economic groups within different societies. For example, research shows that the availability of hand sanitizer and handwashing facilities is not evenly distributed, with many countries severely lacking in access (Brauer et al., 2020). Similarly, economic disruption has been unevenly experienced. Not surprisingly, with the pandemic dominating global discussion, many individuals, especially those with fewer resources and in societies with greater disruption, experienced greater helplessness. In a study of Egyptian adults, researchers reported that more than half of respondents reported feeling helpless in regard to the pandemic (El-Zoghby et al., 2020), with similar results in Turkey (Özçevik Subaşı et al., 2021).

Participants exhibiting problem-focused coping tend to score low on anxiety and depression (Leandro & Castillo, 2010) and are more optimistic and cope more successfully when presented with stressors (Avşaroğlu & İdayeva, 2020). Conversely, emotion-focused coping strategies are related to higher levels of depression (Völlink et al., 2013). An explanation is that participants following an emotion-focused coping strategy are more likely to accept the stress experienced and thus, may be less successful in coping (Fluharty et al., 2021; Obembe et al., 2019). As mental health worsened at the outset of the pandemic but improved as individuals adjusted to a new reality, coping strategies may have shown a weaker than expected contribution to explaining variation in distress measures than predicted. Reports from health psychology suggest individuals adjust and cope differently with chronic and acute sources of stress (Harris et al., 2017; Pourhosein & Farsham, 2021).

The second research question explored how gender related to emotional intelligence and coping strategies; our findings showed no difference in male and female support seeking despite prior research suggesting females were more likely to do so (Martínez-Hernández et al., 2016). We suggest one explanation for the non-significant findings; in cultures that place high value on collectivism, like Turkey, support searching may already be a primary coping strategy for both males and females, although research is inconsistent (Hofstede, 2011). Some studies suggest that individuals from collectivistic cultures rely more on social support networks than individuals from individualistic cultures (Boroş et al., 2019), although others diverge. For example, Taylor et al. (2004) reported that Koreans, nominally from a culture that values collectivism, sought out social support less frequently than European Americans (individualistic). The distinction between high and low context cultural differences may also account for the differences. High context cultures use communication that focuses on underlying meaning and context rather than focusing on the explicit message being communicated (Hall, 1976). Examples of high context cultures include the MENA region, Turkey, and Japan (Aydin & McIsaac, 2004); low context cultures include Australia, Canada, and England (Copeland & Griggs, 1985; Hall & Hall, 1989; Samovar et al., 2014). Research suggests



that seeking social support and the interpretation of that support may vary across high and low context cultures (Morling et al., 2015; Pourmand et al., 2021).

Equally, the measure used to assess social support seeking may not have been adequately calibrated to assess this variable in a collectivist, high context nation. Moreover, evidence suggests that contemporary gender-based role norms and expressions between male and female persons are more likely to show greater convergence than in previous studies, with the concomitant outcome that strict differences in both behaviors and experiences are lessened and greater gender egalitarianism expressed (Bergmark, 2004). With demographic changes occurring in Turkey, including a decline in fertility, increase in female literacy rates and employment rates, rapid urbanization, expanded education and greater democratic parenting styles, strict gender dichotomies are no longer as much a defining characteristic (De Bel-Air et al., 2019). It is possible that male and female participants sought similar levels of social support as the distinction between appropriate behavior for male and females has been modified via different socialization practices that recognize greater sex role similarity.

More specifically, male help-seeking may show greater similarity to female help-seeking as both a consequence of these changes, and as a reflection of social dynamics in more collectivistic-oriented cultures (Kim et al., 2008). Individuals from social and cultural environments that place high importance on group cohesion and social relations are more likely to rely on social support rather than seeking out professional assistance, a distinction often not made when comparing help-seeking across different cultures (Taylor et al., 2004). A possible explanation for this finding is that seeking help through explicit channels (e.g., professional help) or through the direct sharing with close others of problems, is more likely to be stigmatized (Mojaverian et al., 2013), whereas reliance on implicit types of social support is accepted (Kim et al., 2008). A further contextualization derives from research suggesting that in collectivist-oriented cultures, the perception of social support availability, especially support from family members, is tied to wellbeing and indices of psychosocial functioning, including self-esteem (Glazer, 2005; Goodwin & Plaza, 2000). Studies of perceived social support in collectivistic cultures suggest that males perceive more available social support than females, a finding that may partly explain our results (Soman et al., 2016).

### **Contributions of the Current Study**

Our study provides empirical support for the role of functional coping strategies and emotional intelligence in the promotion of mental health. The COVID-19 pandemic has led to social upheavals across societies and to a worsening of mental health (Pfefferbaum & North, 2020). It is imperative to examine protective factors that can help minimize distress and to develop intervention programs to strengthen those factors. Specifically, optimism and helpless approaches seemed to carry the most weight when explaining mental health outcomes, and thus, point toward specific mechanisms of wellbeing that can be addressed via program development. The second contribution relates to the way in which gender did not appear to be relevant in the use of coping strategies or emotional intelligence. While tentative, we suggest that changing gender roles (Tekke et al., 2020) as a function of both socio-cultural and familial influences within a collectivistic culture highlighted by high context communication patterns, may have led participants to engage in similar levels of



functional coping strategies and led to a minimization of differences across emotional intelligence scores (Balkir & Barnow, 2016; Krys et al., 2019).

### **Limitations, Recommendations and Implications**

It is worth noting some limitations in our study. First, it was not possible to examine all the variables related to emotional wellbeing during the COVID-19 pandemic. Future studies may examine these variables and determine their influence in the prediction of the protective factors assisting in minimizing mental distress related to external stressors. Second, our study used self-report measures of the variables and these self-perceptions may not reflect the general mental health experienced by participants. Third, participants were not representative of the population gender distribution among emerging adults as there were considerably more women than men in the study, and thus, it is important to take any significant gender differences cautiously.

Still, we foresee several implications for the amelioration of distress during challenging and potentially stressful experiences, including the ongoing pandemic and its long-term effects. While the global COVID-19 pandemic is unique, emotional intelligence and coping strategies are not limited in application to large-scale challenges. Emotional intelligence is associated with many positive outcome measures related to physical health, emotional regulation, empathetic responses to others' distress, and career success (Bhullar et al., 2012; Marks et al., 2016; Salguero et al., 2012). In this study, emotional intelligence was associated with participants' handling of the stressors during the pandemic, which served to promote greater levels of wellbeing. Based on this, we suggest that it is critical to develop greater emotional intelligence via interventional and educational programs.

Indeed, a large part of positive psychology seeks to increase levels of subjective wellbeing and decrease levels of illbeing via positive psychological intervention programs. These programs focus on the many factors contributing to wellbeing, including meaning in life, self-regulation, intrinsic motivation and goal development, cultivation of positive emotions, coping strategies, and emotional intelligence, among others (Chang, 2008; Seligman, 2012). Results from intervention programs across age-groups and in diverse settings show evidence that these programs are effective in promoting wellbeing (Ho et al., 2014; Kwok et al., 2016; Lambert et al., 2019; Shoshani & Slone, 2017). Among the most addressed factors in positive psychology-based intervention programs is emotional intelligence, as it has a robust relationship with measures of wellbeing, including physical (Mikolajczak, 2014), psychological (Guerra-Bustamante et al., 2019), and spiritual (Di Fabio & Kenny, 2016) components.

Programs focusing on increasing emotional intelligence are viable and generally successful, although they are often overlooked as integral components in the promotion of individual wellbeing and success. Intervention programs have been utilized among different age groups and across cultures in both formal and informal contexts with considerable success (Lambert et al., 2019). The protective role of emotional intelligence has become increasingly relevant as individuals cope with the stressors inherent in a global pandemic. Persich et al. (2021) reported findings that participants completing an emotional intelligence training program evinced lower levels of anxiety, depression, and suicidal ideation compared to similarly-matched controls. Ulutaş and Ömeroğlu (2007) reported on an intervention program for school children in Turkey aiming to increase levels of



emotional intelligence. Results indicated a significant improvement in emotional intelligence over a 12-week period, a finding similar to prior research on intervention programs (Trigueros et al., 2020).

A further implication for the promotion of wellbeing is suggested through a consideration and evaluation of the contextual nature of pandemic responses, and appreciation of the necessity of understanding locally-focused experiences and approaches to minimize distress and promote wellbeing. In many Western countries, mental health services are relatively widespread and available, while in other parts of the world, owing to social and economic divisions, access may be limited to a portion of the population. In Turkey, the average net monthly minimum income is approximately 2,800 Turkish Lira (TL) (approximately 325 USD). Yet, the average hourly fee for psychotherapy can range between 350 to 500 TL per session, putting the monthly total at nearly half the monthly minimum income. Moreover, by the World Health Organization's (2017) estimates, there are fewer than three available psychologists and only 1.7 psychiatrists per 100,000 population in Turkey.

Similar results can be found in the MENA region. According to Al-Darmaki and Yaaqeib (2015), the population growth in the UAE and the resulting demand for therapy has outstripped the clinical resources available and the economic stratification of society has made accessing therapy for many individuals cost prohibitive. Thus, as the need for therapy and mental health services are expected to increase in the immediate future, both for post-pandemic countries and those still experiencing upheaval, it is vital that governments provide affordable and available care, but that researchers also follow individuals over time to determine the effectiveness of therapies and make appropriate policy recommendations. A critical element in this process will be the inclusion of emotional intelligence and other wellbeing programs, especially since individuals suffering from PTSD often show diminished levels of emotional wellbeing and emotional management skills (Janke et al., 2018).

This study shows that cultural strengths indeed matter and are what helped participants be 'well,' i.e., social support and turning to others. This is a distinct advantage collective societies have over Western nations which are plagued with loneliness, especially among young men (Heu et al., 2019). The interaction between culture-level values and gender suggests that young men especially benefit in collectivistic-oriented societies and cultures (Barreto et al., 2021) owing to the greater social support provided and sought. Cultural values make important contributions to how individuals manage their responses to stressors (Fernández-Berrocal et al., 2005), and it is essential to include this element in any analysis of coping and stress so as to not overlook the unique strengths between different societies that inform lived experiences.

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