Deanship of Scientific Research

Big Five Personality Traits and Psychological Resilience as Predictors of Fear of Corona pandemic (COVID-19) among University Students

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Abstract

Objective: The study aims to determine the levels of fear of the (COVID-19) pandemic and the relative contribution of psychological resilience and the big five personality factors for predicting the fear of COVID-19.

Methods: The psychological resilience scale, the scale of the five major factors of personality, and the scale of fear of the Corona pandemic were used in this study. The study sample consisted of (215) male and female students in the faculties of Education, Arts, and Humanities at Suez Canal University, Egypt.

Results: The results indicated that (69.30%) suffer from fear of the Corona pandemic (COVID-19) in a medium to large degree. There is a statistically significant positive correlation between fear of the Corona pandemic and both the dimension of neuroticism, and the dimension of commitment and care for psychological resilience. The results also showed a statistically significant negative correlation between fear of the Corona pandemic and both the dimension of conscientiousness and the dimension of optimism and perseverance to psychological resilience. Furthermore, there were negative effects of both the dimension of optimism and perseverance to psychological resilience and the dimension of conscientiousness on fear of the Corona pandemic. Finally, the results showed positive effects of both the dimension of commitment and care for psychological resilience and the dimension of neuroticism on fear of the Corona pandemic.

Conclusions: This study recommends developing the awakening of conscience and psychological resilience to reduce the fear of the Corona pandemic by preparing psychological programs.

Keywords: Fear of Covid-19, psychological resilience, big five-factor of personality, university students.

العوامل الخمسة الكبرى للشخصية والصمود النفسي كمنبآت بالخوف من جائحة كورونا (COVID-19) لدى طلبة الجامعة

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ملخّص

الأهداف: هدفت الدراسة إلى تحديد مستوى الخوف من جائحة كورونا، وتحديد الإسهام النسبي للعوامل الخمسة الكبرى للشخصية والصمود النفسي للتنبؤ بالخوف من جائحة كورونا(COVID-19).

المنهجية: استُخدم مقياس الصمود النفسي، ومقياس العوامل الخمسة الكبرى للشخصية، ومقياس الخوف من جائحة كورونا. تكونت عينة الدّراسة من (215) طالبٍ وطالبةٍ في كليتي التربية والآداب والعلوم الإنسانية بجامعة قناة السويس، مصر.

النتائج: أشارت النتائج الى أن (69.30%) يعانوا من الخوف من جائحة كورونا بدرجة من متوسطة إلى كبيرة، ووجود ارتباط موجب دال إحصائيًا بين الخوف من جائحة كورونا وبُعد العصابية، وبُعد الالتزام والحرص للصمود النفسي، كما أظهرت النتائج ارتباط سالب دال إحصائيًا بين الخوف من جائحة كورونا وبُعد يقظة الضمير وبُعد التفاؤل والمثابرة للصمود النفسي، وتأثيرات سالبة من الصمود النفسي المثابرة والتفاؤل ويقظة الضمير إلى الخوف من جائحة كورونا، كما أظهرت النتائج تأثيرات موجبة من بُعد الالتزام للصمود النفسي والعصابية إلى الخوف من جائحة كورونا.

الاستنتاجات: توصي الدّراسة بتنمية بُعد يقظة الضمير والصمود النفسي لخفض الخوف من جائحة كورونا من خلال إعداد برامج نفسية.

الكلمات الدالة: الخوف من جائحة كورونا، العوامل الخمسة الكبرى للشخصية، والصمود النفسي، طلاب الجامعة.

1. Introduction

The novel Coronavirus (COVID-19) was first identified in September 2019 in Wuhan, China. The World Health Organization (WHO) declared it an epidemic and later declared a pandemic on 19 March 2020 because of its global widespread. Globally, more than 100 million have been confirmed cases and more than 1 million deaths associated with COVID-19. Following the crippling effects of the coronavirus's first wave, most people were concerned about the second expected wave, which resulted in further negative psychological consequences such as worry, panic, anxiety, sadness, boredom, tension, anger in almost all societies. The Corona pandemic has altered people's lifestyles and social relationships, resulting in a variety of psychological manifestations such as anxiety, which is an unpleasant emotional state characterized by tension, worry, and panic as a result of society's experience with the Corona pandemic.

Several studies have found negative impacts of Covid-19 on university students' psychological, social, and personal aspects, and its effects on their quality of life (Amer, 2020a, b). According to Amer and Farrag (2020), students in Arab countries reported a moderate to a high level of negative psychological feelings regarding the adverse effects of the corona pandemic. Of which 72% fear, 34.6% depression, 52.2% of stress, 54.1% boredom and distressed 39.6, depressed 46.9% Loneliness, and 83.5% worried about their family. Bin Abdullah et al. (2020) found negative psychological impacts of the COVID-19 pandemic (anxiety, depression, and stress) on the quality of life of Malaysian university students. Where Son et al. (2020) concluded that 71% of university students in the United States have increased levels of stress and anxiety as a result of the Corona pandemic, while 91% suffered from negative effects, including difficulty in concentration 89%, sleep disturbances 86% and decreased social interactions 86%. In China, university students reported experiencing (mild-sever) anxiety. (Cao et al., 2020; Ma & Miller, 2020). It is noteworthy that several studies focused on the psychological impacts of the pandemic among university students, particularly, in nursing major and other majors in general, for example, Baticulon et al. (2020) in the Philippines, Aker & Mıdık (2020) in Turkey, Carrillo (2020) in Mexico, and Meo et al. (2020) in Saudi Arabia, Al-Fiqi and Abul-Fotouh (2020) and Amer (2021).

Given that fear of the aggressive outbreak of covid-19 is a rising concern in the university community, it is vital to investigate the psychological and personal traits affecting this fear. Personality traits and psychological resilience are among the most dominant elements influencing the fear of the Corona pandemic since these traits reflect people's characteristic patterns of thoughts, feelings, and behavior's and they imply consistency and stability.

The Big Five Factors Model (FFM) is one of the most significant frameworks and taxonomies that describe the dynamics of personality (McCrae & Costa, 1987; Goldberg, 1993). This model assumes that the personality is made up of five broad factors or traits, which are extroversion, agreeableness or kindness, conscientiousness, neuroticism, and the openness to experience factor. These big Five personality factors have an impact on various health outcomes and behavior's (Hampson et al., 2006). For example, individuals with higher levels of introversion or neuroticism are more anxious and fearful for their health (Van Dijk et al., 2016), While extraversion is adversely correlated with neurotic disorders such as fear and anxiety (Peng et al., 2012), indicating that the more extroverted and balanced the individual is, the more he can face fear and coexist with it. Carvallo et al. (2020) found that higher levels of extraversion are associated with lower levels of interpersonal social distancing, while higher levels of conscientiousness are associated with higher levels of social distancing. Hudek-Knezevic and Kardum (2009) concluded that neuroticism predicted negative mood with a regression coefficient of (0.54), where extraversion contributed with a negative regression coefficient of -0.22, while the rest of the factors did not predict bad mood. Muris et al. (2018) revealed that anxiety disorder is positively correlated with neuroticism and negatively correlated with extraversion. Kotov et al. (2010) conducted a meta-analytic study of the relationship between the Big Five personality factors and anxiety and fear disorders. He concluded that most fear and anxiety problems arise as a result of high levels of neuroticism and low levels of extraversion. According to Amer (2020c), there are positive and statistically significant effects of extraversion, conscientiousness, acceptance, religion, and psychological resilience on quality of life, but social anxiety has a negative influence. Social anxiety, neuroticism, and religiosity all have positive and significant influences on the fear of corona. Extraversion, life satisfaction, and conscientiousness have negative effects on social anxiety, whereas neuroticism and extroversion have positive effects. Extraversion, conscientiousness, acceptance,

and religiosity have positive effects on psychological resilience.

Psychological resilience is one of the psychological processes that individual exercises to cope with a crisis he is exposed to in his social, economic, psychological life to bring about personal harmony. Indeed, it is one of the best psychological mechanisms that help the individual face the consequences of the Corona pandemic. Psychological resilience is defined as the ability to respond successfully to severe stress, trauma, or a negative experience. It is also one of the defensive mechanisms that an individual utilizes to prevent and treat diseases.

Resilience as seen by (Connor & Zhang, 2006), is one of the mechanisms used to intervene in the treatment of mental disorders such as anxiety, depression, and stress reactions. Higher levels of psychological resilience reduce negative emotions and positive emotions are a function of the individuals' higher levels of resilience (Davydov et al., 2010), and negatively correlated with mental disorders (Peng et al., 2012).

Ovaska-Stafford et al. (2019) found a positive correlation between psychological resilience and good mental health. In Hong Kong, Bonanno et al. (2008) findings on psychological resilience among SARS survivors show that individuals with higher levels of psychological resilience have greater social support and are less anxious about SARS. And it showed that the more resilient the individual is psychological, the more he can face fear and anxiety. Ran et al. (2020) addressed the relationship between psychological resilience and mental health (depression, anxiety, and symptoms of somatization) for a sample in Chinese society. The findings revealed that psychological resilience is adversely correlated to the anxiety of the Corona pandemic ($\beta = -0.443$), and they reported that psychological resilience represents a primary goal for psychological intervention in public health and emergency. Barzilay et al. (2020) concluded that a higher resilience level is associated with lower COVID-19 concerns. In a Meta-analysis study, Faber and Rosendal (2018) concluded that the relationship between psychological resilience and mental health is 0.43. Sarmini (2021) study concluded that mental illness is spread by (36.7%) among university students, and obsessive-compulsive disorder is one of the most common disorders. It reached 36.8%, then depression by 43.7%, then hysteria by 41.9%, followed by anxiety by 36.7%, then phobia by 27.9%, and finally physical anxiety by 17.5%. It has also been shown that individuals with a low level of psychological resilience suffer from fear, anxiety, obsessive-compulsive disorder, physical anxiety and hysteria.

Problem Statement

Psychological resilience is one of the psychological mechanisms that a man employs to confront or effectively adapt to the dangers and negative disasters that he encounters in his social, economic, psychological, and other lives to the events of a type of personal adjustment. It is one of the best psychological mechanisms that help the individual face the consequences of the Corona pandemic, and the logical endurance that states, the greater the degree of resistance or psychological steadfastness, the greater the person's ability to face the challenges caused by the Corona pandemic, and it acts as a barrier that prevents the individual from contracting mental and physical diseases associated with fear of this pandemic. Personality traits and psychological resilience are among the most important factors affecting the fear of corona. Personality is the psychological component that explains the dynamics and processes of the psychological life of individuals. Due to the scarcity of studies related to the impact of the Corona pandemic on university students, the current study comes to fill this research gap in the Arab psychological and social context. Based on the foregoing, we can admit the logical analysis which concluded that psychological resilience and personality traits are among the most prominent psychological variables influencing the fear of the Corona pandemic. Previous studies emphasized the importance of personality traits, especially extroversion and neuroticism, which play a significant role in psychological disorders such as fear, anxiety, and resilience. Psychological resilience also plays a crucial role in determining the level of fear of the Corona pandemic. In light of the aforementioned, the study aims to address the following questions:

1. What is the level of fear of the Corona pandemic among university students?

2. To what extent does fear of the Corona pandemic, psychological resilience, and the five key personality traits among university students correlate?

3. What is the relative contribution of the five major factors of personality and psychological resilience to predicting

fear of the Corona pandemic among a sample of university students?

Study objective:

The main aim of the study is to determine the impact of the big five factors of personality and psychological resilience on the fear of the Corona pandemic, and also to determine the level of the fear of the corona pandemic among a sample of university students considering the pandemic conditions that the world is going through.

Significance of the Study

The study's significance stems from the topic it addresses, which is the phenomenon of fear of the Corona pandemic, as it is one of the phenomena that have brought about debilitating changes in social, economic, and educational life, and identifying the level of fear of this phenomenon among university students as it is one of the most important groups affected by this phenomenon psychologically and educationally. This study is considered one of the unique studies that have linked these variables at the local and Arab levels. From a practical standpoint, it is hoped that this current study will provide useful information for those in charge of the teaching process by determining the extent to which the five major factors of personality and psychological resilience contribute to predicting or affecting the Corona fear, which aids in the development of psychological and counseling programs based on these variables to reduce the effects of these phenomena.

Definitions:

Fear of Corona Pandemic: An emotional state accompanied by tension and terror from the emerging Coronavirus and measured through the Corona Pandemic Fear Scale designed by (Amer, 2020b).

The Big Five Factors of Personality:

One of the classification frameworks used to describe personality traits, consists of five major factors, namely, extraversion (the need for social participation, joy, pleasure, and optimism), agreeableness, or kindness (trust, interest, cooperation, warmth, participation, and empathy with others), conscientiousness (responsibility, mastery and work, seriousness, adherence to rules, organization, and perseverance), neuroticism (emotional stability, anxiety, tension, and sadness), and openness to experience (creativity, curiosity, and the willingness to accept new ideas). These big factors are measured by (Rammstedt & John, 2007) ten-word shortlist.

Psychological resilience: It is strategies that include confrontation, persistence, determination and achieving goals despite the Corona pandemic, and it is measured through a short formula that included items taken from (Conner & Davidson, 2003).

Methods and Procedures

Study design: The study relied on the design of cross-sectional studies, including the application of scales to a sample of university students to determine the levels of fear of the Corona pandemic, and also adopted the correlational approach to collect data to verify the statistical relationship between variables.

Variables:

A.   Independent variable: The five factors of personality and the dimensions of psychological resilience.

B.   Dependent variable: The fear of the Corona pandemic.

Participants:

The study measures were submitted using Google Forms via the Internet to several students in the Faculties of Arts and Humanities, and Education at Suez Canal University, Egypt. Then the participants were asked to share it with others (snowball sample) electronically using their smartphones. The sample population, therefore, included Suez Canal University students who used smartphones, or the Internet counted (215). Of which 15 (7%) male students and 200 (93%) female students, aged (18- 23years.) with an average of (20.26) years and a standard deviation of (1.91).

Measures:

The following measures were adopted:

A.   The Big Five Personality Factor Scale:

A ten abbreviated items form was used, in which each factor is represented by two words, according to the Big Five Inventory (BF1-10) (Rammstedt & John, 2007), for example, one of the items after neuroticism: " irritated quickly". The scale

adopted a 5-point Likert scale.

B. The Corona Pandemic Fear Scale:

A 5- point Likert scale was used to measure the fear of the corona pandemic adopting "The Corona Pandemic Fear Scale" designed by (Amer 2020b). The internal consistency reliability coefficient of the scale was 0.892, indicating a high consistency.

Construct validity was verified by applying the exploratory factor analysis using the principal components method. The analysis produced two factors before and after the rotation. The first factor loaded with 7 items representing the fear of engaging in daily practices and dealing with others as a result of the Corona pandemic (going out, shaking hands, touching the face, fear of others), while the second factor was loaded with 5 items representing personal fear (panic, horror, terrifying dreams, suspicion of Corona symptoms). The confirmatory factor analysis proved a good fit of the two factors model versus the general factor model. The reliability of the internal consistency for the alpha coefficient of the scale for the sample was (0.903).

C. Psychological Resilience Scale:

Psychological resilience refers to the individual's ability to bounce back balance after exposure to turbulent ordeals and shocks. Ten statements adopted from the scale of (Conner & Davidson, 2003) were tailored to fit the Corona pandemic, such as "I have the determination to face any difficulties in my life." in light of the Corona pandemic." "I can face the consequences of the Corona pandemic with courage," and corrected using the five-point Likert scale after modifying the statement "I am afraid of facing the Corona pandemic and adapting to it."

Reliability: The coefficient of internal consistency of the alpha scale for the participants was 0.821, a single item was excluded from the scale, and therefore the reliability was boosted to 0.855. The alpha coefficient of the scale after exclusion of the single item ranged from (0.823 - 0.850), and the corrected correlation coefficient ranged from (0.30 to 0.764).

Validity: The construct validity was verified by conducting exploratory factor analysis by the principal components method and orthogonal rotation Varimax, where the value of the KMO and Bartletts test of sphericity was 0.885, which is considered very convenient. The analysis produced two factors, the first factor (eigenvalues= 4.28, explained 47.56) of the variance of the correlation matrix and loaded with 6 items representing optimism, perseverance, persistence, and adherence to achieving the goals. The factor loading ranged from 0.580 to 0.745, while the eigenvalues of the second factor (eigenvalues=1.047 explained 11.64%) of the variance of the correlation coefficients matrix and loaded with three items representing the influencing others and objectively dealing with the pandemic.

Procedures:

The data was collected electronically through (link) posted to the students at Suez Canal University in the Faculties of Education and Arts at Suez Canal University in the Arab Republic of Egypt in the middle of the second week of June by communicating remotely with students' groups. The application took about a month and the individuals were notified that the data of the study is used for research purposes and has a high degree of confidentiality to enable the students to respond contentedly, they were informed not to write their names. The questionnaire data file was converted to an Excel file, then converted to an SPSS file, and the taxonomic variables such as gender and others were encoded.

Statistical analysis:

Data were analyzed using the IBM SPSS program (26) to conduct descriptive statistical analyzes. Correlation coefficient and exploratory factor analysis were performed using the principal components method with orthogonal rotation to verify the validity of the concept of the psychological resilience scale. The multiple regression method was used using the Enter. Method.

Results and Discussion

Results of the first question: "What is the level of fear of the Corona pandemic among university students?" Descriptive analysis was extracted (Means, Standard Deviations, Kurtosis, Skewness) as shown in Table (1).

Table 1. Descriptive analysis (Means, Standard Deviations, Kurtosis, Skewness) N=215

Item	Mean	SD	kurtosis	Skewness
I avoid leaving the house to avoid seeing anyone	3.33	1.38	-1.17	-.267
I avoid praying with others fearing to touch others.	2.81	1.51	-1.40	.21
I avoid visiting my relatives for fear of Corona.	3.30	1.39	-1.20	-.25
I am afraid of others so that the virus will not infect me.	3.36	1.36	-1.00	-.34
I am afraid to shake hands with someone for fear of touching his hand.	3.40	1.32	-.85	-.46
I am afraid to buy daily necessities because they contain the Coronavirus.	2.99	1.36	-1.08	0.03
I avoid touching my face for fear of contracting the Coronavirus	3.00	1.38	-1.12	0.00
I am afraid of getting corona because I am afraid of death.	2.52	1.38	-1.04	0.44
I have terrifying dreams while sleeping from being infected with Corona.	1.67	1.07	2.11	1.66
I am terrified of contracting the Coronavirus.	2.34	1.39	-.85	0.6
I constantly doubt that I have symptoms of corona	2.28	1.32	-.51	0.74
I am terrified to hear the news of coronavirus deaths	3.36	1.33	-.97	-.30

Data in Table (1) illustrate that the Skewness values do not exceed (1), while the kurtosis values do not exceed (2.0) for most of the items, indicating the availability of moderation to a good degree. The mean values for most of the participants' responses are close to 3.0, indicating the quality of the items as it centers around the median response. Generally, participants suffer from fear of corona to a moderate degree, except for the items "I have terrifying dreams during sleep about being infected with corona." "I have a fear of contracting corona." And "I constantly doubt that I suffer from symptoms of corona" which show a low degree. The overall mean of the scale is 31.39 = 53.22% of the total score (60), indicating that the fear of Coronavirus among the participant is (moderate).

The lawyer Quartile and Upper Quartile were estimated to determine the distribution of the participants on the scale "levels of fear of the Corona pandemic among university students" Q1 was P_{25} = 27, and Q3 was P_{75} = 42. Accordingly, the participants were distributed as follows:

Table (2): The distribution of the participants (N=215)

Fear level	N	Ratio
Low (27≤ fear)	66	30.7
Medium (28 ≥ fear <42)	85	39.53
High (≤ 42 fear)	64	29.77
	215	100

Table (2) shows that of the participants (30.7%) suffer from fear of the Corona pandemic to a (weak) degree, (39.53%=moderate) degree, (29.77% = high) degree. Indicating that (69.30) of the total participants suffer from the fear of the Corona pandemic (moderate-high) degree.

Descriptive statistics: The following shows descriptive statistics for variables including Mean, Standard Deviation, Skewness, and Kurtosis:

Table (3). Descriptive analysis (Mean, Standard Deviation, Skewness, Kurtosis)

Variable	Mean	SD	Skewness	Kurtosis
Extroversion (2)*	6.42	1.79	-.18	0.13
Neuroticism (2)	7.57	1.67	-.58	-.02
Agreeableness (2)	7.30	1.64	-.49	0.50
Conscientiousness (2)	6.40	1.64	0.02	0.16
Openness (2)	6.72	1.83	-.47	-.09
Psychological resilience/ 1st domain (6)	22.29	5.10	-.71	0.49
Psychological resilience/ 1st domain (3)	10.53	2.27	-.34	0.24
Corona fear	31.39	10.34	0.11	-.43

As shown in Table (3), the most dominant personality factors are neuroticism and agreeability, followed by openness and

extraversion. Where the least dominant factor was Conscientiousness. A high level of psychological resilience among university students was evident in both dimensions. The study variables have an appropriate degree of moderation, as the Skewness and Kurtosis indicators did not exceed (1).

Results of the second question: "To what extent does fear of the Corona pandemic, psychological resilience, and the five key personality traits among university students correlate?" Pearson correlation coefficient was used to determine the correlations between the variable.

Table (4): Correlation matrix between study variables (N=215).

Variable	1	2	3	4	5	6	7	8
Extroversion (1)	1.00							
Neuroticism(2)	−.15*	1.0						
Agreeableness (3)	.36**	−.17*	1.0					
Conscientiousness(4)	.51**	−.16*	.35**	1.0				
Openness (5)	.15*	0.02	.06	0.08	1.0			
Resilience/ 1st domain (6)	.56**	−0.13	.35**	.53**	.24**	1.00		
Resilience/ 2nd domain (6)	.49**	-0.02	.39**	.40**	.35**	.62**	1.00	
Corona fear (8)	-.03	.30**	0.02	−.17*	-.01	−.16*	0.12	1.00

**Significance at (0.01) * (0.05).

The fear of the Corona pandemic was inversely correlated to a very low degree, close to zero, with the personality traits, Extroversion, Agreeability and Openness, but it was inversely correlated with a statistically significant difference at 0.05 with Conscientiousness. This indicates that the person who can assume responsibility, mastery, hard work and adherence to the rules is less afraid of contracting the Corona pandemic. Neuroticism was positively and statistically significant at 0.01 with the fear of corona and with a medium effect size. Meaning, the more neurotic the person is, the more likely he is to fear the Corona pandemic. These results are consistent with (Peng et al., 2012).

It was also found that there is a low negative and statistically significant correlation between fear of the Corona pandemic and the dimensions: optimism, perseverance, and determination to face challenges for psychological resilience.

Results of the third question: "What is the relative contribution of the five major factors of personality and psychological resilience to predicting fear of the Corona pandemic among a sample of university students?

To address this question, a multiple regression analysis was conducted using the Enter method, which is to enter all the variables together once for the regression model. In this model, $R^2 = 0.217$, while $R\_adj^2 = 0.190$, meaning that the five personality factors and the two dimensions of psychological resilience =19% of the variation in fear of the Corona pandemic, and this represents an average effect size.

ANOVA through F-test was used to test whether the variables included in the model are suitable for predicting fear of the Corona pandemic, meaning that a prediction equation can be built ($F_{(7,207)} = 8.18, P < 0.01$) and therefore it is statistically significant, accordingly, the seven independent variables can be used to predict fear of the Corona pandemic as shown in Table (5).

Table (5): Coefficient Regression and their statistical significance (N=214).

Model	Unstandardized coefficients (B)	Standardized coefficients (Beta)	Confidence Interval 95%	
			lower	upper
Constant	20.98**		9.40	32.56
Extroversion	0.51	0.08	-0.49	1.51
Neuroticism	1.41	−.21**	0.55	2.28
Agreeableness	0.35	0.05	-0.60	1.31
Conscientiousness	-1.17	−0.17*	-2.22	-0.12
Openness	-.22	-.04	-1.01	0.57
Psychological resilience/1st domain	-0.52	−.27**	-0.84	-0.19
Psychological resilience/ 2nd domain	2.65	0.36**	1.55	3.75

**Significance at (0.01) * (0.05).

Regarding the results of the personality traits of extraversion, agreeability, and openness, Table (5) shows that they cannot predict fear of the Corona pandemic based on confidence intervals and tests of statistical significance. Whereas conscientiousness shows a negative effect on fear of the Corona pandemic (β=-0.17) indicating that the more a person can assume responsibility, mastery, hard work and adherence to the rules, he can face the fear of Corona. The results also reveal a positive effect from neuroticism to fear of Corona. This means that the more worried a person is and lacks emotional balance, the more he suffers from high levels of corona fear. In a matter of fact, this seems logical when compared with the results of (Van Dijk et al., 2016) where the nervous person is less able to control his emotions and more prone to stress, fear and psychological breakdown.

Regarding the results of the psychological resilience of the first dimension (optimism, perseverance, determination, and adherence to achieving goals), the above data reveal their negative impact on the fear of the Corona pandemic, as the more a person has persevered, persistence, optimism and can deal with courage, the more he can face fear.

Notably, the second factor of psychological resilience, which is the impact on others and dealing objectively with the pandemic, has a positive and statistically significant effect in the sense that the more a person can deal objectively with the pandemic and the ability to influence others, the more fearful he is, and this partly contradicts with the results of (Ovaska-Stafford et al., 2019; Peng et al., 2012). Accordingly, the standard prediction equation can be built to predict the fear of the Corona pandemic as follows:

$$Z_{Fear} = 0.25\, Z_{\text{Neurot.}} - 0.16\, Z_{Consci.} - 0.31\, Z_{Psyc/1st} + 0.33 Z_{Psyc/\,2nd}$$

Discussion

The study aimed to identify the level of fear of the Corona pandemic among university students at the beginning of August 2020. The findings revealed that university students had a moderate level of fear of Corona and that the least manifestation of fear was the occurrence of daydreams and terrible nightmares for fear of Corona infection. It also found that 69.30% of participants have a moderate to high level of fear of the Corona pandemic, showing that the Corona pandemic is a real concern in people's life and occupies a space of their thinking. This is compatible with present findings, in which there is a level of fear connected with the virus's initial stage of transmission in the early 2020s, and this is congruent with (Amer & Fragg, 2020; Son et al., 2020; Amer, 2020a,b).

Concerning the fear of the Corona pandemic, it turns out that the most critical factor associated with the increase in fear of the Corona pandemic is the neurotic personality which is in line with the theory and logical analysis, as the introverted, tense, nervous, isolationist person who fears social relationships is more susceptible to Corona's fear, and this agrees with the results of (Hudek-Knezevic & Kardum, 2009; Kotov et al., 2010; Muris et al., 2018). And more introverted people are more afraid of the Corona pandemic and are more able to adhere to the rules, unlike an extrovert person who can be less committed to the rules of social distancing, and this agrees with (Carvallo et al., 2020).

Extraversion, as one of the most significant components of the five personality traits, has no impact on the fear of the Corona pandemic, and this contradicts (Hudek-Knezevic & Kardum, 2009; Muris et al., 2018; Pen et al., 2012), while there is a negative effect of conscientiousness on fear of the Corona pandemic, meaning that a person who is characterized by moderately, persistence and more responsible, he can overcome the Corona fear, and this result agrees with the result of (Hampson et al., 2006).

Regarding psychological resilience, the exploratory factor analysis produced two factors, which are the first dimension represented by the items of persistence, determination, optimism, and achievement of goals. Barzilay et al., 2020 ; Pen et al., 2012; Ran et al., 2020). As for the second dimension, it represents dealing objectively with the Corona pandemic and the ability to influence others.

The results of the regression analysis showed a positive effect of this dimension on the fear of the Corona pandemic, meaning, the more a person adheres to the instructions and can influence others, the higher his level of fear of the Corona pandemic. This is partially inconsistent with (Pen et al., 2012; Ran et al., 2020). But why did this happen? It can be due to the fact that, some of the items included in the scale of fear of Corona measure diligence and commitment, such as avoiding

shaking hands with others, avoiding prayer in congregation, and fear of buying daily demands. These items actually represent the objective commitment to the instructions, which are items of the second dimension of psychological resilience.

The study's significance stems from addressing the topic of fear of the Corona pandemic, as it is one of the emergent scenarios that has dramatically affected social and psychological lifestyles and approaches. The current study addressed personality traits and psychological resilience as one of the most important variables affecting the fear of Corona, and the study contributed to revealing the dynamics of the relationships between these factors to reach a better understanding of this phenomenon. The importance of the conscientious factor cannot be overstated, as it comprises perseverance and responsibility, which supports the individual in restoring his psychological balance in the face of adversity, such as the situation we are currently experiencing with the Corona pandemic.

The study has some limitations, which is that access to causal inferences from the correlations between the variables is uncertain, as correlation does not mean causation. Also, the data was collected from electronic means (telephone, personal computer, and tablet), which makes the process of applying the standards procedures not subject to the direct supervision of the researcher.

But it turned out that the quality of the data is at an appropriate degree for conducting the necessary statistical analyzes.

The researcher recommended developing psychological programs based on psychological resilience and the components of Conscientiousness because of their role in mitigating fear of the Corona pandemic as well as programs aiming to reduce neurotic behavior's that contribute significantly to increasing fear of the Corona pandemic. But if we assume that there is the relative stability of personality variables, then the components of psychological resilience must be developed, such as perseverance, optimism, and determination to achieve required goals.

The current study was limited to students at Suez Canal University in the Arab Republic of Egypt, at the Faculty of Arts and Humanities and the Faculty of Education, during the second week of July to the fourth week of the same month 2020. Its results must be taken with a degree of caution, and other studies must be conducted on other university variables including a variety of theoretical and practical faculties to reach a degree of generalization of the results.

Finally, the current study is considered an addition to the field of Corona studies in particular and epidemics in general. It provides a vision of the nature of the relationships and influences between emotional and personal variables and the fear of the Corona pandemic, especially in light of the scarcity of studies in this field, hence, it is necessary to realize our social and psychological reality locally, regionally, and globally.

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