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Quantifying the impact of COVID-19 on the individuals in the Kingdom of Saudi Arabia: A cross-sectional descriptive study of the posttraumatic growth

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This study seeks to explore the effect of the COVID-19 outbreak pandemic on the posttraumatic growth among Saudi individuals and also to assess the effect of demographic variables on the PTG. A descriptive design was applied to detect the level of PTG and to determine the differences in PTG due to demographic variables. A randomized sample consisting of 365 participants was chosen; the participants' ages ranged between 20 and 60. The study sample was divided into subgroups according to demographic variables. The posttraumatic growth scale (PTG-21) applied online to the study sample. The results indicated that there were high levels of improved personal relationships, increased emotional strength and resilience, greater spiritual connection, and a heightened sense of gratitude toward life among Saudis, while there were low levels of the new opportunities and the total score of posttraumatic growth. The results also found that there are significant statistical differences in the PTG due to demographic variables except academic degree has not no effect in PTG. The findings highlighting the importance of the psychological service centers, to help who suffer from the negative effects of COVID-19 pandemic outbreak symptoms such as anxiety, depression, and obsessive compulsive.

KEYWORDS
COVID-19 pandemic, emotional strength, personal relationships, posttraumatic growth PTG, resilience, spiritual connection

1 | INTRODUCTION AND THEORETICAL BACKGROUND REVIEW

The world is experiencing a healthy, political, and economic labor that humanity has never experienced before. Humanity today is facing a global pandemic that spread and swept the world in a few weeks and months. As the Corona virus is associated with SARS-CoV-2, its development then leads to acute respiratory distress syndrome, septic shock, and then death (WHO, 2020).

The international human rights law guarantees everyone the right to the highest attainable standard of health, and obliges states to take procedures to prevent a public health threat and to provide medical care to those who need it. Human rights law also recognizes that restrictions imposed on some rights, in the context of serious threats to public health and public emergencies that threaten the life of a nation, can be justified when they have a legal basis, and are absolutely necessary, based on scientific evidence, and their application is not arbitrary or discriminatory (Arnout, 2020).

1.1 | Quarantine as stressor

There is no doubt that the experiences and trauma to which the individual is subjected to such as current COVID-19 crisis have its apparent and hidden repercussions and psychological consequences at the level of society and individuals. It is one of the crises and specific

shocks to which the individual was exposed, either because of a loss or injury that occurred to him or a member of his family, in addition to his fear and anxiety that he or his family would be infected with this epidemic. As well as, the compulsory precautions imposed on all members of society such as social divergence, home bans, and changes in an individual's lifestyle, thoughts, feelings, behavior, social relationship, and physical condition.

Arnout et al. (2020) pointed out the stresses associated with the quarantine; if a person is not able to confront it with effective coping styles, it may lead him to fall into the psychological problems, and perhaps mental illness. These quarantine stresses include:

1. Longer periods of quarantine were associated with symptoms of posttraumatic stress, reluctance, and anger.
2. Quarantined people feel fear for their health or have suffered fears of injuring others. Quarantined people get angry and bored during it, due to restrictions, daily routine loss, and lack of social and material contact with others.
3. Inappropriate basic supplies (such as food, water, clothing, or accommodation) during quarantine caused frustration and were associated with anger and anxiety from four to 6 months after quitting.
4. Obtaining inappropriate information, including clarity about the actions to be taken, the purpose of quarantine, and the different levels of risk, have proven to be stressful.

In general, quarantine is an unsatisfactory experience that can cause traumatic situations.

1.2 | COVID-19 pandemic and posttraumatic growth

The term posttraumatic growth is a new research term closely related to positive psychology, which in turn aims to fully and effectively employ the individual's possessions—regardless of the individual's psychological health or the nature of the circumstances he is undergoing—of personal skills and abilities so that he does not reach. The individual only attends to mental health or transcends conditions and crises, but rather lies in the development of a life characterized by satisfaction, happiness, and achievement in a way that satisfies himself and achieves it, and that is beneficial to himself and others around him (Al-Sabwa, 2006).

The concept of PTSD refers to positive psychological growth and development in all aspects of personality. This concept was coined by "Richard Duchy," pointed that traumatic events give individuals greater strength, create positive changes, and increase the ability to cope stress of life.

These bright aspects of trauma and the potential for positive psychological outcomes as a result of traumatic life experiences have led to more theoretical and experimental research to describe and address fundamental psychological changes and the establishment of scientific concepts such as posttraumatic growth, and several other titles related to the intended meaning such as stress-related growth, and perceived benefits, prosperity, and reverse the growth (Younis, 2018).

In the same context, researchers in positive psychology point out that trauma is not necessarily followed by a disturbance in the lives of individuals, because trauma can increase the psychological and spiritual resilience, agratitude, and a tendency to help others (Al-Smadi, 2019). This was also confirmed by Abu Aisha (2017) when he mentioned that positive psychology researchers consider that "posttraumatic growth" is the most common among individuals who have experienced trauma compared to posttraumatic stress disorder; they see that growth and prosperity for the individual are the basis.

In the same context, Tedesch and Calhoun (2004) indicate that individuals experience posttraumatic growth not only exceeding trauma and returning to what they were before the trauma, they are also reaching a higher level of self-management, psychological performance, and awareness of life. Also, Tedesch and Calhoun (2004) believe that a distinction should be made between posttraumatic growth and the concepts of resilience and psychological resilience; these concepts describe the characteristics and traits of an individual's personality that help and qualify him to manage adversity and trauma and overcome them, while the concept of posttrauma growth includes a qualitative shift and change and a real change in performance. On the other hand, Wang et al. (2015)) believe that the symptoms of posttraumatic stress are positively related to posttraumatic growth, which means that there are both positive and negative symptoms.

Al-Zour (2001) believed that one of the most important effective strategies for overcoming trauma is the individual's spiritual relationship to GOD and the strength of his belief in him, as well as knowledge, education, support, and family and community solidarity. Whereas, Schroevers et al. (2010) mentioned that the characteristics of individuals who thrive and develop aftershocks are that the individual is social: the most vulnerable to posttraumatic growth are the social people who love to socialize with others, as others are able to provide social support and that in turn, it contributes to overcoming shocks and achieving the psychological balance of the individual. He also sees that being optimistic is one of the contributing factors in helping him to grow and prosper aftershocks, so searching for positive aspects of crises and shocks is itself a growth and shows the individual's strengths that drive him to adaptation and then access to his mouth growth of posttraumatic stress.

Whereas Abu Al-Qasman (2016) indicated that training an individual to cope life is one of the characteristics that must be present in individuals in order to be able to grow and develop after the trauma, researchers argued that individuals who are keen to engage in and gain new experiences are among the most able to grow aftershocks, exposure to life situations, and experiences and perhaps problems that differ in degrees and severity, individuals gain psychological immunity and cumulative experiences that qualify the individual to

better deal with trauma. The physical level of individuals, especially when it is high, is one of the factors that helps to reduce the impact of the trauma and the ability of the individual to overcome it and then grow after it.

By reviewing theoretical literature on posttraumatic growth posttraumatic growth (PTG) and the impact of the COVID-19 pandemic as a traumatic event, we conclude that this traumatic event (COVID-19) may have a positive impact on individuals Until now psychological studies did not interest to investigate the PTG after COVID-19 pandemic.

2 | OBJECTIVE

Accordingly, this study seeks to reveal the level of posttrauma growth among members of the Saudi society for the two categories of youth and the elderly in the light of some demographic variables, and then reaching recommendations that help individuals in general, workers and practitioners in the mental health field in particular to training practices and programs not only to overcome the current crisis and adapt to it, rather, to prosperity, growth, and development at various levels of the individual's personality, which contributes to improving the individual's mental health and quality of life to enjoy stability and psychological well-being. This study attempts to reveal the differences in posttraumatic growth among a sample of Saudi society during the COVID-19 pandemic, which is due to the variable of gender and age, economic level, social level, marital status, as well as differences between injured and non-COVID-19 in the PTSD variable.

3 | METHODOLOGY

3.1 | Population and sample

The population of this study includes all individuals residing in the Kingdom of Saudi Arabia. We chose a randomized sample consisting of 5611 (365) and their ages ranged between 20 and 60 . They were divided into subgroups according to sex, social status, age, academic level, income level, and COVID-19 affected/not affected (see Tables 1–6).

3.2 | Tools

3.2.1 | Posttraumatic growth scale

The posttraumatic growth scale consisted of 21 items; it was prepared by Tedesch and Calhoun (2004), which consist of five dimensions. The individual responds with a 5-point Likert scale (never = 1 to very much = 5). The validity and reliability of the scale were verified on a sample that consisted of 50 respondents. The results showed in Tables 7–9 indicate that the psychological problems or symptoms are validated and reliable.

From the results shown in Tables 7 and 8, we noticed that the PTG-21 scale items and dimensions are significantly related to the total score of the scale, that mean this scale is characterized by internal consistency.

The findings showed in Table 9 about the Cronbach's Alpha coefficients for the posttraumatic growth scale (PTG-21) scale indicated that the scale is reliable.

3.3 | Research design

After the outbreak of the COVID-19 pandemic among Saudis, a survey descriptive design was used in this study to detect the level of PTG and to determine the differences in PTG due to age, sex, social status, academic level, and income level. PTGS-21 applied online to a random sample from Saudis 356 Saudis have responded to the scale and sent it back to the researchers.

3.4 | Data analysis

The data collected from the study sample (n = 365) were analyzed by using SPSS 25.0 and by calculating Mean, Standard Deviation, t test, and one-way ANOVA.

TABLE 1 Distribution of the study sample according to sex

Variable		Frequency	Percent	Valid percent	Cumulative percent
Valid	Female	249	68.2	68.2	68.2
	Male	116	31.8	31.8	100.0
	Total	365	100.0	100.0	

TABLE 2 Distribution of the study sample according to social status

Variable		Frequency	Percent	Valid percent	Cumulative percent
Valid	Unmarried	91	24.9	24.9	24.9
	Married	248	67.9	67.9	92.9
	Widower	6	1.6	1.6	94.5
	Divorced	20	5.5	5.5	100.0
	Total	365	100.0	100.0	

4 | RESULTS

4.1 | The results about posttraumatic growth PTG levels among total sample

To determine the level of PTG among the Saudi individuals, t-test value of one sample was calculated to detect the differences between the hypothetical mean and the mean scores of the individuals in PTG. The results are shown in Table 10.

The results shown in Table 10 indicate the lower levels of the total score of posttraumatic growth and the new opportunities among the study sample, while there were high levels in improved personal relationships, increased emotional strength and resilience, greater spiritual connection, and a heightened sense of gratitude toward life. The differences for one sample were statistically significant at the level 0.01.

4.2 | The results about the differences in posttraumatic growth due to sex

The *t* test for independent samples were calculated to detect the difference between males and females in the PTG. The findings shown in Table 11.

From the results shown in Table 11, we note that there are significant statistical differences between males and females in posttraumatic growth in favor of females; they obtained high means in the PTG scale (total score and their dimensions).

4.3 | The results about the differences in posttraumatic growth due to age

One-way ANOVA was calculated to detect the differences in the PTG due to age. The findings were shown in the Tables 12–14.

TABLE 3 Distribution of the study sample according to age

Variable		Frequency	Percent	Valid percent	Cumulative percent
Valid	20–30 year	94	25.8	25.8	25.8
	30–40 year	141	38.6	38.6	64.4
	40–50 year	84	23.0	23.0	87.4
	50–60 year	46	12.6	12.6	100.0
	Total	365	100.0	100.0	

TABLE 4 Distribution of the study sample according to academic degree

Variable		Frequency	Percent	Valid percent	Cumulative percent
Valid	Middle school level	40	11.0	11.0	11.0
	University education level	262	71.8	71.8	82.7
	Master degree	52	14.2	14.2	97.0
	PhD degree	8	2.2	2.2	99.2
	Primary school level	3	0.8	0.8	100.0
	Total	365	100.0	100.0	

TABLE 5 Distribution of the study sample according to income level

Variable		Frequency	Percent	Valid percent	Cumulative percent
Valid	Less than 5000 SAR	110	30.1	30.1	30.1
	Less than 10,000 SAR	102	27.9	27.9	58.1
	Less than 20,000 SAR	119	32.6	32.6	90.7
	Less than 30,000 SAR	23	6.3	6.3	97.0
	More than 30,000 SAR	11	3.0	3.0	100.0
	Total	365	100.0	100.0	

TABLE 6 Distribution of the study sample according to COVID-19 affected/not affected

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Not affected by COVID-19	358	98.1	98.1	98.1
	COVID-19 affected	7	1.9	1.9	100.0
	Total	365	100.0	100.0	

The results shown in Tables 12 and 13 indicated that there are significant statistical differences due to age in posttraumatic growth PTG (total score and all dimensions) except a heightened sense of gratitude toward life. To determine the direction of these differences, a Scheffe test was used (see results in Table 14).

As the results shown in Table 14, the differences in the total score of the posttraumatic growth, improved personal relationships, increased emotional strength and resilience, and greater spiritual connection in the favor of individuals belonging to the 50–60 year group, while the differences in the new opportunities and a heightened sense of gratitude toward life dimensions were in the favor of the 40–50 year group individuals.

TABLE 7 Correlations between PTGS-21 items and the total scale

Item	r	Item	r	Item	r
1	0.772**	8	0.761**	15	0.299*
2	0.751**	9	0.733**	16	0.714**
3	0.674**	10	0.700**	17	0.641**
4	0.610**	11	0.750**	18	0.627**
5	0.740**	12	0.788**	19	0.675**
6	0.843**	13	0.728**	20	0.756**
7	0.642**	14	0.826**	21	0.723**

[a]Correlation is significant at the 0.01 level (2-tailed).
[b]Correlation is significant at the 0.05 level (2-tailed).

TABLE 10 One-sample statistics

Variables	*M*	*SD*	*t*	Sig. (2-tailed)
Dis1	14.471	4.657	2.169	0.031
Dis2	19.690	6.952	4.646	0.000
Dis3	0.13.214	4.087	5.673	0.000
Dis4	7.520	2.356	12.328	0.000
Dis 5	10.299	3.434	7.225	0.000
Total score	65.194	18.237	8.177	0.000

TABLE 8 Correlations between PTGS-21 dimensions and the total scale

		Dis1	Dis2	Dis3	Dis4	Dis-5	Total
Dis1	Pearson correlation	1	0.688[a]	0.630[a]	0.467[a]	0.681[a]	0.853[a]
	Sig. (2-tailed)		0.000	0.000	0.001	0.000	0.000
	N	50	50	50	50	50	50
Dis2	Pearson correlation	0.688[a]	1	0.774[a]	0.536[a]	0.652[a]	0.922[a]
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000
	N	50	50	50	50	50	50
Dis3	Pearson correlation	0.630[a]	0.774[a]	1	0.535[a]	0.588[a]	0.852[a]
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000
	N	50	50	50	50	50	50
Dis4	Pearson correlation	0.467[a]	0.536[a]	0.535[a]	1	0.620[a]	0.680[a]
	Sig. (2-tailed)	0.001	0.000	0.000		0.000	0.000
	N	50	50	50	50	50	50
Dis5	Pearson correlation	0.681[a]	0.652[a]	0.588[a]	0.620[a]	1	0.818[a]
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000
	N	50	50	50	50	50	50
Total	Pearson correlation	0.853[a]	0.922[a]	0.852[a]	0.680[a]	0.818[a]	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	
	N	50	50	50	50	50	50

[a]Correlation is significant at the 0.01 level (2-tailed).

TABLE 9 Cronbach's alpha coefficients for PTG-21 scale

Dimensions	Alpha-Cronbach	Spearman-Brown coefficient	Guttman Split-half coefficient
Dis1	0.889	0.885	0.838
Dis 2	0.910	0.895	0.907
Dis 3	0.772	0.716	0.743
Dis 4	0.849	0.849	0.849
Dis 5	0.844	0.789	0.887
Total score	0.949	0.919	0.924

TABLE 11 Differences between males and females in PTG

Variables	Sex	*N*	*M*	*SD*	*t*	Sig. (2-tailed)
dis1	Females	249	14.8916	4.67581	2.545	0.011
	Males	116	13.5690	4.50550		
dis2	Females	249	20.2369	6.73131	2.212	0.028
	Males	116	18.5172	7.29441		
dis3	Females	249	13.6104	3.75414	2.741	0.006
	Males	116	12.3621	4.62770		
dis4	Females	249	7.8635	1.99733	4.164	0.000
	Males	116	6.7845	2.85842		
dis5	Females	249	10.8996	3.05625	5.061	0.000
	Males	116	9.0086	3.83688		
Total	Females	249	67.5020	16.75659	3.599	0.000
	Males	116	60.2414	20.27018		

TABLE 12 Descriptive

Variable		*N*	*M*	*SD*	Std. error
dim1	20–30 year	94	14.4681	4.65983	0.48062
	30–40 year	141	13.7730	4.66808	0.39312
	40–50 year	84	15.2619	4.51268	0.49237
	50–60 year	46	15.1739	4.69186	0.69178
	Total	365	14.4712	4.65719	0.24377
dim2	20–30 year	94	19.4468	7.23435	0.74617
	30–40 year	141	18.1702	6.85561	0.57735
	40–50 year	84	21.2857	6.43704	0.70234
	50–60 year	46	21.9348	6.54354	0.96479
	Total	365	19.6904	6.95156	0.36386
dim3	20–30 year	94	12.9043	4.61197	0.47569
	30–40 year	141	12.4610	3.97765	0.33498
	40–50 year	84	14.3214	3.53693	0.38591
	50–60 year	46	14.1304	3.70950	0.54694
	Total	365	13.2137	4.08741	0.21395
dim4	20–30 year	94	6.7872	2.51393	0.25929
	30–40 year	141	7.4326	2.39435	0.20164
	40–50 year	84	8.0238	2.12260	0.23160
	50–60 year	46	8.3696	1.83010	0.26983
	Total	365	7.5205	2.35637	0.12334
dim5	20–30 year	94	10.3404	3.58177	0.36943
	30–40 year	141	9.8794	3.42778	0.28867
	40–50 year	84	10.7381	3.27134	0.35693
	50–60 year	46	10.6957	3.39195	0.50012
	Total	365	10.2986	3.43401	0.17974
total	20–30 year	94	63.9468	19.62244	2.02390
	30–40 year	141	61.7163	17.70445	1.49098
	40–50 year	84	69.6310	16.70133	1.82226
	50–60 year	46	70.3043	17.32547	2.55450
	Total	365	65.1945	18.23663	0.95455

TABLE 13 ANOVA

		Sum of squares	*df*	Mean square	*F*	Sig.
dim1	Between groups	143.959	3	47.986	2.235	0.084
	Within groups	7750.989	361	21.471		
	Total	7894.948	364			
dim2	Between groups	776.920	3	258.973	5.561	0.001
	Within groups	16813.096	361	46.574		
	Total	17590.016	364			
dim3	Between groups	230.619	3	76.873	4.743	0.003
	Within groups	5850.713	361	16.207		
	Total	6081.332	364			
dim4	Between groups	106.072	3	35.357	6.665	0.000
	Within groups	1915.024	361	5.305		
	Total	2021.096	364			
dim5	Between groups	48.415	3	16.138	1.373	0.251
	Within groups	4244.034	361	11.756		
	Total	4292.449	364			
total	Between groups	4706.504	3	1568.835	4.868	0.002
	Within groups	116350.685	361	322.301		
	Total	121057.189	364			

4.4 | The results about the differences in posttraumatic growth due to social status

One-way ANOVA calculated to detect the differences in the PTG due to social status. The findings shown in Tables 15–17.

The results shown in Tables 15 and 16 indicated that there are significant statistical differences due to age in posttraumatic growth PTG (total score and all dimensions) except a heightened sense of gratitude toward life. To determine the direction of these differences, a Scheffe test was used (see results in Table 17).

The results shown in Table 17, indicated that there are differences in the total score of the posttraumatic growth, improved personal relationships in the favor of divorced individuals, while the differences in the new opportunities, increased emotional strength and resilience, greater spiritual connection, and a heightened sense of gratitude toward life dimensions were in the favor of the widower individuals.

4.5 | The results about the differences in posttraumatic growth due to academic degree

One-way ANOVA was calculated to detect the differences in the PTG due to academic degree. The findings were shown in Tables 18–20.

The results shown in Tables 18 and 19 indicated that there are no significant statistical differences due to an academic degree in posttraumatic growth PTG (total score and all dimensions).

4.6 | The results about the differences in posttraumatic growth due to income level

One-way ANOVA calculated to detect the differences in the PTG due to income level. The findings were shown in Tables 20–22.

The results shown in Tables 20 and 21 indicated that there are significant statistical differences due to income level in posttraumatic growth PTG (total score and all dimensions) except new opportunities. To determine the direction of these differences, a Scheffe test was used (see results in Table 22).

As the results shown in Table 22, the differences in the total score of the posttraumatic growth, improved personal relationships, increased emotional strength and resilience and a heightened sense of gratitude toward life dimensions in the favor of the individuals with monthly income (less than 20,000 SAR) group, while the differences in the change in spirituality dimensions were in favor of individual with the monthly income less than 10,000 SAR group.

5 | DISCUSSION

5.1 | Posttraumatic growth level

The findings of this study indicated that the total score of posttraumatic growth due to the outbreak of COVID-19 pandemic were low among the Saudi individuals, while the levels of improved personal relationships, increased emotional strength and resilience, greatest spiritual connection and a heightened sense of gratitude

TABLE 14 The results of Scheffe test for the differences in PTG due to age

Dependent variable	(I) Age	(J) Age	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
dim1	20–30 year	30–40 year	0.69504	0.61700	0.737	-1.0379-	2.4280
		40–50 year	-0.79382-	0.69572	0.729	-2.7479-	1.1602
		50–60 year	-0.70583-	0.83377	0.869	-3.0477-	1.6360
	30–40 year	20–30 year	-0.69504-	0.61700	0.737	-2.4280-	1.0379
		40–50 year	-1.48886-	0.63866	0.145	-3.2827-	0.3050
		50–60 year	-1.40086-	0.78679	0.368	-3.6107-	0.8090
	40–50 year	20–30 year	0.79382	0.69572	0.729	-1.1602-	2.7479
		30–40 year	1.48886	0.63866	0.145	-0.3050-	3.2827
		50–60 year	0.08799	0.84992	1.000	-2.2992-	2.4752
	50–60 year	20–30 year	0.70583	0.83377	0.869	-1.6360-	3.0477
		30–40 year	1.40086	0.78679	0.368	-0.8090-	3.6107
		40–50 year	-0.08799-	0.84992	1.000	-2.4752-	2.2992
dim2	20–30 year	30–40 year	1.27660	0.90872	0.578	-1.2757-	3.8289
		40–50 year	-1.83891-	1.02465	0.360	-4.7169-	1.0391
		50–60 year	-2.48797-	1.22798	0.252	-5.9370-	0.9611
	30–40 year	20–30 year	-1.27660-	0.90872	0.578	-3.8289-	1.2757
		40–50 year	-3.11550-[a]	0.94062	0.013	-5.7574-	-0.4736-
		50–60 year	-3.76457-[a]	1.15878	0.015	-7.0193-	-0.5099-
	40–50 year	20–30 year	1.83891	1.02465	0.360	-1.0391-	4.7169
		30–40 year	3.11550[a]	0.94062	0.013	0.4736	5.7574
		50–60 year	-0.64907-	1.25177	0.966	-4.1649-	2.8668
	50–60 year	20–30 year	2.48797	1.22798	0.252	-0.9611-	5.9370
		30–40 year	3.76457[a]	1.15878	0.015	0.5099	7.0193
		40–50 year	0.64907	1.25177	0.966	-2.8668-	4.1649
dim3	20–30 year	30–40 year	0.44326	0.53606	0.877	-1.0624-	1.9489
		40–50 year	-1.41717-	0.60445	0.141	-3.1149-	0.2805
		50–60 year	-1.22618-	0.72439	0.414	-3.2608-	0.8084
	30–40 year	20–30 year	-0.44326-	0.53606	0.877	-1.9489-	1.0624
		40–50 year	-1.86044-[a]	0.55487	0.011	-3.4189-	-0.3020-
		50–60 year	-1.66944-	0.68357	0.115	-3.5894-	0.2505
	40–50 year	20–30 year	1.41717	0.60445	0.141	-0.2805-	3.1149
		30–40 year	1.86044[a]	0.55487	0.011	0.3020	3.4189
		50–60 year	0.19099	0.73842	0.995	-1.8830-	2.2650
	50–60 year	20–30 year	1.22618	0.72439	0.414	-0.8084-	3.2608
		30–40 year	1.66944	0.68357	0.115	-0.2505-	3.5894
		40–50 year	-0.19099-	0.73842	0.995	-2.2650-	1.8830
dim4	20–30 year	30–40 year	-0.64539-	0.30669	0.221	-1.5068-	0.2160
		40–50 year	-1.23658-[a]	0.34581	0.006	-2.2079-	-0.2653-
		50–60 year	-1.58233-[a]	0.41443	0.003	-2.7464-	-0.4183-
	30–40 year	20–30 year	0.64539	0.30669	0.221	-0.2160-	1.5068
		40–50 year	-0.59119-	0.31745	0.326	-1.4828-	0.3004
		50–60 year	-0.93694-	0.39108	0.127	-2.0354-	0.1615
	40–50 year	20–30 year	1.23658[a]	0.34581	0.006	0.2653	2.2079
		30–40 year	0.59119	0.31745	0.326	-0.3004-	1.4828
		50–60 year	-0.34576-	0.42246	0.880	-1.5323-	0.8408

TABLE 14 (Continued)

Dependent variable	(I) Age	(J) Age	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
	50–60 year	20–30 year	1.58233[a]	0.41443	0.003	0.4183	2.7464
		30–40 year	0.93694	0.39108	0.127	-0.1615-	2.0354
		40–50 year	0.34576	0.42246	0.880	-0.8408-	1.5323
dim5	20–30 year	30–40 year	0.46099	0.45656	0.797	-0.8214-	1.7433
		40–50 year	-0.39767-	0.51480	0.897	-1.8436-	1.0483
		50–60 year	-0.35523-	0.61696	0.954	-2.0881-	1.3776
	30–40 year	20–30 year	-0.46099-	0.45656	0.797	-1.7433-	0.8214
		40–50 year	-0.85866-	0.47258	0.349	-2.1860-	0.4687
		50–60 year	-0.81622-	0.58219	0.580	-2.4514-	0.8190
	40–50 year	20–30 year	0.39767	0.51480	0.897	-1.0483-	1.8436
		30–40 year	0.85866	0.47258	0.349	-0.4687-	2.1860
		50–60 year	0.04244	0.62891	1.000	-1.7240-	1.8089
	50–60 year	20–30 year	0.35523	0.61696	0.954	-1.3776-	2.0881
		30–40 year	0.81622	0.58219	0.580	-0.8190-	2.4514
		40–50 year	-0.04244-	0.62891	1.000	-1.8089-	1.7240
total	20–30 year	30–40 year	2.23050	2.39051	0.832	-4.4838-	8.9448
		40–50 year	-5.68414-	2.69549	0.219	-13.2550-	1.8867
		50–60 year	-6.35754-	3.23037	0.277	-15.4307-	2.7157
	30–40 year	20–30 year	-2.23050-	2.39051	0.832	-8.9448-	4.4838
		40–50 year	-7.91464-[a]	2.47442	0.018	-14.8646-	-0.9647-
		50–60 year	-8.58804-[a]	3.04834	0.049	-17.1500-	-0.0261-
	40–50 year	20–30 year	5.68414	2.69549	0.219	-1.8867-	13.2550
		30–40 year	7.91464[a]	2.47442	0.018	0.9647	14.8646
		50–60 year	-0.67340-	3.29294	0.998	-9.9223-	8.5756
	50–60 year	20–30 year	6.35754	3.23037	0.277	-2.7157-	15.4307
		30–40 year	8.58804[a]	3.04834	0.049	0.0261	17.1500
		40–50 year	0.67340	3.29294	0.998	-8.5756-	9.9223

[a]The mean difference is significant at the 0.05 level.

toward life were high. Tedesch and Calhoun (2004) mentioned that there is a disparity in psychological reactions among individuals, especially in such situations and trauma.

Painful experiences and trauma can cause negative impacts for some, such as anxiety, depression, and sadness. Arnout et al. (2020) and Arnout et al. (2020) emphasized that as a result of the multiple stresses imposed by the escalating outbreak of the Corona epidemic, from increasing physical, social, professional, and spiritual stresses, all members of the study, regardless of gender, nationality, level of learning, marital status, and age, have high levels of psychological problems following the outbreak of the COVID-19. Abu Aisha (2017) and Al-Smadi (2019) point out that trauma is not necessarily followed by a disturbance; it may lead to psychologically and spiritually flourishment.

According to what Tedeschi and McNally (2011) point out, the newer and developed trauma model has revealed the role of many other variables in increasing the potential for growth and psychological prosperity after trauma. The most prominent of these variables is to control the fears associated with traumatic events, cognitive therapy, rumination, the social and cultural context in which trauma occurs, the method and conditions in which therapy is carried out. In addition, Abdul-Basit (2008) points out the importance of social environment characteristics and their vital and effective role in the psychological development of the individual. The mental health of the Saudi individual today is a priority of attention and efforts by the state and its various institutions. The quality of one's life is one of the main pillars of the Kingdom's 2030 vision. Based on an ambitious homeland, a prosperous economy, and a vibrant community, the quality-of-life program is one of the core programs to achieve this vision. This is through improving the living standards of the members of society and their lifestyles and empowering its groups to enjoy a stable and balanced life.

TABLE 15 Descriptive

Variable		N	M	SD	Std. error
					0.45603
	Married	248	14.3710	4.59795	0.29197
	Widower	6	15.3333	6.88961	2.81267
	Divorced	20	18.4000	4.46507	0.99842
	Total	365	14.4712	4.65719	0.24377
dim2	Unmarried	91	17.8901	6.67907	0.70016
	Married	248	19.8911	6.84533	0.43468
	Widower	6	22.5000	8.66603	3.53789
	Divorced	20	24.5500	6.49271	1.45181
	Total	365	19.6904	6.95156	0.36386
dim3	Unmarried	91	12.1319	4.46520	0.46808
	Married	248	13.3024	3.86006	0.24511
	Widower	6	17.0000	3.16228	1.29099
	Divorced	20	15.9000	3.38573	0.75707
	Total	365	13.2137	4.08741	0.21395
dim4	Unmarried	91	6.6374	2.57560	0.27000
	Married	248	7.7419	2.23651	0.14202
	Widower	6	9.5000	0.54772	0.22361
	Divorced	20	8.2000	1.93581	0.43286
	Total	365	7.5205	2.35637	0.12334
dim5	Unmarried	91	9.2088	3.62558	0.38006
	Married	248	10.5444	3.36420	0.21363
	Widower	6	12.3333	1.75119	0.71492
	Divorced	20	11.6000	2.47939	0.55441
	Total	365	10.2986	3.43401	0.17974
total	Unmarried	91	59.6923	18.39063	1.92786
	Married	248	65.8508	17.57131	1.11578
	Widower	6	76.6667	18.06285	7.37413
	Divorced	20	78.6500	16.94038	3.78798
	Total	365	65.1945	18.23663	0.95455

Also included in this model is the relationship of the concept of posttraumatic growth with satisfaction with life and a sense of its meaning as well as wisdom. This in turn is related to the spiritual aspect of individuals, their religious beliefs, and their cultural and social references, according to what Davey et al. (2015) indicated. The Saudi personality is distinguished by high spiritual and religious aspects, as the practice and religious rituals are a pillar and a central part of the individual's daily activities, in addition to the religious instructions they receive. Among the most important religious symbols is the necessity of steadfastness, patience, calculating remuneration, optimism, good thinking in God, trust in him, contentment, and acceptance of his judgment in all the different events, trauma, and life experiences they face. This was confirmed by Abdul-Basit (2008)) in that the growth, prosperity, and mental health are linked to the culture of society and its religious orientation as beliefs, behavioral patterns, and cultures that have the attribute of persistence and permanence in religious societies to eventually form the pillars of knowledge structures of the individual and the group; consequently, these are important factors and have an effective role in bringing about positive changes for members of society. This may explain the high level of dimensions of the concept of posttrauma growth for members of Saudi society.

We also see that the nature of the age and its speed and ease of access to information and psychological services, especially when we are in the age of globalization and the explosion of knowledge, had the greatest impact on the high level of individuals in all its segments and their different levels and educational qualifications. This result is consistent with the findings of Al-Abassadah and Abu Yousef (2015), Abu Al-Qasman (2016), and Abu Aisha (2017) that indicated that there were no differences in the level of posttraumatic growth according to the educational level or an academic degree variable.

According to McMillen et al. (1996), the individuals who invest in disasters and shocks can get rid of the distress of posttraumatic stress,

TABLE 16 ANOVA

		Sum of squares	*df*	Mean square	*F*	Sig.
dim1	Between groups	353.757	3	117.919	5.645	0.001
	Within groups	7541.191	361	20.890		
	Total	7894.948	364			
dim2	Between groups	824.605	3	274.868	5.919	0.001
	Within groups	16765.412	361	46.442		
	Total	17590.016	364			
dim3	Between groups	338.795	3	112.932	7.099	0.000
	Within groups	5742.536	361	15.907		
	Total	6081.332	364			
dim4	Between groups	115.879	3	38.626	7.319	0.000
	Within groups	1905.217	361	5.278		
	Total	2021.096	364			
dim5	Between groups	181.771	3	60.590	5.321	0.001
	Within groups	4110.678	361	11.387		
	Total	4292.449	364			
total	Between groups	7272.441	3	2424.147	7.691	0.000
	Within groups	113784.748	361	315.193		
	Total	121057.189	364			

then it fades with time and this in turn is due to the personality traits of the individual before the crises and sudden shocks, which he formed through formation during the previous stages of his life, which makes them able to adapt to the challenges of life and benefit from their experiences and achieve personal growth, while those who do not invest in and benefit from shocks, the distress of posttraumatic stress continues with them, perhaps for many years (refereed in Shaaban, 2013).

This is confirmed by Murph et al. (2015) who state that individuals seek to search for new experiences and the desire to engage in them, and to practice activities that produce positive results is a contributing factor to their growth after trauma; therefore individuals who develop posttrauma are individuals who enjoy a good amount of self-motivation toward life and its experiences. While the results of Zhang et al. (2015) referred to in Younis (2018) concluded that the most important dimensions of trauma growth are: communication with others, personal strength, a new style and philosophy in life and appreciation of it, and finally spiritual elevation. Perhaps it is appropriate here to point out that 70% of individuals are exposed to at least one trauma in their lives, and that most traumatic events do not yet form distress posttraumatic stress, the average of those who suffer from posttraumatic stress disorder is (4%) and in a subsequent study (5.6%), and this percentage does not seem large compared to the percentage of those expected to survive mental disorders.

This study results indicated that the Saudi society's awareness of the stresses of COVID-19 pandemic outbreak was less. Likewise, the spirituality enjoyed by the Saudi personality, resorting to God through prayer and supplication in crises, psychological resilience, and hardiness in the face of adversity, also reduced the influence of the COVID- 19 pandemic outbreak. Arnout (2004, 2019), Arnout & Almoied (2020), and Arnout and Abdelmotelab (2020) found that the spirituality and resilience moderate the negative effects of the stresses on the mental health components.

The high levels in the dimensions of the posttrauma growth scale, except for the first dimension and the total score of the PTG scale, are due to the procedures that the Kingdom of Saudi Arabia take such as the financial, health, and societal supports for the community members, and what they have implemented in terms of home quarantine procedures have alleviated feelings of anxiety and fears of affection with COVID-19.

5.2 | The differences in PTG according to demographic variables

5.2.1 | Sex

The results of this study revealed that there are significant statistical differences between males and females in PTG, the differences were in favor of females. These differences may resulting from the psychological nature of the woman and thier contemplative thinking. Afaneh & Lulu (2002) indicated that female superiority over the male in the level of thinking meditative, which in turn is an effective contributor to the high level of satisfaction with life. Al-Sufyani (2017) found a positive correlation between life statisfaction and the ability to think contemplatively because the practice of contemplative thinking has an effective positive

TABLE 17 The results of Scheffe test for the differences in PTG due to social status

Dependent variable	(I) Social status	(J) Social status	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
dim1	Unmarried	Married	-0.54679-	0.56017	0.813	-2.1202-	1.0266
		Widower	-1.50916-	1.92644	0.893	-6.9200-	3.9017
		Divorced	-4.57582-[a]	1.12874	0.001	-7.7461-	-1.4055-
	Married	Unmarried	0.54679	0.56017	0.813	-1.0266-	2.1202
		Widower	-0.96237-	1.88835	0.967	-6.2662-	4.3415
		Divorced	-4.02903-[a]	1.06241	0.003	-7.0131-	-1.0450-
	Widower	Unmarried	1.50916	1.92644	0.893	-3.9017-	6.9200
		Married	0.96237	1.88835	0.967	-4.3415-	6.2662
		Divorced	-3.06667-	2.12746	0.557	-9.0421-	2.9088
	Divorced	Unmarried	4.57582[a]	1.12874	0.001	1.4055	7.7461
		Married	4.02903[a]	1.06241	0.003	1.0450	7.0131
		Widower	3.06667	2.12746	0.557	-2.9088-	9.0421
dim2	Unmarried	Married	-2.00102-	0.83523	0.127	-4.3470-	0.3449
		Widower	-4.60989-	2.87239	0.463	-12.6776-	3.4578
		Divorced	-6.65989-[a]	1.68298	0.002	-11.3869-	-1.9329-
	Married	Unmarried	2.00102	0.83523	0.127	-0.3449-	4.3470
		Widower	-2.60887-	2.81559	0.835	-10.5171-	5.2993
		Divorced	-4.65887-[a]	1.58409	0.036	-9.1081-	-0.2096-
	Widower	Unmarried	4.60989	2.87239	0.463	-3.4578-	12.6776
		Married	2.60887	2.81559	0.835	-5.2993-	10.5171
		Divorced	-2.05000-	3.17212	0.937	-10.9596-	6.8596
	Divorced	Unmarried	6.65989[a]	1.68298	0.002	1.9329	11.3869
		Married	4.65887[a]	1.58409	0.036	0.2096	9.1081
		Widower	2.05000	3.17212	0.937	-6.8596-	10.9596
dim3	Unmarried	Married	-1.17055-	0.48882	0.127	-2.5435-	0.2024
		Widower	-4.86813-[a]	1.68108	0.040	-9.5898-	-0.1465-
		Divorced	-3.76813-[a]	0.98497	0.002	-6.5346-	-1.0016-
	Married	Unmarried	1.17055	0.48882	0.127	-0.2024-	2.5435
		Widower	-3.69758-	1.64783	0.171	-8.3259-	0.9307
		Divorced	-2.59758-	0.92710	0.051	-5.2015-	0.0064
	Widower	Unmarried	4.86813[a]	1.68108	0.040	0.1465	9.5898
		Married	3.69758	1.64783	0.171	-0.9307-	8.3259
		Divorced	1.10000	1.85650	0.950	-4.1144-	6.3144
	Divorced	Unmarried	3.76813[a]	0.98497	0.002	1.0016	6.5346
		Married	2.59758	0.92710	0.051	-0.0064-	5.2015
		Widower	-1.10000-	1.85650	0.950	-6.3144-	4.1144
dim4	Unmarried	Married	-1.10457-[a]	0.28156	0.002	-1.8954-	-0.3137-
		Widower	-2.86264-[a]	0.96830	0.034	-5.5823-	-0.1430-
		Divorced	-1.56264-	0.56734	0.057	-3.1561-	0.0309
	Married	Unmarried	1.10457[a]	0.28156	0.002	0.3137	1.8954
		Widower	-1.75806-	0.94915	0.331	-4.4240-	0.9078
		Divorced	-0.45806-	0.53400	0.865	-1.9579-	1.0418
	Widower	Unmarried	2.86264[a]	0.96830	0.034	0.1430	5.5823
		Married	1.75806	0.94915	0.331	-0.9078-	4.4240
		Divorced	1.30000	1.06934	0.688	-1.7035-	4.3035

TABLE 17 (Continued)

Dependent variable	(I) Social status	(J) Social status	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
	Divorced	Unmarried	1.56264	0.56734	0.057	-0.0309-	3.1561
		Married	0.45806	0.53400	0.865	-1.0418-	1.9579
		Widower	-1.30000-	1.06934	0.688	-4.3035-	1.7035
dim5	Unmarried	Married	-1.33556-[a]	0.41358	0.016	-2.4972-	-0.1739-
		Widower	-3.12454-	1.42230	0.187	-7.1194-	0.8703
		Divorced	-2.39121-[a]	0.83335	0.043	-4.7319-	-0.0506-
	Married	Unmarried	1.33556[a]	0.41358	0.016	0.1739	2.4972
		Widower	-1.78898-	1.39418	0.649	-5.7048-	2.1269
		Divorced	-1.05565-	0.78439	0.613	-3.2588-	1.1475
	Widower	Unmarried	3.12454	1.42230	0.187	-0.8703-	7.1194
		Married	1.78898	1.39418	0.649	-2.1269-	5.7048
		Divorced	0.73333	1.57072	0.975	-3.6784-	5.1451
	Divorced	Unmarried	2.39121[a]	0.83335	0.043	0.0506	4.7319
		Married	1.05565	0.78439	0.613	-1.1475-	3.2588
		Widower	-0.73333-	1.57072	0.975	-5.1451-	3.6784
total	Unmarried	Married	-6.15850-[a]	2.17591	0.047	-12.2700-	-0.0470-
		Widower	-16.97436-	7.48304	0.163	-37.9921-	4.0434
		Divorced	-18.95769-[a]	4.38444	0.000	-31.2724-	-6.6430-
	Married	Unmarried	6.15850[a]	2.17591	0.047	0.0470	12.2700
		Widower	-10.81586-	7.33506	0.538	-31.4180-	9.7863
		Divorced	-12.79919-[a]	4.12681	0.023	-24.3903-	-1.2081-
	Widower	Unmarried	16.97436	7.48304	0.163	-4.0434-	37.9921
		Married	10.81586	7.33506	0.538	-9.7863-	31.4180
		Divorced	-1.98333-	8.26389	0.996	-25.1943-	21.2276
	Divorced	Unmarried	18.95769[a]	4.38444	0.000	6.6430	31.2724
		Married	12.79919[a]	4.12681	0.023	1.2081	24.3903
		Widower	1.98333	8.26389	0.996	-21.2276-	25.1943

[a]The mean difference is significant at the 0.05 level.

effect in clarifying and observing life situations and experiences to reach better and more responsive behavioral changes and wisdom that directly contributes to the balance and stability of the individual psychological and then his feeling of satisfaction with life and its events then bringing concrete growth and prosperity from different life experiences and events; this may explain the differences in the level of posttraumatic growth in favor of females. In addition, Abdul-Basit (2008) state that experimental studies indicate that females are more likely to grow and invest results.

This result is consistent with the Tedesch and Calhoun's (2004) study that indicated that there are differences in the level of posttraumatic growth between males and females, as well as the Abu Aisha's (2017) study, which indicated that there are differences in posttraumatic growth depending on the gender variable in favor of females.

Academic degree

The findings of this study indicated that there are no differences in PTG due to an academic degree. This result can interpret in the light of the intensive awareness campaigns by the official recruiting agencies from the state for this task, such as the National Center for Mental Health Promotion, which had scheduled tasks during the crisis period to receive psychological and family counseling, in addition to continuous training that were centered the basic rehabilitation and empowerment of individuals and families on how to deal with the crisis and overcome it in peace, growth, and prosperity, and invest it in self-development and documenting family relations and accomplishing deferred tasks, and not to be immersed in the details of the exhausted and useless crisis, which increased the psychological ability of individuals and had a specific in facing and overcoming the repercussions of these the global COVID-19 pandemic. There were also clear and

TABLE 18 Descriptive

		N	M	SD	Std. error
					0.75426
	University education level	262	14.5878	4.69510	0.29006
	Master degree	52	14.3846	4.35284	0.60363
	PhD degree	8	15.7500	5.67576	2.00669
	Primary school level	3	12.0000	1.73205	1.00000
	Total	365	14.4712	4.65719	0.24377
dim2	Middle school level	40	19.9750	7.00362	1.10737
	University education level	262	19.4351	6.94157	0.42885
	Master degree	52	20.8654	7.04893	0.97751
	PhD degree	8	19.6250	8.03452	2.84063
	Primary school level	3	18.0000	2.64575	1.52753
	Total	365	19.6904	6.95156	0.36386
dim3	Middle school level	40	13.2750	3.73471	0.59051
	University education level	262	13.1565	4.16728	0.25746
	Master degree	52	13.5000	4.18447	0.58028
	PhD degree	8	13.5000	3.66450	1.29560
	Primary school level	3	11.6667	1.52753	0.88192
	Total	365	13.2137	4.08741	0.21395
dim4	Middle school level	40	8.0250	2.17783	0.34435
	University education level	262	7.4733	2.37912	0.14698
	Master degree	52	7.4808	2.40498	0.33351
	PhD degree	8	7.0000	2.50713	0.88641
	Primary school level	3	7.0000	1.73205	1.00000
	Total	365	7.5205	2.35637	0.12334
dim5	Middle school level	40	9.6250	3.17593	0.50216
	University education level	262	10.3092	3.51459	0.21713
	Master degree	52	10.7885	3.23181	0.44817
	PhD degree	8	10.1250	3.94380	1.39434
	Primary school level	3	10.3333	1.15470	0.66667
	Total	365	10.2986	3.43401	0.17974
total	Middle school level	40	64.6500	18.25398	2.88621
	University education level	262	64.9618	18.33340	1.13264
	Master degree	52	67.0192	18.14267	2.51594
	PhD degree	8	66.0000	21.23340	7.50714
	Primary school level	3	59.0000	6.08276	3.51188
	Total	365	65.1945	18.23663	0.95455

diversified efforts in the nonprofit sector represented by charitable societies as well as academics and psychologists who volunteered to provide treatment, preventive and development advisory programs as well as to provide free and extensive free consultations on a large scale covering all regions of the Kingdom of the Saudi Arabia.

Age

The results indicate that there is a significant statistical difference in PTG due to age in the favor of the individuals belonging to the 40–50 and 50–60 year group. As for the high level of posttraumatic growth in individuals in the age range of 40–60, the researchers attribute these results to the nature of this age stage and its characteristics. According to Erikson's theory of psychosocial development, which indicates that individuals at this stage (middle age stage) are considered in the stage of production and creativity to be distinguished in life at the personal level of the individual surrounding them from the family (whether the partner or children) they are keen to provide opportunities for a good life, and Erikson also indicated that they are candidates for developing their feelings on production, growth, and prosperity (Abdel-Moati & Qenawy, 2010), and the nature of this stage may be a strong motivation for its members to invest all available opportunities that they face,

TABLE 19 ANOVA

Variables		Sum of squares	*df*	Mean square	*F*	Sig.
dim1	Between groups	56.159	4	14.040	0.645	0.631
	Within groups	7838.789	360	21.774		
	Total	7894.948	364			
dim2	Between groups	100.712	4	25.178	0.518	0.722
	Within groups	17489.305	360	48.581		
	Total	17590.016	364			
dim3	Between groups	13.106	4	3.276	0.194	0.941
	Within groups	6068.226	360	16.856		
	Total	6081.332	364			
dim4	Between groups	13.827	4	3.457	0.620	0.649
	Within groups	2007.269	360	5.576		
	Total	2021.096	364			
dim5	Between groups	30.902	4	7.725	0.653	0.625
	Within groups	4261.548	360	11.838		
	Total	4292.449	364			
total	Between groups	319.490	4	79.872	0.238	0.917
	Within groups	120737.699	360	335.382		
	Total	121057.189	364			

including traumatic events such as COVID-19 pandemic crisis; this may justify this category having high levels of PTSD.

Social status

The results of this study showed that there are significant statistical differences in PTG due to the social status variable; these differences were in favor of divorces and widows persons. We can interpret these results to the fact that the category of divorced and widowed women is not subjected to marital stresses and differences compared to the married people as a result of the precautionary procedures and conditions of home quarantine imposed by the state as preventive methods that may be a contribution to raising the level of challenges and psychological stresses in conjunction with the repercussions of the crisis and its psychological effects. As well as, we can say that divorcees and widows did not come under more psychological and financial stresses and responsibilities during the crisis, such as the economic and financial stresses that singles and married are exposed to. Moreover, the married couples face many family financial problems faced toward their partners and children, as well as radically changing lifestyle.

Divorces and widows individuals received intense and multiple psychological, financial, and social support during the COVID-19 crisis that contributed to the transformation and prosperity of their life more than it was before the crisis, as it has the attention and sympathy of the official and nonprofit institutions of the state, and all members of society work to enable and support them in various forms and in various fields before the COVID-19 crisis occurred and during the crisis, and also what might lead us to say that it is the biggest winner in this global COVID-19 pandemic.

The Kingdom of Saudi Arabia provides assistance to people with special circumstances, including divorcees, widows, the elderly, and low-income people. Therefore, these groups were the highest in the positive changes or posttraumatic growth PTG after the COVID-19 pandemic outbreak from other groups in the Saudi society. This is due to the increased awareness of the Saudi Arabia government of the stresses these groups are experiencing, which increases their needs for aid, especially in times of disasters and crises. As well as the nature of Saudi society as an Islamic society based on the principle of social solidarity, and the proliferation of voluntary charitable institutions that provide aid and assistance to all groups of society, including widowed, divorced, and low-income individuals. As in light of the spread of the COVID-19 pandemic, many charitable organizations have contributed to their efforts to help community members to mitigate the negative effects and provide financial and moral support.

6 | LIMITATIONS AND FUTURE DIRECTIONS

The limitations of this study include that it was applied to a survey cross-sectional design, which revealed the level of PTG among the sample of the study and also detected the effect of demographic variables on PTG. Thus, we need future experimental studies to reveal the effectiveness of the counseling and psychotherapy programs to

TABLE 20 Descriptive

Variables		*N*	Mean	*SD*	Std. error
					0.46455
	Less than 10,000 SAR	102	14.0490	4.47961	0.44355
	Less than 20,000 SAR	119	15.2185	4.56991	0.41892
	Less than 30,000 SAR	23	13.1304	4.48537	0.93527
	More than 30,000 SAR	11	14.7273	4.94148	1.48991
	Total	365	14.4712	4.65719	0.24377
dim2	Less than 5000 SAR	110	19.0182	7.33845	0.69969
	Less than 10,000 SAR	102	19.2941	6.58319	0.65183
	Less than 20,000 SAR	119	21.1092	6.80452	0.62377
	Less than 30,000 SAR	23	16.9130	6.74815	1.40709
	More than 30,000 SAR	11	20.5455	6.21874	1.87502
	Total	365	19.6904	6.95156	0.36386
dim3	Less than 5000 SAR	110	13.0818	3.96575	0.37812
	Less than 10,000 SAR	102	13.3333	4.51254	0.44681
	Less than 20,000 SAR	119	13.7311	3.65851	0.33538
	Less than 30,000 SAR	23	10.6087	4.63915	0.96733
	More than 30,000 SAR	11	13.2727	2.57258	0.77566
	Total	365	13.2137	4.08741	0.21395
dim4	Less than 5000 SAR	110	7.2000	2.57653	0.24566
	Less than 10,000 SAR	102	7.9020	2.17324	0.21518
	Less than 20,000 SAR	119	7.8151	2.09910	0.19242
	Less than 30,000 SAR	23	5.6957	2.63602	0.54965
	More than 30,000 SAR	11	7.8182	1.83402	0.55298
	Total	365	7.5205	2.35637	0.12334
dim5	Less than 5000 SAR	110	10.0545	3.39950	0.32413
	Less than 10,000 SAR	102	10.4314	3.56970	0.35345
	Less than 20,000 SAR	119	10.8655	3.09161	0.28341
	Less than 30,000 SAR	23	8.2174	4.06712	0.84805
	More than 30,000 SAR	11	9.7273	3.22772	0.97319
	Total	365	10.2986	3.43401	0.17974
total	Less than 5000 SAR	110	63.6636	18.86567	1.79877
	Less than 10,000 SAR	102	65.0098	17.81783	1.76423
	Less than 20,000 SAR	119	68.7395	17.11252	1.56870
	Less than 30,000 SAR	23	54.5652	21.10757	4.40123
	More than 30,000 SAR	11	66.0909	12.15281	3.66421
	Total	365	65.1945	18.23663	0.95455

relieve the negative effects of COVID-19 pandemic for the individuals.

7 | CONCLUSION

The study findings highlighting the importance of the counseling and psychotherapy service centers in the Kingdom of Saudi Arabia help Saudi individuals who suffer from the negative effects of the stresses related to the COVID-19 pandemic outbreak symptoms such as anxiety, depression, and obsessive compulsive. The results of this study confirm the importance of all individuals collaborate together to alleviate the pandemic stresses of COVID-19, especially health and psychological care providers. We need to prepare counseling programs to raise people's awareness about self and life and how to manage it; and to achieve high levels of quality of life in line with the aims of Vision 2030. The results of these studies emphasized the importance of preparing guidance programs to develop hardiness and psychological resilience among members of Saudi society. As well as, we need to educate the members of the society in their various age stages about the importance of contemplative thinking about life events

TABLE 21 ANOVA

Variables		Sum of squares	*df*	Mean square	*F*	Sig.
dim1	Between groups	129.592	4	32.398	1.502	0.201
	Within groups	7765.356	360	21.570		
	Total	7894.948	364			
dim2	Between groups	490.743	4	122.686	2.583	0.037
	Within groups	17099.273	360	47.498		
	Total	17590.016	364			
dim3	Between groups	191.346	4	47.837	2.924	0.021
	Within groups	5889.985	360	16.361		
	Total	6081.332	364			
dim4	Between groups	114.038	4	28.509	5.382	0.000
	Within groups	1907.058	360	5.297		
	Total	2021.096	364			
dim5	Between groups	149.813	4	37.453	3.255	0.012
	Within groups	4142.636	360	11.507		
	Total	4292.449	364			
total	Between groups	4364.159	4	1091.040	3.366	0.010
	Within groups	116693.030	360	324.147		
	Total	121057.189	364			

TABLE 22 The results of Scheffe test for the differences in PTG due to income level

Dependent variable	(I) Income level	(J) Income level	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
dim1	Less than 5000 SAR	Less than 10,000 SAR	0.26007	0.63841	0.997	-1.7166-	2.2368
		Less than 20,000 SAR	-0.90940-	0.61430	0.701	-2.8114-	0.9926
		Less than 30,000 SAR	1.17866	1.06487	0.874	-2.1185-	4.4758
		More than 30,000 SAR	-0.41818-	1.46869	0.999	-4.9657-	4.1293
	Less than 10,000 SAR	Less than 5000 SAR	-0.26007-	0.63841	0.997	-2.2368-	1.7166
		Less than 20,000 SAR	-1.16947-	0.62669	0.482	-3.1099-	0.7709
		Less than 30,000 SAR	0.91858	1.07206	0.947	-2.4008-	4.2380
		More than 30,000 SAR	-0.67825-	1.47391	0.995	-5.2419-	3.8854
	Less than 20,000 SAR	Less than 5000 SAR	0.90940	0.61430	0.701	-0.9926-	2.8114
		Less than 10,000 SAR	1.16947	0.62669	0.482	-0.7709-	3.1099
		Less than 30,000 SAR	2.08805	1.05788	0.422	-1.1874-	5.3635
		More than 30,000 SAR	0.49121	1.46363	0.998	-4.0406-	5.0230
	Less than 30,000 SAR	Less than 5000 SAR	-1.17866-	1.06487	0.874	-4.4758-	2.1185
		Less than 10,000 SAR	-0.91858-	1.07206	0.947	-4.2380-	2.4008
		Less than 20,000 SAR	-2.08805-	1.05788	0.422	-5.3635-	1.1874
		More than 30,000 SAR	-1.59684-	1.70258	0.927	-6.8685-	3.6748
	More than 30,000 SAR	Less than 5000 SAR	0.41818	1.46869	0.999	-4.1293-	4.9657
		Less than 10,000 SAR	0.67825	1.47391	0.995	-3.8854-	5.2419
		Less than 20,000 SAR	-0.49121-	1.46363	0.998	-5.0230-	4.0406
		Less than 30,000 SAR	1.59684	1.70258	0.927	-3.6748-	6.8685
dim2	Less than 5000 SAR	Less than 10,000 SAR	-0.27594-	0.94735	0.999	-3.2092-	2.6573
		Less than 20,000 SAR	-2.09106-	0.91156	0.264	-4.9135-	0.7314
		Less than 30,000 SAR	2.10514	1.58017	0.777	-2.7875-	6.9978

(Continues)

TABLE 22 (Continued)

Dependent variable	(I) Income level	(J) Income level	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
		More than 30,000 SAR	-1.52727-	2.17940	0.974	-8.2753-	5.2208
	Less than 10,000 SAR	Less than 5000 SAR	0.27594	0.94735	0.999	-2.6573-	3.2092
		Less than 20,000 SAR	-1.81513-	0.92995	0.434	-4.6945-	1.0643
		Less than 30,000 SAR	2.38107	1.59085	0.692	-2.5446-	7.3068
		More than 30,000 SAR	-1.25134-	2.18716	0.988	-8.0234-	5.5207
	Less than 20,000 SAR	Less than 5000 SAR	2.09106	0.91156	0.264	-0.7314-	4.9135
		Less than 10,000 SAR	1.81513	0.92995	0.434	-1.0643-	4.6945
		Less than 30,000 SAR	4.19620	1.56980	0.131	-0.6643-	9.0567
		More than 30,000 SAR	0.56379	2.17190	0.999	-6.1610-	7.2886
	Less than 30,000 SAR	Less than 5000 SAR	-2.10514-	1.58017	0.777	-6.9978-	2.7875
		Less than 10,000 SAR	-2.38107-	1.59085	0.692	-7.3068-	2.5446
		Less than 20,000 SAR	-4.19620-	1.56980	0.131	-9.0567-	0.6643
		More than 30,000 SAR	-3.63241-	2.52649	0.723	-11.4551-	4.1903
	More than 30,000 SAR	Less than 5000 SAR	1.52727	2.17940	0.974	-5.2208-	8.2753
		Less than 10,000 SAR	1.25134	2.18716	0.988	-5.5207-	8.0234
		Less than 20,000 SAR	-0.56379-	2.17190	0.999	-7.2886-	6.1610
		Less than 30,000 SAR	3.63241	2.52649	0.723	-4.1903-	11.4551
dim3	Less than 5000 SAR	Less than 10,000 SAR	-0.25152-	0.55600	0.995	-1.9731-	1.4700
		Less than 20,000 SAR	-0.64927-	0.53500	0.831	-2.3058-	1.0072
		Less than 30,000 SAR	2.47312	0.92741	0.133	-0.3984-	5.3446
		More than 30,000 SAR	-0.19091-	1.27910	1.000	-4.1514-	3.7696
	Less than 10,000 SAR	Less than 5000 SAR	0.25152	0.55600	0.995	-1.4700-	1.9731
		Less than 20,000 SAR	-0.39776-	0.54579	0.970	-2.0877-	1.2922
		Less than 30,000 SAR	2.72464	0.93368	0.077	-0.1663-	5.6156
		More than 30,000 SAR	0.06061	1.28366	1.000	-3.9140-	4.0352
	Less than 20,000 SAR	Less than 5000 SAR	0.64927	0.53500	0.831	-1.0072-	2.3058
		Less than 10,000 SAR	0.39776	0.54579	0.970	-1.2922-	2.0877
		Less than 30,000 SAR	3.12240[a]	0.92132	0.023	0.2697	5.9751
		More than 30,000 SAR	0.45837	1.27470	0.998	-3.4885-	4.4052
	Less than 30,000 SAR	Less than 5000 SAR	-2.47312-	0.92741	0.133	-5.3446-	0.3984
		Less than 10,000 SAR	-2.72464-	0.93368	0.077	-5.6156-	0.1663
		Less than 20,000 SAR	-3.12240-[a]	0.92132	0.023	-5.9751-	-0.2697-
		More than 30,000 SAR	-2.66403-	1.48281	0.521	-7.2552-	1.9272
	More than 30,000 SAR	less than 5000 SAR	0.19091	1.27910	1.000	-3.7696-	4.1514
		Less than 10,000 SAR	-0.06061-	1.28366	1.000	-4.0352-	3.9140
		Less than 20,000 SAR	-0.45837-	1.27470	0.998	-4.4052-	3.4885
		Less than 30,000 SAR	2.66403	1.48281	0.521	-1.9272-	7.2552
dim4	Less than 5000 SAR	Less than 10,000 SAR	-0.70196-	0.31638	0.297	-1.6815-	0.2776
		Less than 20,000 SAR	-0.61513-	0.30442	0.396	-1.5577-	0.3275
		Less than 30,000 SAR	1.50435	0.52771	0.089	-0.1296-	3.1383
		More than 30,000 SAR	-0.61818-	0.72783	0.949	-2.8718-	1.6354
	Less than 10,000 SAR	Less than 5000 SAR	0.70196	0.31638	0.297	-0.2776-	1.6815
		Less than 20,000 SAR	0.08683	0.31057	0.999	-0.8748-	1.0484
		Less than 30,000 SAR	2.20631[a]	0.53128	0.002	0.5613	3.8513

TABLE 22 (Continued)

Dependent variable	(I) Income level	(J) Income level	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
		More than 30,000 SAR	0.08378	0.73042	1.000	-2.1778-	2.3454
	Less than 20,000 SAR	Less than 5000 SAR	0.61513	0.30442	0.396	-0.3275-	1.5577
		Less than 10,000 SAR	-0.08683-	0.31057	0.999	-1.0484-	0.8748
		Less than 30,000 SAR	2.11947[a]	0.52425	0.003	0.4963	3.7427
		More than 30,000 SAR	-0.00306-	0.72532	1.000	-2.2489-	2.2428
	Less than 30,000 SAR	Less than 5000 SAR	-1.50435-	0.52771	0.089	-3.1383-	0.1296
		Less than 10,000 SAR	-2.20631-[a]	0.53128	0.002	-3.8513-	-0.5613-
		Less than 20,000 SAR	-2.11947-[a]	0.52425	0.003	-3.7427-	-0.4963-
		More than 30,000 SAR	-2.12253-	0.84374	0.178	-4.7350-	0.4899
	More than 30,000 SAR	Less than 5000 SAR	0.61818	0.72783	0.949	-1.6354-	2.8718
		Less than 10,000 SAR	-0.08378-	0.73042	1.000	-2.3454-	2.1778
		Less than 20,000 SAR	0.00306	0.72532	1.000	-2.2428-	2.2489
		Less than 30,000 SAR	2.12253	0.84374	0.178	-0.4899-	4.7350
dim5	Less than 5000 SAR	Less than 10,000 SAR	-0.37683-	0.46629	0.957	-1.8206-	1.0669
		Less than 20,000 SAR	-0.81100-	0.44868	0.515	-2.2002-	0.5782
		Less than 30,000 SAR	1.83715	0.77777	0.235	-0.5711-	4.2454
		More than 30,000 SAR	0.32727	1.07272	0.999	-2.9942-	3.6487
	Less than 10,000 SAR	Less than 5000 SAR	0.37683	0.46629	0.957	-1.0669-	1.8206
		Less than 20,000 SAR	-0.43417-	0.45773	0.924	-1.8514-	0.9831
		Less than 30,000 SAR	2.21398	0.78303	0.094	-0.2105-	4.6385
		More than 30,000 SAR	0.70410	1.07654	0.980	-2.6292-	4.0374
	Less than 20,000 SAR	Less than 5000 SAR	0.81100	0.44868	0.515	-0.5782-	2.2002
		Less than 10,000 SAR	0.43417	0.45773	0.924	-0.9831-	1.8514
		Less than 30,000 SAR	2.64815[a]	0.77267	0.021	0.2558	5.0406
		ore than 30,000 SAR	1.13827	1.06903	0.889	-2.1717-	4.4483
	Less than 30,000 SAR	Less than 5000 SAR	-1.83715-	0.77777	0.235	-4.2454-	0.5711
		Less than 10,000 SAR	-2.21398-	0.78303	0.094	-4.6385-	0.2105
		Less than 20,000 SAR	-2.64815-[a]	0.77267	0.021	-5.0406-	-0.2558-
		More than 30,000 SAR	-1.50988-	1.24356	0.831	-5.3603-	2.3405
	More than 30,000 SAR	Less than 5000 SAR	-0.32727-	1.07272	0.999	-3.6487-	2.9942
		Less than 10,000 SAR	-0.70410-	1.07654	0.980	-4.0374-	2.6292
		Less than 20,000 SAR	-1.13827-	1.06903	0.889	-4.4483-	2.1717
		Less than 30,000 SAR	1.50988	1.24356	0.831	-2.3405-	5.3603
total	Less than 5000 SAR	Less than 10,000 SAR	-1.34617-	2.47481	0.990	-9.0089-	6.3166
		Less than 20,000 SAR	-5.07586-	2.38133	0.339	-12.4491-	2.2974
		Less than 30,000 SAR	9.09842	4.12797	0.304	-3.6830-	21.8798
		More than 30,000 SAR	-2.42727-	5.69339	0.996	-20.0556-	15.2011
	Less than 10,000 SAR	Less than 5000 SAR	1.34617	2.47481	0.990	-6.3166-	9.0089
		Less than 20,000 SAR	-3.72969-	2.42937	0.671	-11.2517-	3.7923
		Less than 30,000 SAR	10.44459	4.15587	0.179	-2.4232-	23.3123
		More than 30,000 SAR	-1.08111-	5.71365	1.000	-18.7722-	16.6100
	Less than 20,000 SAR	Less than 5000 SAR	5.07586	2.38133	0.339	-2.2974-	12.4491
		Less than 10,000 SAR	3.72969	2.42937	0.671	-3.7923-	11.2517
		Less than 30,000 SAR	14.17428[a]	4.10089	0.019	1.4768	26.8718

(Continues)

TABLE 22 (Continued)

Dependent variable	(I) Income level	(J) Income level	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
		More than 30,000 SAR	2.64859	5.67379	0.994	-14.9191-	20.2162
	Less than 30,000 SAR	Less than 5000 SAR	-9.09842-	4.12797	0.304	-21.8798-	3.6830
		Less than 10,000 SAR	-10.44459-	4.15587	0.179	-23.3123-	2.4232
		Less than 20,000 SAR	-14.17428-[a]	4.10089	0.019	-26.8718-	-1.4768-
		More than 30,000 SAR	-11.52569-	6.60010	0.550	-31.9615-	8.9101
	More than 30,000 SAR	Less than 5000 SAR	2.42727	5.69339	0.996	-15.2011-	20.0556
		Less than 10,000 SAR	1.08111	5.71365	1.000	-16.6100-	18.7722
		Less than 20,000 SAR	-2.64859-	5.67379	0.994	-20.2162-	14.9191
		Less than 30,000 SAR	11.52569	6.60010	0.550	-8.9101-	31.9615

[a]The mean difference is significant at the 0.05 level.

and its positive impact to reach high levels of psychological well-being and encouraging them to employ and invest their mental abilities and skills to cope with different life challenges and situations.

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CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Not applicable.

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