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Fear of the Unknown among Normal People, People with Psychological Disorders, and People with Organic Disorders in the Light of Some Demographic Variables

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Abstract: The present paper aimed to determine the fear of the unknown among normal people, people with psychological disorders, and people with organic disorders in the light of some demographic variables. The authors adopted the descriptive-comparative method and developed and applied a three-domain questionnaire to a randomly selected sample of (942) participants. The results showed that the people with psychological disorders suffer from fear of the unknown more than normal people and people with organic disorders at a significance level of (0.05). There were no statistically significant differences between the different categories of psychological disorders (including generalized anxiety disorder, depression, panic attacks, post-traumatic stress disorder, obsessive-compulsive disorder, and phobia) in contrast with the organic diseases, in which cardiac and respiratory diseases were at a greater risk of being afraid of the unknown more than those with diabetes, blood pressure, and thyroid. The paper recommends conducting further studies on the concept of fear of the unknown in the Arab countries and adopting fear of the unknown as a psychological intervention for people with psychological disorders and people with cardiac and respiratory diseases.

Keywords: Fear of the Unknown, Normal People, Psychological Disorders, Organic Disorders, Demographic Variables.

Introduction

Fear of the unknown is one of the main factors that have a great impact on human psychological compatibility and the ability to satisfy personal needs in socially acceptable ways. Therefore, it is necessary to control fear of the known to achieve psychological compatibility to face and solve the other stresses that differ in severity and continuity, especially in a period of fast change. People with fear-related disorders are at risk of reacting with exaggerated anticipatory anxiety as a response to a vague and uncertain threat. Almost all the psychological and fear-related disorders are the outcomes of either the excessive fear of the unknown or the uncertain and vague threats [1]. Based on their work and direct contact with people with psychological disorders, the authors found out that several anxiety disorders, including panic disorder, social anxiety disorder, and phobia, have a common response to the general feelings of apprehension and a rising reaction because of the disability to expect vague threats.

According to Carleton [2], fear of the unknown is a noticeable lack of information, and the individual disability to cope with the aversive response because of such uncertainty. As a result, the individuals have negative feelings toward life situations that are uncertain in some way. They consciously realize their lack of information at the response level. Therefore, the authors adopted a three-domain scale to measure the features of fear of the unknown by calculating the degrees of the examined participants**.**

Because people are rational enough, they always attempt to analyze and understand the outcomes of new unknown situations, know the situations' outcomes and obtain reassuring and self-satisfactory replies, look for ways to protect themselves and their relatives, and avoid all forms of discomfort, harm, danger, and threat [3]. Taking into consideration the concept of rational thinking and its influence on people's interpretation of life situations, a person is viewed as rational if one realizes the events rationally and irrational if one understands these events irrationally. However, if these new events are vague and certain, people automatically look for ways to expect their possible

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consequences. To protect themselves, people adopt what the psychologists call the protection manuscript (the self and relatives), which helps them predict negative future views and expectations about the unknown event, and evoke their sentiments and behaviors. If people are offered two choices with varying degrees of ambiguity, they prefer to choose the less ambiguous to avoid ambiguity [4]. There is a close relationship between the individuals' negative thoughts and their inner fear of the potential unknown threat [5]. This type of abnormal thinking is known for its absolute dogmatism. Though it is considered obligatory, it cannot be proven in reality and leads to a set of negative feelings, including self-defeat, negativity, and failure in achieving goals.

According to Hillen et al. [6], if the individual has a previous experience of such an event or situation, his behaviour will take one of two ways with regard to this experience. If it is negative, negative manuscripts about the situation, event, people, or outcomes have emerged as a threat to the individuals who have negative thoughts, feelings, and expectations of such an event leading to their disordered behaviour. However, if their prior experience with a certain event or situation is positive, it does not pose a threat or danger for individuals who already have positive thoughts and feelings towards such an event resulting in appropriate, acceptable, and normal behaviors that accord with the surrounding events and issues.

Hezel et al. [7] give an explanation to the exposed question, why the response of two persons, who face the same unknown event or situation, may differ, as one reacts with an abnormal behavior and the other with a normal one. Applying the clinical work to a variety of psychological disorders, it is found that they share a common factor, i.e., the fear of a situation that the person is not aware of its consequences and outcomes. For example, a patient with Obsessive-Compulsive Disorder (OCD) always has doubts and warnings about the risk of infection if one does not wash and sterilize hands.

After consulting the intellectual content and main reasons for disorder's genesis, the authors found out that the patient has directly or indirectly gained a prior health experience that affected one's expectations, made one doubt probable exposure to get any disease, and rather think about the consequences of being infected, which one is already ignorant of. Therefore, fear of the unknown is a cross-diagnostic factor that is common among a variety of disorders.

According to Rosser [8], excessive efforts are exerted to highlight the concept of fear of the unknown and investigate whether it can be defined as a cross-diagnostic factor among various disorders or not due to its close association with mood-related difficulties, including obsessiveness more than the other anxiety-related difficulties. This assumption is confirmed by Shihata et al. [9], who argue that fear of the unknown is a cross-diagnostic concept that plays a notable role in promoting the survival of neurotic disorders and creating a link among various disorders.

In contrast, Durrheim and Foster [10] argue that people's feelings of uncertainty and fear of the unknown raise due to the technical developments in the health sector and the increasing discussions on social media about this issue, causing many potential negative psychological effects, such as fear, anxiety, and feeling of weakness. They not only do not help people take any crucial beneficial decisions but rather have a negative impact on the therapeutic relationship between the patient and the health system, which promotes the continual search and exchange of information and the participation in joint decision-making.

Practically speaking, the present paper helps enrich people's knowledge about the concept of fear of the unknown and its role as a central mutual factor which causes the emergence and survival of several psychological disorders. Thus, it suggests applying particular treatment programs to investigate the degree and negative impact of fear of the unknown on patients. It also aims to identify the mean degree of the participants, distinguish the difference between the hypothetical mean and the overall mean of the study sample, and determine the differences among normal people, people with psychological disorders, and people with organic disorders. It explores differences between the means of males and females concerning fear of the unknown and investigates the differences in fear of the unknown due to other variables, including age and educational level.

The problem of the study is defined by posing and answering the following questions:

1- What is the actual level of fear of the unknown among the participants?

2- Are there any differences among normal people, people with psychological disorders, and people with organic disorders concerning the fear of the unknown?

3- Are there any differences among normal people, people with psychological disorders, and people with organic disorders concerning the fear of the unknown due to other variables, including gender, age, and educational level?

To answer these questions, the paper adopted the descriptive-comparative method and applied an online questionnaire, due to the Corona pandemic, to a randomly selected sample of (942) participants in Saudi Arabia from 1/12/2019 to

30/3/2020. The study sample included (614) normal people with a mean age of (35 years and 8 months) and a standard deviation of (8.38), and (151) people with psychological disorders (including Generalized Anxiety Disorder (GAD), depression, panic attacks, OCD, post-traumatic stress disorder (PTSD), and phobia) with a mean age of (36 years and 6 months) and a standard deviation of (9.12), and (159) people with organic disorders (diabetes, blood pressure, cardiac diseases, respiratory diseases, and thyroid) with a mean age of (41 years and 10 months) and a standard deviation of (9.25).

Review of the Literature:

Rosen et al. [11] argue that uncertainty means the doubt about whether a specific event will take place or not, represents effective stress with psychological and physiological impact on individuals, raises their anxiety and depression, and decreases the quality of life. Fear of the unknown is a common trait among all people but differs in response to individual and cultural differences. Several studies reported these findings, such as Greco and Roger [12] and Buhr and Dugas [13]. Uncertainty has been defined as a fundamental item in the cognitive models of anxiety disorders, although they do not stress its role but may consider it as a dependent trait by the continual reframing of the cognitive structure or solving the exposed problems [14]. As Carleton [2] reported, the emergence of uncertainty is related to various factors, including social upbringing or parental education.

By evidence and documented models, it is affirmed that fear of the unknown is fundamental and common to a number of disorders, including anxiety, depression [15], eating disorders [16], symptoms of personal disorders [17], social anxiety [18], and OCD [19]. In addition, Uljarević et al. [20] found out that there is a close relation between raising a child with autism spectrum disorder (ASD) and uncertainty intolerance. Therefore, their mothers always suffer from both anxiety and uncertainty intolerance.

Many studies, including meta-analysis studies, defined the fear of the unknown as a cross-diagnostic factor. For example, Hillen et al. [6] developed an integrated conceptual model to guide future research regarding the nature, causes, and effects of uncertainty tolerance by reviewing (18) scales of uncertainty and tolerance of uncertainty, and highlighting how these scales' designers defined the components of uncertainty and intolerance. The study concluded that there is no consensus on these concepts, and there is no consistent theoretical model for their definition that includes the positive, cognitive, emotional, and behavioral dimensions provoked by the fear of the unknown, especially with regard to the field of health care where there are many unknown issues. It also offered a procedural definition of uncertainty as a more comprehensive structure than ambiguity (the unknown), which represents a meta-cognitive state that implies the ambiguity of perception, while the unknown is defined as a kind of information that lacks credibility, reliability, and sufficiency, forming the final outlet for intolerance.

By examining 15 studies, Rosser [8] defined uncertainty as inadequate information about the expected solutions that may cause difficulties in bearing the experience and more emotional and behavioral responses to avoid such situations. In addition, Carleton [2] viewed uncertainty as a cross-diagnostic mechanism that has a close relationship with anxiety, panic, social anxiety, and obsessiveness, but the strongest relation is with anxiety.

Numerous studies discussed the relation between fear of the unknown, uncertainty, and other disorders. For instance, Gorka et al. [21] measured the extent of this relation by exposing (160) adults to unexpected sounds and shocks. The study reported that people with social anxiety disorder and specific phobias blinked more while anticipating an unfamiliar and unpleasant experience, suggesting it is a physiological indicator of fear of the unknown. Tull et al. [22] fear of the unknown is referred to as a fundamental factor that accompanies and mediates anxiety during the infection of COVID-19. It may affect expectations, perceptions, and desires.

The present paper differs from the literature as the first Arab study that tackles the concept of fear of the unknown. It compares normal people, people with psychological disorders, and those with organic disorders. Moreover, it develops and applies a three-domain scale of fear of the unknown.

Method

Several studies, such as Buhr and Dugas [13], Rosser [8], Shihata et al. [9], and Rosser [8], discussed the concept of fear of the unknown, but few studies, e.g., Hillen et al. [6] and Gorka et al. [21], addressed this concept as a fundamental factor that causes several psychological disorders. Therefore, it is recommended that fear of the unknown must be examined in Saudi Arabia. Through the clinical observation of many visitors to the psychiatric clinics, the authors found that fear of the unknown is a cross-diagnostic factor among some psychological disorders.

To define the concept, the authors developed the scale of fear of the unknown as a psychometric tool that accords with the Arab culture and environment, on the one hand, and the objectives and sample of the study, on the other. They reviewed the literature and theoretical frameworks on fear of the unknown, such as Gentes and Ruscio [15], Rosen et al.

[11], Carleton [2], Gorka et al. [21], Rosser [8], and Tull et al. [22]. They formulated the draft of the scale of (33) items distributed to three domains, including the personal, ontological, and health domains. Then, they presented the scale to (12) reviewers of the faculty members of Saudi universities who suggested reformulating some items.

After verifying the validity and reliability of the factorial structure of the scale, the authors applied exploratory factor analysis to a survey sample of (206) male and female participants to verify the adequacy of items. Thus, the principal components analysis of Hotelling are adopted for factorial matrix analysis. Items with at least (0.35) saturation level are accepted. Then, the authors adopted the scale of fear of the unknown to resume the rest of the paper's procedures. The results are presented, as follows:

While Kaiser–Meyer–Olkin test (KMO) is applied to measure sample size adequacy, Bartlett's test is applied to measure sample homogeneity and verify the hypothesis of the original correlation matrix asymmetry. Using the results of the Statistical Package for the Social Sciences Program (SPSS), it is found that the value of the KMO test equates to (0.9), which is greater than the minimum that Kaiser assumed. Being closer to the ideal limit (0.9) and far from the minimum (0.5), the resulting value denotes the survey sample adequacy. It is also concluded that the indication of Bartlett's test of Sphericity, which is applied to verify the hypothesis of whether the original correlation matrix is identified or not, was significant at the level of (0.01). The determinant of the correlation matrix equaled (3.850E-9), which was less than zero, as a good indicator of linear dependence. Then, the correlation matrix was reviewed, and some items with high correlations were deliberately deleted, resulting in a scale of 21 items subjected to factorial analysis and fulfilled its conditions. As a result, the value of the KMO test was at the level of (0.884) after deleting some items. The Bartletts Test of Sphericity was significant at the level of (0.01), indicating that the matrix represents an identity matrix, and the value of the matrix determinant equalled (0.01), which differed from zero.

The results of the factorial analysis showed that there were three factors or domains with latent root values greater than (1), and the total variance percentage of all the three factors was (53.79%). This analysis also illustrated that the latent root value of the first factor was (3.921) with a percentage of (18.672%), the latent root value of the second factor was (3.745) was with a percentage of (36.507%), and the latent root value of the third factor was (3.630) with a percentage of (35.792%). Comparing the latent root values of the first and second factors, it was found that the percentage was more than two, indicating a univariate domain. Three factors are discussed, as follows:

The first factor: Items (1, 2, 3, 4, 5, 6, and 7) represented this factor with reference to the personal domain, which tackled fear of the unknown in cases of (social acceptance and rejection, success and failure, and appearance).

The second factor: Items (8, 9, 10, 11, 12, 13, and 14) represented this factor with reference to the ontological domain, which explained fear of the unknown in cases of (life and death, reckoning, grave and resurrection, and the unseen).

The third factor: Items (15, 16, 17, 18, 19, 20, and 21) represented this factor with reference to the health domain, which illustrated fear of the unknown in issues including (health and disease).

Internal consistency of the scale was verified using the Pearson correlation coefficients between the score of each item and the score of its domain and between the score of each domain and the total score of the scale; in addition, the scores of some items, that do not fulfil the conditions of the factorial analysis, are deleted. Thus, the items number becomes 21 which are distributed to the three applied domains, as shown in the following tables.

Table (1): Correlation coefficients between the score of each item and the score of its domain (N= 206)

The First Domain (Personal)		The Second Domain (Ontological)		The Third Domain (Health)	
Item No.	Correlation coefficients to the total score of the domain	Item No.	Correlation coefficients to the total score of the domain	Item No.	Correlation coefficients to the total score of the domain
1	0.623**	8	0.701**	15	0.680**
2	0.737**	9	0.512**	16	0.793**
3	0.732**	10	0.733**	17	0.825**
4	0.756**	11	0.557**	18	0.536**
5	0.635**	12	0.799**	19	0.772**
6	0.722**	13	0.781**	20	0.798**
7	0.818**	14	0.778**	21	0.758**

Table (1) shows that all the correlation coefficients are statically significant at the level of (0.01), indicating the high internal consistency of the scale items that ranged from (0.512) to (0.825), suggesting the relevance of the items to their domains.

Table (2): Correlation coefficients between the score of each domain and the total score of the fear of the unknown scale (N= 206)

Domain	Correlation coefficients of the total score of the scale
The first domain (personal)	0.776**
The second domain (ontological)	0.839**
The third domain (health)	0.831**

As shown in table (2), all the correlation coefficients are statically significant at the level of (0.01) and high. They ranged from (0.776) to (0.831), indicating the internal consistency of the scale.

Reliability

As for the reliability of fear of the unknown scale, Cronbach's alpha coefficients are calculated.

Table (3): Using Cronbach's alpha coefficient to verify the reliability of the fear of the unknown scale (N= 206)

Domain	No. of items	Cronbach's alpha
The first domain (personal)	7	0.845
The second domain (ontological)	7	0.815
The third domain (health)	7	0.864
Total	21	0.903

Table (3) shows that the total value of the scale's reliability coefficient was (0.903), while the domains were high and ranged from 0.864 to 0.815, indicating the validity and reliability of the scale.

Answers to the Research Questions

- To answer the first question, one-sample t-test was adopted to compare the hypothetical mean and the overall mean of the study sample, including normal people, people with psychological disorders, and people with organic disorders.

Table (4): A comparison of the hypothetical mean and the overall mean of the study sample, including normal people, people with psychological disorders, and people with organic disorders

Total categories	Category	Sample number	Mean of sample categories	Examining the difference between the mean of the category and the hypothetical mean		Examining the difference between the mean of the category and the hypothetical mean Mean = 53.0065	
				T value	Significance level	T value	Significance level
Normal people / Psychological disorders / Organic disorders (924)	Normal people	614	50.8315	-22.334	0.000	-3.992	0.000
	Psychological disorders category	151	64.3642	1.264	0.208	10.527	0.000
	Organic disorders category	159	53.8553	-7.922	0.000	0.735	0.463
Psychological disorders categories (151)	Generalized anxiety disorder	61	66.4426	1.951	0.056	7.615	0.000
	Depression	44	60.7727	-1.102	0.277	3.843	0.000
	Panic attacks	11	63.9091	0.233	0.821	2.789	0.019
	PTSD	12	63.4167	0.159	0.876	3.980	0.002
	Phobia	11	69.2727	1.815	0.100	4.706	0.001
	OCD	12	66.8333	0.202	0.843	2.631	0.023
Organic disorders categories (159)	Diabetes	54	49.4630	7.456-	0.000	-1.952	0.056
	Blood pressure	38	54.2895	3.586-	0.001	0.528	0.600
	Respiratory diseases	33	56.0000	2.720-	0.010	1.163	0.253
	Cardiovascular diseases	12	64.0000	0.246	0.810	2.703	0.021
	Thyroid gland	22	55.1364	2.639-	0.015	0.715	0.483

Table (4) shows that:

- The mean of normal people was less than the hypothetical mean and the overall mean of the participants at the significance level of (0.05). This result is normal because any organic or psychological disorder implies a high level of ambiguity.
- The mean of all categories of people with psychological disorders was higher than the overall mean and didn't differ from the hypothetical mean at the significance level of (0.05).
- The mean of all categories of people with organic disorders was less than the hypothetical mean of the participants at the significance level of (0.05) and the same as the overall mean of the participants except for people with cardiovascular diseases whose mean was higher than the overall mean of the participants at the significance level of (0.05) and the same as the hypothetical mean of fear of the unknown. This result is assumed to be logical because cardiovascular diseases are ambiguous and dangerous, cause a radical change in people's lifestyles, and require a high commitment to particular prescribed medications, diet, and sports.
- To answer the second question, one-sample t-test was adopted to compare the means of people with psychological disorders and people with organic disorders, while one-way analysis of variance (ANOVA) was adopted to compare the means within patient groups, as shown in table (5).

Table (5): Significance of differences between the means of normal people and those of people with psychological disorders and people with organic disorders

Comparison		Category	Sample number	Mean of the sample's categories	Examining the difference between the means of normal people and patient categories	
					T value	Significance level
Comparison between normal people and people with psychological disorders	Total score	Normal people	614	50.7878	-11.082	0.00
		Psychological disorders	151	64.3642		
	The first domain	Normal people	614	19.6934	-10.020	0.00
		Psychological disorders	151	24.9669		
	The second domain	Normal people	614	16.4916	-8.090	0.00
		Psychological disorders	151	20.5166		
	The third domain	Normal people	614	14.6028	-7.632	0.00
		Psychological disorders	151	18.8808		
Comparison between normal people and people with organic disorders	Total score	Normal people	614	52.8301	-0.803	0.422
		Organic disorders	159	53.8553		
	The first domain	Normal people	614	20.5281	-0.290	0.772
		Organic disorders	159	20.6855		
	The second domain	Normal people	614	15.1699	-1.476	0.140
		Organic disorders	159	15.9371		
	The third domain	Normal people	614	17.1320	-0.200	0.842
		Organic disorders	159	17.2327		

Table (5) illustrates that there are statically significant differences at the significance level of (0.05) between the means of normal people and people with psychological disorders in the total score and all (health, personal, and ontological) domains, indicating that the mean of people with psychological disorders is higher than that of normal people. As for the overall mean of the study sample, it is found that the mean of the normal people is less by a standard deviation of about (1) than the overall mean that equals (14.65) due to the ambiguity of psychological disorders in treatment and outcome. However, there are no statically significant differences between the means of normal people and people with organic disorders because the patient may know the outcome and treatment.

Table (6): Differences between the means of patient categories

Category	Variation source	Sum of squares	Freedom degrees	Mean of Squares	F value	Significance level
A comparison between the means of psychological disorders	Between groups	1112.516	5	222.503	1.278	0.277
	Within groups	25252.451	145	174.155		
	Total score Between groups	26364.967	150	396.658		
A comparison between the means of organic disorders	Within groups	2471.840	4	617.960	3.069	0.018
	Within groups	31005.833	154	201.337		
	Total score	33477.673	158	819.297		

Table (6) shows that there are no statically significant differences at the significance level of (0.05) between the means of psychological disorders, indicating that they are almost the same because the vast majority of psychological disorders imply the same level of ambiguity. Through post hoc comparisons, it is found that there are statically significant differences between the means of organic disorders at the significance level of (0.05).

Table (7): Post hoc (LSD) comparisons between the means of organic diseases

Organic diseases	Blood pressure	Respiratory diseases	Cardiovascular diseases	Thyroid gland
Diabetes	-4.82651	*-6.53704	*-14.53704	-5.63740
Blood pressure		1.71053	*-9.71053	-8.4689
Respiratory diseases			*-8.00000	0.86364
Cardiovascular diseases				8.86364

Table (7) shows that there are statically significant differences at the level of (0.05) between the means of cardiovascular diseases and diabetes and high blood pressure and between respiratory diseases and diabetes, suggesting that fear of the unknown among people with cardiovascular and respiratory diseases was higher than other categories.

- Answer to the third question

First: Investigating the differences in the means of fear of the unknown among males and females of the normal people, people with psychological disorders, and people with organic disorders

T-test was applied to draw a comparison between the means of males and females, as shown in table (8).

Table (8): Significance of differences in fear of the unknown among males and females of the normal people, people with psychological disorders, and people with organic disorders

Comparison		Category	Sample number	Arithmetic mean	Standard deviation	means of differences	Standard deviation	T value	Significance level
Normal people	The first domain (personal)	Males	229	19.166	6.078	1.268	0.503	2.521	0.012
		Females	385	20.434	5.994				
	The second domain (ontological)	Males	229	13.655	5.131	1.418	0.471	3.010	0.003
		Females	385	15.073	5.928				
	The third domain (health)	Males	229	14.773	5.222	3.043	0.458	6.645	0.000
		Females	385	17.816	5.638				
	Total score	Males	229	47.594	13.025	5.728	1.150	4.982	0.000
		Females	385	53.322	14.208				
People with psychological disorders	The first domain (personal)	Males	41	26.049	4.566	1.431	0.993	1.441	0.152
		Females	110	24.618	5.707				
	The second domain (ontological)	Males	41	20.146	5.606	1.592	1.173	1.358	0.177
		Females	110	18.555	6.678				
	The third domain (health)	Males	41	19.220	5.561	1.592	1.031	1.798	0.074
		Females	110	21.073	5.660				

	Total score	Males	41	65.415	12.389	1.169	2.453	0.477	0.634
		Females	110	64.245	13.760				
People with organic disorders	The first domain (personal)	Males	60	19.550	6.038	1.824	1.008	1.809	0.072
		Females	99	21.374	6.235				
	The second domain (ontological)	Males	60	15.933	5.991	0.006	1.005	0.006	0.995
		Females	99	15.939	6.233				
	The third domain (health)	Males	60	15.817	5.549	2.274	0.901	2.525	0.013
		Females	99	18.091	5.479				
	Total score	Males	60	51.300	15.740	4.104	2.367	1.734	0.085
		Females	99	55.404	13.640				

Table (8) shows that

- There are statically significant differences between normal male and female people in all domains and the total score of the scale in favor of females.
- There are statically insignificant differences between male and female people with psychological disorders in all domains and the total score of the scale.
- There are statically insignificant differences between male and female people with organic disorders in both the first (personal) and the second (ontological) domains and the total score of the scale. However, there are statically significant differences among male and female people with organic disorders in the third (heath) domain in favor of females.

Second: Differences in the means of the participants of normal people, people with psychological disorders, and people with organic disorders regarding fear of the unknown according to age groups using One Way ANOVA, as shown in the following tables.

Table (9): One Way ANOVA of age groups to highlight the differences among normal people regarding fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	1336.136	3.000	445.379	12.868	0.000
	Within groups	21112.926	610.000	34.611		
	Total	22449.062	613.000			
The second domain (ontological)	Between groups	188.680	3.000	62.893	1.958	0.119
	Within groups	19597.633	610.000	32.127		
	Total	19786.313	613.000			
The third domain (health)	Between groups	361.775	3.000	120.592	3.793	0.010
	Within groups	19393.658	610.000	31.793		
	Total	19755.433	613.000			
Total score	Between groups	2826.619	3.000	942.206	4.867	0.002
	Within groups	118080.215	610.000	193.574		
	Total	120906.834	613.000			

Table (9) illustrates that there are statistically significant differences between the age groups of normal people in the first (personal) domain, the third (health) domain, and the total score of the scale. However, there are statically insignificant differences between the age groups of normal people in the second (ontological) domain. Therefore, the Least Significant Difference (LSD) test was applied to determine these differences.

Table (10): Applying LSD to measure differences between the age groups of the normal people with regard to fear of the unknown

Age group		Means	20 – 30	30 – 40	40 – 50	Above 50
The first domain (personal)	20-30	21.931		*2.676	*3.454	1.268
	30-40	19.255			0.778	*3.944
	40-50	18.476				*4.723
	50 and above	23.200				
The third domain (health)	20-30	16.971		0.421	0.688	*7.629
	30-40	16.549			0.265	*8.051
	40-50	16.282				*8.317
	50 and above	24.600				
Total score	20-30	53.137		*2.809	*3.601	*14.862
	30-40	50.328			*2.809	0.792
	40-50	49.535				*18.464
	50 and above	68.000				

Table (10) shows that

- There are statistically significant differences in the first (personal) domain between the (20-30), (30-40), and (40-50) age groups in favor of the (20-30) age group. Besides, there are statistically significant differences between the (30-40) and (above 50) age groups, favoring the (30-40) age group. There are statistically significant differences between the (40-50) and (above 50) age groups, favoring the (40-50) age group. However, there are no statically significant differences between the (20-30) and (above 50) age groups and between the (30-40) and (40-50) age groups.
- There are statistically significant differences in the third (health) domain between the (above 50) age group and the (20-30), (30-40), and (40-50) age groups in favor of the (20-30) age group. In contrast, there are no statically significant differences between the (20-30), (30-40), and (40-50) age groups and between the (40-50) and (30-40) age groups.
- There are statically significant differences in the total score between the (20-30) age group and the (30-40), (40-50), and (above 50) age groups, favoring the (20-30) age group. There are statically significant differences between the (30-40) and (40-50) age groups in favor of the (30-40) age group. There are statically significant differences between the (40-50) and (above 50) age groups, favoring the (40-50) age group. However, there are no statically significant differences between the (30-40) and (above 50) age groups.

Table (11): One Way ANOVA of the age groups of people with psychological disorders regarding fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	378.015	3.000	126.005	4.554	0.004
	Within groups	4066.979	147.000	27.667		
	Total	4444.993	150.000			
The second domain (ontological)	Between groups	106.179	3.000	35.393	0.855	0.466
	Within groups	6087.795	147.000	41.414		
	Total	6193.974	150.000			
The third domain (health)	Between groups	95.044	3.000	31.681	0.983	0.402
	Within groups	4735.976	147.000	32.218		
	Total	4831.020	150.000			
Total score	Between groups	929.632	3.000	309.877	1.760	0.157
	Within groups	25887.520	147.000	176.106		
	Total	26817.152	150.000			

Table (11) illustrates that there are statically significant differences between the age groups of people with psychological disorders in the first (personal) domain, while there are statically insignificant differences between these groups in the second (ontological) and third (health) domains, and the total score of the scale. To find out the direction of these differences, LSD was applied.

Table (12): Applying LSD to measure differences between the age groups of the people with psychological disorders with regard to fear of the unknown

Age group		Means	20-30	30-40	40-50	Above 50
The first dimension (personal)	20-30	66.740		1.205	*5.840	*6.432
	30-40	65.534			*4.634	*5.226
	40-50	60.900				0.592
	50 and above	60.308				

Table (12) shows that there are statistically significant differences between the (20-30) age group and the (40-50) and (above 50) age groups, favoring the (20-30) age group. There are statistically significant differences between the (30-40) age group and the (40-50) and (above 50) age groups, favoring the (30-40) age group. There are no statically significant differences between the (20-30) age groups and (30-40) and between the (40-50) and (above 50) age groups.

Table (13): One Way ANOVA of the age groups of people with organic disorders regarding fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	594.833	3.000	198.278	5.599	0.001
	Within groups	5489.443	155.000	35.416		
	Total	6084.277	158.000			
The second domain (ontological)	Between groups	227.801	3.000	75.934	2.066	0.107
	Within groups	5697.570	155.000	36.759		
	Total	5925.371	158.000			
The third domain (health)	Between groups	262.274	3.000	87.425	2.889	0.037
	Within groups	4690.116	155.000	30.259		
	Total	4952.390	158.000			
Total score	Between groups	2496.821	3.000	832.274	4.164	0.007
	Within groups	30980.852	155.000	199.876		
	Total	33477.673	158.000			

Table (13) illustrates that there are statically significant differences between the age groups of people with organic disorders in the first (personal) and third (health) domains and the total score of the scale, while there are statically insignificant differences between these groups in the second (ontological) domain. To find out the direction of these differences, LSD was applied.

Table (14): Applying LSD to measure differences between the age groups of people with organic disorders regarding fear of the unknown

Age group		Means	20-30	30-40	40-50	Above 50
The first domain (personal)	20-30	23.261		0.427	*3.942	*4.689
	30-40	22.833			*3.515	*4.261
	40-50	19.318				0.746
	50 and above	18.571				
The third domain (health)	20-30	18.696		0.028	*2.847	1.552
	30-40	18.667			*2.818	1.523
	40-50	15.848				1.294
	50 and above	17.143				
Total score	20-30	58.000		0.857	*6.878	*8.607
	30-40	58.857			*7.735	*9.464
	40-50	51.121				1.728
	50 and above	49.393				

Table (14) shows that

- There are statistically significant differences in the first (personal) domain between the (20-30) age group and (40-50) and (above 50) age groups, favoring the (20-30) age group. There are statistically significant differences between the (30-40) age group and (40-50) and (above 50) age groups, favoring the (30-40) age group. However, there are no statically significant differences between the (20-30) and (30-40) age groups and the (40-50) and (above 50) age groups.

- There are statistically significant differences in the third (health) domain between the (20-30) and (40-50) age groups in favor of the (20-30) age group. There are statistically significant differences between the (30-40) and (40-50) age groups in favor of the (30-40) age group. However, there are no statically significant differences between the (20-30) age group and the (30-40) and (above 50) age groups, between the (30-40) and (above 50) age groups, and the (40-50) and (above 50) age groups.
- There are statically significant differences in the total score between the (20-30) age group and the (40-50) and (above 50) age groups, favoring the (20-30) age group. There are statically significant differences between the (30-40) age group and the (40-50) and (above 50) age groups, favoring the (30-40) age group. There are no statically significant differences between the (20-30) and (30-40) age groups and between the (40-50) and (above 50) age groups.

Third: Differences between the means of the participants of normal people, people with psychological disorders, and people with organic disorders in fear of the unknown according to educational level using One Way ANOVA, as illustrated in the following tables.

Table (15): One Way ANOVA to determine differences between educational levels among normal people regarding fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	256.367	4.000	64.092	1.759	0.136
	Within groups	22192.695	609.000	36.441		
	Total	22449.062	613.000			
The second domain (ontological)	Between groups	173.094	4.000	43.274	1.344	0.252
	Within groups	19613.218	609.000	32.206		
	Total	19786.313	613.000			
The third domain (health)	Between groups	334.967	4.000	83.742	2.626	0.034
	Within groups	19420.466	609.000	31.889		
	Total	19755.433	613.000			
Total score	Between groups	1715.286	4.000	428.821	2.191	0.029
	Within groups	119191.548	609.000	195.717		
	Total	120906.834	613.000			

Table (15) illustrates that there are statically significant differences among normal people in the third (health) domain and the total score of the scale in educational level, but there are no statically significant differences among them in the first (personal) and the second (ontological) domains. To define the direction of these differences, LSD was applied.

Table (16): LSD between educational levels among normal people regarding fear of the unknown

Educational level		Means	Middle school	High school	Diploma	University	Postgraduate studies
The Third domain (health)	Middle school	19.087		1.769	*3.193	*2.228	*3.402
	High school	17.317			1.423	0.458	1.632
	Diploma	15.894				0.964	0.209
	University	16.858					1.173
	Postgraduate studies	15.685					
Total score	Middle school	57.174		*4.893	*7.812	*5.586	*8.104
	High school	52.280			*2.918	0.693	*3.211
	Diploma	49.362				*2.225	0.292
	University	51.587					*2.518
	Postgraduate studies	49.069					

Table (16) illustrates that

- There are statistically significant differences in the total score of the third (health) domain between the (middle school) and the (high school), (diploma), (university), and (postgraduate studies) levels, favoring the middle school. There are no statistically significant differences between the (postgraduate studies) and (high school), (diploma), (university) levels and between the (high school) and (diploma) and (university) levels, and between the (diploma) and (high school) levels.

There are statistically significant differences in the total score between the (middle school) andthe (high school), (diploma), and (postgraduate studies) levels in favor of the (middle school) educational level. There are statistically

significant differences between the (high school) level and the (diploma) and (postgraduate studies) levels, favoring the (high school) level. There are statistically significant differences between the (diploma) and (university) levels, favoring the (university) levels. There are statistically significant differences between the (university) and (postgraduate studies) levels, favoring the (university) level. However, there are no statistically significant differences between the (high school) and (university) levels and between the (diploma) and (postgraduate studies) levels.

Table (17): One Way ANOVA to determine differences between educational levels among people with psychological disorders regarding fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	75.428	4.000	18.857	0.630	0.642
	Within groups	4369.566	146.000	29.929		
	Total	4444.993	150.000			
The second domain (ontological)	Between groups	226.598	4.000	56.650	1.386	0.242
	Within groups	5967.375	146.000	40.872		
	Total	6193.974	150.000			
The third domain (health)	Between groups	219.006	4.000	54.751	1.733	0.146
	Within groups	4612.014	146.000	31.589		
	Total	4831.020	150.000			
Total score	Between groups	1112.371	4.000	278.093	1.580	0.183
	Within groups	25704.782	146.000	176.060		
	Total	26817.152	150.000			

Table (17) illustrates that there are statically significant differences among people with psychological disorders in the first (personal), second (ontological), and third (health) domains and the total score of the scale at the educational level.

Table (18): One Way ANOVA to determine differences between educational levels among people with organic disorders concerning fear of the unknown

Source of variance		Sum of squares	Freedom degree	Mean of Squares	F value	Significance level
The first domain (personal)	Between groups	168.719	4.000	42.180	1.098	0.360
	Within groups	5915.557	154.000	38.413		
	Total	6084.277	158.000			
The second domain (ontological)	Between groups	214.659	4.000	53.665	1.447	0.221
	Within groups	5710.712	154.000	37.083		
	Total	5925.371	158.000			
The third domain (health)	Between groups	343.674	4.000	85.919	2.871	0.025
	Within groups	4608.716	154.000	29.927		
	Total	4952.390	158.000			
Total score	Between groups	887.622	4.000	221.906	1.049	0.384
	Within groups	32590.051	154.000	211.624		
	Total	33477.673	158.000			

Table (18) illustrates that there are statically significant differences among people with organic disorders in the third (health) domain. There are statically insignificant differences in the first (personal) and the second (ontological) domains and the total score of the scale. To define the direction of these differences, LSD was used.

Table (19): LSD between educational levels among people with organic disorders concerning fear of the unknown

Educational level		Means	Middle school	High school	Diploma	University	Postgraduate studies
The Third domain (health)	Middle school	18.750		0.750	0.276	1.133	*4.343
	High school	18.000			*4.736	0.383	*3.593
	Diploma	18.474				0.857	*4.067
	University	17.616					*3.210
	Postgraduate studies	14.406					

Table (19) shows that there are statistically significant differences in the third (health) domain between the (middle school) and (postgraduate studies) levels in favor of the (middle school) level. There are statistically significant differences between the (high school) level and (diploma) and (postgraduate studies) levels, favoring the (diploma)

educational level. Moreover, there are statistically significant differences between the (postgraduate studies) level and (diploma) and (university) levels, favoring the (diploma) level. However, there are no statically significant differences between the (middle school) level and (high school), (diploma), and (university) levels, between the (high school) and (university) levels, and between the (high school) and (university) levels.

Results and Discussion

The results showed that the differences among the research categories concerning fear of the unknown relate to a degree but not type because fear of the unknown is shared between all categories but to different degrees. This finding agrees with Greco and Roger [12]. Comparatively, people with psychological disorders suffer more than normal people and those with organic disorders from fear of the unknown because people with psychological disorders cannot handle everyday situations with reason and wisdom, lack confidence, and lack the psychological, mental, social, and personal aspects. Their personalities are insufficient with regard to the psychological, mental, and social aspects. They are characterized by recklessness, indifference, distorted thinking disorder, mood swings, and fear. Due to the ambiguity and uncertainty of all psychological diseases in all stages, fear of the unknown is higher among people with psychological disorders. This result agrees with the findings of Grayson [23], Fergus and Rowatt [17], Boelen et al. [16], Teale Sapach et al. [18], Reuman et al. [24], and Gorka et al. [21].

In comparison with other people with organic disorders, fear of the unknown is higher among people with cardiac and respiratory diseases, as shown by modern medical reports, which highlighted the possible negative effect of COVID-19 on the myocardium and the respiratory system. What makes the matter worse is the lack of information regarding this crisis and the medical procedures that must be taken. Fear of the unknown is higher among people with cardiac and respiratory diseases because they not only suffer from illnesses but are also afraid of the unknown consequences of such an existing crisis. It can also be taken into consideration that such people always suffer from anxiety, stress, frustration, anger, inability to control their motivation, rapid agitation, as well a lack of bearing pressure and making crucial decisions in hard times.

In addition, it is found that fear of the unknown is higher among normal female people than males at the significance level of (0.01) due to gender-related beliefs that are essentially relied on culture, dominant values, and socializing methods of the Arab community, which always provide males with more freedom and independence, enhance their decision-making skills, encourage them to be responsible and gain experience, and raise social mobility. On the contrary, females face many social restrictions on freedom. Thus, they are generally ambiguous and overprotected in spite of the frequent attempts to gain gender equality.

There are no statically significant differences between male and female people with psychological disorders concerning fear of the unknown due to the nature of psychological diseases and their same negative effects on both males and females who merely face the same circumstances and suffer from the same stresses and symptoms. The results also showed that there are no statically significant differences between male and female people with organic disorders regarding fear of the unknown trait except for the third (health) domain because females are more careful and subject to the public health rules than males. Regarding the relation between fear of the unknown and age, it is generally revealed that fear of the unknown is lower among the old and becomes stable at the age of (40) years due to the individuals' everyday experiences and the daily situations and stresses to be more careful, rational, and calm while dealing with any ambiguous and uncertain situations.

As for the educational level, the results are rather different because education is considered a new experience for all brains that paves the way for more knowledge and new information and unveils any ambiguity and uncertainty in situations. Therefore, fear of the unknown is lower among people with high educational levels. Those with lower education lack predictive thinking. Applying the factor analysis, it is found that there are three main domains with a close relation to fear of the unknown, namely the personal, ontological, and health. The present paper tackles fear of the unknown among normal people, people with psychological disorders, and people with organic disorders.

Recommendations

- Discussing fear of the unknown, especially among women with psychological disorders in psychotherapy sessions to assess its impact on therapy and reduce any negative effects.
- Conducting the necessary psychometric procedures to present the applied scale of fear of the unknown in the present paper as a survey tool for the degree of fear of the unknown.
- Addressing the concept of fear of the unknown as a part of raising awareness by health authorities.

- Measuring the impact of fear of the unknown in implementing the treatment plan of the patients.
- Examining fear of the unknown among other samples and communities.
- Establishing treatment programs regarding fear of the unknown.
- Providing people with cardiac and respiratory diseases with the appropriate psychotherapy interventions for being the most vulnerable to suffer from fear of the unknown.

Limitations

- In spite of the large amount and variety of the sample size, it does not include all the geographical regions.
- There are many psychological disorders that are not discussed as variables in the present paper.

Some chronic diseases are not taken into consideration.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

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