

State Anxiety and Irrational Beliefs during Coronavirus Pandemic: The Case of Palestinian Women

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Abstract

This study investigates the correlation between state anxiety and irrational beliefs among Palestinian women during the coronavirus pandemic. It seeks to reveal whether there are any statistically significant differences in state anxiety and irrational beliefs due to age, marital status, education level, household income and the number of children. It also seeks to identify the level of state anxiety and the level of irrational beliefs among Palestinian women. The study used the descriptive correlational method, and the sample consisted of 750 Palestinian women from the West Bank governorates. The study adopted the State-Trait Anxiety Inventory (Spielberger et al., 1983) and Irrational Beliefs Inventory (IBI) (Rihani, 1985). The results showed a statistically significant positive correlation between the levels of state anxiety (moderate) and irrational beliefs among Palestinian women during the Coronavirus pandemic. There were also statistically significant differences in the level of state anxiety due to household income. No statistically significant differences were found owing to other variables. The results showed that a moderate level of irrational beliefs among Palestinian women during the Coronavirus pandemic. There were statistically significant differences in the level of irrational beliefs due to all study variables, except for the number of children. The study is concluded with a number of recommendations in the light of its findings.

Keywords: state anxiety, irrational beliefs, Palestinian women, Coronavirus pandemic

prevailed over the spread of this disease and the lack of a certain treatment for it. This has been evident in women's behavior and in the prevalence of a state of confusion in almost all walks of life, particularly at health and psychological levels, which are closely associated with the prevalence of anxiety.

Anxiety is a big part of human being and an existential fact of man's existence. It has a great contribution to personality development, and it may help a person to overcome a problematic situation. However, when anxiety exceeds the normal limits, it is considered a disorder (Momani, Naim & Mazen, 2013), which in turn causes confusion at work and psychological suffering for people (Rocio et al., 2019). Anxiety influences one's attitudes, accounts for extremism in decision-making, and drives an individual to adopt irrational beliefs and illogical attitudes about oneself

Since the onset of Coronavirus pandemic (COVID-19) in March 2020, the whole world has been experiencing exceptional conditions as the disease has affected so far almost all countries of the world, including Palestine. It has substantially increased the pressures already imposed on Palestinian families and on Palestinian women in particular. Palestinian women were in charge of about 11% of Palestinian families and made up 18% of the total Palestinian female working-age population in 2019 (Palestinian Central Bureau of Statistics, 2020). In addition to being responsible for taking care of their homes and kids as wives, mothers, sisters and daughters, many women have responsibilities outside their homes. These tasks have immensely pressured them on all social, economic, political, and especially psychological aspects, the focus of the present study. Fear and anxiety have

members and the absence of a decisive treatment for this pandemic have made women more anxious and troubled than ever. Such exceptional circumstances may well contribute to the creation of irrational beliefs that would hinder their normal daily life activities and cause a feeling of discomfort, instability, and negativity in seeing events and others. Such exceptional circumstances may well have psychological effects on women and their family members, hence the importance of the topic under study.

Research Questions

The study sought to address the following major question:

Is there a relationship between state anxiety and irrational beliefs among Palestinian women during the Coronavirus pandemic?

The following sub-questions fall under this major question:

- What is the level of state anxiety among Palestinian women during the Coronavirus pandemic?
- What is the level of irrational beliefs among Palestinian women during the Coronavirus pandemic?
- Are there any statistically significant differences at the significance level ($\alpha \leq 0.05$) in the level of state anxiety among Palestinian women during the Coronavirus pandemic due to the study variables (age, marital status, education level, household income, and number of children)?
- Are there any statistically significant differences at the significance level ($\alpha \leq 0.05$) in the level of irrational beliefs among Palestinian women during the Coronavirus pandemic due to the study variables (age, marital status, education level, household income and number of children)?

and life (Al-Mouwsili and Mahmoud, 2014). Several studies have shown that the level of anxiety in females is higher than that in males due to many reasons, such as psychological pressures and social frustrations that women experience and have to encounter in life (Al-Majali, 2015).

Anxiety can make a person nervous and distort one's perception (Finlay-Jones & Brown, 1981). According to Ellis (1991), anxiety arises from the effect of irrational beliefs on one's emotions and behavior, and is treated by correcting irrational beliefs and replacing them with rational ones (Mahmodalilo, Gholizadehborhani & Zabardast, 2010). That is, the individual has the ability to avoid anxiety and distress with the help of positive thoughts and rational beliefs.

Ellis (1991) points out that a person's perception of an event affects his irrational thinking and takes the form of a cognitive and unrealistic distortion of the self and the negative events that he has encountered in his life. A person who thinks and behaves irrationally exerts a greater effort in solving his problems and sometimes needs treatment (Maddi, 1996). The present study believes that anxiety results in irrational beliefs which causes the individual to have wrong interpretation of the surrounding reality, and leads him to excessive fear and loss of control over his feelings, rational beliefs and psychological stability.

Research Problem

Palestinian women experience a lot of pressures on a daily basis in a number of contexts: psychological, social, political and health. They bear family burdens, and these burdens have increased during the quarantine periods as a result of the spread of the Coronavirus pandemic. The fear of the transmission of infection among family

Practical Significance

- This study may benefit institutions working in the field of mental health and psychological counseling to develop plans and programs that contribute to reducing state anxiety and irrational beliefs among an important segment of the Palestinian society, namely women.
- It may contribute to spreading awareness among women about the irrational beliefs that may cause them psychological disturbances and thus helping them avoid such beliefs.
- It may contribute to developing educational and preventive programs to alleviate state anxiety and irrational beliefs among community members, especially women, during the Coronavirus pandemic.

Research Terminology

State Anxiety

An emotional and temporary urgent state in a person's life that varies from time to time, and disappears with the disappearance of the stimuli that they emit. It is an internal state which is characterized by feelings of tension and danger perceived emotionally, and which increases the activity of the autonomic nervous system (Qamish & Ma'aytah, 2014: 256).

Procedural State Anxiety

This is the score obtained by the respondent Palestinian women on the Scale of State Anxiety.

Irrational Beliefs

These are evaluations derived from empirically unproven assumptions and appear in absolute language using words like "need," "must" and phrases expressing obligatory acts and destructive ideas that represent absolute thinking. They have no empirical basis, are incorrect and realistic and lead to emotional disturbances. They result from destructive and irrational beliefs

Research Objectives

- To investigate the correlation between state anxiety and irrational beliefs among Palestinian women during the Coronavirus pandemic.
- To identify the level of state anxiety among Palestinian women during the Coronavirus pandemic.
- To identify the level of irrational beliefs among Palestinian women during the Coronavirus pandemic.
- To identify the differences in the level of state anxiety among Palestinian women during the Coronavirus pandemic due to the variables of the study (age, marital status, education level, house hold income and number of children).
- To identify the differences in the level of irrational beliefs among Palestinian women during the Coronavirus pandemic due to the study variables (age, marital status, education level, household income and number of children).

Research Significance

Theoretical Significance

- The importance of the study is evident in its population, the Palestinian women, which has never been investigated.
- Lack of previous studies that dealt with the topic of the present study, to the best knowledge of the researchers, which would enrich theoretical literature.
- The significance of the study also stems from the fact that it has been conducted under new and exceptional circumstances that the Palestinian people and the world are going through, owing to the Coronavirus pandemic and its exceptional consequences, a state of anxiety and irrational beliefs.

ends. According to Madiha, et al., (2011) state anxiety is “a temporary emotional state that a person feels in threatening situations, so his independent nervous system is activated and his muscles become tense to prevent the threat. This state disappears when the source of the threat is removed, so the person returns physically and psychologically to his normal state.”

Freud defines anxiety as “a felt, affective, unpleasant state accompanied by a physical sensation that warns the person against impending danger.” (Nasira, 2009). This emotional state accompanies the individual constantly or almost constantly in a form of discomfort, uneasiness, distress, tension and anguish towards the topics and attitudes that he perceives in the health, social, emotional, academic and future fields” (Jabr, 2015: 128).

According to Spielberger et al. (1983), a person who is characterized by a tendency to worry about his behavior suffers from threats in his relationship with others. This is due to one’s feeling that his self-esteem is threatened, and thus his response is characterized by excessive anxiety. So state anxiety means a reaction for a limited period of time (Ansari, 2000).

Many studies indicate the presence of anxiety in a person’s life in different degrees or levels: low, medium and high. The low level of anxiety is considered normal. When a person is alerted of an impending risk, the degree of his vigilance and sensitivity to external events increases, and so is his ability to face the danger in his environment (Sayrafi, 2008). In case of a medium level of anxiety, the person becomes less able to control his behavior, and so he loses his flexibility and control over his behavior in anxiety-invoking situations. He also loses his ability to distinguish between what is good or bad for

that lead to anxiety and that do not help a person achieve his goals. (Ellis & Harper, 1976)

Procedural Irrational Beliefs

This is the score obtained by the respondent Palestinian women on the Scale of Irrational Beliefs.

The COVID-19 Pandemic

The Coronavirus disease (COVID-19) is an infectious respiratory disease caused by a new strain of Coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. When many countries reported surging numbers of cases, the WHO recognized the spread of COVID-19 as a pandemic in March 2020. Common symptoms include fever, cough, fatigue, shortness of breath and loss of smell and taste. It spreads very easily and sustainably through the air, primarily via small droplets, as an infected person breathes, coughs, or sneezes. It may also be transmitted via contaminated surfaces. (WHO, 2020)

Background

Theoretical Framework

Anxiety is the most common emotional disorder which has drawn the attention of many psychologists in the modern era. It is considered one of the main factors influencing the human personality as it is profoundly and strongly related to most psychological problems (Habib, et al., 2018). Anxiety is an existential fact that accompanies an individual throughout the stages of his life and personality development. It is a basic behavioral variable and may be considered an unpleasant experience that may hurt one’s personality if it exceeds the normal limit. State anxiety is also known as situational anxiety which a person feels in a specific situation and disappears when the situation

between two types of beliefs: rational beliefs and irrational beliefs. Rational beliefs are true and logical ideas or thoughts that are helpful to a person as he strives towards his goals. These beliefs are consistent with one's social reality, flexible and non-extreme, and they involve positive feelings.

By contrast, irrational beliefs are false and illogical ideas or thoughts that are unhelpful to a person as he strives towards his goals. These beliefs are rigid or extreme, and they are conducive to psychological disturbance which may lead to negative and abnormal behavioral and emotional consequences (Shaya, 2011).

Irrational beliefs can be defined as unrealistic and authoritarian ideas, and in essence they require ideas related to negative self-evaluation and inability to tolerate frustration. Rational beliefs, however, reflect realistic and flexible ideas. They enhance one's adjustment feelings. By contrast, irrational beliefs reinforce self-destructive feelings, and are linked with various indicators of psychological maladjustment (Matthias, et al., 2010). Irrational beliefs are verbal symbols that include self-destructive expressions. Ellis identifies eleven irrational beliefs, or ideas (Rihani, 1985).

- 1) *It is a dire necessity for an adult human being to be loved or approved by virtually every significant other person in his community.*
- 2) *One should be thoroughly competent, adequate, and achieving in all possible respects if one is to consider oneself worthwhile.*
- 3) *Certain people are bad, wicked, or villainous and that they should be severely blamed and punished for their villainy.*

himself or other people. This situation would affect his personality, and lead him to a high level of anxiety whereby an unpleasant emotional state appears, accompanied by apprehension and tension (Chua et al., 2018).

These three levels of anxiety are the result of person's response to some ideas or beliefs that give him a sense of danger, tension, insecurity, love, appreciation and respect, and that make him unable to face crises or stressful circumstances.

Dowidar (2000) states that the causes that lead to anxiety are either self-suggestion or suggestion resulting from sudden events or types of diseases and their symptoms. When a person is unable to deal with these stressful conditions, he opts for psychological defenses that help him reduce the level of anxiety through suppression, denial, and projection; as a result, this situation would distort a person's awareness of the stimuli that caused the process of anxiety (Rowwad & Hamdi, 2014).

The present study believes that human existence is related to the individual's ability to rational beliefs, which has an important role in psychological stability and adjustment. By contrast, the individual's irrational beliefs can cause disturbance to his behavior, deterioration of his psychological health and maladjustment with others and his environment.

Irrational beliefs are negative and extreme ideas which are unhelpful, illogical and inconsistent with one's social reality. They lead to psychological pressure and maladjustment. A person may not express these irrational beliefs, but they appear through the way he deals with the events encountering him.

Palmer & Dryden (2002) point out that Albert Ellis in REBT distinguishes

others, or the external environment of how things “should be”; (B) *Catastrophic beliefs*: These are extremely negative assessments of unpleasant life events involving intimidation and maximization; (C) *Frustration beliefs*: These involve assessments of a negative event as being too intolerable (frustration intolerance); (D) *Self-deprecation beliefs*: These reflect negative evaluations of oneself, others and life events (Philip, et al., 2014).

According to Dahadha (2010), these irrational beliefs were developed in Ellis's Theory of Personality (ABCDE Model). 'A' stands for activating event or adversity. 'B' refers to one's irrational belief about 'A.' That belief then leads to 'C,' the emotional and behavioral consequences. 'D' stands for the disputation of beliefs. 'E' stands for new effect.

It can be noticed from the above review that irrational beliefs are characterized by lack of objectivity and influenced by personal whims and desires. These are based on false expectations or assumptions, and on a mixture of conjectures, prospects, intimidation and exaggeration, which do not coincide with the one's realistic and mental capabilities. The source of perception is considered an intermediate process between stimulus and anxiety. Differences become a source of tension, and thus under stressful circumstances, anxiety is generated. Ellis asserts that anxiety is linked with negative self-assessments and performance.

Relevant Previous Studies

A large number of previous studies in English and Arabic have examined the variables of the present study, state anxiety and its relation to irrational beliefs, focusing on different segments of the society, mainly students. However, the researchers of the present study could not find any studies in

- 4) *It is awful and catastrophic when things are not the way one would very much like them to be.*
- 5) *Human unhappiness is externally caused and that people have little or no ability to control their sorrows and disturbances.*
- 6) *If something is or may be dangerous or fearsome one should be terribly concerned about it and should keep dwelling on the possibility of its occurring.*
- 7) *It is easier to avoid than to face certain life difficulties and self-responsibilities.*
- 8) *One should be dependent on others and needs someone stronger than oneself on whom to rely.*
- 9) *One's past history is an all-important determiner of one's present behavior and that because something once strongly affected one's life, it should indefinitely have a similar effect.*
- 10) *One should become quite upset over other people's problems and disturbances.*
- 11) *There is invariably a right, precise, and perfect solution to human problems and that it is catastrophic if this perfect solution is not found.*

While developing a test for rational and irrational ideas, Rihani (1985) added two ideas to Ellis's 11 irrational ideas:

- 1) *One should be formal and serious when dealing with others in order to be respected by them.*
- 2) *In a man-woman relationship, it is axiomatic that a man has the upper hand.*

These irrational beliefs have been divided into four main irrational belief processes: (A) *Claiming beliefs*: These are strict imperatives directed towards oneself,

their scores on the scale of emotional problems. It also found significant discrepancies between the average scores of males and females in the total score of the scale of irrational beliefs, particularly in the following items (exaggeration in requesting approval, intolerance of frustration, excessive anxiety, avoiding facing problems, dependence) in favor of females. However, no differences were found in the other dimensions of the scale of irrational beliefs.

Qahtani's study (2016) aimed to identify the relationship between future anxiety and irrational ideas in light of some demographic variables for a sample of 224 students of the Department of Psychology at Imam Saud Islamic University. The study used Shuqair's Scale of Future Anxiety (2005) and Hooper and Layne's Common Belief Inventory for Students (1983) which was translated and adapted into Arabic by (Abdullah and Abdurrahman, 2002), and applied to the Saudi environment by (Al-Mutairi, 1434 AH). Among the most important findings of the study was the existence of a positive correlation between future anxiety and irrational beliefs. The study also found statistically significant differences due to gender and academic level.

A study by Khalafi (2016) about the level of irrational beliefs and the level of social anxiety among a sample of 60 high school students revealed that the students had a moderate level of irrational beliefs and social anxiety. The study also found a relation between irrational beliefs and social anxiety among the students.

Hamza (2015) aimed to find out the extent of irrational beliefs among high school students, and the correlation between irrational beliefs with exam anxiety and motivation for achievement among a sample

the English or Arabic literature that discussed state anxiety and irrational beliefs among women, especially during the Corona virus pandemic. What follows is a review of relevant previous studies in reverse chronological order of publications. A study by Habib, et al. (2018) aimed to identify the relationship between irrational beliefs and future anxiety among a sample of 60 mothers of children under treatment for leukemia. A scale for irrational beliefs designed by the study was used. Among the most important results of the study were the presence of a positive correlation between symptoms of future anxiety and irrational beliefs among the sample, and the absence of an impact of gender or birth order on symptoms of future anxiety.

Hadyawah's study (2018) about the prevalence rate of irrational beliefs, social anxiety and the relation between irrational beliefs and social anxiety among a sample of 300 nursing students at Tishreen University. Using Irrational Beliefs Inventory (IBI) developed by Rihani (1985), the study found that more than 50% of the sample have irrational beliefs, the vast majority have social anxiety, and there is a positive correlation between irrational beliefs and social anxiety.

A study by Abarah (2017) investigated the relationship between irrational beliefs and some emotional problems (emotional imbalance, shyness, anxiety, anger) among a sample of 381 adolescent students from public high schools in the city of Homs in Syria. A scale for irrational beliefs originally prepared by Bushra al-Mughariel, and a scale for emotional problems prepared by the researcher were used. The study found a positive relationship between students' scores on the scale of irrational beliefs, and

and anxiety were more common among females than males; irrational beliefs were more common among Islamic Azad University students than Payame Noor University students. However, the anxiety was greater among Payame Noor University students than Islamic Azad University students.

A study by Muhaimzi (2012) about the relation between irrational beliefs and anxiety among drug addicts in Al-Amal Complex for Mental Health in Riyadh and a random sample of non-drug addicts from the Saudi community in Riyadh, Saudi Arabia. The study used Rihani's Irrational Beliefs Inventory (IBI) (1985) and AdDileym's Scale of Anxiety. The study found a low level of anxiety and irrational beliefs among non-drug addicts compared with high levels of anxiety and irrational beliefs among alcohol and marijuana addicts. The study also revealed a positive correlation between irrational beliefs and anxiety and significant differences in the levels of anxiety and irrational beliefs in favor of drug-addicts. There were also significant differences due to profession, marital status and education on the scales of anxiety and irrational beliefs, but there were no statistically significant differences due to age on these scales.

Commenting on Previous Studies

From the above review, it can be noticed that most of these studies have dealt with the relationship between irrational beliefs and future anxiety, social anxiety, or exam anxiety. It can also be noticed that these studies differ in their environments, populations, numbers of their samples, objectives, methods and instruments. However, none of the previous studies has ever addressed this important segment of the society, women during the

of 120 high school students. The study used different scales: Rihani's Irrational Beliefs Inventory (IBI) (1985), Zahran's Scale of Test Anxiety (1999), and Al-Ghamdi's Scale of Motivation for Achievement (2009). The study indicated that the students had a high level of irrational beliefs, and that there was a positive correlation between irrational beliefs and exam anxiety among the students.

A study by Daham (2015) about the relation between quality of life and irrational beliefs related to exam anxiety among a sample of 80 third-year high school students found no relationship between the quality of life and irrational beliefs related to exam anxiety. The study also found statistically significant differences in irrational beliefs related to exam anxiety due to gender, study stream, and year repetition.

A study by Shalash (2015) aimed to determine the relationship between future anxiety, psychological hardness, and irrational beliefs among a sample of 150 male and female students from the College of Education at Shaqra University in Saudi Arabia. The study used Shuqair's Scale of Future Anxiety (2005) and Chan's Chinese Irrational Beliefs and Rational Attitude Scale (CIBRAS) (2016). The study found a positive correlation between future anxiety and irrational beliefs, and a negative correlation between psychological hardness and irrational beliefs.

In their article, Khaledian, et al. (2013) aimed to find out the relation between irrational beliefs and anxiety among a sample of 280 male and female graduate students in Iranian universities. The study found a positive correlation between irrational beliefs and anxiety among Iranian university students. The study also revealed that irrational beliefs

the West Bank in Palestine. These governorates are Jerusalem, Hebron, Bethlehem, Jericho, Ramallah and Al-Bireh, Nablus, Tubas, Tulkarm, Jenin, Salfit, and Qalqilya. Due to the quarantine conditions related to the spread of COVID 19, an electronic questionnaire was designed and distributed to a randomly selected sample of 705 Palestinian women. Table 1 shows the distribution of the study sample by the study variables.

spread of the Coronavirus pandemic, hence the significance of the present study.

Methodology

Approach

The present study adopted the Descriptive Correlational Method to explore the relationship between state anxiety and irrational beliefs among Palestinian women during the Coronavirus pandemic, and to answer the questions of the study.

Population and Sampling

The study population consisted of all Palestinian women in the 11 governorates of

Table 1. Distribution of the study sample by the study variables

Variable	Category	Number	Percentage
Age	From 20 - less than 30 years old	319	45.2
	From 30 - less than 40 years old	271	38.4
	From 40 years and over	115	16.3
Marital Status	Single	124	17.6
	Married	548	77.7
	Other (separated / widowed)	33	4.7
Education	High school or less	78	11.1
	Diploma	105	14.9
	Bachelor's degree	424	60.1
	MA and above	98	13.9
Household Income	Low	56	7.9
	median	626	88.8
	High	23	3.3
Number of Children	None	166	23.5
	One - two	255	36.2
	Three or more	284	40.3

sample of 55 Palestinian women in the West Bank, as follows:

1) State Anxiety Inventory

The present study used an accredited Arabic version (Buhairi, 2005) of the State-Trait Anxiety Inventory (STAI) as a measure for state anxiety (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). This measure consists of 20 items or questions used to examine the respondents'

Instruments

Having reviewed the instruments employed by a number of previous studies and related literature, the study adopted two scales: one to measure state anxiety and the other to measure irrational beliefs. In order to identify their psychometric properties and to ensure their validity and reliability, these scales were applied to an exploratory

3-2-1 (Zoubi, 1997). The validity and reliability indicators were extracted to ensure the proper use of this measure.

Instrument Validity

The validity of the State Anxiety Inventory was checked by calculating Pearson correlation coefficient for the items of the questionnaire with the overall degree of this instrument. Obviously, there was a statistical significance in all the items of the questionnaire, which demonstrates a good internal consistency within and between the items, as shown in Table 2.

state anxiety on a self-report basis, and it is based on a 4-point Likert scale: *never*, *rarely*, *sometimes*, and *often* (Madiha et al., 2011). The state anxiety items are divided into 10 positive statements (1-3-4-6-7-10-13-14-16- 19) and 10 negative statements (2-5-8-9-11-12-15-17-18-20). There are two types of statements. In the first type, the high rating indicates a high level of anxiety, and the grading weights are as follows: 1-2-3-4. In the second type, the high rating indicates a low level of anxiety, and the grading weights are inverted as follows: 4-

Table 2. Results of Pearson correlation coefficient for inter-item correlation matrix of state anxiety level among Palestinian women during Coronavirus pandemic

No.	R-Value	Sig.	No.	R-Value	Sig.	No.	R-Value	Sig.	No.	R-Value	Sig.
1)	0.629**	0.000	6)	0.689**	0.000	11)	0.521**	0.000	16)	0.592**	0.000
2)	0.643**	0.000	7)	0.642**	0.000	12)	0.522**	0.000	17)	0.685**	0.000
3)	0.651**	0.000	8)	0.478**	0.000	13)	0.570**	0.000	18)	0.705**	0.000
4)	0.656**	0.000	9)	0.625**	0.000	14)	0.457**	0.000	19)	0.639**	0.000
5)	0.722**	0.000	10)	0.730**	0.000	15)	0.613**	0.000	20)	0.683**	0.000

Sig.= Significance **Statistical Significance at 0.01 * Statistical Significance at 0.0

Instrument Reliability

the inventory to fit well within the Arab culture. Each of these ideas has four yes/no-answer items on the scale, each of which has two-point value for a *Yes* answer and one-point value for a *No* answer. Thus, the total score on the test ranges between a minimum of 52 points, which implies the respondent's rejection of all irrational beliefs included in the test, that is a high degree of rational thinking, and a maximum of 104 points, which indicates the respondent's acceptance of all irrational ideas included in the test, that is a high degree of irrational thinking.

Instrument Validity

The validity of the Irrational Beliefs Inventory was checked by calculating

The reliability of this instrument was calculated by means of Cronbach's Alpha coefficient. The reliability coefficient was (0.773), which indicates that the instrument had a reliability and consistency that meet the purposes of the study.

2) Irrational Beliefs Inventory

The present study also used an accredited and adapted Arabic version (Rihani, 1985) of a 52-item and 13-dimension Irrational Beliefs Inventory (IBI) to serve as a valid and reliable instrument for the assessment of irrational thinking. Originally, Ellis (1994), in his Rational Emotive Behavior Therapy (REBT), identified 11 irrational ideas, to which Rihani (1985) added two ideas in order for

statistical significance in all the items of the questionnaire, which demonstrates a good internal consistency within and between the items, as shown in Table 3.

Pearson correlation coefficient for the items of the questionnaire with the overall degree of this instrument. Obviously, there was a

Table 3. Results of Pearson correlation coefficient for inter-item correlation matrix of irrational beliefs level among Palestinian women during Coronavirus pandemic

No.	R-Value	Sig.	No.	R-Value	Sig.	No.	R-Value	Sig.	No.	R-Value	Sig.
1)	0.320**	0.000	14)	0.221**	0.000	27)	0.135**	0.000	40)	0.104**	60.00
2)	0.326**	0.000	15)	0.314**	0.000	28)	0.374**	0.000	41)	0.252**	0.000
3)	0.179**	0.000	16)	0.218**	0.000	29)	0.462**	0.000	42)	0.106**	50.00
4)	0.364**	0.000	17)	0.469**	0.000	30)	0.297**	0.000	43)	0.426**	0.000
5)	0.253**	0.000	18)	0.109**	40.00	31)	0.392**	0.000	44)	0.325**	0.000
6)	0.224**	10.00	19)	0.346**	0.000	32)	0.375**	0.000	45)	0.464**	0.000
7)	0.374**	0.000	20)	0.402**	0.000	33)	0.272**	0.000	46)	0.221**	0.000
8)	0.121**	0.000	21)	0.269**	0.000	34)	0.272**	0.000	47)	0.457**	0.000
9)	0.333**	0.000	22)	0.424**	0.000	35)	0.261**	0.000	48)	0.225**	0.000
10)	0.254**	0.000	23)	0.356**	0.000	36)	0.347**	0.000	49)	0.340**	0.000
11)	0.150**	0.000	24)	0.511**	0.000	37)	0.430**	0.000	50)	0.198**	0.000
12)	0.243**	0.000	25)	0.349**	0.000	38)	0.287**	0.000	51)	0.107**	40.00
13)	0.364**	0.000	26)	0.117**	20.00	39)	0.156**	0.000	52)	0.101**	70.00

Sig.= Significance **Statistical Significance at 0.01 * Statistical Significance at 0.05

Instrument Reliability

The reliability of this instrument was calculated by means of Cronbach's Alpha coefficient. The reliability coefficient was (0.916), which indicates that the instrument had a reliability and consistency that meet the purposes of the study.

In order to determine the mean score of the respondents' answers, the following grades were adopted, as shown in Table 4.

Table 4. Grades and mean scores for the levels of state anxiety and irrational beliefs

Grade	Mean Score	
	State Anxiety Level	Irrational Beliefs Level
Low	2.00 or less	1.33 or less
Medium	2.01-3.00	1.34-1.67
High	3.01 or more	1.68 or more

variables. The findings of the present study are presented and discussed below according to its questions:

1) Is there a relationship between anxiety and irrational beliefs among Palestinian women during the Coronavirus pandemic?

Findings and Discussion

The present study aimed to find out the correlation between state anxiety and irrational beliefs among Palestinian women during the Coronavirus pandemic, as well as to identify the differences in the level of each of them in line with the study

emotional response will be higher, and vice versa. This explains why there is a positive relationship between the levels of irrational beliefs and state anxiety among Palestinian women during the Coronavirus pandemic. When there are illogical and negative beliefs in dealing with the current health situation, more state anxiety cases are likely to appear. It is axiomatic that a person with state anxiety will have irrational beliefs. This result is consistent with several previous studies (Habib, et al., 2018; Qahtani, 2016; Khalafi, 2016; Khaledian, et al., 2013; Muhaimzi, 2012).

2) *What is the level of state anxiety among Palestinian women during the Coronavirus pandemic?*

To answer this question, the arithmetic averages and standard deviations of the responses were calculated on the scale items that express the level of state anxiety among Palestinian women during the Coronavirus pandemic. The arithmetic mean of the overall score was (2.30) and the standard deviation was (0.539). This indicates that Palestinian women had a moderate level of state anxiety during the Coronavirus pandemic. The numbers and percentages of the responses of the study sample were calculated

on the level of state anxiety, as shown in Table 6.

Table 5. Numbers and percentages of responses to the level of state anxiety among Palestinian women during Coronavirus pandemic

Level	Number	Percentage
Anxiety Free (20)	2	0.3
Normal Anxiety (21-40)	226	32.1
Moderate Anxiety (41-60)	406	57.5
Severe Anxiety (61-80)	71	10.1

have anxiety, 226 (32.1%) responses had normal anxiety, 406 (57.5%) responses had

To answer this question, it was transformed to the following hypothesis: *There is a statistically significant relationship at the level of significance ($\alpha \geq 0.05$) between the level of irrational beliefs and the level of state anxiety among Palestinian women during the Coronavirus pandemic.*

The hypothesis was examined by calculating the Pearson correlation coefficient and the statistical significance between the level of irrational beliefs and the level of state anxiety among Palestinian women during the Coronavirus pandemic. The results confirmed that the value of the Pearson correlation coefficient of the total score (0.449) and the level of significance (0.000) indicate that there is a statistically significant positive correlation at the level of significance $\alpha \geq 0.05$ between the levels of irrational beliefs and state anxiety among Palestinian women during the Coronavirus pandemic. This finding also confirms that the higher the level of irrational beliefs is, the higher the level of state anxiety will be among Palestinian women during the Coronavirus pandemic and vice versa. According to Albert Ellis's REBT theory (1994), people view an event according to the beliefs and ideas they hold. If those beliefs are not rational,

Statistics from Table 5 reveal that 2 (0.3%) responses of the study sample did not

insult to injury for Palestinian women and contributed to their feelings of anxiety about themselves and others. This finding is consistent with a study by Khalafi (2016).

3) *What is the level of state irrational Beliefs among Palestinian women during the Coronavirus pandemic?*

To answer this question, the arithmetic averages and standard deviations of the responses of the study sample were calculated on the scale items that express the level of irrational beliefs among Palestinian women during the Coronavirus pandemic. The arithmetic mean of the overall score was 1.42 and the standard deviation was 0.088. This indicates that Palestinian women had a moderate level of irrational beliefs during the Coronavirus pandemic. The numbers and percentages of the responses of the study sample were calculated at the level of irrational beliefs, as shown in Table 7.

moderate anxiety, and 71 (10.1%) responses had severe anxiety.

Palestinian women have always experienced various social, economic, psychological and political pressures. Like many other women throughout the world, women have many roles and responsibilities in the Palestinian society. They work at home as mothers and household managers, and they work at the labor market as teachers, caregivers, farmers, etc. However, unlike other women in the world, Palestinian women have to endure the daily inconveniences of Israeli occupation and settlers. Currently, the conditions that the entire world is going through due to the rapid dissemination of the Coronavirus pandemic and its unprecedented consequences, such as the nationwide lockdown, quarantine measures, business and school shuttering, the uncertainty surrounding this epidemic, and the death of many friends and loved ones have added

Table 7. Numbers and percentages of responses to the level of irrational beliefs among Palestinian women during Coronavirus pandemic

Level	Number	Percentage
Zero irrational beliefs (52)	0	0
Low-level irrational beliefs (53-70)	176	25
Moderate-level irrational beliefs (71-88)	529	75
High-level irrational beliefs (89-104)	0	0

manner, and this explains the current result. Obviously, the current health situation has contributed to the development of some negative and irrational beliefs among Palestinian women.

4) *Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the level of state anxiety among Palestinian women during the Coronavirus pandemic due to the study variables (age, marital status,*

Statistics from Table 7 reveal that 176 (25%) responses of the study sample had a low level of irrational beliefs, and 529 (75%) responses had a moderate level of irrational beliefs. This result is consistent with Hadyawah (2018) and Khalafi (2016). When a person is exposed to stressful situations with a very high level of life's uncertainties for a long time, the person will start thinking and behaving in an irrational

5) Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) in the level of irrational beliefs among Palestinian women during the Coronavirus pandemic due to the study variables (age, marital status, education level, household income and number of children)?

To answer this question, it was transformed to some hypotheses: There are no statistically significant differences at the level of significance ($\alpha \geq 0.05$) in the level of irrational beliefs among Palestinian women during the Coronavirus pandemic due to the study variables: age, marital status, level of education, household income, and number of children.

One way ANOVA was used to test these hypotheses, the finding shows apparent statistically significant differences in the level of irrational beliefs among Palestinian women during the Coronavirus pandemic due to age, level of education, and household income. This result is inconsistent with Muhaimzi's study (2012) regarding the age variable, but it is consistent with it regarding the level of education. As for marital status and number of children, there are no statistically significant differences in the level of irrational beliefs related to these two variables. This result is inconsistent with Muhaimzi's study (2012) regarding the variable of marital status. The older the women are, the higher the level of education they have, and the better income they get, the less irrational beliefs and more rational ideas they are likely to have. This can be attributed to the more and more experience they are likely to have with age advancement. In addition, the level of education contributes to

education level, household income and number of children)?

To answer this question, it was transformed to some hypotheses: There are no statistically significant differences at the level of significance ($\alpha \geq 0.05$) in the level of state anxiety among Palestinian women during the Coronavirus pandemic due to the study variables: age, marital status, level of education, household income and number of children.

One way ANOVA was used to test these hypotheses, the findings show that there are no statistically significant differences in the level of state anxiety among Palestinian women during the Coronavirus pandemic with respect to all variables, except for household income.

The Coronavirus pandemic has not differentiated between age and marital status, or between the level of education and the number of children. It has attacked suddenly and shockingly all groups of population. This result is consistent with Muhaimzi's study (2012).

Moreover, there were statistically significant differences in the level of state anxiety among Palestinian women during the Coronavirus pandemic due to household income. This is because the scale was applied during the quarantine period, which resulted in real daily pressures due to the stoppage of life and financial difficulties. Women felt anxious about the unstable and uncertain economic situation during the period of the Coronavirus pandemic. They were not able to go to work or lead a normal work life. Household income was affected by the economic situation. Hence, the economic situation is considered an important and influential factor.

of anxiety and consolidate rational ideas to confront crises, especially the Coronavirus pandemic.

- 3) Paying attention to psychological counseling based on Albert Ellis' theory in dealing with the Coronavirus pandemic crisis.
- 4) Activating the various guiding institutions to develop and increase positive and rational thinking, reduce anxiety and tension, and help community members cope with this crisis.
- 5) Conducting more research and studies to explain the discrepancy between types of anxiety and irrational beliefs among other societal sectors in light of the Coronavirus pandemic.

References

- Abarah, H. (2017). Irrational ideas and their relation to the emergence of emotional problems among adolescents: A field study on a sample of high school students in the city of Homs. *The International Journal of Specialized Education*, 6 (9), 197-194. (Arabic version)
- Abdel Ghaffar, Gh. (2007). Irrational ideas predictors of depressive disorder among a sample of university students. *Psychological Studies*, 17 (3), 643-688. (Arabic version)
- Abdel Khaleq, A. & Murad, S. (2001). Mental health self-assessment: A study of its most important predictors. *Psychological Studies*, 11 (4), 623-635. (Arabic version)
- Abdel-Wahab, T. (2000). Some personality variables for high-religious university students. *The Egyptian Journal of Psychological Studies*, 10 (27), 87-110. (Arabic version)

women's development and knowledge that would improve their capabilities to handle various problems, managed different crises, enhance their positive thinking and curb their irrational beliefs. The economic situation can be considered an influential factor, too. The lower the household income women get, the more irrational beliefs they are likely to experience due to the economic pressures which are doomed a threat to their survival and ability to provide a living for themselves and their families. This situation will ultimately result in increasing women's irrational thinking while they are striving to provide the basic needs for their families.

As for marital status and number of children, there are no statistically significant differences in the level of irrational beliefs related to these two variables. Palestinian women are subject to nearly the same conditions of social and educational upbringing that depend on some rational ideas through which customs and traditions play a major role and tend to draw a typical picture of women regardless of their social status. This result is not consistent with Muhaimzi's study (2012). As for the number of children, the spread of irrational ideas may be linked to other variables. The number of children does not change their irrational beliefs or ideas, and as mentioned earlier, the causes of irrational ideas can often be attributed to matters related to learning and social education.

Recommendations

- 1) Designing preventive programs to develop rational beliefs and positive thinking among different segments of the society, especially women.
- 2) Conducting special preventive and treatment programs to reduce the level

- Kong (Doctoral dissertation). Retrieved from the University of Hong Kong website: <http://hub.hku.hk/handle/10722/225100>
- Chase, K. (1987). *The Relationships among Irrational Beliefs, Levels of Stress, and Social Problem-Solving Ability*. (Doctoral Dissertation, The Florida State University, 1986). Dissertation Abstracts International, 47(8).
- Chua, s., Harris, A., Jasmine, M., Rosnah, I.(2018): *Psychometric Properties Of The State-Trait Anxiety Inventory (Form Y) Among Malaysian University Students*, 1-13.
- Dahadha, B. (2010). *A practical guide to counseling and psychotherapy: Exercises to reduce the level anxiety, depression and stress*. Dar Al-Falah Publishing and Distribution. Alayen: Kuwait. (Arabic version)
- Daham, F. (2015). *Quality of life and its relation to irrational beliefs related to exam anxiety among third-year secondary school students: A correlational descriptive study in the secondary schools of Hafian Muhammad Al-Eid and Abdel Aziz Al-Sharif* (Unpublished Master Thesis). Faculty of Social Sciences and Humanities, University of Shahid Hama Lakhdar: Al-Wadi Province, Algeria. (Arabic version)
- Deffenbacher, J., Story, D., Brandon, A., Hogg, J & Hazeteus, S. (1988). *Cognitive and Cognitive Relaxation Treatment of Anger*. Cognitive Therapy and Research, 12.
- Abu Maraq, J. & Barakat, Z. (2016). Irrational beliefs and their relation to self-deception among a sample of students from Hebron University and Al-Quds Open Universities. *An-Najah University Journal for Research (Human Sciences)*, 30 (2), 241-274. (Arabic version)
- Ali, H, & Shareet. A. (2004). Mental health and psychological compatibility. University Knowledge House for Printing, Publishing and Distribution. Alexandria: Egypt. (Arabic version)
- Ansari, H. (2010). Religiosity and its relation to self-efficacy and anxiety among three Kuwaiti samples. *Psychological Studies*, (22), 149-180. (Arabic version)
- Awaja, O. (2016). *Post-traumatic stress disorder and irrational beliefs among adolescents whose homes were destroyed in the Israeli aggression on Gaza 2014*(Unpublished Master's Thesis). Islamic University, Gaza: Palestine. (Arabic version)
- Bani Khalid, M. (2015). Irrational beliefs among secondary school adolescents and their relation to some demographic variables. *Journal of the Association of Arab Universities for Education and Psychology*, 13 (2), 117-138. (Arabic version)
- Beck, A. (2000). *Cognitive therapy and emotional disorders*. Translated by Adel Mustafa. Dar Al-Afaq Al-Arabiya. Cairo: Egypt. (Arabic version)
- Chan, H. W. Q. (2016). *Irrational beliefs, depression, anxiety and stress of university students in Hong*

- among mothers of children treated for leukemia. *Arab Journal of Educational and Psychological Sciences*, 3, 245-284. (Arabic version)
- Hadyawah, M. (2018). *Irrational beliefs and their relation to social anxiety among students of the Faculty of Nursing at Tishreen University* (Unpublished Master's Thesis). Faculty of Nursing, Tishreen University, Syria. (Arabic version)
- Hamza, R. (2015). *Irrational beliefs and their relation to exam anxiety and achievement motivation among third-year secondary school students: A field study in M'sila Province* (Unpublished Master Thesis). College of Humanities, Social Sciences and Islamic Sciences, Haji Lakhdar University: Batna, Algeria. (Arabic version)
- Hooper, S. R., & Layne, C. C. (1983). The Common Belief Inventory for Students: A measure of rationality in children. *Journal of Personality Assessment*, 47(1), 85–90. https://doi.org/10.1207/s15327752jpa4701_10
- Hussein, N. (2011). Irrational beliefs that predict anger outburst. *Psychological Studies*, 21 (2), 207-244. (Arabic version)
- Jabr, H. (2015). Psychological security and its relation to the concept of anxiety among students of the Faculty of Fine Arts. *Journal of the University of Babylon (Human Sciences)*, 23 (3), 1275-1294. (Arabic version)
- Jan, N. (2008). Feeling of happiness and its relation to religiosity, social support, marital compatibility, economic Dowidar, A. (2000). *On medical, pathological and clinical psychology*. University Knowledge House for Printing, Publishing and Distribution. Alexandria: Egypt. (Arabic version)
- Ellis A. (1957). Rational psychotherapy and individual psychology. *Journal of Individual Psychology*. 13 38–44.
- Ellis, A. (1988). *You are What You Think*. Psychology Today.
- Ellis, A. (1991). The revised ABC's of rational-emotive therapy (RET). *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 9 (3), 139-172.
- Ellis, A. (1994). *Reason and Emotion in Psychotherapy*, NY: Birch Lane Press
- Ellis, A. Harper, R.(1976). *A New Guide to Rational Living*. By Institute for Living, Inc. Hal Leighton, California: USA.
- Finlay-Jones R, Brown GW. (1981). Types of stressful life events and the onset of anxiety and depressive disorders. *Psychological Medicine*, 11(4), 803-15.
- Gramer, D. & Kupshik, G. (1993). Effect of rational and irrational statements on the intensity and 'inappropriateness' of emotional distress and irrational beliefs in psychotherapy patients. *British Journal of Clinical Psychology*, 32.
- Habib, U., Abdel-Rahman, M. & Hassan, M. (2018). Irrational beliefs and their relation to future anxiety

- Matthias, S., Maria, S. & Andranik, T. (2010). On the incremental validity of irrational beliefs to predict subjective well-being while controlling for personality factors. *Psicothema*, 22, (4), 543-548. www.psicothema.com
- Momani, M., Ahmad, N. & Mazen, M. (2013). Future anxiety among students of Hebron University colleges in the light of some variables. *The Jordanian Journal of Educational Sciences*, 9, (2), 175-185. (Arabic version)
- Mord, C. & Kirk, R. (1987). An Examination of the Construct and Concurrent Validity for the Irrational Beliefs Inventory Psychology. *A Quarterly Journal of Human Behavior*, 23(43).
- Muhaimzi, S. (2012). *Irrational beliefs and their relation to anxiety among drug addicts and non-drug addicts in Riyadh* (Unpublished Master's Thesis). College of Graduate Studies, Naif Arab University for Security Sciences, Kingdom of Saudi Arabia. (Arabic version)
- Najati, M. (2001). *An Introduction to Islamic Psychology*. Dar Al Shorouk for Publishing & Distribution. Cairo: Egypt. (Arabic version)
- Nasira, T. (2009). The problem of unemployment and its impact on anxiety among Algerian university graduates. *Journal of Studies in Development and Society*. Hassiba Ben Bouali University, Algeria, (6), 1-17. (Arabic version)
- Othman, F. (2002). Patterns of anxiety and its relation to academic level and health status. *Psychological Studies*, 18 (4), 601-648. (Arabic version)
- Khalafi, D. (2016). *Irrational beliefs and their relation to social anxiety among secondary school students: A field study at Ahmed Mansouri Mishonesh Secondary* (Unpublished Master Thesis). College of Humanities and Social Sciences, University of Muhammad Khudair: Biskra, Algeria. (Arabic version)
- Khaledian, M., Saghafi, F., Pour, S. & Moradian, O. (2013). Investigating the relationship of irrational beliefs with anxiety in Iranian collage students. *Journal of Basic and Applied Scientific Research*, www.textroad.com, 759-764.
- Maddi, S. (1996). *Personality theories: A comparative analysis* (6th ed.). Thomson Brooks/Cole Publishing Co.
- Madiha, B., Samira, A. & Fatima, B. (2011). *State anxiety and trait anxiety in an adult with chronic renal failure through the application of the Spielberger Test* (Published Master's Thesis). Faculty of Humanities and Social Sciences, Mohamed Khider University of Biskra. Biskra: Algeria. (Arabic version)
- Mahmodalilo, M., Gholizadehborhani, L., & Zabardast, M. (2010). *Comparison of irrational beliefs of mother whose children had severe mental disorder with mothers with normal children*. Rehabilitating and Empowering University, (Extra version) 5. 702-704. www.sid.ir

- anxiety, growing up trait emotional intelligence as a mediator of the relationship between self-esteem and university anxiety, 1-9.
- Rowwad, Th. & Hamdi, M. (2014). Developing a Gestalt counseling program and rational emotive counseling program and investigating their effectiveness in reducing anxiety among university students. *Dirasat Journal* (Educational Sciences), 41, (1), 592-611. (Arabic version)
- Salloum, H. (2015). Irrational ideas and their relation to strategies of emotional organization among a sample of high school students in Damascus. *Al-Baath University Journal*, Syria, 37 (21), 115-143. (Arabic version)
- Sayrafi, M. (2008). *Administrative Stress and Anxiety*. Horus International Foundation for Publishing and Distribution. Alexandria: Egypt. (Arabic version)
- Shalash, O. (2015). Future anxiety and its relation to psychological hardness and irrational beliefs among a sample the University of Shaqra students. *Journal of Scientific Research in Education*, (16), 264-283. (Arabic version)
- Shaya, A. (2011). Irrational ideas and their relation to psychological pressures among students of the Faculty of Education at Saada, Amran University of Technology. *Damascus University Journal*, (27), 193-241. (Arabic version)
- Sherbiny, Z. (2005). Irrational beliefs and some sources of their acquisition: A achievement, gender, and the environment among university students during the Gulf Crisis. *Journal of Psychology*, 25. (Arabic version)
- Palestinian Central Bureau of Statistics (2020). *Women and men in Palestine: Issues and statistics*. Ramallah: Palestine. (Arabic version)
- Philip, H., Mark, S. , Gary, A. & Daniel B. (2014). Irrational Beliefs in Posttraumatic Stress Responses: A Rational Emotive Behavior Therapy Approach. *Journal of Loss and Trauma: International Perspectives on Stress & Coping* Publication. <http://www.tandfonline.com/loi/upil20>
- Qahtani, M. (2016). Future anxiety and its relation to irrational ideas in light of some demographic variables among male and female students of the Department of Psychology at Imam Muhammad Ibn Saud Islamic University. *Journal of Human and Social Sciences*, 41, 13-74. (Arabic version)
- Rihani, S. (1985). Development of Rational and Irrational Beliefs Test. *Dirasat Journal* (Educational Sciences), 12, 11, 77-95. (Arabic version)
- Rihani, S., Hamdi, N. & Abu Talib, S. (1989). The Relationship between Irrational Beliefs and Depression among the University of Jordan Students. *Dirasat Journal* (Educational Sciences), 16 (6), 36-56. (Arabic version)
- Rocio, G., Gómez, M., Ana, C., Paloma, O., Antonio, Z. (2019). Facing

study on a sample of university students. *Journal of Psychological Studies*, 15 (4), 531-567. (Arabic version)

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.

WHO (2020). *Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus. (2019-nCoV)*.

Zwerner, A. & Deffenbacher, L. (1984). Irrational Beliefs, Anger and Anxiety. *Journal of Counseling Psychology*, 31(3).