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The Student's Psychological Stress During Covid-19

Stres Psikologis Siswa Selama Covid-19

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Abstract

This study investigates psychological stress among middle school students in Baquba district during the COVID-19 pandemic, focusing on potential gender-based differences. Despite established evidence of heightened stress levels during pandemics, few studies have explored these impacts on school-aged children and potential variances between genders. Utilizing a balanced sample of 100 students (50 male and 50 female) from four schools, this research employed a psychological stress scale with confirmed psychometric properties, including a stability coefficient of 0.80. Statistical analysis revealed significant stress levels among the students, yet no gender differences were identified at the 0.05 significance level. These findings suggest that interventions aimed at reducing student stress during pandemics need not differentiate between male and female students but should instead focus on strategies that address the broader student population.

Highlights:

- Significant psychological stress exists among middle school students during COVID-19.
- No statistical difference in stress levels between male and female students.
- Stress reduction interventions should target all students, regardless of gender.

Keywords: Psychological Stress, COVID-19, Gender Differences, Middle School, Stress Interventions

Published date: 2024-06-19 00:00:00

Introduction

Like other classes of community, students are exposed to several stresses due to the nature of the age and academic stage, personal experiences, and the harsh conditions that society is going through during Covid-19. The effects following those conditions are negatively reflected on the student's physical and psychological health and on social life in general, in addition to its repercussions on their achievement in particular. During one's life, a person faces many hard situations and events affecting his daily life and his psychological energy. The conditions and events that a person encounters on a daily basis and that his psychological and physical energies cannot help him confront and deal with are referred to by the researchers as stress. Due to the stress, challenges, and issues that students today face in order to meet the demands of an era in which numerous developments have taken place in various educational, technological, economic, political, social, family, and health fields, it requires ways of thinking and ways of dealing that differ from what the person is accustomed to in terms of ready-made methods to address these issues and developments. [1]

The secondary stage, which is accompanied by various stresses, events, circumstances, and urgent everyday problems, is thought of as one of the significant stations in the student's life. These stresses had health, psychological, social and school effects upon learners. This stage leads students to encounter several hitches and situations that require responses and reactions. Also, it aids in preparing students to handle any crises and occasions that may arise in the future. Psychological stresses are a great danger to the student's health and balance, as well as threatening his being, because of the negative effects that arise from them, like inadaptability, poor level of performance, incapability to practice daily life, low motivation to study, and a feeling of psychological exhaustion, where psycho stress arise. Hence, the need for this paper is to address the questions: What is the student's psychological stress during Covid-19? Are there differences in the male and female students' level of psychological stress?

1. Research Importance

Recently, the world have vast technological and information developments, and openness to different cultures. This necessitates those who are responsible for educational institutions must adapt to global trends. It is the outcome of the current global conditions, as reflected by the spread of Covid-19, which has had a significant influence on the educational process as a result of this pandemic. Stress is the primary motor of life, revealing the hidden human qualities and capabilities that push the individual to labor, endure, confront, and encounter. Stress should be viewed positively in terms of its capacity to motivate people and encourage them to work harder in order to realize a state of psychological and social harmony that the person accepts for himself and his community, rather than solely from the perspective of how it affects the individual's psychological health and compatibility. Hans Salye, 1976, decides that an individual cannot be without stress except by death. However, it exists in such a way that it has no effect on human life, adaptability, or mental or physical balance. [2]

Several scholars believe that psychological stress is any new or severe natural or social condition that an individual faces. Student's normal response is insufficient to confront it, which disturbs his psychological and social balance. Psychological stress is described as exhausting, harmful, stressful, or threatening or risky. At its most extreme, it might be described as a disaster. In this case, it is sudden or overwhelming and represents a danger to the individual or important people in his life. Theorists consider psychological stress or states of psychological and physical tension as a result of the forces exerted by stressful events on the individual [3].

Perhaps, the change and loss are among the most psychological stresses that individuals are exposed to in various aspects of life. According to Erickson, during individual's self-realization, they possibly face many obstacles that they may or may not succeed in overcoming. Therefore, a person must know his weaknesses and strengths in order to be able to understand himself. The individual's mental health requires a degree of emotional balance, social adaptation, the ability to adapt to environmental variables. The individual's way of interpreting what he is exposed to through his interaction with his environment has an impact and an important role in his mental health [4].

Everyone experiences psychological stress from time to time. A person may also go through all kinds of nervous situations that may occur in everyday life. Low-level stress can be useful or encouraging.. Many strategies may be used to deal with stressful situations, and quick actions can be made to ease tension, stress, or tiredness. The literature indicates that psychological stress is a threat to the health and balance of the individual, as well as threatening his psychological entity. The negative consequences include difficulty to adapt, poor performance, inability to practice everyday life, low willingness to work, and a sense of psychological weariness. The way of dealing with such stresses are the mature solutions to re-establish harmony in a person if he is inferred to know the appropriate method for his personality. On the other hand, The study of stress management techniques is a compensating component that helps us preserve both mental and physical health, provided the individual is aware of how to cope with stress. What are the appropriate methods and strategies to face such a situation. Some view these methods as stabilizing factors that help the individual to maintain psychological compatibility during the stressful times of his life. [5]

2. Research Objectives

The current research aims at identifying:

- a. The student's psychological stress during Covid-19.
- b. The significance of differences in the student's level of psychological stress based on gender variable (male, female).

3. Research Limits

The research limit is the students of the governmental preparatory stage in the city of Baquba, affiliated to the General Directorate of Diyala Education for the academic year 2021-2022, of both (males and females).

4 . Define Terms

First: psychological stress

It was defined by:

- a. The Dictionary of Psychoanalysis: All the external factors that put pressure on the individual's psychological state to the extent that it puts him in a state of stress and anxiety and negatively affects his ability to achieve integration and balance in his personality [6].
- b. Lazarus 1986: The psychological stress is a kind of events outside the individual's domain place him in a unique predicament and are special needs that endanger him in some way. [7]
- c. Abdul-Ghani 2005: The psychological stress is the problems and unpleasant situations which face the person in his daily life or suddenly, like loss, insecurity, social rejection and poverty [8]
- d. Al-Taritri 1994 defined psychological stress as a state that the person suffers from when he is faced with an urgent demand that exceeds the limits of his ability, or when he falls into a situation of harsh conflict [9].
- e. Oltmanns & Emery 1998: The psychological stress is the events imposed on a person, and require him/her to adapt physiologically, cognitively or behaviorally [10].
- f. Al-Hashemi 2006 defined the psychological stress as a group of painful and disturbing events that individuals exposed to in their lives and that lead to a threat or be a burden on them and keep them away from the state of vital balance that man seeks. Their sources are either external (environmental) or internal (the individual himself) [11].
- g. Al-Sultan 2008 defined the psychological stress as the problems and unpleasant situations facing the person in his real-time life or suddenly, such as loss, insecurity, social rejection and poverty [12].

The theoretical definition of psychological stress:

The researcher adopted Lazarus definition of psychological stress.

Operational definition of psychological stress:

The overall score achieved by the respondent via his answer to the paragraphs of the psychological stress scale.

Second: Covid-19 pandemic

The World Health Organization has defined them as viruses of a widespread family known to cause diseases ranging from the common cold to more severe illnesses such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

Methods

A. Theoretical Framework

Psychological stress arises from the individual's dealings with the environment when he interprets an event or alert as a danger or threat. The situation that raises the stress includes requirements that go beyond the available and possible means for that individual. The sources of psychological stress are events that caused trauma to the individuals who were subjected to it, making them feel insecure and expecting painful events, and causing a number of them to have what is called adjustment disorder. The most common theories in the field of psychological stress are:

1. Theory of Stressful Life Events

This theory focused on the environmental events that a person exposed to during his life. This theory was adopted in the thirties of the 20th century in the research and studies conducted by Adolf Meyer, using lists of life experiences to diagnose medical problems by studying the individual's life history and knowing the beginning of the emergence of symptoms of physical disorders. In addition, some information was recorded that focused on the various environmental situations that the person encounter, like marriage, or changing the place of residence, or the death of a person dear to him...etc. The aim of using these lists was to identify daily life events that are likely to be a cause of some diseases [13].

2. The Theory of the Syndrome of General Adaptation Symptoms

Hans Selye as a physician, influenced by the physiological interpretation of stress. Thus, Selye's theory is attributed to biological theories that rely on biological or physiological reactions in their interpretations. Hans Selye's theory stems from a postulate that stress is a non-independent variable and is a response to a stressor that characterizes a person and places him on the basis of a response to a stressful environment. There is a specific response or patterns of responses from which it can be inferred that a person is under an annoying environmental influence [14].

Selye considers that the symptoms of the physiological response to stress are universal, aimed at preserving the entity and life. But although most of the responses are temporary, they create chemical effects that build up in the body and lead to a nervous breakdown. It is the point of connection between stress and psychosomatic diseases. General adjustment syndrome describes the general response of an individual to stress in terms of three stages:

a. The First Stage: the Alarm Response

This stage is defined by exposing the individual to the stimuli of the stressful event when his sensory organs receive them. The defense mechanisms of the body alert and activate to defend it to confront the temporary state of shock, where the body quickly secretes hormones and stimulates the immune system to deal with the stress.

b. The Second Stage: the Stage of Resistance

At this stage, the adaptive mechanisms in the human body work on the continuous resistance to face stress and try to restore the individual to his psychological balance.

c. The Third Stage: Stage of Exhaustion

At this stage, the organism becomes helpless, signs of exhaustion gradually appear on it, resistance ends, and collapses. When stressful situations go for a longer period, it would lead to depletion of the body's resistance. This stage is called the "exhaustion, or depletion" stage. Symptoms reappear in a more severe and dangerous way, and in some cases this stage ends with the death of the individual [15].

3. Cognitive Evaluation Theory

Richard Lazarus 1970 (Professor at the University of California) believes that what determines the event as a stress depends on the cognitive evaluation of the event and the individual's interpretation of it. It was entitled "cognitive evaluation". This means judgments regarding how we act in our confrontation with the environment and in our life in general, how we deal with what is harmful and benefit from it, and an individual's interpretation of the events he goes through, whether they are painful, threatening, or challenging, his position on these events and how to deal with them. The individual's assessment of the situation depends on several factors, including personal, external, especially social factors, and factors related to the situation itself [16].

Lazarus emphasized the importance of the individual's awareness and evaluation of the stressful situation and the methods he used to deal with it. In this regard, he indicated that there are two parallel evaluation processes [17].

Initial evaluation: the individual perceives events as leading to a positive, neutral, or negative outcome. It is evaluated as not bad or could be bad, based on the harm, threat or challenge it can cause.

Secondary Evaluation: The process of secondary evaluation of the situation begins at the time the initial evaluation of the stressor events takes place. The process of secondary evaluation includes an assessment of the capabilities and resources that the individual possesses to deal with the event, and whether they are sufficient to face the harm, threat and challenge that arises from the event [18].

4. Moos and Schaefer Theory

Stress is explained by the model of Moos and Schaefer 1986. This model indicates that the processes of coping with stress include behavioral and cognitive efforts made by the individual while dealing with stressful situations and events. Moos and Schaeffer identified three phases of an individual's response to a stressful event.

The first stage includes three factors:

- a. The factors related to the nature of the stressful event in terms of the stressful event like disasters, wars, social events such as marriage or the death of beloved one, or physiological factors such as illness.
- b. The individual's demographic and personal factors: These factors include age, gender, economic and social status, self-confidence, beliefs, cognitive and emotional maturity, and the individual's experiences in facing events.
- c. Factors related to the social and physical environment: These factors include the nature of the environment and social relations between individuals and the degree of cohesion among them, whether it is individuals or other people who influence the individual.

The second stage: it includes three factors:

- a. The individual's awareness of the stressful event: This awareness is gradual after the occurrence of the stressful event, as it appears vague at first, then its features, dimensions, and possible consequences soon become clear.
- b. The individual takes actions that lead to coping with stressful events: represented in maintaining strong personal relationships with family, friends and individuals who can provide assistance in facing the stressful event.
- c. Adjustment Strategies: It occurs by focusing on the stressful event and understanding it, and discovering the appropriate method for coping with it, with the aim of restoring the individual to his balance.

The third stage: the results of the stressful event and its effects on the individual. This adjustment may be successful, as the individual can benefit from the experiences he gained during the event in order to continue his life, or he may fail to achieve reconciliation, so symptoms of psychological and physical disorder appear on him [19].

5. Buss 1962 Theory

Buss believes that events are detrimental stimuli that the person faces in his everyday life via the various situations experiencing. One of those situations is what is expressed by frustrations that impede the instrumental response. Deprivation and loss are among those mysterious events that an individual goes through. Buss also believes that frustration is only a type of harmful stimulus because those stimuli are broader and more comprehensive. There are sources of annoyances in the individual's daily life, such as noise, bright light, population bottlenecks, overcrowding, sudden changes in events. Buss emphasized particular kinds of detrimental stimuli, like social rejection, and threat, as these stimuli were given attention, whether they occurred verbally or behaviorally. He considered them so impressive, as aggression is stressful events on the individual. Buss divided rejection into three types:

- a. Clear and Explicit Rejection: It means that the individual confronts the issue immediately, like compelling him to go in front of others or without them.
- b. Indirect Verbal Rejection: It is experienced implicitly by the person, like instances in which the person is subjected to scorn and ridicule, where the person has poor self-esteem.
- c. Criticism: It is a sequence of critiques that a person faces throughout his life, like criticism of parents or instructors in a harsh manner. They are unforgettable situations, where criticism is about appearance, clothes, or the way of speaking, all of them lead to undermining the person.

With regard to the threat, it is expressed by verbal situations, like parents threatening their children with beating and punishment. The threat is a source of panic and fear. In addition, such state of affairs could be hard for the person to confront or respond in kind, since he lacks the valor and daring to do so directly. The psychological stresses are threatening in nature, but they are the most approaching to the events of insecurity. Threat is known as the vulnerability, and continuing to expect the possibility of its occurrence to the extent that it is accompanied by the use of the mechanisms of belief in fate and destiny. The individual may have experienced it previously, and then he would suddenly expect it to happen. Threatening to kill or die of disease and other events that threaten security.

6. Research Procedures

The procedures include a description of the research community, sample, tools, as well as the statistical methods that were used to process the current research data.

a. First: Research Community

The research community is expressed as all the individuals, people, or things that make up the research problem. The current research community consists of (4) schools selected from Baquba district schools for the year (2021-2022).

b. Second: Research Sample

The sample means selecting a part of the research community so that this part represents the whole community in all its characteristics. The randomly selected samples are the best and most accurate types of samples for representing the community. The sample was chosen randomly. It was composed of (100) male and female middle school students, with (50) male (50) female students from (4) schools in Baquba district, as illustrated in Table (1).

No	School	Chosen sample		
		Males	Females	Total
1	Al-Khansa High school for girls		25	25
2	Jumanha high school for girls		25	25
3	Al-Jawahry high school for boys	25		25
4	Al-Sadr high school for girls	25		25
		50	50	100

Table 1. Illustrated composed male and female middle school students

For the purpose of adopting an appropriate measure to achieve the research objectives, the researcher verified a number of relevant literature and standards, and did not find what suits the nature of the sample and the conditions of Covid-19. So, this prompted the researcher to prepare a tool to do the research tasks through the following actions:

7. Arising an Exploratory Questionnaire

The researcher formulated an open questionnaire to a sample of (30) masculine and feminine students, with (15) students, who were randomly chosen from two schools. The first school is Al-Sadr Secondary School for Boys and Al-Khansa High School for Girls. The questionnaire included a question about the psychological stress and obstacles that one faced during Covid-19. (Appendix / 1).

B. Literature and Previous Studies

The researcher examined the previous studies and literature that coped with the concept of psychological stress. Accordingly, (24) paragraphs were formulated and distributed over (4) fields (7) items for the psychological field and (6) items for the social field (7) for the academic field (4) for the economic field (Appendix / 2).

a. Validity

Validity is a key concept in the field of relative measures, if not the most important of them all. Validity means the ability of the tool to measure the phenomenon that was designed to measure it. The apparent validity of the test can be calculated by expressing it to a group of specialists in education and psychological sciences.

b. Stability

Stability means the consistency of the paragraphs of the scale that measures the objective and how consistent its items are. It is an indication of the stability of the test results to find out the extent of the stability of the items, the researcher calculated the stability by:

c. Test and re-test

It is the application of the same measure twice on the same sample, as it is applied to a group of individuals and then after a specified period of time it is re-applied to them again under the same conditions in which the measure was applied the first time. Therefore, the scale was applied to a sample of (30) students randomly, with (15) male and (15) female students from the research community. The scale was applied, then the scale was re-applied on the same sample fortnight after the first application. The correlation coefficient between the first and second applications was calculated by using the Pearson correlation coefficient. The value of the correlation coefficient was (0.80), which was good to be relied upon.

d. Statistical Means

1. The Person Correlation coefficient was employed to figure the stability extraction by the test and re-test method.

2. The T-test for single sample to figure out the significance of the differences between the mean scores of the sample on the psychological stress scale and its hypothetical mean.

Results and Discussion

A. Presentation and Interpretation of Results

1. First: the First Objective

(Identifying the student’s psychological stress during Covid-19)

The arithmetic mean of the scores of this research sample was calculated on the psychological stress scale to achieve this goal. The arithmetic mean was (64,460), with a standard deviation of (12,023). It was also calculated to figure out the significance of the difference among the arithmetic mean of the scores of the sample, where the hypothetical mean of the scale was (60) by using the T-test for one sample. It was found that the calculated T-value of (3,710) was greater than the tabular value of (1.65) at a significance level of (0.05) and with a degree of freedom (99). The difference is statistically significant as shown in Table (2).

Sample	T- Value		Hypothetical mean	Standard deviation	Arithmetic mean	Level of sig.0,05
	Tabular	calculated				
100	1,65	3,710	60	12,023	64,460	Sig

Table 2. *The difference is statistically significant tabular value*

The results revealed that the calculated T-value was higher than the tabular t-value. This indicates that the respondents have psychological stress, which may be ascribed to the possibility of infection with the Covid-19 infected almost all, and that home quarantine was imposed on everyone, including students. Moreover, the lack of clarity of vision regarding the nature of coping with the pandemic, and the changes that occurred in the individuals’ lives, inevitably led to their feeling of psychological stress. Psychological stress is inevitable in our daily lives. Sometimes these stresses may be necessary to motivate us to perform our work and carry out our various tasks. Lazarus argues that stress arises from the interaction among the individual and the environment when the person interprets the stimulus as a threat, harm, or challenge. Requirements are perceived in general stressful situations as a burden or exceed the available means possessed by the individual.

2. Second: the Second Objective

The second objective is represented in the significance of differences for student’s level of psychological stress according to the gender variable (male, female). To find out the significance of the difference in the level of psychological stress based on the gender variable (males, females), the researcher employed the T-test for one sample. Table (3).

Type	No	T- Value		Standard deviation	Arithmetic mean	T- Value
		calculated	calculated			
Males	50	1,98	0,166	12,419	64,260	Non-sig.
	50			11,736		

Table 3. *T-test difference in the level of psychological stress based on the gender male*

No statistically significant differences were noticed among males and females in the level of psychological stress as illustrated in results. The calculated value was (0.166), which was less than the tabular value of (1.98) at the level of significance (0.05) and with a degree of freedom (98). The above table indicates that there are no differences in psychological stress according to the gender variable. This was due to the fact that both genders were exposed to the same situation and conditions, but the whole world experienced the same conditions. The feeling of psychological stress is a reaction resulting from an external danger, and an emotional reaction due to breaking out fatal virus. Within such circumstances, it is normal for the individual to feel of fear and anxiety. Furthermore, all of this is reflected in the various aspects of students’ lives, whether psychological, social, academic or economic, for both males and females.

Conclusion

The study aimed to assess psychological stress among middle school students during the Covid-19 pandemic, focusing on gender differences. It involved 100 students from four schools in the Baquba district. The psychological stress scale used demonstrated a stability coefficient of 0.80, ensuring reliability. Findings revealed that students

experienced significant psychological stress during the pandemic, with no notable differences between male and female students. These results underline the pervasive impact of the pandemic on student mental health, irrespective of gender. The study emphasizes the need for educational stakeholders to implement targeted psychological support and stress management programs to aid students in coping with pandemic-related stressors. Further research could explore long-term psychological impacts and the effectiveness of specific interventions to mitigate stress among students in similar crises.

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