

**Al-Quds University**

**Deanship of Graduate Studies**



**The Prevalence of Depressive and anxiety Symptoms  
among Adolescents at non -Governmental Schools in  
Bethlehem Governorate**

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**The Prevalence of Depressive and anxiety Symptoms  
among Adolescents at non -Governmental Schools in  
Bethlehem Governorate**

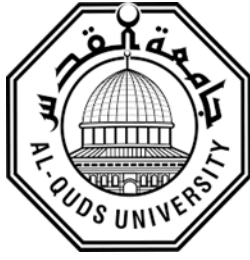
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بيت لحم

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## **Dedication**

To the Soul of My Friend Ziad Hammash, he will be always remembered.

To my Father, the first teacher in my life.

To my friend Ashraf who believed and supported my academic career.

Ibrahim Ahmad Awwad Salim

## **Declaration**

I declare that this thesis has been just submitted by me and that it has not been submitted, in whole or in part in any previous research or application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

**Signature:**

A handwritten signature in blue ink, consisting of several overlapping loops and a final vertical stroke.

**Ibrahim Ahmad Awwad Salim**

**Date: ١٤٤٣/٢٠٢٢**

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Finally, I give sincere and deep thanks for all whom supported me in my educational career.

# **The prevalence of depression and anxiety symptoms among adolescents in Bethlehem non-governmental schools.**

**Prepared by: Ibrahim Ahmad Awwad Salim**

**Supervisor Najah Al khatib**

## **Abstract**

Adolescence stage considered one of the most sensitive stages in human being development as it is a transformation stage from being a child to be an adult. This transformation holds several biological, conative and behavioral changes and pressures which would be trigger to depression and anxiety among them.

Depressive and anxiety symptoms have been estimated to occur in up to (39.5%) of some adolescent populations, and it is believed that during adolescence, a depressive episode is likely to take place at least once during the adolescent time period in (10%) of adolescents (Zhou et al., 2020).

The aim of this study was to assess the prevalence of depressive and anxiety symptoms among adolescents at Bethlehem non-governmental schools.

To achieve the study objective, a cross sectional study was conducted that targeted a population of (973 students) from Bethlehem non-governmental schools. Beck depression inventory which is a self-report questionnaire was used to assess the prevalence of depressive symptoms besides Spielberger state anxiety inventory which was used to assess the prevalence of state anxiety. The sample consisted of (317) students from tenth and eleventh grades who were selected conveniently from the randomly selected schools.

The questionnaires were tabulated and analyzed using (SPSS) software version 21 by using descriptive analysis and parametric tests such as frequency, percentage, T-tests, ANOVA and Tukey tests. The results of the study presented that 53.6% of the students had minimal depressive symptoms of depression while 46.4% appeared to have depressive symptoms in reference to a total of 17 as a cutoff point according to BDI inventory.

The results showed that 18.6% of the participants had moderate depressive symptoms while 20.2% had severe depressive symptoms. On the other hand, the study found that the majority if the participants (62.5%) had no anxiety symptoms, while 38.5% had anxiety symptoms according to Spielberger state anxiety inventory.

Moreover, the study findings indicated that there was a statically significant relationship between depression and gender, region of living, living area, family income, school achievement and parent's marital status. While, a statically significant relationship was found between state anxiety and gender and parent's material statues.

There are several writers address the correlation between anxiety and depression they mention that the feeling of depression as a circle. (Spielberger, 1983) mentioned that when we get anxious, we tend to have this pervasive thinking about some worry or some problem, which lead into creating negative thoughts which affects mood and my result depression.” (Spielberger, 1983). Therefore, the schools administrative and decision makers need to increase their efforts in term of facilitating the accessibility to psychosocial and counseling services, disseminating awareness materials relating to depression and anxiety symptoms.

Keywords:

Depression, Anxiety, state anxiety, Adolescents, Nongovernmental schools.



مدى انتشار اعراض الاكتئاب والقلق بين المراهقين في المدارس غير الحكومية في محافظة

بيت لحم

الطالب: ابراهيم احمد عواد سليم

اشراف الدكتورة : نجاح الخطيب

### الملخص

تعتبر مرحلة المراهقة من المراحل الحساسة في حياة الانسان التطورية بما انها تعد مرحلة انتقالية من كون الانسان طفل يكونه بالغ. هذا التغير يحمل في طياته العديد من التغيرات البيولوجية، الادراكية، السلوكية بالاضافة الى الضغوطات التي يمكن ان تحفز ظهور اعراض الاكتئاب و القلق بينهم.

تظهر اعراض القلق والاكتئاب عند حوالي ما يعادل (39.5%) من مجتمع المراهقين، ويعتد بانه خلال مرحلة المراهقة تحدث نوبات الاكتئاب والقلق عند المراهقين على الاقل مرة واحدة عند 10% من الاطفال وذلك على اقل تقدير.

وتهدف هذه الدراسة الى التعرف على نسب انتشار اعراض القلق والاكتئاب بين المراهقين في المدارس غير الحكومية في محافظة بيت لحم.

ولتحقيق هدف الدراسة، تم عمل دراسة مقطعية استهدفت (973) طفل وطفلة من المدارس غير الحكومية في بيت لحم. وقد تم استهدام مقياس بيك للاكتئاب والذي يعد مقياس استجابة ذاتي ويقيس اعراض الاكتئاب، بالاضافة الى مقياس سبيلبيرجر للقلق كحالة والذي يستخدم في قياس نسب انتشار القلق كحالة. وتتكون عينة الدراسة من (217) طالب من الصف العاشر والصف الحادي عشر والذين تم اختيارهم بطريقة العينة القصدية غير العشوائية من المدارس التي تم انتقائها بطريقة عشوائية.

تم ادخال البيانات وتحليلها باستخدام برنامج الرزم الاحصائية للعلوم الاجتماعية (SPSS) رقم 21، وقد تم استخدام عدة اساليب احصائية وصفية و قياسية مثل التكرارات، النسب المئوية ، واختبار (ت) للفروق بين المجموعات و اختبار التباين الاحادي (ANOVA) بالاضافة الى

اختبار توكي لفحص الفروق بين المجموعات. اظهرت نتائج البحث بأن 53.6% من الطلاب لديهم الحد الأدنى من اعراض الاكتئاب، بينما كان هناك 46.4% ظهرت لديهم اعراض اكتئاب بناء على نقطة نقطة الحسم والتي كانت 17 فأعلى بناء على اختبار بيك للاكتئاب. وظهرت النتائج ان 18.6% من المشاركين يعانون من اعراض اكتئاب متوسطة، بينما يعاني 20.2% من المشاركين من اعراض اكتئابية حادة. ومن ناحية اخرى.

وجدت الدراسة بأن معظم المشاركين والبالغ نسبتهم 62.5% لا يعانون من اعراض القلق كحالة، بينما كان هناك 38.5% من المشاركين يعانون من اعراض القلق كحالة بناء على مقياس سبيلبيرغر لقياس القلق كحالة. بالاضافة الى ذلك، اظهرت نتائج الدراسة بأن هناك علاقات ذات دلالة احصائية بين اعراض الاكتئاب والجنس، ومنطقة السكن، و دخل الاسرة، و التحصيل الاكاديمي، و الحالة الاجتماعية للعائلة.، وايضا اظهرت النتائج ان هناك دلالة احصائية بين اعراض القلق كحالة و بين الجنس والحالة الزوجية للعائلة.

وبناء على نتائج الدراسة الحالية فانه على ادارة المدارس وصناع القرار ان يعززوا جهودهم فيما يتعلق بزيادة منالية الوصول الى الخدمات النفس اجتماعية وخدمات الارشاد للمراهقين، بالاضافة الى زيادة وعي الطلبة باعراض الاكتئاب والقلق من خلال استحداث برامج التثقيف والتوعية في المدارس.

كلمات مفتاحية :

الاكتئاب، القلق، القلق كحالة، المراهقين، المدارس غير الحكومية.

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## **Abbreviation**

<b>AQU</b>	<b>Al Quds University</b>
<b>BDI</b>	<b>Beck Depression inventory</b>
<b>SES</b>	<b>Social Economical situation</b>
<b>DSM-V</b>	<b>Diagnostic and Statically Manual for mental disorders Fifth edition</b>
<b>NIS</b>	<b>New Israeli Shekel</b>
<b>US</b>	<b>United States of America</b>
<b>SPSS</b>	<b>Statically Package for social science</b>
<b>WHO</b>	<b>World Health Organization</b>
<b>STAI</b>	<b>State – trait anxiety inventory</b>
<b>MoE</b>	<b>Ministry of Education</b>
<b>MDD</b>	<b>Major depressive disorder</b>
<b>CES-D</b>	<b>Center for Epidemiologic Studies Depression</b>
<b>CES-Dc</b>	<b>Center for Epidemiological Studies Depression Scale for Children</b>
<b>PCBS</b>	<b>Palestinian Central Bureau of Statistics</b>



## **Chapter one**

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Introduction

Problem statement

Justification for the Study

The aim of the study

Study objectives

Study questions

Limitations of the study

Study Variables

Definition of Terms

## Chapter One

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### 1.1. Introduction

Adolescence is one the most important developing stages in a person's life, as it includes tremendous changes occurring in all dimensions of biological, cognitive, psychosocial, and emotional aspects, necessary for the shift from childhood to adulthood (Richard et al., 2019). There is a consensus from all communities around the world that adolescence is an undeniable phase of one's life, in which one get to be predisposed to severe stress that might be dangerous (Casey et al., 2011).

an investigation in 30 countries confirm that adolescence is a universally recognized life stage, starting around, or just after puberty, and ending with the beginning of the adulthood stage (Currie et al., 2008). During this sensitive transitional period, adolescents experience moderate to traumatic levels of stress, related to interpersonal problems and maladaptation, which could lead them to develop suicidal tendencies, mood disorders, and behavioral misconduct (Casey et al., 2010).

The adolescent's family plays a significant role in their mental and medical health. Children, who grow up in broken families, or without proper communication, care, tenderness, respect, and love, are much more at risk for mood and affect disorders, which are considered the most common disorders among adolescents, with variations in prevalence from one country and culture to the other (Watson et al., 1994).

Alongside depression, which is estimated to impact up to (29.4%) of the population, at least once during their lifetime, anxiety has a global prevalence estimation of (15-30%) (Murphy et al., 2012).

In another study, depressive symptoms have been estimated to occur in up to (39.5%) of some adolescent populations, and it is believed that during adolescence, a depressive episode is likely to take place at least once during the adolescent time period in (10%) of adolescents (Zhou et al., 2020)

On this, the World Health Organization (WHO) stressed that depression, specifically, will continue to rank as one of the leading global disease burdens. As such, it is one of the priority conditions covered by the WHO's Mental Health Gap Action Programs (WHO, 2014). Moreover, WHO considers the most common mental disorder, as its statistics revealed that anxiety is in the top ten causes of non- fatal health live loss (WHO, 2017).

A study conducted in 2020 reveled that depression and anxiety symptoms were 25.2% and 20.5%, respectively. While the study mentioned that the prevalence of depression and anxiety symptoms during COVID-19 have doubled, compared with pre-pandemic estimates (Nicole et al, 2021).

According to the American Psychiatric Association (APA) (2013), as stated in the revised text of the Diagnostic and Statistical Manual of Mental Disorders, (5th) edition, the two primary diagnostic criteria for depression are depressed mood and loss of interest or pleasure in most activities, occurring for a duration of two weeks, either separately or together. Secondary symptoms may include significant appetite change, weight loss, or both, sleep disturbance, psychomotor agitation or retardation,

fatigue or energy loss, feelings of worthlessness or guilt, attention or concentration difficulties, and recurrent thoughts of death or suicide. Of these diagnostic symptoms, dysphonic mood, appetite and sleep change, and thoughts of death are most common, while loss of interest in activities and psychomotor change appear to be less common (DSM-V. P; 152)

This introduced the need for this study, which was conducted to assess the prevalence of depressive and anxiety symptoms among adolescents in non-governmental schools in the Bethlehem Governorate.

## **1.2 Problem Statement:**

Adolescents form the largest demographic group, as they form around (20%) of the population on earth (Currie, 2008). In Palestine, children aged (10-17) years old, compose around a quarter (25%) of the population in the West Bank and the Gaza Strip (PCBS, 2021). When taking into consideration the sensitivity of this developmental stage, as well, adolescence health issues rise to a crucial topic of consideration.

Regionally, a study in Jordan was conducted by Dwekat et al. (2021) showed that 78.2% of Jordanian adolescents suffer from severe anxiety symptoms.

Relevant Palestinian work on the topic of children's mental health in a Palestinian population indicated that (42%) of Palestinian children had emotional and behavioral problems (Zakrison, 2004). This raises concerns of mental health professionals with the health conditions of children. Palestinian counseling center paper (2009) estimated that 25% of the service seekers suffering from Anxiety symptoms, while 16% of the people seek service from Palestinian counseling center suffers from anxiety. (Bushia, 2010).

The latest study regarding to the prevalence of depression and anxiety among adolescents was Radwan et al. (2021) which revealed that the prevalence of depression among Palestinian students aged from 10 – 18 during Corona pandemic was 72.1% while 89.1% suffers from moderate to severe anxiety symptoms.

In Palestine, some adolescent populations have been studied in terms of prevalence of depressive symptoms, but none of the studies referred to the prevalence of depression among adolescents in non-governmental schools, according to the researcher's knowledge.

Depression holds cognitive, affective, and behavioral implications. It causes feelings of sadness and a loss of interest in activities once enjoyed, which directly impacts interpersonal relationships, academic and professional achievement, as well as general life quality (DSM-V, 2013).

While anxiety considered the cornerstone of most of the mental and personality disorders (Ghanim. 2004), besides that it affects several dimensions of persons' life as academic achievement and interpersonal relationships (Zahrn. 1974). Moreover, it affects the total health status of the individuals including heart, digestive system, and respiratory system. (Fayed.2001). As well, sleeping disturbance, focus impairment,

along with physical symptoms as problems in digesting loss of weight, muscular pain, would be considered as a main result of severe anxiety. (AL khatip, et al . 2001).

In general, depression and anxiety are common in the stage of adolescence, as this stage is characterized by biological, cognitive, and emotional changes which increase the risk for adolescents to develop depression and anxiety much more than other age categories. (AL khatip, et al . 2001).

The absence of relevant studies on these important health issues, among a high-risk demographic group, creates a great obstacle for decision makers in terms of developing strategies, implementing programs, and identifying budgets to combat anxiety and depression among adolescents, as assessment of prevalence is the first step to an informed opinion and practice.

As such, the researcher was motivated to conduct this study, which addressed the prevalence of depressive and anxiety symptoms among adolescents in Bethlehem Governorate non-governmental schools, and their relationship to some demographic and non-demographic variables.

### **1.3 Justification of the study:**

The importance of this study came partially due to the lack of studies to assess the prevalence of depressive and anxiety symptoms among adolescents in the tenth and eleventh grades in the Bethlehem Governorate non-governmental schools, making it one of few of its kind, according to the researcher's knowledge.

These schools include private schools, which do not often allow researchers access to their students, and which also hinders these schools' decision makers' efforts in providing appropriate mental health interventions for their students, especially those indeed struggling from depressive and anxiety symptoms.

### **1.4 Study Aim**

The main aim of this study was to measure the prevalence of depressive and anxiety symptoms among adolescents at non-governmental schools in the Bethlehem Governorate.

### **1.5 Specific Objectives**

1. To identify the prevalence of depressive symptoms among adolescents at non-governmental schools in the Bethlehem Governorate.
2. To identify the statistically significant differences in the prevalence of depressive symptoms among adolescents at the Bethlehem Governorate's non-governmental schools according to demographic and non-demographic variables (age, gender, Living area, economic status of the family, grade, academic achievements, number of siblings, birth order of the participant, marital status of parents, and number of family members).



3. To identify the prevalence of anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools.
4. To identify the statistically significant differences in the prevalence of anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools according to demographic and non-demographic variables (age, gender, Living area, economic status of the family, grade, academic achievements, number of siblings, birth order of the participant, marital status of parents, and number of family members)
5. To identify the statistically significant relationship between depressive symptoms and anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools.

## **1.6 Study Questions**

1. What is the prevalence of depressive symptoms among adolescents at Bethlehem Governorate's non-governmental schools?
2. Are there statistically significant differences in the prevalence of depressive symptoms among adolescents at Bethlehem Governorate's non-governmental schools according to demographic and non-demographic variables (age, gender, Living area, economic status of the family, grade, academic achievements, number of siblings, birth order of the participant, marital status of parents, and number of family members)?
3. What is the prevalence of anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools?
2. Are there statistically significant differences in the prevalence of anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools according to demographic and non-demographic variables (age, gender, Living area, economic status of the family, grade, academic achievements, number of siblings, birth order of the participant, marital status of parents, and number of family members)?
5. Is there a statistically significant relationship between the prevalence of depressive symptoms and the prevalence of anxiety symptoms among adolescents at Bethlehem Governorate's non-governmental schools?

## **1.7 Study Variables**

### **1.7.1 Dependent Variables:**

(1) Depressive symptoms, (2) Anxiety symptoms.

### **1.7.2 Independent Variables:**

Independent variables included socio-demographic data (living area, gender, age, economic status of the family, grade, and number of family members), in addition to

non-socio-demographic data (academic achievement, number of siblings, birth order of the participant, marital status of parents, and region of living).

## **1.8 Definition of Terms:**

### **1.8.1 Prevalence**

The prevalence of a phenomenon is the number of cases, which the phenomenon applies to and describes, that exists in the population, at a given point in time. It is usually reported as the total number of prevalent cases in a country, or any other given unit of population (WHO, 2011).

**Operational Definition of Prevalence:** the total percentage of depressive symptoms and the total prevalence of anxiety symptoms among adolescents participating in study.

### **1.8.2 Depressive Symptoms**

Depressive symptoms are manifestations of a depressive disorder, characterized by low or sad mood as its main symptomatology. Individuals, experiencing depression, report painful feelings, dark humor or cynicism, a sense of anguish, panic attacks, performance decline of various psychic and cognitive functions, tendency to isolate, demotivation, apathy, apulia, difficulty to enjoy activities or to connect with others, feelings of hopelessness, motor inhibition, hypotonia, negative thoughts, and delusional preoccupation in cases of serious severity (Bernard, 2018).

**Operational Definition of Depressive Symptoms:** the total score that each participant gets on Beck's Depression Inventory.

### **1.8.3 Anxiety Symptoms**

a state of continues and inclusive stress as a result of expecting a real or symbolic mysterious threat that might happened and strikes along with physical symptom. (Zahran. 1997. P 484).

**Operational Definition of Anxiety Symptoms:** the total score that each participant receives on the Spielberg State Anxiety Inventory.

### **1.8.4 Adolescence**

Adolescent development is a stage involving interaction among biological and cognitive developmental processes, and it is specifically referring to individuals whose ages 13-19 years old. (Bell, 2016).

### **Operational Definition of Adolescence:**

answers provided by the participants to the age variable question in the questionnaire, which fulfill a critical part of inclusion criteria include students from the tenth and eleventh grades.

#### **1.8.5 Bethlehem Governorate Non-Governmental Schools**

These are all non-governmental schools, located in the Bethlehem Governorate of the West Bank, and which are only supervised by the Palestinian ministry of education, and referred to as “private schools”, but are completely run by charity- or profit-directed bodies of education (MoE.2020).

## **Chapter Two**

### **Literature Review**

#### **Chapter Two**

Depression

Introduction

Depression

Depression in DSM-V

Prevalence of Depression

Causes of depression

Theories of depression

Effects of depression

Anxiety

Introduction

Anxiety as a stat- and Anxiety as a trait

Prevalence of anxiety

Causes of anxiety

Theories of anxiety

Effects of anxiety

Previous studies

Conceptual farm work

## **Chapter Two – Literature Review and previous studies**

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### **2.1 Introduction**

Psychologist had an agreement that the human being is going through several stages of development. Although developmental theories are deferent in defining developmental stages though biological and cognitive developmental and social development (Bell.2016) .Despite the fact that they are no agreeing on one definition and dimensions of these stages for example Jean Piaget's though his theory "cognitive development" described the four stages of development sensorimotor stage, pre-operational stage, concrete operational stage, and formal operational stage (Chung, 2018). On the other hand Erik Erikson's described eight stages of psychosocial (ego-social) development are infancy, toddlerhood, preschooler, schooled, adolescence, young adulthood, middle adulthood, and late adulthood (Erikson. 1963).

The importance of adolescence comes from being a transitional period between childhood and adulthood. As well, it is considered as an important stage because an adolescent has a mental disorder during this stage, he/she will such as depression, it will lead to unwilling dramatic results such as loss of function, suicide, and possible failure in the adult years to meet life challenges and demands.

### **2.2 Adolescence**

Adolescence stage is very important and complex stage for humans' development, the sensitivity of this age came from the involvement and interaction between biological, emotional, and cognitive development. Despite the fact there is several dimension of defining the Adolescence Period as biological which specifically referring to the individual aged between 13-18 ( Bell.2016) there are who identify it by being developmental period straddling the transition from childhood to adulthood, which may be characterized by the biological, cognitive, psychological and social changes that occur during this time (Steinberg, 2014). Most of the definitions for the adolescents characterize it of being the period of transaction from being child, to be adult.

According to WHO (2021) there are now around 1.2 Billion adolescent in the world making up to 20.6% of the total population of the world. On the other hand according to Palestinian Central Bureau of Statistics (2017) there are one million three hundred child aged between 10 – 19 years living in Palestine making up to 21.9% of the total population in Palestine.

When reaching adolescence, fundamental biological changes accorded to the adolescent represented in puberty which means that the child is transformed into a adult able of sexual production (Bill, 2016).On the other hand many hormonal changes occurs during adolescence period. Some studies linked these changes with the changes of behavior for adolescents, influencing their behavioral response to the social context (Nelson.2010).

While also a cognitive development occurs in that period as Piaget described that formal operation replaced concrete operations as information abilities increased in complexity (Rosenblum et al . 2019).

Moreover, in adolescence there is significant Changes in emotional ability, including improvements in affective modulation and discrimination of emotional cues, are also seen during adolescence (Todd, 2007).

Due to the above mentioned facts points that adolescents considered one of the most important transitional phases in human developmental stages. As this phase maintain to transform child into adult on different aspects biologically, emotionally, socially, and behaviorally. These aspects shapes adult adolescent characteristics and any problematic in the development would cause serious health and mental health issue to the adolescent.

As Steinberg (2014) pointed, there are several challenges occurred during adolescent's development could be emphasized in Identity, Sexuality, Intimacy, Autonomy and Achievement:

While Shek et al (2000) pointed that there are also challenges facing adolescents as substance abuse, internet addiction, sexuality issues, school bullying, and marital orientation.

## **2.3 Depression**

Most people would say that they have felt "depressed" at least once in their lives, so much so, that depression has become a part of normal life and a universal phenomenon. The word depression is used to mean different things for people, as it is used both clinically to indicate a spectrum of mental health illnesses characterized by low and sad mood, as well as culturally to indicate that someone is experiencing a deep sense of sadness and hopelessness.

Depression is a large concept, referring to one of several affective "mood" disorders, characterized by a feeling of severe sadness and despair, along with severe feelings of guilt, worthlessness, pessimism, and fatigue (Turner, 1984; Ghanam, 2004).

Depression is a common mental disorder that presents with sad mood, loss of interest or pleasure, decreased energy, feelings of guilt, low self-worth, disturbed sleep, disturbed appetite, and poor concentration. Depression can be chronic, or it can appear in the form of recurrent episodes, but at its core, it leads to substantial impairment in an individual's ability to take care of their health, hygiene, and simple everyday tasks and responsibilities, or worse at severe levels, as it is the leading cause of suicide worldwide (Marcus, 2010).

Depressive disorders are the third leading cause of death in individuals aged (15-24) years old, and the second leading cause of death among college students (Pedrelli ,et al., 2014). Almost one million lives are lost yearly due to suicide, which means there are about (3000) suicide related deaths every day worldwide. For every person who completes a suicide, (20) or more individuals may be attempting to end their life (WHO, 2012).

Adolescents are the most impacted by depressive disorders, as they find it difficult to navigate the illness's physical, psychological, and social challenges, while maintaining acceptable functionality and thriving in school, with peers, and within their families (Turner, 1984).

Depressed adolescents may suffer with their ability to keep up a good level of academic achievement, engage in self-harm, substance use, and suicidal behaviors. They will often express interpersonal conflict and distress, in addition to experiencing psychosomatic symptoms and physical issues, including growth and development problems (Bistawi et al., 2005; Zhang, 2007; Anttila, 2017; Espada, 2011; Rahman et al., 2008).

Risk factors to depression may include coming from a low-income country or environment, genetic and hereditary factors, being female, and other psychosocial factors, including deprivation of care and emotional needs (Marcus et al., 2014; WHO, 2008).

### **2.3.1 Clinical Definition of Depression**

According to the latest version of the DSM (Diagnostic and Statistical Manual), a Depressive Disorder may be diagnosed after at least two weeks of continuous reporting of depressed mood or loss of interest in nearly all activities, which includes at least four of the following criteria, which must accompany the primary condition of sadness and loss of interest, to confirm the diagnosis:

- Changes in appetite, weight gain, or loss.
- Sleep disturbance in the form of insomnia or hypersomnia.
- Psychomotor disruption either in the form of increased or decreased activity.
- Decreased energy or lack of motivation.
- Feelings of worthlessness or guilt
- Cognitive problems including issues in thinking, concentrating, or making decisions.
- Recurrent thoughts of death or suicide, or plans and attempts to commit suicide (DSM-V, 2013).

### **2.3.2 Prevalence of Depression among Adolescents**

There has not been an agreement on the prevalence of depressive disorders among adolescents, as there appears to be variations in surveys across different societies and cultures, as well as according to differences in gender, socioeconomic factors, and culture.

Globally, several studies addressed the prevalence of depression among adolescents, as (Cook et al, 2009) study which estimated that 20 percent of adolescent's population in the world suffers from depression.

A study in the United States of America (USA) reported that the prevalence of depression among adolescents was 15.8%. It was noted that the prevalence of depression among adolescents whose ages were 15-17 years was twice than those who

were 12- 14 years. The females in the study reported a prevalence of 3:1 compared to males in the sample. (Dally, 2019 P:58).

While also other studies found that the prevalence of depression among adolescents in India was 52.9% (Malik, et al 2015), while study in the urban areas of Bangladesh pointed that A total of 36.6% of the adolescents reported depressive symptoms (Anjuma et al. 2019). While a study estimated the prevalence of depression in Jimma town, in the southwest of Ethiopia with 28% (Girma.2021).

Dwekat pointed to a high relevant of depression in Jordan making up to 78% of Jordanian adolescent suffers from depression, while in Egypt Essawe et al (2015) pointed that around 40% of the Egyptian adolescents are suffering from depression. (Essawe, 2015).

As the researcher knows, In Palestine there is a lack in the psychological studies generally and depression disorder in specific. During the researcher's search for literature and previous studies on the subject of the study, the researcher did not find new recognized researches about the prevalence of depression in Palestine , but a study for Radwan et al. revealed that the prevalence of depression among Palestinian students aged from 10 – 18 during Corona pandemic was 72.1% (Radwan et al 2021).while a study for psychological morbidity among Palestinian children among Palestinian children revealed that 42.3% are suffering from psychological morbidity ( Zakrison et al 2004). While a paper published by the Palestinian counseling center revealed that 31% of the children suffering from affective disorders (Bushia, 2009).

During adolescence stage, adolescents face depression in deferent prevalence according to their age, as Gotleb et al (1992) mentioned that in a study for 8-12 and 17 years old that the depression was four times higher the 17 years old that the other groups.

Many research papers alluded that depression on more prevalent among females (DSM-IV, 2013; WHO, 2001; Turner, 1984).in the same context Albert (2015) pointed that the females are more prone at depression twice than males (albert, 2015). While also the prevalence of depression among adolescents is decreeing among socio-economic classes as many researches points that depression is more prevalent among adolescent from lower socio-economic classes ( Hellmich, 2017; Tuner, 1984; Freeman et al., 2016; WHO, 2014; Anjum et al., 2017).

Also, the prevalence of depression among adolescents is different regarding to the parental marital status, as many researches alluded that the prevalence of depression among adolescents whom are their parents divorced is more prevalent than those who are their parents still married (Hadžikapetanović, 2015; Wahyuningsih, 2020; Wirback, 2018).

Determining the prevalence of depression and its dimensions will lead to initiation of preventive school programs for depression, which is an area that deserves attention. These prevention programs if implemented across the lifespan may reduce elevated levels of depressive symptoms among adolescents.

Tapping into the issue and attempt avoiding it growing is important to keep depression at bay. It can be done in many ways for example through school



counselling for the students and teach them how to effectively manage their negative emotions (WHO, 2012).

Interventions for parents of children with problems aim at improving parental psychosocial well-being by information provision and by training in behavioral childrearing strategies, that may reduce teenagers and adolescents' depressive symptoms, and improve their outcomes (WHO, 2012).

### **2.3.3 Causes of Depression**

Depression does not seem to have one main cause or source. While some individuals may feel a surge of depressive symptoms in synchronicity with a distressful event or after a loss, but not all individuals develop such symptoms. This has caused clinicians and researchers to conclude that the onset of depressive symptoms is also linked to biological, genetic, psychological, familial, and social factors, in addition to the experience of negative life-events.

#### **2.3.2.1 The Biological Factors of Depression**

The biological aspect of depression has received considerable attention in studies focused on the etiology of depression, and especially in certain high-risk groups for depression, such as adolescents, whom experience great hormonal changes and socioemotional distress, as they transform across dimension from childhood through puberty into adulthood (Beck, 1967; Hankin, 2006).

Neurobiological interpretations of Depression, however, have held the largest weight in addressing causes and treatment for depressive disorders, that is since the emergence of SSRIs and other antidepressants and antipsychotic agents, which significantly improved the management of depressive disorders, as they are connected to secretion and reuptake imbalance of neurotransmitters in the brain, including dopamine, serotonin, GABA, among others (Syvälahti, 1994).

#### **2.3.2.2 Genetic factors**

Hereditary and genetic aspects of depression have also been seriously considered, as studies suggested there is an up to (65%) chance of development of depressive disorders in a zygotic twin of someone diagnosed with a depressive disorder (Ghanim, 2004; Beck, 1967). In a person, who is genetically vulnerable to depression, any stress, such as a missed deadline at work or a medical illness, may push the homeostasis of the system off balance (Fayed, 2001).

While other studies refer that this association have not been confirmed in replication studies, and only a small number of genes have been proven to be associated with depression development (Shadrina, 2018).

#### **2.3.2.3 Psychological Factors of Depression**

Psychological factor are considered key triggers of depression. These factors may include family environment, personality type, interpersonal distress and conflict,

childhood experiences, self-esteem, history of mental or medical illness, social bias and culture, attachment style, temperament, tendency for rumination, and experiences of trauma and violence (Clark et al., 1999; Palmer, 2016; Latha et al., 2006, 1954; Beck, 1967; Turner, 1984).

Black dog institute mentioned that there are certain types of personality at more risk of developing depressive symptoms than other personalities depending on their personality style whether they are self-critic, perfectionist, self-focused, anxious and worrying personalities (Blackdog, 2012).

Zahran (1997) alluded that the persons with emotional imbalance, and lack of self-esteem could be considered as one of the major risk factors for developing depressive symptoms (Zahran, 1997).

Early loss of a nurturing person in early childhood through early adolescence makes one prone of developing depressive symptoms in later stages in their lives. Moreover, poor relationship with the mother could be a great risk factor as the child loses intimacy in that age (Turner, 1984).

Traumatic events in childhood could be remarkable causes in developing depressive symptoms in the later on stages of adolescent's life as the abbreviation in the childhood, traumatic events, and loss of love and intimacy in the childhood, or a death of nurturing persons could lead to fragile personality more prone of developing depressive systems (Zahran, 1997).

The children who were exposed to abuse in childhood considered as a great risk factors in developing fragile personality more prone to develop depressive symptoms (Perry, 2004).

#### **2.3.2.4 The effects of socio-demographic Factors on the prevalence and severity of Depression**

Socioeconomic factors are so crucial in the diagnosis, prevention, and treatment of depression, that they have been included in assessment of depressive symptoms, with a wide array of intervention protocols specifying that resolving the negative impact of socioeconomic factors as a first step in healing depressed individuals (Turner, 1984). Socioeconomic factors, related to both social integration and economic stability, could largely impact the individual's likelihood for developing depressive symptoms. These factors may include marital status, social support, interpersonal stability, the existence of a sufficient and reliable source of income for providing for essential and secondary needs, socioeconomic class, as well as education and occupational status of individual and their family (Hellmich, 2017; Tuner, 1984; Freeman et al., 2016; WHO, 2014; Anjum et al., 2017).

Gender is a main demographic factor impacting the prevalence and severity of depression; women are much more likely to develop depressive symptoms than man, but in contrast, men are more likely to experience more severe symptoms of depression, often appearing as agitated depression, since men are usually more violent

and expressive of their hostility and anger, but are not as expressive of their vulnerability, shame, and sadness (WHO, 2001).

While also another study referred that Depression prevalence was significantly higher among urban residents in ten studies and significantly higher among rural residents in three studies (Purtle,2019).

## **2.3.4 Theories of Depression**

### **2.3.4.1 Behavioral Theory**

Behavioral theory could be also mentioned as Behaviorism, McLeod (2020), and It is defined as range of actions that result in experience by dealing with surroundings environment, and could be represented as “response to environmental stimuli (McLeod,2020).

Behavioral theory indicated that the change in the environment and the avoidant behaviors can obstacle persons from experiencing rewards and reinforcement which in many cases may lead to developing of depressive symptoms (Carvalho et al., 2011).

Behavioral theories explain the development and persistence of depressive symptoms as the result of decreased environmental reward, associated reductions in positively reinforced healthy behavior, reinforcement of depressive or passive behaviors, and punishment of healthy behaviors (Carvalho, 2011).

Through the behavioral theory classical conditioning indicates that depression is learned through associating the stimuli with its privet negative emotions. While on the other hand social learning theory indicates that the persons learned the behavior through observation then imitating and reinforcement (McLeod. 2021). Anani (year) also pointed that depression is a learned behavior occurred due to conditioning and also could be treated though conditioning.

While Ghanim (2004) pointed to the depression occurred du to what called “learned helplessness” which means that when the individuals cannot change or deal with the cofounded circumstances that leads to surrender to negative feelings and helplessness (Ganim.2004).

Moreover, Assal (2018)” stated that the punishment/reinforcement for the behavior had a great role in the existence and development of the depression as he suggests that the depression may be caused by high level of punishment in early life stages (Rahman.2018).

As a conclusion, depression according to behavioral theory is a learned behavior developed through conditioning and the behavior scantest argues that the way of treating and dealing with depression is mainly through proper conditioning.

### **2.3.4.2 Psychodynamic Theory**

Freud pointed that depression could be considered as a state of anger and aggression directed to the self. (Ghanim, 2004). Moreover, the depression according to Freud come from satisfaction occurred during the child oral stage which results disturbance in the self-esteem (Fayed. 2001).

Psychodynamic theory considered as one of the main/first theories worked on defining the depression and its causes. The godfather of psychoanalysis Sigmund Freud was one of the leaded professionals who worked on the depression to provide a quit proper and consent definition and etiology for it. (McLeod.2018).

Sigmund Freud stated that mourning could occur due to lose of love, and he tried to emphasize that it could be a reaction of losing a loved person, or an symbolic meaning that which has taking the place of one, like home, country, liberty (Freud.1917. P 243).He further explained that this would be not enough unless these situations goes beyond that and having thoughts of being s “In melancholia, the occasions which give rise to the illness extend for the most part beyond the clear case of a loss by death, and include all those situations of being slighted, neglected, or disappointed, which can import opposed feelings of love and hate into the relationship or reinforce an already existing ambivalence” (Freud, 1917, p. 251).

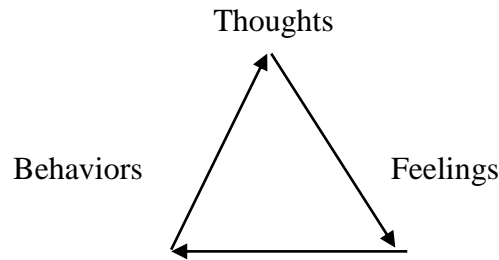
While Desmet tried to explain that through his paper Some Preliminary Notes on an Empirical Test of Freud’s Theory on Depression that “For Freud there is no reason to believe that a loss – be it by death, divorce, or any other reason – should necessarily lead to depression if it is not connected to a feeling of being slighted or disappointed, and if it does not introduce a profound ambivalence toward what is lost (Desmet.2013).

Zahran (1997) pointed that the inner conflict between Ego, and Id leads makes that one feels with confusion which generates anxiety and instability which could lead to develop depressive symptoms (Ghanim, 2004). Ghanim (2004) believed that most of the psychoanalytic therapists are in line with Freud point of view that depression is an aggression toward the self (Ghanem. 2004. P64).

While Lacan, one of the most famous psychoanalytic do not use the term of depression for two main reasons that depression is not accorded the status of a diagnostic concept in Lacanian theory. Firstly, the notion of depression is considered to be both under-defined and over-used. Hook emphasizes, “the ‘depression’ of ordinary language and psychiatry is too vague a term.” (Hook.2017)

### **2.3.4.3 Cognitive Approach**

The cognitive theory of psychology generally points to a method of analyzing and modifying attitudes, in regards to their thought component, their emotional aspect, and their behavioural implications (Anani, 2005). The following model is called the “ABC” model of addressing psychological constructs according to the cognitive theory:



The cognitive theory has specialized in the management of depressive disorders, especially as it appeared in Aaron Beck's and Albert Ellis's work on the subject, which identified depression as a combination of a negative view of the self, the world, and the future, revolving around feeling and anticipating failure and inability, which lead to hopelessness in the chance that life will improve in the future (Brown et al., 2011; Gautam et al., 2011).

Cognitive therapy has shown to be of great benefit in helping clients to overcome recurrent or chronic depression, in an almost as effective result as it was using psychopharmacological interventions (Thomas, 2003). However, Cognitive therapy is not a single intervention, and it is often used in conjunction with medication and behavioral modification therapy, which enable the individual to reexamine their cognitive evaluations of events (Iddon et al., 2013).

According to Beck and Ellis, three mechanisms were suggested to be addressed when dealing with depression:

1. Negative Automatic Thoughts: Negative automatic thoughts are irrational illogical patterns of thinking, which are based on deeper negative schemas. Statements of this sort may include "I must be completely competent in everything I do, or I am worthless", "Others must treat me considerately, or they are absolutely terrible", "The world should always give me happiness, or I will die".
2. Negative Self- and Other-Schemas: Negative Schemas may be acquired in childhood as a result of a traumatic event or experiences of abuse and neglect by caregivers. These negative experiences may, for example, lead the individual to believe that they are unworthy of love or care, or that the world is a dark and dangerous place. People act upon these beliefs, which impact their emotional wellbeing as well as their ability to cope and manage daily stressors.
3. Faulty Information Processing: This refers to the person's inability to perceive things neutrally and objectively as they are, which causes the development of dysfunctional and distorted beliefs about the self and others. These irrational beliefs are often rigid or absolute evaluations and they lack empirical and pragmatic support. Examples of this may include making irrational demands of others, viewing simple or trivial events as awful or catastrophic, or viewing criticism as an attack on the self and reacting with hostility and anger (Beck, 1967; Bennett, 2004; Turner, 2016;).

## 2.4 Anxiety

Some considerable researchers called our 21 century as, “century of anxiety and depression” (Ghanim 2004). In this era, anxiety might be experienced in a relatively severity due to a number of social, economic, and cultural situation, such as work, taking exam, going through a job interview, intense economic situation, or any situation that requires to marshal our protective forces in anticipation of what is coming.

While anxiety can occur to anyone in any point in life like feeling joy or sadness, the umbrella of the anxiety is associated with the feeling of apprehension and expecting harmful event is about to happen. It may occur multiple times (Turner.1984). DSM-V refers that “Anxiety disorders include disorders that share features of excessive fear affecting behavioral” (DSM-V. 2013, p189). Zharan (1997), defined anxiety as a state of continues and inclusive stress that results from expecting a real or symbolic mysterious threat that might happen along with physical symptom (Zahran. 1997. p. 484). On the other hand, Shreet (2003), identified it as an “unpleasant emotional state along with physical and psychological discomfort characrizd by the feeling of fear, feeling with unsafety and explication of catastrophe.

Al Atia (2011), alluded that there are two demotions of the definition of anxiety, as each of them represent a limited direction: first dimension represents the clinical researchers who articulated that it is an unpleasant emotional state that involves fear, which has no objective justification and mostly apply for past and future and came along with behavioral disturbance.

The second dimension is represented by the experimental researchers. They define it as motivation or incentive that if it is stimulated can lead to energize the person in the under certain circumstances that require designated talents (Attia. 2011. P.20-21).

Anani (2005), divided anxiety into two main types as in the following:

1. The Realistic anxiety: and this is akin to a feeling of fear since its source is conspicuous. For instance, the one might feel anxious when the thesis discussion is around the corner.
2. The neurotic anxiety: when one does not know the source of anxiety, it can be scary because it is associated with enigmatic fear that one do not now its source and could identify it as a continues overall anxiety, which results from predicting a threat that come along with physical and psychological symptoms (Anani. 2005).

In addition to the previous mentioned anxieties, Ghanem (2004) demonstrated a third type of anxiety, which is moral anxiety that can be identified as an anxiety resulted from an inner conflict, stemmed from the super ego (Ghanim.2004).

Expecting physical or psychological harm, can drive one to show symptoms of anxiety. To illustrate, when people are subjected to danger, the level of anxiety rises (Shrit et al 2003).

Ganim (2004), pointed that there are biological, psychological, and social risk factors that significantly contribute to cause anxiety, such as biological tendency, being ostracized from community, or inner internal conflicts (Ghanim. 2004).

There are several symptoms for anxiety could be emphasized as following:

1. Physical symptoms includes increase or disturbance heart beats, shaking, headache, chest tightness, menopause, and nausea, problems in digesting, constipation and diarrhea. (Ganim. 2014).
2. Psychological symptoms: psychological instability, nervousness, loss of focus, generalized fears, low predictability. (Ganim. 2014).
3. Behavioral symptoms: avoidance, withdrawal behaviors, substance abuse, disproportionate reaction toward situations. (Okasha. 2018).

Notably, anxiety affects the person's life due to multiple and varied emotional, physical, cognitive, and behavioral responses, which can negatively impact on adolescents' social, emotional, and academic performance (Shrit et al, 2003).

#### **2.4.1 Clinical Definition of Anxiety**

There are several symptoms of anxiety according to the DSM-V:

The DSM-V displays the symptoms of anxiety in the following:

- Exhibiting signs of tremendous fear regarding issues, situations, or other matters, and usually it happens within half a year.
  - Indeed, one can find it difficult to manage wariness for both adults and adolescences.
  - Sleepless nights, feeling burned out easily, not enduring people around and have little patience are symptoms associate with anxiety. It can also extend beyond the psychological aspect. For instance, feeling of uneasiness with the food that comes to the stomach, muscle spasms, and respiratory problems.
- 
- The presence of excessive anxiety and worry about a variety of topics, events, or activities. Worry occurs often for at least 6 months and is clearly excessive.
  - The worry is experienced as incredibly challenging to control. The worry in both adults and children may easily shift from one topic to another.
  - The anxiety and worry are accompanied with at least three of the following physical or cognitive symptoms
    - Edginess or restlessness
    - Tiring easily; more fatigued than usual
    - Impaired concentration or feeling as though the mind goes blank
    - Irritability (which may or may not be observable to others)
    - Increased muscle aches or soreness
    - Difficulty sleeping (due to trouble falling asleep or staying asleep, restlessness at night, or unsatisfying sleep). (DSM-V)
- Several physical symptoms such as:
- Muscle tension

- Stomachaches and Other Digestive Problems
- Headache and Dizziness
- Edginess
- Shortness of breath (Gans, 2020)

### **2.4.2 Anxiety as a trait and Anxiety as a state**

Spielberger (1966), distinguished between trait and state anxiety. He presented his theory in the concepts of Anxiety as a state and anxiety as a trait. He went further in his elaboration and presented that there are differences that need to be taken into consideration when addressing these concepts. As he mentioned, they should separate between anxieties as a trait, which comes from personality tendency towards it and the external environment that triggers it (Guardy and spielberger. 1971).

He articulated that anxiety could be conceptualized as a long term stable disposition related to personality tendency 'Trait', and a transient reflex emotional state that everyone could experience from a time to another (Tovilović et al . 2009).

On the other hand, 'trait anxiety' refers to the personal tendency when responding to a perceived threat and that elect anxious response to that certain situation (Spielberger et al., 1972. p. 7) which refers to the personal tendency to response to a perceived threaten and alerting anxious response to that certain situation.

On the other hand, 'trait anxiety' refers to the personal tendency when responding to a perceived threat and that elect anxious response to that certain situation (Spielberger et al, 1966. p. 7).

to stable individual differences in anxiety proneness, that is, to differences between people in the tendency to respond to situations perceived as threatening with elevations in state anxiety. Therefore, trait anxiety is the predisposition, the readiness to respond anxiously to certain situations (Spielberger et al, 1966)  
Cattel pointed that the levels of trait anxiety depending on the individual much more than situation, because those with trait anxiety realize most of stations as a high risk situations (Attia. 2011).

According Spielberger (1983), "State anxiety has been defined as an unpleasant emotional response while coping with threatening or dangerous situations". This means that state anxiety is considered psychological and physical, which reflects the transient reactions directly related to it and in emergency situations at a specific moment.

Attia (2011) pointed that "anxiety as a state is a temporary emotional state stimulated in the situations of stress and intensity that one realizes it as a threatening situation, and disappear when the source of threat disappears" (Attia. 2011.p 27).

Cattle pointed that the state anxiety changes according to the situations, and the variance of the levels of anxiety depends on the situation much more that depending on the persons themselves (Attia.2011). Moreover, Anani (2004) pointed that anxiety as a state is a situational anxiety related to the citrine and momentum condition and circumstances and its levels depends directly on the situation itself (Anani. 2004).



This means that state anxiety is considered as a psychological and physical, which reflect the transient reactions directly related to it and in emergency situations in a specific moment.

Indeed, anxiety is an unpleasant emotion that comes with excessive worry, and it affects one's ability to normally function on all levels whether emotionally, behaviorally, cognitively, or physically (Alwawe, 2012).

There are signs and symptoms of anxiety expressed in four dimensions which are, cognitive, emotional, behavioral, and physical response (Anani, 2004).

### **2.4.3 Prevalence of Anxiety**

Anxiety is considered one of the most common disorders among adolescents in the world. 30% of adolescents experienced anxiety at least once in a lifetime.

(Olofsdotter, 2017), while Tassin et al. (2014) found that from 15% to over 30% of adolescents in the world suffer from anxiety at least once in their lives. According to Dwekat et al. (2021), 78.2% of Jordanian adolescents suffers from severe anxiety symptoms. The Palestinian counseling center (2009), estimated that 25% of the service- seekers suffer from anxiety symptoms, while 16% of the people who suffer from anxiety seek service from Palestinian counseling center (bushia, 2010).

A cross-sectional study conducted by Radwan et al (2021) in Gaza strip during Covied-19 pandemic on children and adolescents revealed that 89.1% suffer from moderate to severe anxiety symptoms.

Research papers regarding the prevalence of anxiety differed about the relation between gender and the prevalence of anxiety among women ; some of them claim that anxiety is higher among men (Anani.2005).

The anxiety found to be more prevalence among females further more than males, as the females are more prone to this disorder. (DSM-V, 3013; Pappa, 2013) . Also the low socioeconomic classes are more at prone to developing anxiety further more than the high economic classes, also poor adolescents found to be more anxious than other categories (Poquis et al 2016).

Moreover, the anxiety is found to be more prevalent among the students with low academic achievement than other students who had high academic achievement. (Sousa et al, 2018).

Furthermore, the prevalence of anxiety is higher with the families with divorced or decided parents, further more than the families holding the two parents (Pappam 2013).

### **2.4.4 Causes of Anxiety**

Anxiety does not result from one cause, rather a result of a complex interaction of several factors such as, Genetic, Biological, personality, and environmental factors;

however, the brain is the common bath of the control of overall operations for human beings (Greene. 2012).

#### **2.4.4.1 Biological and Genetic Factors**

The biological base of anxiety is considered one of the most important risk factors of anxiety in many cases. Such biological bases may interact with cognitive factors and may help in developing anxiety among adolescents.

Biological causes of anxiety disorders reflect a disruption in brain chemistry and brain activities. The biological causes and effects of anxiety disorders include disruption of brain chemistry and brain activity; genetics; and medical, psychiatric, and substance use issues.

Rector et al., (2019), explained the binary between anxiety and issues with “the regulation of various neurotransmitters—the brain’s chemical messengers that transmit signals between brain cells. Three major neurotransmitters are involved in anxiety: serotonin, norepinephrine and gamma-aminobutyric acid (Gaba). ( Rector et al.2019. p 7).

Awdas et al referred to the relation of disruption serotonin, which has a role in the regulation of mood, aggression, impulses, sleep, appetite, body temperature, and pain, and mood disorders (Adwas et al., 2019).

Other researcher suggest that the, “amygdala, a structure deep within the brain, serves as a communication hub that signals the presence of a threat and triggers fear response or anxiety. It also stores emotional memories and may play a role in the development of anxiety disorders” (Redlich et al., 2018).

Moreover, Ghanim showed that there are evidences points to abnormal chemical activities in the brain, which leads to a larger secretion of catecholamine’s, leading to the emergence of anxiety (Ghanim. 2005).

Nursing Time (2020), found that there is a certain gene that is responsible for causing one to react when feeling anxious, and it is in both males and females. As well, (Vaudry. 2009), emphasized that there are two genes that are responsible for stimulating some nerves in the brain and releasing anxiety hormones.

Relating to up mentioned facts we reach a constructive evidence based conclusion relating the relationship of biological factors and the development and existing of anxiety among persons. These facts are found to be true, and it explains the evident relationship between the biological factors and anxiety. In some instances, there is research evidence suggesting that particular genetic factors affecting brain chemistry contribute to the onset and progression of mental illness. (Attia.2011).

Also a there are several studied conducted in the eighties and tightens pointed to linkages between chromosomes and psychotic, mood and anxiety disorders. (Barnett, 2009). Studies have established that individuals with anxiety often find a history of these disorders in immediate family members. Evidence suggests that many different genes may act together and in combination with other factors to cause a mood

disorder. Although some studies have suggested a few interesting genes or genomic regions, the exact genetic factors that are involved in mood disorders remain unknown (Health Canada, 2002).

Some of those who demonstrate anxiety and related disorders have a family record with such disorders. Biological factors can interact and make one anxious; nevertheless, some scholars refer that there are genes that are responsible for causing these disorders are still not yet identified (Health Canada.2002).

According to Anani (2005), 15% of the people whom their parents suffer from anxiety were found to have the same anxiety disorder, while the percentage in zygotic twins reached 50% having the same anxiety disorder; 65% of them suffer from some characteristics of anxiety (p. 105).

#### **2.4.4.2 Psychological risk factors**

Psychological factors are considered the main risk factors for occurring anxiety among adolescents, as the crisis occur in the adolescents in their early childhood. PTSD is when one feels powerless and inferior, and the feelings of frustration are all considered psychological factors of anxiety (Zahran. 1997).

According to Horny there are three main reasons leads to anxiety as the feeling of which are the feeling of helplessness, aggression, and isolation as the early stages of child's life might help in shaping and reinforcing that feelings and these conditions might be enough to develop the anxiety among the adolescents (Anani. 2005).

Articulates that there are play factors for causing anxiety: "helplessness, aggression, and isolation as the early stages of child's life might help in shaping and reinforcing that feelings and these conditions might be enough to develop the anxiety among the adolescents (Anani. 2005).

Also, psychological "frugality" is considered one of the psychological risk factors for anxiety, which developed as a result of childhood traumas. It triggers inner conflicts from the past. Besides the wrong methods in rearing the children as cruelty, authoritarianism, and/or overprotection. (Anani.2005). Moreover, a study conducted by Hudson et al., (2005), also revealed that, "overprotection rearing for the children significantly helped in developing anxiety symptoms for children" (Attia. 2011).

Ghanim (2005), pointed that the anxiety may occur due to the internal psychological conflicts, and those who suffer from this conflict may feel confused, which generates stress and psychological instability and then the anxiety starts to accentuate.(Ghanim, 2005).

The experience of a traumatic event may influence the development of anxiety disorders. Trauma in childhood disposes to further anxiety disorders through the hyperactivity of the HPA axis and the hypersecretion of CRF. Traumatic experience in developmental age leads to neuro biochemical changes in brain, typical for panic disorder or PTSD. Because of early trauma, there is change of biological mechanisms and increase in anxiety sensitivity (Anani. 2005).

### **2.4.4.3 Family and Environment risk factors**

A study conducted by Radulescu et al. (2014), showed that child separation anxiety is negatively correlated with the maternal care received from his mother, and the care received from the mother from both her parents. There also highlighted about statistically significant correlation between child's social phobia, obsessive-compulsive disorder and his father overprotection. (Karin et al 2017).

Radulescu et al., (2014), showed that, "child separation anxiety is negatively correlated with the maternal care received from his mother," and the care received from the mother's parents. In addition, the statistical association between "child's social phobias, obsessive-compulsive disorder" is linked to his father's overprotection (Karin et al 2017).

Also, childhood experience can play a major role in developing anxiety in the later stages of the child's life. (Anani, 2004), pointed to the round circumstances that play a crucial role in developing anxiety such as family requirements, Living area, and family economic issues, besides wars and natural disasters.

Also, the "disintegration of the family, or the treatment of disintegration, divorce, domestic violence especially in front of children, while they are at an early stage of their life, creates the proper circumstances for developing anxiety in their later stages in life" ( Ghanim.2005).

Geshicaa (2018), showed that the lack of family support resulting from either "the death of parents, divorce, or separation" makes their children feel less loved, respected, and cared for, which is considered a risk factor for rising Anxiety prevalence among adolescents.

Raoof (2013), alluded to the family role as a risk factor for emerging anxiety through the harsh rearing, abuse, and violence against children, which increase the possibility of developing anxiety symptoms in later stages in their lives (Raoof, 2013).

Furthermore, a toxic and unhealthy environment such as exposing one to toxic emissions could cause brain damage along with cognitive and behavioral impairment, and may lead to developing anxiety disorders (Dabkowska et al 2012).

### **2.4.5 Theories of Anxiety**

#### **2.4.5.1 Lazarus theory**

"The Person Environment fit theory – or the cognitive appraisal" can be interpreted as the way one analyzes "plight at any time is critical to the emotional response" (Lazarus. 1982: P27).

Lazarus explains the reaction of people to a particular situation is derived from an evolutionary standpoint. In other words, people respond to these situations with

certain emotions, depending on what do they face in a particular situation. That can be a close definition of “appraisal” (Lazarus. 1990).

that the individuals reacts emotionally to any situation is according to an evaluation of what the encounter we reacts emotionally to an encounter depends on an evaluation of what the encounter indicates for personal wellbeing, which is what "appraisal" means in our usage ( Lazarus. 1990).

He mentioned that there is important relationship between the environment surrounding the individuals and his previous experience along with his explanation of the situation (Lazarus. 1982).

This theory distinguishes two basic forms of appraisal, primary and secondary appraisal as the following:

1. "Primary appraisal", and "secondary appraisal" is pertained to the individuals' choices “for coping with the encounter”

2. "Primary appraisal", and "secondary appraisal" concerns the person's resources and options for coping with the encounter

Primary appraisal: is pertained to “whether and how the encounter is relevant to the person's well-being” (Lazarus. 1990). This can be classified into three aspects: relevant objectives, one's ability to stay focused and in line with the expected performance in order to hit that particular objective, and “Type of ego- involvement designates aspects of personal commitment such as self- esteem, moral values, ego-ideal, or ego-identity” (Lazarus et al. 1984)

Primary appraisal: concerns whether and how the encounter is relevant to the person's well-being (Lazarus. 1990). There are three components are distinguished: goal relevance describes the extent to which an encounter refers to issues about which the person cares. Goal congruence defines the extent to episode proceeds in accordance with personal goals. Type of ego- involvement designates aspects of personal commitment such as self- esteem, moral values, ego-ideal, or ego-identity (Lazarus et al. 1984).

In the same fashion, these components can be classified into: “blame or credit results from an individual's appraisal of who is responsible for a certain event” (Lazarus et al. 1984).

Likewise, three secondary appraisal concerns coping options. (Krohne. 2002) Components are distinguished: blame or credit results from an individual's appraisal of who is responsible for a certain event. (Lazarus et al. 1984)

#### **2.4.5.2 Behavioral theory:**

Behavioral theory argues that the anxiety is learned through the environment that the one live in, and that could occur through negative or positive reinforcement and punishment. (Raoof, 2013, Anani 2004).

The perioral therapists disagreed with analytic theory therapists as they do not believe in unconsciousness motivations and also do not believe also in the three elements of personality the ego, super ego and id. On the other hand they believe that each stimulus is independent and could be attached with other stimulus and result fear and anxiety. (Anani, 2014).

Atiya (2011) considered anxiety as a response to fear triggered by stimuli, which should not otherwise cause such a response. This is linked to previously learned experiences and is understood, by behaviorists, through the same lenses, in which all behavior is analyzed; that is using the concepts of learning and conditioning.

Furthermore, behaviorists believed that fear is a normal response, but distinguished it from anxiety, in that anxiety revolves around topics, which may not interest others, and that anxiety may often be so severe, that it disrupts the person's daily life (Atiyah, 2011).

### **2.4.5.3 Psychodynamic theory**

This theory was one of the first theories in psychology at the beginning of the twentieth century. Freud, the father of the psychodynamic theory, suggested two theories for anxiety. In both theories, he interpreted anxiety as an everyday phenomenon and as a way of explaining neuroses (Strongman, 1995).

Strongman (1995), pointed that the first formulation of anxiety as being libido, which he emphasizes as a transformation coming about through repression, while the second formulation that he pointed is the occurrence of repression because of the experience of anxiety. He articulated that anxiety is a signal comes from the ego about real or potential danger.

Freud mentioned three types of anxiety according to that:

The objective (realistic anxiety). It occurs as a result of realizing a real danger

While Elder interpreted anxiety emerges as a result of the individual's attempts to get rid of the feeling of inferiority and attempt to reach the feeling of superiority. The struggle for superiority and avoiding the feeling of inferiority is the main cause of anxiety (Atiya, 2011)

### **2.4.5.4 Humanistic theory:**

While psychologists and behavioral psychologists believe that anxiety may refer to a past painful experience, the humanistic psychologists believe that the anxiety is a fear of future events, and what these events could carry out a threat to the human and his humanity. Moreover, they point that the anxiety may result as when human expect the things would have occurred in the future, and is not as a result of past experience. (Anani, 2004).

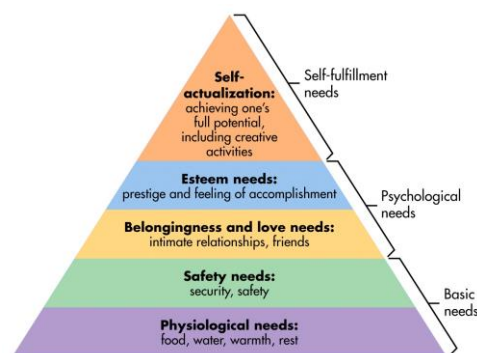
The humanist psychologist Carl Rogers speculated that anxiety develops when adults find they are unable to accept the person they have become. Rogers also focused on childhood as a critical period of development and theorized that when subjected to harsh criticism and the standards of those around them a child will try to

accommodate these to the detriment of their personal beliefs and desires. (abu Asaad, 2011).

While Maslow believes that the anxiety could occur as a result of the failed in fulfilling his needs which are the most basic needs for human to survive and live. These needs include:

1. Physiological needs food and water, shelter, clothes besides
2. Safety needs which represents protection
3. Love and belonging needs which represents the need for intimacy and relationships.
4. Esteem needs which are represented in self-esteem, respect and acknowledgment.
5. Self-actualization which could be represented in reaching the full potentials as a person. (Attia,2011; Anani,2004)

**Figure (2.2) Hierarchy of needs of according to Maslow:**



## 2.5 Previous studies

### Western Studies.

#### **Malik, Et al. (2015) Prevalence of depression among school going adolescents in an urban area of Haryana, India**

Cross-sectional study was conducted to assess the Prevalence of depression among school-going adolescents in an urban area of Haryana. A sample size of a total of three hundred and seventy-four adolescents participated in the study. The used tool for the study was Beck's Depression Inventory II (BDI-II).

The study results showed that 52.9% of adolescents participated in the study were found to have scores corresponding to some mild degree of depression. The study

found that 11.3% of the adolescents had scores in the range of moderate depression, besides having 7 1.8% had a score corresponding to severe depression.

### **Gautam et al. (2021): Depression among Adolescents of Rural Nepal: A Community Based Stud. Nibal.**

A descriptive cross-sectional study was conducted among the adolescent students of age 15-19 years currently studying in grades 11 and 12 in rural Nepal. The current study aimed at finding out the prevalence of depression, and its correlates among adolescents in rural Nepal.

Three hundred seventy-one students aged from sixteen and seventeen years. The used tool in the study was Patient Health Questionnaire (PHQ-9)

The study showed that the prevalence of depression among adolescents in rural Nibal areas was found to be 27% of participants in the study. Moreover the results of the study revealed that depression was prevalent among adolescents who are not satisfied by their academic satisfaction. While the prevalence of the depression among who had poor relationships with other peers was 2.4 times that other children.

The study concluded that depression is affecting several dimension of adolescent's life and make them more at prone for having poor academic achievement, poor relationships and have long negative effects on heath.

### **Maharaj et al. (2008): Depression among Adolescents, Aged 13–19 Years, Attending Secondary Schools in Trinidad. Trinidad.**

A cross-sectional study was carried out to determine the prevalence of depression and psychosocial factors associated with depression in secondary school students in Trinidad. One thousand two hundred students were recruited in the current study through stratified random sample of public secondary schools.

The used tool for the study was modified pre-tested self-administered Beck Depression Inventory (BDI) to detect depression in students aged between thirteen and nineteen years in Trinidad.

The study revealed that 25.3% of the adolescents in Trindad suffered from depression. Moreover, the study pointed that the depression was more prevalent among females as were 1.7 likely to have depression comparing to males.

The study concluded that there were strong association between age, gender, school type, and family structure and depression.

### **Moeini et al. (2019): Prevalence of depression and its associated sociodemographic factors among Iranian female adolescents in secondary schools. Iran.**

Cross-sectional study was carried out to determine the prevalence of mild depression, moderate and severe depression among female adolescents aged between fourteen and eighteen years in Hamadan, Iran. A total of Six Hundred and seventy female



secondary school students, within the age range of fifteen to eighteen years, were investigated using the multistage random sampling method.

The used tool for the study was the Persian version of Center for Epidemiologic Studies Depression Scale (CES-D). The study found that the prevalence of severe depression in female students according to the Center for Epidemiologic Studies Depression Scale (CES-D) found out to be 52.6%. Moreover, 25% of the students suffered from mild and moderate depression.

The study concluded that there were high percentage of depression among secondary school female students In Iran, Moreover, the study revealed that there where a significant correlation with socioeconomic statues and depression.

### **Ajaero et al. (2018): Rural-urban differences in the prevalence and predictors of depression among adolescents in South Africa**

Data were obtained from the National Income Dynamics Study (NIDS), wave 4 of 2014, which was conducted on a nationally representative sample of 3751 adolescents responded to the survey. The study aimed at presenting an analysis of rural–urban differences in the prevalence of depression and to assess the sociodemographic predictors of depression among adolescents in South Africa using bivariate analysis test for significant differences in the depression status of the population.

Finally, binary logistic regression was used to estimate the predictors of depression. The bivariate analysis revealed a significant difference in the prevalence of depression between rural and urban respondents,

In rural areas, 9.40% of adolescents were depressed compared with a prevalence of 14.64% among urban adolescents. In addition, the results showed significant differences in the prevalence of depression between racial groups, income ranges, and provincial distribution in both rural and urban areas. Gender, income levels, and province of residence also showed significant differences in both rural and urban areas.

The study concluded that more mental health services should be provide to the urban adolescents further more than adolescent from rural areas as the depression was more prevalent in the rural areas.

### **Zhou et al. (2020): Prevalence of depression and its correlative factors among female adolescents in China during the coronavirus disease 2019 outbreak. China.**

A cross-sectional study was carried out to assess the Prevalence of depression and its correlative factors among female adolescents in China during the coronavirus disease 2019 outbreak. Four thousand eight hundred and five female adolescents were enrolled in the study.

The tool used in the study was the Center for Epidemiologic Studies Depression Scale (CES-D) and the correlative factors of depression to detect the prevalence of depression among females in China.

The study results showed out that 39.5% of the female adolescents enrolled in the study suffered from depression, with a CES-D score of > 15.

**Grigore et al. (2020): Exploring the Mediating Roles of State and Trait Anxiety on the Relationship between Middle Adolescents' Cyberbullying and Depression. Romania.**

A cross-sectional study was carried out to assess the prevalence and the relationships between cyberbullying, gender, and age. Five hundred one middle adolescents were enrolled in the study, the used tool in the study was an adapted version of The Beck Depression Inventory-II (BDI II; Beck and Steer) to measure depression, on the other hand to measure state and trait anxiety the author used the State-Trait Anxiety Inventory STAI, Spielberger to measure anxiety.

The study results pointed that there were no significant correlation between gender, age, and depression. Mediation analyses suggested that the relationship between cyber-victimization, cyber-aggressiveness, and depression was mediated by state anxiety and not trait anxiety.

**Moksnes et al. (2011): Self-esteem and emotional health in adolescents – gender and age as potential moderators**

A cross-sectional sectional study was conducted in Mid-Norway. The current study aimed at investigating gender and age differences in emotional states and self-esteem, as well as investigate the role of self-esteem in relation to the outcome of state depression and state anxiety.

One thousand two hundred and eighty adolescents aged between 13 and 18 years from public elementary and secondary schools were enrolled in the study. The tools used in the study are the state depression scale constructed by Byrne et al. (2007). It consists of a short, 15-item questionnaire measuring respondent's level of current depressive mood, moreover the author used The Spielberger State-Trait Anxiety Inventory (STAI) (Spielberger, 1983).

The state (current) subscale consists of 20 items and aimed at measuring state anxiety among adolescents. The results showed that girls scored significantly higher on state depression and state anxiety compared to boys, Moreover, there were significant and positive correlations between depression and anxiety, and significant negative correlations were found between each depression and anxiety in relation to self-esteem for both boys and girls.

**Verma,n. Jain,m & roy,P. (2014): Assessment of Magnitude and Grades of Depression among Adolescents in Raipur City, India**

A cross sectional study was conducted aimed at assessing the Magnitude and Grades of Depression among Adolescents in Raipur City. Three hundred twenty one students

were enrolled the tool for the study was Center for Epidemiological Studies-Depression scale (CES-D).

The study results showed that 40.49% had mild depression, while, 19% of the adolescents had major depression. Also the study shows that depression is more prevalent among females, comparing to the males.

Study findings revealed a statically significant correlation between depression among adolescents and working mothers, staying away from home, poor relation with the family. Besides finding a statically significant correlation between depression and peer pressure.

### **Jha, et al. (2016): Prevalence of depression and associated factors among adolescent students in an Urban Area of Bihar, India**

A cross sectional study was conducted and aimed at assessing the prevalence of depression and correlation with sociodemographic factors among school adolescents. One hundred and four hundred and eighty-five student's were recruited in the study. And the used tool for the Beck's Depression Inventory II (BDI) to assess the measure the depression among adolescents.

The study results revealed that the prevalence of depression among adolescents who participated in the study was found to be 49.2%, while the prevalence of severe depression was 7.7%, followed by moderate depression (18.1%), and mild depression (23.4%). The prevalence of depression among females was higher than males in the current study, besides that the students belonging to minorities have high prevalence of depression comparing to the adolescents belonging to majority ethnic students.

The study concluded that the prevalence of depression among adolescents in Bihar was high, besides that there is a vital need to increase the awareness about depression in term of seeking for help for those who are suffering from depression.

### **Demoze MB, Angaw DA, Mulat H. (2018): Prevalence and Associated Factors of Depression among Orphan Adolescents in Addis Ababa, Ethiopia**

A cross-sectional study was conducted in Addis Ababa orphan centers, the current study was to assess prevalence and associated factors of depression among orphan adolescents living in Addis Ababa orphan centers. Four hundred fifty-three adolescents aged from fifteen to nineteen from Addis Ababa orphans were recruited in the study. The study found that the overall prevalence of depression between the orphan participants was 36.4%. There are several factors showed a significant correlation with depression in this study as perceive social support, community discrimination, and length of stay at the orphan institution. The study concluded that depression among adolescents in the orphan was prevalent.

### **Poquiz et al.(2016): National Trends in the Prevalence and Treatment of Depression in Adolescents and Young Adults. USA.**

A cross sectional study was carried out aiming at assessing the prevalence of depression among adolescents. The study aimed at assessing the prevalence of Major depression in adolescents and young adults. One hundred and seventy two thousands and four hundred ninety five adolescents aged between twelve and seventeen years participated in the study besides and one hundred seventy eight thousands and seven hundred fifty five Adults aged from eighteen and twenty five years also participated in the study.

The study Data were taken from the National Surveys on Drug Use and Health. The results of the study revealed that the prevalence of depression increased from 8.7% in 2005 to 11.3% in 2014 in adolescents and from 8.8% to 9.6% in young adults. The study concluded that the prevalence of depression in adolescents and young adults has increased in past years.

### **Moksnes, (2011) Stress and health in adolescents: The role of potential protective factors. Norway.**

A cross sectional study was carried out and aimed at assessing the knowledge about the nature of adolescent stressors through assessing the factor structure and psychometric properties of The Adolescent Stress Questionnaire. one thousand one hundred eighty-three adolescents aged from thirteen to eighteen participated in the study.

The used tools in the study were The Norwegian version of The Adolescent Stress Questionnaire measuring state depression, The Rosenberg Self-Esteem Scale, and The Spielberger State-Trait Anxiety Inventory.

The study concluded that girls likely to report higher levels of stress, besides emotional symptoms and subjective health complaints than boys, especially in the age group 15-16 years.

### **Zarafshan et al , Prevalence of Anxiety Disorders among Children and Adolescents in Iran: A Systematic Review.**

Data were obtained from three Persian databases (IranMedex) in Iran up to 2014. The current study aimed at conduct a review to investigate the prevalence of anxiety disorders among Iranian children and adolescents. 120 article was reviewed through this study and after the screening 26 article was analyzed.

The study results showed prevalence of anxiety among Iranian children and adolescence was from 6.8% in Saravan, and 85% in Bandar Abbas, while the prevalence of OCD was the second common study with prevalence rates ranging from 1% in Tabriz to 11.9% in Gorgan. Severe levels of state and trait anxiety was seen in 23% and 19%, of students respectively and the study concluded that there is considerable prevalence of anxiety disorders among Iranian children and adolescents

### **Fatemeh. Comparison of anxiety levels in rural and urban high school students in Mashhad-Northeastern part of Iran.(2012)**

A cross sectional study was carried out in Mash–had City in Iran. The study aimed at investigating the prevalence of anxiety among adolescents. Three hundred forty students aged from fifteen to eighteen years was recruited from the rural and urban secondary schools of mash-had was recruited in this study selected by stratified cluster random sampling.

The tool used in the study was Spielberger Inventory (STAI) in Mash-had. The study results showed severe levels of state and trait anxiety among adolescents as 23% and 19%, of students respectively.

The finding of the currants study revealed a higher anxiety scores in girls especially in rural students. Screening for anxiety disorders and strategies for reducing anxiety, improving mental health and providing educational and recreational conditions in rural schools should be considered

### **Arabic Studies:**

#### **AlShabo'on, Dania (2011): relationship Between Anxiety and depression among adolescence. Syria.**

Across-sectional study was carried out and aimed at assessing the relationship between anxiety and adolescents in ninth grade, moreover, it aimed at assessing the prevalence of State-trait anxiety among adolescents.

Six Hundred Fifty-Five students were randomly chosen from governmental schools in Damascus. The used tool for the study was STAI Inventory to measure anxiety, and a developed tool by the researcher to scale Depression. Study results showed that 4.49% of the participants had trait Anxiety, while 4.48 suffers from trait anxiety, and 7.90% suffers from depression.

Moreover, the study indicates that there is correlation between state-trait anxiety and depression, and the depression where prevalent in females than males.

### **Radwan et al, depression, anxiety and stress during the COVID-19 pandemic: A cross-sectional study among Palestinian students.2021.**

A cross sectional study was carried out in Gaza strip aims at identifying psychological distress among school students during the lockdown period in Gaza. For hundred twenty students was enrolled in the study. Data was collected using an online questionnaire that included informed consent, socio-demographic questions, and a psychometric scale (DASS-21). The study results showed that (89.1%) experienced moderate to severe levels of anxiety while (72.1%) of the students and moderate to severe levels of depression.

The study results showed that anxiety and depression scores were significantly different across gender, age groups, Number of Family Members Living under the Same Roof, and family's economic status

**Dwekat et al. (2021) Prevalence and Correlates of Depression and Anxiety Among Jordanian Adolescents: A Cross-Sectional Study. Jordan.**

A cross sectional study was carried out in Jordan and aimed at assessing the prevalence and correlates of depression and anxiety among a national sample of adolescents. Study results revealed that the prevalence and correlates of depression and anxiety among a Jordanian adolescent was 49.1% and 78.2% respectively.

The study showed that there were significant positive correlation between gender, age, negative relationship, income, fathers' and mothers' educational levels and depression and anxiety.

This study points that there is high prevalence of depression and anxiety among Jordanian adolescents. Besides that, there is lack of funds to the mental health services.

**Malakeh et al. (2017). Anxiety and depression among school students in Jordan: Prevalence, risk factors, and predictors. Jordan.**

A cross sectional study was carried out in Jordan and aimed assessing the prevalence of anxiety and depression, among Jordanian school students aged 12–18 years.

800 students were selected randomly from 10 public schools in the capital Amman. The tool used for the study was Symptom Checklist-anxiety, and CES-DC to detect depressive and anxiety symptoms.

Study results revealed that 42.1% and 73.8% of the participants in the study had anxiety and depression.

**Essawy et al.(2015). Prevalence of Egyptian Childhood Depression among Middle School Students. Egypt.**

A cross sectional study was carried out in Egypt aimed at assessing the prevalence of depression and for Egyptian adolescents aged 12 through 16 years old. 739 children and adolescents aged between 12 and 16 years. The tools of the study was revised behavioral problem checklist (RBPCL) MINI-KID and Childhood Depressive Inventory (CDI).

Results showed that (10.5%) appeared to have depressive symptoms.40% of the depressed adolescents have mild symptoms, while 24% have moderate symptoms, and 36% severe depression symptoms. The researchers concluded that prevalence rates obtained vis-a-vis the availability of mental health services in Egypt reflected a major public health problem.

### **El Masri et al. (2012) screening for depression in a sample of Egyptian secondary school female students. Egypt.**

A cross sectional study was carried out in eastern Cairo aiming at assessment the prevalence of depressive symptoms among female schools students in secondary schools. Six hundred fifty two female students from public and private secondary schools were recruited in the research. The tool used for the research was CDI.

The results showed that 15.3% of female adolescents students suffered from depression according to the study, the researchers concluded that depression was prevalent among female adolescents in Egyptian female secondary school students. And recommended to enhance psychoeducational programs, besides providing better identification in order to provide better intervention spicily for those who are for those at risk.

### **Khader, et al (2021) Depression and Anxiety and Their Associated Factors among Jordanian Adolescents and Syrian Adolescent Refugees**

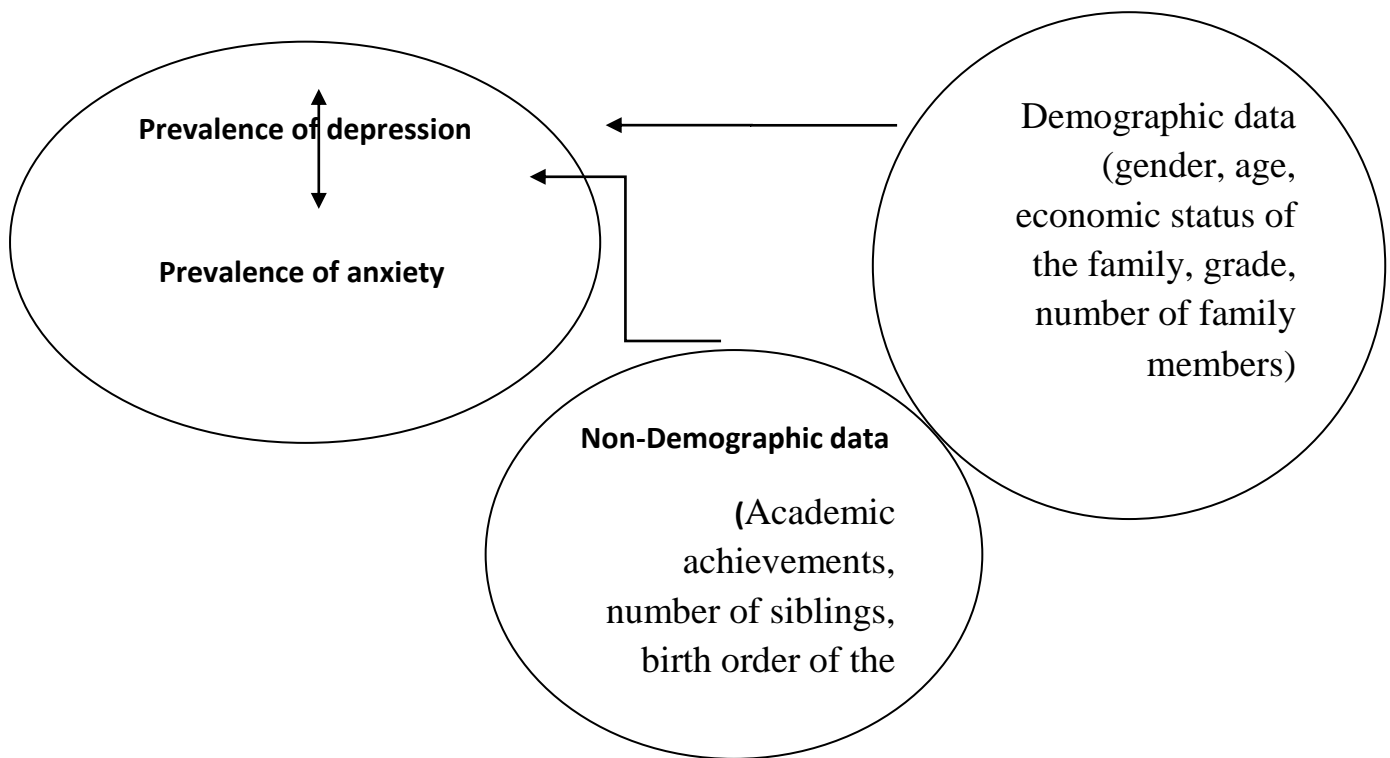
A cross sectional study was carried out and aimed at determine the prevalence of depression and anxiety and their associated factors among Jordanian adolescents and Syrian adolescent refugees aged from 12 to 17 years. 1,773 one thousand seven hundred and seventy three adolescents were recruited in the study. The used tools for the study was, Patient Health Questionnaire-9-Modified, and Generalized Anxiety Disorder-7 questionnaire.

Approximately 27.2% of Jordanian adolescents and 28.3% of Syrian adolescent refugees had depression and it was significantly variances in the prevalence of depression and anxiety between males and females, as 17.6% of Jordanian adolescent's males suffers from anxiety, while 19% of Syrian adolescent refugees had anxiety. On the other hand, 28.1% Jordanian adolescent females, and 27.3% of Syrian female adolescent refugees had anxiety.

## **2.6 Conceptual Framework**

Conceptual framework is a tool formulated from a set of different and broad ideas, theories, assumptions, concepts, expectations, and beliefs taken from relevant field of enquiry that can support the researchers to properly identify the problem that they are looking for, direct their investigation, form their questions, and search for suitable literature (Levien, 2006).

**Figure ( 2.6.1 ) Conceptual framework of this study:**



### **2.6.1 Conceptual model of the study.**

The main concepts of the current framework is depression and anxiety as a dependent variables, Besides other variables as independent variables such as the socio-demographic data which includes age, gender, economic status, grade, parental marital status, Living area, and Demographic variables: Age, Gender, Economic state , Number of Sibling, Parental marital status, Living area, The region of living, , and non-demographic data which are Academic achievements, number of siblings, birth order of the participant, marital status of parents, health statues of the participant.

### **2.6.2 Dependent variable**

#### **2.6.2.1 Depression**

In the current study, Beck depression Inventory (BDI) was utilized to assess depression and it included 21 questions (See Appendix C). BDI assesses the depression symptoms as the following: Question 1, the severity of sadness; question 2, pessimism; question 3, past failure; question 4, loss of pleasure; question 5, feeling of guilt; question 6, feeling of punishment; question 7, self-dislike; question 8, self-criticalness; question 9, suicidal thoughts or wishes; question 10, crying; question 11, agitation; question 12, loss of interest; question 13, indecisiveness; question 14, worthlessness; question 15, loss of energy; question 16, change in sleep pattern;



question 17, tiredness or fatigue; question 18, change in appetite; question 19, weight loss; question 20, health worried; and question 21, loss of interest in sex (Beck, 1961).

### **2.6.2.2 Anxiety:**

In the current study, The State-Trait Anxiety Inventory (STAI) was utilized to assess Anxiety and it included 20 questions.

STAI's format of independent State and Trait scales (Gros.2007) , for this research we used State anxiety inventory to assesses the State-Anxiety symptoms as the following,: Question 1, I feel calmed down; question 2, I feel safe ; question 3, I feel tense; question 4, annoyed; question 5, I feel comfortable; question 6, I feel upset ; question 7, concern with future misfortunes; question 8, I feel relaxed; question 9, Anguished; question 10, at ease; question 11, Self Confidence; question 12, I feel Nervous; question 13, I feel restless; question 14, I feel down hearted; question 15, I feel rested; question 16, I feel satisfied; question 17, Concerned; question 18, I feel stunned; question 19, I feel happy and Question 20, I feel good. (Spielberg, 1968).

### **2.6.2.2 Independent Variables**

In the current study many variables affect the prevalence of depression and state-anxiety among adolescent's students. According to previous studies, it was apparent that the demographic variables have a high effect on the depression rate and severity. In this study, the researcher used a self-reported questionnaire that contain such questions that assessed the demographic variables and which of the variables that greatly affect depression.

## **Chapter Three**

Introduction  
Methodology  
Study design  
Study design  
Study setting  
Targeted population  
Sample size  
Sampling techniques  
Inclusion criteria  
Exclusion criteria  
Sample description  
Study instrument  
Validity and reliability  
Data collection procedure  
Study strengths and limitations  
Ethical considerations  
Data analysis

## **Chapter Three Methodology and Procedures**

### **3.1 Introduction**

In this part of the study, the researcher will discuss the design and setting of the study, the population of the study and the sampling process, as well as the criteria for inclusion and exclusion, the tools used for data collection and data analysis, and their validity and reliability, in addition to the ethical considerations of this study, and the design's benefits and limitations.

### **3.2 Study Design**

In this study, the researcher carried out a cross-sectional methodology using a self-reported questionnaire, as it is an inexpensive method of data collection enabling researchers to collect large quantities of information in little time, especially as it relates to information on prevalence's of phenomena at a certain point in time spreading across a big population (Levien, 2006; Wang, 2020).

Besides these benefits, it merits mentioning that the cross-sectional design is limited by some challenges, including its inability to make causal inferences for phenomena, to study rare disease, and to correctly assess individual incidences (Wang, 2020).

Furthermore, this design can only provide a snapshot of a situation, which could easily provide different results, had the researcher used another timeframe to conduct the study (Levien, 2006).

On the other hand, the cross-sectional design has many limitations: it does not lend to generalization of the result, it may not enable researchers to make causal inferences, and it is not appropriate for incident estimation especially in the case of long-lasting outcomes (Levien, 2006).

### **3.3 Study Setting**

The study conducted at Bethlehem governorate, which is a Palestinian city located in southern of west-bank (WB), the total population of Bethlehem governorate citizen is 217,400, 9850 of them are between 15-17 years. (PCPS, 2019).

Schools are located in Bethlehem governorate, from three cities, Bait jala, Bait Sahor, and Bethlehem.

Participants were recruited from their schools directly, which included a sample of non-governmental, private-owned or charitably-run schools, located in the Bethlehem Governorate.

### 3.4 Study Population

The target population for the study is the entire set of units for which the survey data are to be used to make inferences (Lavrakas, 2011). The target of the study was chosen due to the importance of the stage and due to the extreme lack of studied conducted that aims at revealing prevalence of depressive and anxiety symptoms among it.

In this study, the target population included all adolescents in the eleventh and the tenth grades in the Bethlehem Governorate non-governmental schools.

The researcher received a full list from the Palestinian Ministry of Education, containing a survey of students enrolled into non-governmental schools, which detailed that distributed across (17) non-governmental schools in the Bethlehem Governorate, (973) students were in tenth and eleventh grades, whom belonged to the tenth and eleventh grades.

The following table presents the distribution of the study population, according to the Palestinian Ministry of Education, according to their (2020) survey, which they shared with the researcher.

**(Table 3.1) Distribution of Population According to School**

	<b>School Name</b>	<b>Student Count (10th &amp; 11th Grades)</b>	<b>Percentage</b>
1	Al-Ikhaa Al-Islamiya	9	0.9%
2	Al-Amal High School	31	3.1%
3	Terra Santa High School for Girls	108	11%
4	Greek Catholic Patriarchate School / Beit Sahour	74	7.6%
5	Terra Sancta College / Bethlehem	156	16%
6	Dar Al Kalema School	49	5%
7	The Evangelical Lutheran School / Beit Sahour	55	5.6%
8	Bethlehem Evangelical Academy	9	0.9%
9	The Orthodox Shepherds' High School	46	4.7%
10	Talitha Kumi School	53	5.4%
11	The Good Shepherd School	47	4.8%
12	Ephpheta Bethlehem School	19	1.9%
13	Collège des Frères Bethlehem	86	8.8%
14	Latin Patriarchate School / Beit Sahour	46	4.7%
15	Latin Patriarchate School / Beit Jala	65	6.6%
16	Jerusalem School / Bethlehem	71	7.2%
17	Mar Aphrem School / Bethlehem	49	5%
	<b>Total</b>	<b>973</b>	<b>100%</b>

Table (3.1) indicated that about (0.9%) of the population could be located at Al-Ikhaa Al-Islamiya School, (3.1%) at Al-Amal High School, (11%) at Terra Santa High

School for Girls, (7.6%%) at the Greek Catholic Patriarchate School in Beit Sahour, (16%) at the Terra Sancta College in Bethlehem, (5%) at Dar Al Kalema School, (0.9%) at the Bethlehem Evangelical Academy, (4.7%) at the Orthodox Shepherds' High School, (1.9%) at the Ephpheta Bethlehem School, (8.8%) at Collège des Frères of Bethlehem, (4.7%) at the Latin Patriarchate School in Beit Sahour, (6.6%) at the Latin Patriarchate School in Beit Jala, (7.2%) at the Jerusalem School in Bethlehem, and (5%) at the Mar Aphrem School in Bethlehem.

### 3.5 Sampling technique

In this study, a combination of probability and nonprobability sampling was employed. For the first round of sampling schools, in which the study was implemented, were selected through stratified and then simple random sampling.

Simple random sample is a randomly selected subset of a population. In this sampling method, each member of the population has an exactly equal chance of being selected. (Levin, 2016).

In the second round the researcher filled the questionnaire with all the students who bring the parental approval.

#### Round One:

Simple random sampling provided that (6) schools were chosen to represent the study population, with a total of (317) participant in all the chosen schools, which represents (32.5%) of the study population. The following presents this:

**Table (3.2) Numbers and ppercentages of sample according to school**

	School name	Participants from school	Percentage from school
1	The Evangelical Lutheran School	54	17%
2	The Orthodox Shepherds' High School	45	14.1
3	College Des Frères Bethlehem	72	22.7%
4	Latin Patriarch School / Beit Jala	58	18.2%
5	Latin Patriarch school / Beit Sahour	42	13.2%
6	Dar Al Kalima School	47	14.8%
#	Total	317	100%

#### Round Two:

In the second round of sampling, parents of students meeting inclusion criteria received a consent form to ask their approval for their son's participation in the study. All students who bring and provided consent to participating in the study, and whose parents approved of their participation.

#### Inclusion Criteria

1. Students enrolled in a non-governmental school.
2. Students in the tenth and eleventh grades.
3. Students who accepted to fill the questionnaire
4. Students, who filled out the questionnaire and provided parental consent for their participation.

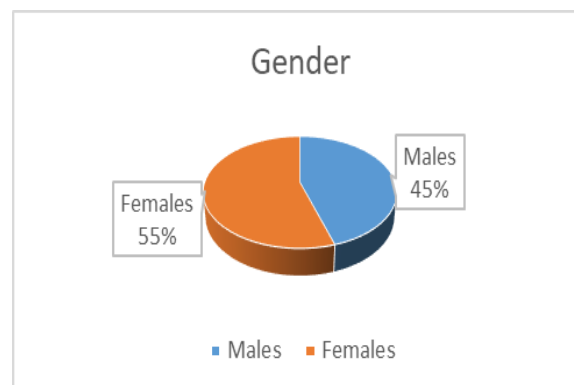
### Exclusion Criteria

1. Governmental school students.
2. Tawjihi students.
3. Students who did not provide parents approval for research

### 3.6 Sample Distribution

The study sample included (317) participants, with a response rate of (100%). The following figures present the distribution of sample participants according to demographic variables:

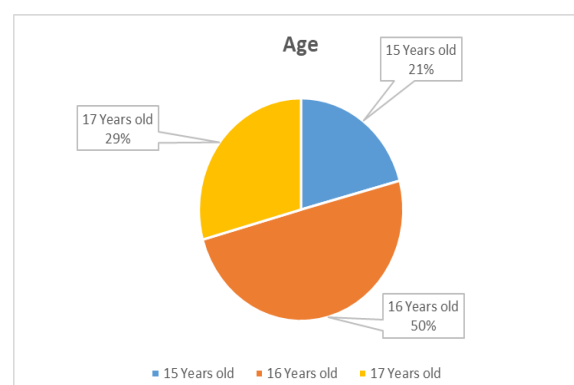
#### Distribution of Sample according to Gender Figure (3.1) Distribution of Sample according to Gender



Data analysis showed that of the (317) participants, (54%, n=174) were females and (46%, n=143) were males

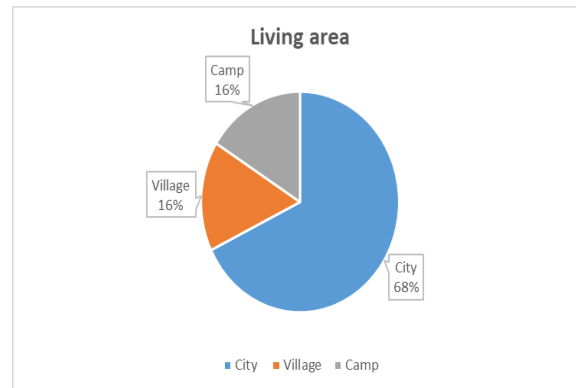
#### 3.7.2 Distribution of Sample according to Age

##### Figure (3.2) Distribution of Sample according to Age



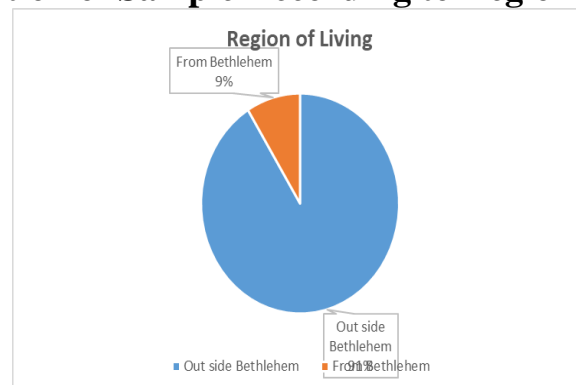
Data analysis showed that (20.8%, n=66) were (15) years old, (49.9%, n=158) were (16) years old, and (29.3%, n=93) of the participants were (17) years old.

### Living area **Figure (3.3) Distribution of Sample according to Living area**



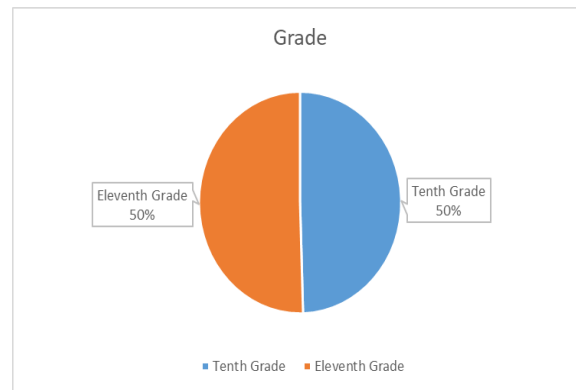
Findings showed that (67.8%, n=215) lived in cities, (16.1%, n=51) lived in villages, and (16.1%, n=51) of the participants lived in refugee camps.

### Distribution of Sample According to Region of Living **Figure (3.4) Distribution of Sample According to Region of Living**



Results showed that (91.1%, n=289) were from the Bethlehem Governorate and (8.9%, n=28) of the participants came from outside the Bethlehem Governorate.

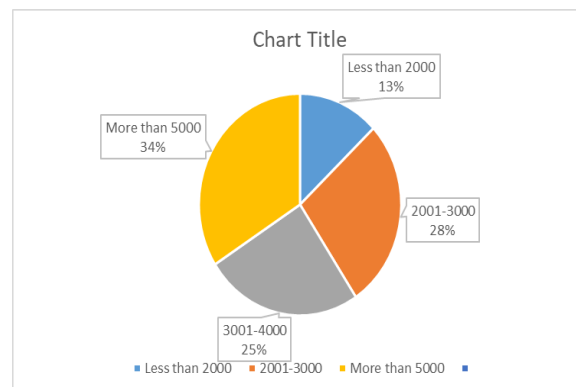
### Distribution of Sample According to School Grade **Figure (3.5) Distribution of Sample According to School Grade**



Findings showed (49.5%, n=157) were tenth grade students and (50.5%, n=160) of the participants were eleventh grade students.

### **Distribution of Sample According to Family Income Figure (3.6)**

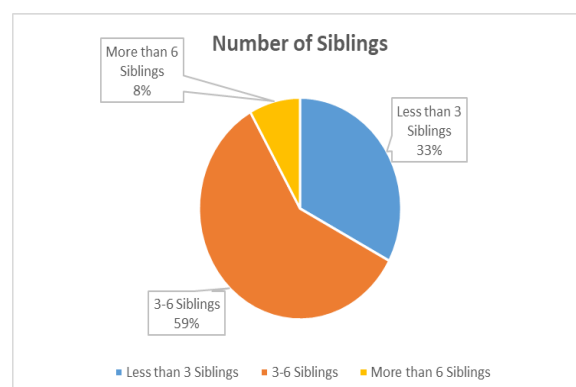
#### **Distribution of Sample According to Family Income**



Findings showed that (12.9%, n=41) of participants identified their family income as less than (2000) NIS, (27.8%, n=88) reported a range of (2000-3000) NIS, (25.2%, n=80) within a range of (3000-4000) NIS, while (34.1%, n=108) said more than (4000) NIS.

### **3.7.7 Distribution of Sample According to Number of Siblings**

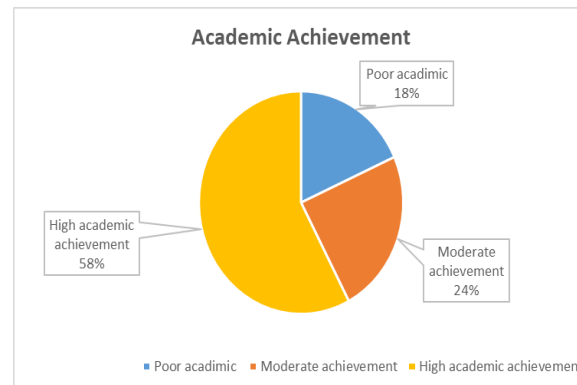
#### **Figure (3.7) Distribution of Sample According to Number of Siblings**





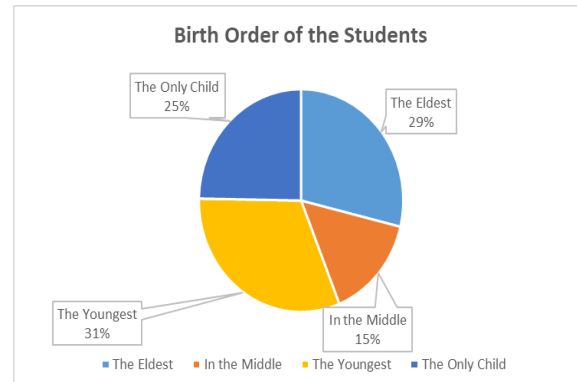
Findings showed (32.8%, n=104) had less than three siblings, (59%, n=187) had (3-6) siblings, and (8.2%, n=26) of the participants had more than (6) siblings.

### **Distribution of Sample According to Academic Achievement Figure (3.8) Distribution of Sample According to Academic Achievement**



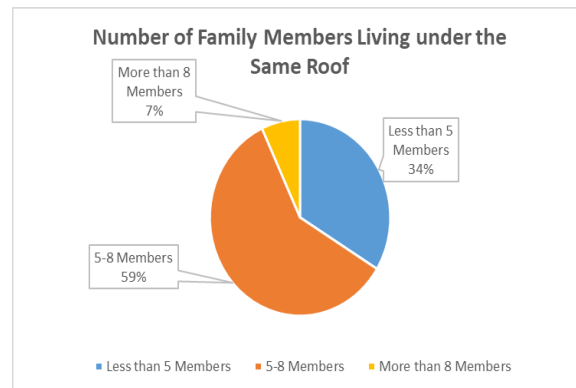
Results showed (18.3%, n=58) had poor academic achievement, (24%, n=76) had moderate achievement, and (57.7%, n=183) of the participants had high academic achievement.

### **Distribution of Sample According to Sibling Arrangement Figure (3.9) Distribution of Sample According to Sibling Arrangement**



Results showed (31.3%, n=99) of participants were the Eldest siblings, (34.1%, n=108) were the youngest siblings, (18.3%, n=85) had no siblings, and (16.4%, n=52) were the middle children.

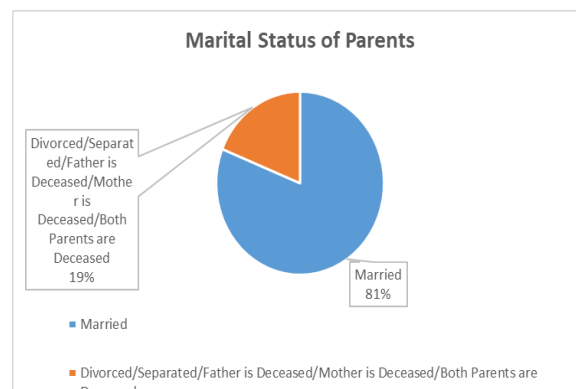
### **Distribution of Sample According to Number of Family Members Living under the Same Roof Figure (3.10) Distribution of Sample According to Number of Family Members Living under the Same Roof**



Results showed (33.8%, n=107) of participants were the Number of Family Members Living under the Same Roof less than five members, (59.3%, n=188) of participants were the Number of Family Members Living under the Same Roof from five to eight members, (6.9%, n=22) of participants were the Number of Family Members Living under the Same Roof

### **Distribution of Sample According to Parental Marital Status.**

**Figure (3.11) Distribution of Sample According to Parental Marital Status**



Results showed (81%, n=257) of the participants' parents were married, while (19%, n=60) were divorced, widowed, or separated.

## **4.7 Study Instrument**

The study instrument included three parts:

### **Part One: Demographic and Non-Demographic Data questionnaire**

#### **Demographic Data**

- 1. Age:** (15), (16), (17).
- 2. Gender:** (Male), (Female).
- 3. Living area:** (City), (Village/Town), (Camp).
- 4. Living Area:** (Inside Bethlehem Governorate), (Outside Bethlehem Governorate).

- 5. Grade:** (Tenth Grade), (Eleventh Grade).
- 6. Family income:** (Less than 2000), (2001-3000), (3001-4000), (More than 5000).
- 7. Number of Family Members Living under the Same Roof:** (Less than 5 Members), (5-8 Members), (More than 8 Members).

## Non-Demographic Data

- 1. Academic Achievement:** (Failed or Less than 50%), (Fair or in the Sixties Range), (Good or in in the Seventies Range), (Very good or in the Eighties Range), (Excellent or in the Nineties Range).
- 2. Birth Order of the Students:** (The Eldest), (In the Middle), (The Youngest), (The Only Child).
- 3. Number of Siblings:** (Less than 3 Siblings), (3-6 Siblings), (More than 6 Siblings).
- 4. Marital Status of Parents:** (Married), (Divorced/Separated), (Father is deceased), (Mother is deceased), (Both Parents are deceased).

## Part Two: The Beck Depression Inventory (BDI-II)

The Beck Depression Inventory (BDI) is a psychometric measure for screening prevalence and severity of depressive symptoms. In this study, the BDI was administered according to a cutoff point of (17), which determines the presence of intervention-worthy depressive symptoms, or a presence of a Major Depressive Episode (Wang et al., 2013). The following table presents the interpretation key for the BDI-II:

**Table (3.3) Beck depression score for BDI-II**

Range	Scores
Minimal	0 – 13
Mild	14 -19
Moderate	20 – 28
Severe	29 – 63

The cutoff score of  $\geq 17$  was used to assess clinical depression (Bostanci et al, 2005)

## Validity and Reliability of the Instrument

The reliability of the BDI-II has been established by Arabic and Palestinian researchers as well as researchers and clinicians around the world. For further reliability, the researcher used inter-rater reliability by consulting with three PhD holders, who reviewed the tool and provided the researcher with their feedback.

## Stability and consistency of the tool

Reliability co efficiency was calculated to the axis of the tool (BDI-II). Results shown in table (3.4):

Table (3.4): Cronbach Alpha for BDI-II

Tool	Cronbach's Alpha	N of Items
BDI-II inventory	0.932	21

The results of internal consistency of BDI-II tool total score of the current study reached 0.932. This indicated high reliability and internal consistency of the used tool.

### **Part Three: The Spielberger State Anxiety Inventory**

The Spielberger State Anxiety Inventory is a validated self-reported assessment containing (20) items, which measure the state of anxiety. It was developed by Charles D. Spielberger, Richard. L Gorsuch, and Robert E. Lushen (Spielberger et al, 1968).

### **3.8 Validity and Reliability of the Instrument**

Alwawi (2012) implemented the scale with a sample of 239 adults in Palestine, and according to his study Cronbach alpha for the scale was. 0.79 For state anxiety. Moreover, Al Hidmi (2021) used the scale with a sample of 214 college's teachers and the the results of Cronbach alpha was 0.76.

In the current study to scale the results of reliability of the statistics, Cronbach alpha was used as represented in the following table:

#### **Stability and consistency of the tool**

Reliability co-efficiency was calculated to the axis of the tool (Spielberger state-anxiety inventory). Results shown in table (3.4):

Table (3.5): Cronbach Alpha for State anxiety inventory.

Tool	Cronbach's Alpha	N of Items
State anxiety inventory	0.857	20

The results of internal consistency of Spielberger state- anxiety inventory total score of the current study reached 0.857. This indicated high reliability and internal consistency of the used tool.

#### **The analysis of Spielberger state- anxiety inventory:**

There were two types of sentences in this test, the first points to a high state anxiety as the weight (1, 2,3,4) and the test contains ten sentences to be corrected in that method, while the other sentences points to a low state anxiety and the weight reversed (4,3,2,1) and the test contains ten sentences to be corrected in that method.

Positive Items	Negative items
1,2,5,6,10,15,16,17,19,20	3,4,6,7,9,11,12,13,14,18

## **4.9 Data Collection**

In this study, the researcher conducted several procedures when collecting data, summarized in the following:

1. The researcher submitted the survey for ethical approval by the committee in Al-Quds University.
2. The researcher conducted a pilot data collection, which included (15) students from the Evangelical Lutheran School, whom represented a sample of the sample, and ensured the instrument is understood.
3. Data collection began in April of (2021) and ended in October of (2021) with a first step of delivering consent forms to students in the selected schools.
4. Another visit to the schools was conducted, in which students, who brought a signed consent form received a copy of the questionnaire to fill.
5. Students filled out questionnaires themselves with the presence of the researcher and the school's guidance counselor, who helped the researcher provide explanation and assistance for study participants.

## **4.10 Data Analysis**

After data collection was completed, data was analysed using the Statistical Package for Social Sciences (SPSS) version (21).

Through using several statically methodologies as frequencies, percentages, means, standard deviation.

To test the hypotheses several tests had been used as the following:

1. One-way Anova. Used to identify the variances when comparing more than tow groups
2. T-tests was used to test the deference's in the means when there was more than tow groups.
3. Tukey tests. Was used to test the deference's between groups

Moreover, Cronbach Alpha test was used to measure the internal consistency of the used scales.

## **4.11 Limitations of Study**

1. The Study sample included only the students from non-governmental schools which will affects the ability to generalize the research results to governmental schools.
2. The sampling methodology is covenanted which may not all adolescents in privet schools of Bethlehem. Which decrease the generalizability of the findings?
3. The Data collection occurred after schools quarantine which could have affected the responses of the students.
5. The weaknesses of cross-sectional studies include the inability to assess incidence, to study rare diseases, and to make a causal inference for the phenomena (Wang, 2020). Also weakness of the cross sectional designs could be extended to be only a snapshot: the situation may provide differing results if another timeframe had been chosen Prevalence-incidence bias (Levien, 2006).
4. The study is descriptive therefore because affect can be assured or detect between independent and dependent variables.

5. The refusal from the ministry of education (MOE) from collecting Data from governmental students.

#### **4.12 Ethical Considerations**

- The researcher got the approvals from the mental health program commity.
- The researcher got the approval of the ethical committee of the Colege of Public health.
- compliance with ethical guidelines for conducting scientific research, which are provided by the ethical committee of Al-Quds University, several measures were put in place, to protect the participants of the study, which are included in the following:
- The researcher was committed to clarifying objective and procedures of study to schools selected for data collection, to the parents of students participating in the research, and to the students themselves. This explanation was provided both written and orally.
- The researcher contacted the school's administrations and got their approval for conducting the research in their schools.

Parents of student were provided were informed through a letter explaining study objectives, and their rights, as well as the students themselves which included the right to drop out of study at any time, the right to privacy and confidentiality, and the right to provide informed consent.

- Data was kept coded and password protected in a safe and private digital space, which no one could access other than the researcher.

## **Chapter Four**

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### **Results and Findings**

#### **Research question one**

#### **Research question Tow**

#### **Research question Three**

#### **Research question Four**

#### **Research question Five**

#### **Summary**

## Chapter Four

### Study results

#### Introduction:

This chapter represents the results of the study according to the questions and the study hypothesis.

#### 4.1. First research question: What is the prevalence of depression among adolescence in Bethlehem non-governmental schools?

Results in table (4.1) shows that 45.7% of the participants had minimal or very low level of depression, 20.2% had severe depression and 18.6% of the participants had moderate depression whereas 15.5% had mild depression.

**Table (4.1): Depression severity range for the participants.**

Depression severity range	Scores	Frequency	Percentage
Minimal	0 -13	145	45.7 %
Mild	14 -19	49	15.5 %
Moderate	20 – 28	59	18.6 %
Sever	29 – 63	64	20.2 %
Total		317	100.0%

**Table (4.2): Depression prevalence results**

Depression score	Frequency	Percentages
< 17	170	53.6%
≥ 17	147	46.4 %
Total	317	100 %

According to BDI scores  $\geq 17$  which is the cutoff point for depression, 53.6% (n= 170) of the participants were not depressed, whereas 46.4% (n= 147) of the participants were depressed as seen in table (4.2).

#### 4.2 Second research question. Is there a relationship between prevalence of depression and demographic variables (age, gender, Living area, region of living, grade, and family income, number of siblings, Academic Achievement, Birth Order of the Students, Number of Family Members Living under the Same Roof and parent marital status) among adolescence in Bethlehem non-governmental schools?

In order to answer this question, several hypotheses were tested.



**4.2.1. Hypothesis one: There is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to gender.**

To test this hypothesis, independent T-test was used to find the difference in prevalence of depression among the participants in regard to gender, as shown in tables (4.3).

**Table (4.3): T-test result for prevalence of depression according to gender.**

Gender	Count	Mean	Standard deviation	Df	T-value	Sig.
Male	143	1.3846	0.48821	315	-2.579	0.01
Female	174	1.5287	0.50061			
Total	317					

As shown in table (4.3), a statistically significant difference was observed between males and females in prevalence of depression at P-value (0.01). T-test revealed that the females had higher means (1.5287) for depression than males (1.3846). Thus the null hypothesis was rejected.

**4.2.2 Hypothesis two: There is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to age.**

ANOVA test was used to find the difference in prevalence of depression among the participants in regard to age, as shown in tables (4.4).

As shown in table (4.4), ANOVA test showed no statistically significant differences in prevalence of depression among the participants in relation to age with P-value (0.819). So the null hypothesis was accepted.

**Table (4.4): ANOVA test results for prevalence of depression according to age.**

Age	Frequency	Frequency%	Mean	Std.deviation
15 year	66	20.8%	1.4394	0.50012
16 year	158	49.9%	1.4810	0.50123
17 year	93	29.3%	1.4516	0.50035
Total	317	100%		

ANOVA					
	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.100	0.050	0.199	316	0.819
Within groups	78.733	0.251			
Total	78.333				

**4.2.3. Hypothesis three: There is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to Living area.**

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among the participants in regard to **Living area**, as shown in tables (4.5).

**Table (4.5): ANOVA test results for prevalence of depression according to Living area.**

Living area	Frequency	Frequency%	Mean	Std.deviation
City	215	67.8%	1.4093	0.49285
Village	51	16.1%	1.5098	0.50488
camp	51	16.1%	1.6471	0.48264
Total	317	100%		

ANOVA					
	Sum of squares	Mean square	F	Df	Sig.
Between groups	2.459	1.230	5.055	316	0.007
Within groups	76.374	0.243			
Total	78.833				

As shown in table (4.5), there was no significant differences in the prevalence of depression among the participants in relation to **Living area** with P-value (0.007). Thus the null hypothesis was accepted.

**4.2.4. Hypothesis four: There is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to region of living.**

To test this hypothesis, independent T-test was used to find the difference in prevalence of depression among the participants in regard to region of living, as shown in tables (4.6).

**Table (4.6): T-test result for prevalence of depression according to region of living.**

Region of living	Count	Mean	Standard deviation	Df	T-value	Sig.
From Bethlehem	289	1.4394	0.49718	315	-2.996	0.005
Out of Bethlehem	28	1.7143	0.46004			
Total	317					

As shown in table (4.6), T-test showed statistically significant differences in prevalence of depression among the participants in regard to region of living at P-

value (0.005). T-test revealed that the participants who are from out of Bethlehem had higher means (1.7143) for depression than the participants who is from Bethlehem (1.4394). Therefore, the null hypothesis was rejected.

#### **4.2.5. Hypothesis five: There is no significant difference at $\alpha \leq 0.05$ level of significance in prevalence of depression among the participants of the study in relation to school Grade.**

To test this hypothesis, independent T-test was used to find the difference in prevalence of depression among the participants in regard to school grade, as shown in tables (4.7).

**Table (4.7): T-test result for prevalence of depression according to school grades.**

School grade	Count	Mean	Standard deviation	Df	T-value	Sig.
Tenth grade	157	1.4522	0.49931	315	-0.405	0.686
Eleventh grade	160	1.4750	0.50094			
Total	317					

As shown in table (5.7), there was no statistical differences in prevalence of depression among the participants in relation to school grade with P-value (0.686). Thus the null hypothesis was accepted.

#### **4.2.6. Hypothesis six: There is no significant difference at $\alpha \leq 0.05$ level of significance in prevalence of depression among the participants of the study in relation to family income.**

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among participants in regard to family income, as shown in tables (4.8).

**Table (4.8): ANOVA test results for prevalence of depression according to family income.**

Family income	Frequency	Frequency%	Mean	Std.deviation
Less than 2000 NIS	41	12.9%	1.6341	0.48765
From 2000-3000 NIS	88	27.8%	1.4091	0.49448
More than 3000-4000 NIS	80	25.2%	1.3875	0.49025
More than 4000 NIS	108	34.1%	1.5000	0.04834
Total	317	100%		

#### **ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	2.060	0.687	2.800	316	0.040
Within groups	76.772	0.245			
Total					

As shown in table (4.8), ANOVA test revealed statistically significant differences in prevalence of depression among the participants in relation to family income at P-value (0.040). Tukey test was used to find differences between groups. The participant with an income less than 2000 NIS had the highest mean (1.6341) for depression, followed by the participants with an income more than 5000 NIS with a mean of (1.5000), then the participants with an income from 2000- 3000 NIS with a mean of (1.4091), and the lowest mean (1.3875) of depression for the participants with an income more than 3000- 4000 NIS. Tuckey test was used to find differences between groups. The results showed that the participants with an income less than 2000 NIS had a higher mean of depression than other groups. Thus the null hypothesis was rejected.

#### **4.2.7. Hypothesis seven: Three is no significant difference at $\alpha \leq 0.05$ level of significance in prevalence of depression among the participants of the study in relation to number of siblings.**

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among the participants in regard to number of siblings, as shown in tables (4.9).

As shown in table (4.9), ANOVA test showed that there was no statistically significant difference in prevalence of depression among the participants in relation to number of siblings at P- value (0.266).

**Table (4.9): ANOVA test results for prevalence of depression according to number of siblings.**

Siblings number	Frequency	Frequency%	Mean	Std. deviation
Less than 3	104	32.8%	1.4423	0.49907
From 3-6	187	59.0%	1.4545	0.49927
More than 6	26	8.2%	1.6154	0.49614
Total	317	100%		

ANOVA					
	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.661	0.331	1.329	316	0.266
Within groups	78.171	0.249			
Total					

#### **4.2.8. Hypothesis eight: Three is no significant difference at $\alpha \leq 0.05$ level of significance in prevalence of depression among the participants of the study in relation to school achievement.**

Because the number of the participants from the categories fail and pass, they were combined under the category “poor achievement”, the participants from the categories very good and excellent were combined under the category “high achievement”.

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among the participants in regard to **Academic Achievement**, as shown in tables (4.10).

**Table (4.10): ANOVA test results for prevalence of depression according to school achievement.**

Academic Achievement	Frequency	Frequency%	Mean	Std.deviation
Poor achievement	58	18.3%	1.6724	0.47343
Moderate achievement	76	24.0%	1.5132	0.50315
High achievement	183	57.7%	1.3770	0.48598
Total	317	100%		

**ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	4.086	2.043	8.583	316	0.000
Within groups	74.746	0.238			
Total					

As shown in table (4.10), there was a statistically significant difference in prevalence of depression among participants in relation to school achievement at P- value (0.000). Tukey test was used to find differences between groups. The participants who had poor achievement had the highest mean (1.6724), then the participants with moderate achievement had a mean of (1.5132), and the lowest mean for the participants who had high achievement (1.3770). Tukey test was used to find differences between groups. The results showed that the participants with poor achievement had a higher mean of depression than the participants with moderate and high school achievement. Thus the null hypothesis was rejected.

**4.2.9. Hypothesis nine: Three is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to Birth Order of the Students.**

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among the participants in regard to **Birth Order of the Students**, as shown in tables (4.11).

**Table (4.11): ANOVA test results for prevalence of depression according to Birth Order of the Students.**

Birth Order of the Students	Frequency	Frequency%	Mean	Std.deviation
Older	99	31.2%	1.4343	0.49819
Younger	108	34.1%	1.4167	0.49531
Alone	58	18.3%	1.5000	0.50437
The middle	52	16.4%	1.5769	0.49887
Total	317	100%		

**ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	1.067	0.356	1.432	316	0.233
Within groups	77.766	0.248			
Total					

As shown in table (4.11), ANOVA test revealed no statistically significant differences in prevalence of depression among the participants in relation to **Birth Order of the Students** at P- value (0.233). Thus the null hypothesis was accepted.

**4.2.10. Hypothesis ten: Three is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to Number of Family Members Living under the Same Roof.**

To test this hypothesis, ANOVA test was used to find the difference in prevalence of depression among the participants in regard to Number of Family Members Living under the Same Roof, as shown in tables (4.12).

**Table (4.12): ANOVA test results for prevalence of depression according to Number of Family Members Living under the Same Roof.**

Number of Family Members Living under the Same Roof	Frequency	Frequency%	Mean	Std.deviation
Less than 5	107	33.8%	1.4019	0.04762
From 5-8	188	59.3%	1.4894	0.03656
More than 8	22	6.9%	1.5455	0.10866
Total	317	100%		

**ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.680	0.640	1.366	316	0.257
Within groups	78.153	0.249			
Total					

As shown in table (4.12), ANOVA test showed that there was no statistically significant differences in prevalence of depression among the participants in relation to Number of Family Members Living under the Same Roof at P- value (0.257). Thus the null hypothesis was accepted.

**4.2.11. Hypothesis eleven: There is no significant difference at  $\alpha \leq 0.05$  level of significance in prevalence of depression among the participants of the study in relation to parental marital status.**

To test this hypothesis, independent T-test was used to find the difference in prevalence of depression among the participants in regard to parental marital status, as shown in table (4.13).

**Table (4.13): T-test result for prevalence of depression according to parental marital status.**

Parental marital status	Count	Mean	St.deviation	Df	T-value	Sig.
Married	257	1.3774	0.48569	315	-7.970	0.000
Divorced, separated or widowed	60	1.8333	0.37582			
Total	317					

As shown in table (4.13), T-test revealed a statistically significant difference in prevalence of depression among the participants in regard to parental marital status at P-value (0.000).

Tukey test was used to find differences between groups. The participants whose parents were divorced, separated or widowed had higher mean (1.8333) for depression than the participants whose parents were married with mean of (1.3774). Therefore, the null hypothesis was rejected.

#### **4.3. Third research question. What is the prevalence of state anxiety symptoms among adolescence in Bethlehem non-governmental schools?**

Results in table (4.14) show that the majority of the participants 62.2% had no anxiety symptoms, while 38.5 % of them were anxious. The questions number (1, 2, 5, 8, 10, 11, 15, 16, 19, 20) were converted to state anxiety inventory scale (SAI).

**Table (4.14): Level of anxiety symptoms:**

Anxiety level	Frequency	Percentages
No anxiety symptoms	195	61.5%
Yes	122	38.5%
Total	317	100%

#### **4.4. Fourth research question: Is there a relationship between the level of anxiety symptoms and demographic variables (age, gender, Living area, region of living, school grade, and family income, number of siblings, Academic Achievement, Birth Order of the Students, Number of Family Members Living under the Same Roof and parent marital status) among adolescence in Bethlehem non-governmental schools?**

In order to answer this question, several hypotheses were tested.

**4.4.1. Hypothesis one: There is no significant difference at  $\alpha \leq 0.05$  level of significance in the state anxiety inventory among the participants of the study in relation to gender.**

Independent T-test was used to find the difference in the state anxiety inventory among the participants in regard to gender, as shown in tables (4.15).

**Table (4.15): T-test result for the state anxiety inventory in regard to gender.**

Gender	Count	Mean	Standard deviation	Df	T-value	Sig.
Male	143	1.2517	0.43554	315	-4.606	0.000
Female	174	1.4943	0.50141			
Total	317					

A statistical significant difference was observed between males and females in the state anxiety inventory with P-value (0.000). T-test revealed that the females had higher mean (1.4943) for anxiety symptoms level than males (1.2517). Therefore the null hypothesis was rejected.

**4.4.2 Hypothesis two: There is no significant difference at  $\alpha \leq 0.05$  level of significance in the state anxiety inventory among the participants of the study in relation to age.**

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to age, as shown in tables (4.16).

**Table (4.16): ANOVA test results for the level of the state anxiety inventory in regard to age.**

Age	Frequency	Frequency%	Mean	Std. deviation
15 year	66	20.8%	1.3788	0.48880
16 year	158	49.9%	1.4177	0.49475
17 year	93	29.3%	1.3333	0.47396
Total	317	100%		

**ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.420	0.210	0.884	316	0.414
Within groups	74.627	0.238			
Total	78.333				

The results showed that there was no statistically significant difference in the state anxiety inventory among the participants in relation to age at P-value (0.414). So the null hypothesis was accepted. As seen in table (4.16).



**4.4.3. Hypothesis three: There is no significant difference at  $\alpha \leq 0.05$  level of significance in state anxiety inventory among the participants of the study in relation to Living area.**

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to Living area, as shown in tables (4.17).

As shown in table (4.17), there was no statistically significant difference in the state anxiety inventory among the participants in relation to Living area with P-value (0.391). Thus the null hypothesis was accepted.

**Table (4.17): ANOVA test results for the state anxiety inventory in regard to Living area.**

Living area	Frequency	Frequency%	Mean	Std.deviation
City	215	67.8%	1.3674	0.48323
Village	51	16.1%	1.3725	0.48829
camp	51	16.1%	1.4706	0.50410
Total	317	100%		

ANOVA					
	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.488	0.224	0.942	316	0.391
Within groups	74.600	0.238			
Total	78.833				

**4.4.4. Hypothesis four: There is no significant difference at  $\alpha \leq 0.05$  level of significance in state anxiety inventory among the participants of the study in relation to region of living.**

To test this hypothesis, independent T-test was used to find the difference in the state anxiety inventory among the participants in regard to region of living, as shown in tables (4.18).

**Table (4.18): T-test result for the state anxiety inventory in regard to region of living.**

Region of living	Count	Mean	Standard deviation	Df	T-value	Sig.
From Bethlehem	289	1.3772	0.48552	315	-0.903	0.367
Out of Bethlehem	28	1.4643	0.50787			
Total	317					

As shown in table (4.18), T- test revealed no statistically significant difference in the state anxiety inventory among the participants in regard to region of living at P-value (0.367). Therefore, the null hypothesis was accepted.

#### **4.4.5. Hypothesis five: There is no significant difference at $\alpha \leq 0.05$ level of significance in the state anxiety inventory among the participants of the study in relation to school grade.**

To test this hypothesis, independent T-test was used to find the difference in the state anxiety inventory among the participants in regard to school grade, as shown in tables (4.19).

**Table (4.19): T-test result for the state anxiety inventory in regard to school grade.**

Gender	Count	Mean	Standard deviation	Df	T-value	Sig.
Tenth grade	157	1.4013	0.49172	315	0.593	0.553
Eleventh grade	160	1.3688	0.48398			
Total	317					

The results showed that there was no statistically significant difference in the state anxiety inventory among the participants in relation to school grade with P-value (0.553). Thus, the null hypothesis was accepted. As shown in table (4.19).

#### **4.4.6. Hypothesis six: There is no significant difference at $\alpha \leq 0.05$ level of significance in the state anxiety inventory among the participants of the study in relation to family income.**

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to family income, as shown in tables (4.20).

**Table (4.20): ANOVA test results for the state anxiety inventory in regard to family income.**

Family income	Frequency	Frequency%	Mean	Std.deviation
Less than 2000 NIS	41	12.9%	1.5122	0.50606
From 2000-3000 NIS	88	27.8%	1.3636	0.48380
More than 3000-4000 NIS	80	25.2%	1.2875	0.45545
More than 4000 NIS	108	34.1%	1.4259	0.49679
Total	317	100%		

#### **ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	1.645	0.548	2.338	316	0.074

Within groups	73.402	0.235			
Total					

As shown in table (4.20), ANOVA test revealed no statistically significant difference in state anxiety inventory among the participants in relation to family income at P-value (0.074). Thus the null hypothesis was accepted.

#### **4.4.7. Hypothesis seven: There is no significant difference at $\alpha \leq 0.05$ level of significance in the state anxiety inventory among the participants of the study in relation to number of siblings.**

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to number of siblings, as shown in tables (4.21).

**Table (4.21): ANOVA test results for the state anxiety inventory in regard to number of siblings.**

Siblings number	Frequency	Frequency%	Mean	Std.deviation
Less than 3	100	32.8%	1.3942	0.49105
From 3-6	187	59.0%	1.3797	0.48661
More than 6	26	8.2%	1.3846	0.49614
Total	317	100%		

#### **ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.014	0.007	0.030	316	0.971
Within groups	75.033	0.239			
Total					

As shown in table (4.21), ANOVA test showed that there was no statistically significant difference the state anxiety inventory among the participants in relation to number of siblings at P- value (0.971). Thus the null hypothesis was accepted.

#### **4.4.8. Hypothesis eight: There is no significant difference at $\alpha \leq 0.05$ level of significance in the state anxiety inventory among the participants of the study in relation to school achievement.**

To test this hypothesis, ANOVA test was used to find the difference the state anxiety inventory among the participants in regard to Academic Achievement, as shown in tables (4.22).

The findings showed that there was no statistically significant difference in the state anxiety inventory among the participants in relation to school achievement at P- value (0.080). Thus the null hypothesis was accepted. As shown in table (4.22).

**Table (4.22): ANOVA test results for the state anxiety inventory in regard to school achievement.**

School achievement	Frequency	Frequency%	Mean	Std.deviation
Poor achievement	58	18.3%	1.5000	0.50437
Moderate achievement	76	24.0%	1.4079	0.49471
High achievement	183	57.7%	1.3388	0.47460
Total	317	100%		

ANOVA

	Sum of squares	Mean square	F	Df	Sig.
Between groups	1.198	0.599	2.546	316	0.080
Within groups	73.850	0.235			
Total					

**4.4.9. Hypothesis nine: Three is no significant difference at  $\alpha \leq 0.05$  level of significance in the state anxiety inventory among the participants of the study in relation to Birth Order of the Students.**

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to **Birth Order of the Students**, as shown in tables (4.23).

**Table (4.23): ANOVA test results for the state anxiety inventory in regard to Birth Order of the Students.**

Birth Order of the Students	Frequency	Frequency%	Mean	Std.deviation
Older	99	31.2%	1.3131	0.46613
Younger	108	34.1%	1.4259	0.49679
Alone	58	18.3%	1.3448	0.47946
The middle	52	16.4%	1.4808	0.50450
Total	317	100%		

ANOVA

	Sum of squares	Mean square	F	Df	Sig.
Between groups	1.263	0.421	1.786	316	0.150
Within groups	73.785	0.236			
Total					

As shown in table (4.23), ANOVA test revealed no statistically significant difference in the state anxiety inventory among the participants in relation to **Birth Order of the Students** at P- value (0.150). Thus, the null hypothesis was accepted.

4.4.10. Hypothesis ten: Three is no significant difference at  $\alpha \leq 0.05$  level of significance in the state anxiety inventory among the participants of the study in relation to Number of Family Members Living under the Same Roof.

To test this hypothesis, ANOVA test was used to find the difference in the state anxiety inventory among the participants in regard to Number of Family Members Living under the Same Roof, as shown in tables (4.24).

**Table (4.24): ANOVA test results for the state anxiety inventory in regard to Number of Family Members Living under the Same Roof.**

Number of Family Members Living under the Same Roof	Frequency	Frequency%	Mean	Std.deviation
Less than 5	107	33.8%	1.3738	0.48610
From 5-8	188	59.3%	1.3936	0.48986
More than 8	22	6.9%	1.3636	0.49237
Total	317	100%		

**ANOVA**

	Sum of squares	Mean square	F	Df	Sig.
Between groups	0.037	00.19	0.078	316	0.925
Within groups	75.010	0.239			
Total					

As shown in table (4.24), there was no statistically significant difference in the state anxiety inventory among the participants in relation to Number of Family Members Living under the Same Roof at P- value (0.925). Thus the null hypothesis was accepted.

**4.4.11. Hypothesis eleven: There is no significant difference at  $\alpha \leq 0.05$  level of significance in the state anxiety inventory among the participants of the study in relation to parental marital status.**

To test this hypothesis, independent T-test was used to find the difference in the state anxiety inventory among the participants in regard to parental marital status, as shown in tables (4.25).

**Table (4.25): T-test result for the state anxiety inventory in regard to parental marital status.**

Parental marital status	Count	Mean	St.deviation	Df	T-value	Sig.
Married	257	1.3424	0.47544	315	3.258	0.001
Divorced, Separated or widowed	60	1.5667	0.49972			
Total	317					

As shown in table (4.25), T-test revealed a statistically significant difference in the state anxiety inventory among the participants in regard to parental marital status at P-value (0.001). Tukey test was used to find differences between groups. The participants whose their parents were divorced, separated or widowed had higher

mean (11.5667) for anxiety symptoms level than the participants whose their parents were married with mean of (1.3424). Therefore the null hypothesis was rejected.

#### 4.5. Correlation ® between depression (BDI) and the state anxiety inventory (SAI)

Pearson correlation ® test was used to test the correlation between depression (BDI) and the state anxiety inventory, as seen in table (4.26). The Pearson correlation test showed a strong positive statistically significant relationship between depression (BDI) and the state anxiety inventory ( $r=0.643$  ‘ $p=0.000$ ).

**Table (4.26): Correlation ® between depression (BDI) and state anxiety inventory**

Depression (BDI)	The state anxiety inventory		
	R	Sig	N
	0.643	0.000	317

#### 4.6 Regression statistics

##### 4.6.1 Depression

To find out the most significant factors on the prevalence of depression, stepwise multiple linear regression analysis was carried out. The statistic procedure was used after the non-significant coefficients were excluded from the model, and the only significant coefficients were included in the model. The new results were analyzed as follows:

**Table(4.27): ANOVA for Multi-linear regression.**

Model (1)	Sum of Squares	D.F	Mean Square	F	Sig.
Regression	10.110	1	10.110	46.342	.0001
Residual	8.722	315	0.218		
Total	78.883	316			

The results in table (4.27) show the ANOVA table which test the acceptability of the model from a statistical perspective. The significance of the F statistic is less than 0.05, which mean that the model fits the data in a perfect way. In addition, this model can be considered as an excellent predictor of the dependent variable (depression) from the independent variables.

**Table (4.28): Coefficient of regression model according to T value.**

Variable	Un standardized Coefficients	Standardized Coefficients	T	Sig.

	B	Std. Error	Beta		
Parent marital status	0.442	0.067	0.347	6.606	.000
Gender	0.110	0.053	0.110	2.086	.038

Results in table (4.28) show all the significant coefficients in the model; all of these variables contribute to the model. In order to determine the relative importance of the significant predictors, the researcher looked at the standardized coefficients (Beta), a predictor with the largest absolute standardized coefficient contributes more to the model. Thus, predictors were arranged according to importance as follows:

- The predictor “parental marital status” contributes more to the model than the other variables because it has a larger absolute standardized coefficient (0.347) ; the coefficients (B) of this predictor are positive, which indicate that there is a direct relationship between this predictor and the dependent variable (depression). A one unit increase in “parental marital status” would yield a 0.442 unit increase in the prevalence of depression scores.
- The predictor “gender” contributes more to the model than the other variables because it has a larger absolute standardized coefficient (0.11) ; the coefficients (B) of this predictor are positive, which indicate that there is a direct relationship between this predictor and the dependent variable (depression). A one unit increase in “females” would yield a 0.11 unit increase in the prevalence of depression scores

## 4.6.2 State anxiety symptoms

**Table (4.29) ANOVA for state anxiety symptoms**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.217	1	1.217	8.982	0.003
	Residual	42.674	315	0.135		
	Total	43.891	316			

**Table (4.30) Coefficient of regression model according to T value**

Variable	Un standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Parent marital	0.158	0.053	0.167	2.997	.003

state					
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As shown in tables (4.29 and 4.30) ,the predictor “parental marital status” contributes more to the model than the other variables because it has a larger absolute standardized coefficient (0.167) ; the coefficients (B) of this predictor was positive , which indicate that there was a direct relationship between this predictor and the dependent variable (anxiety). A one unit increase in “married patents” would yield a 0.158 unit increase in the level of state anxiety inventory toward the divorced or separated or widow parents.

#### 4.7 Summary

- The current study showed in general the prevalence of depression among adolescence in Bethlehem non-governmental schools was (46.4%).
- The study found that 45.7% of the participants had minimal or very low level of depression, 20.2% had severe depression and 18.6% of the participants had moderate depression ‘whereas 15.5% had mild depression.
- The study found that the majority of the participants 62.2% had no anxiety symptoms, while 38.5 % of them were anxious
- The study found statistically significant relationships between depression and gender, region of living, Living area, family income, school achievement and parent marital status
- The study found statistically significant relationships between state anxiety inventory and gender, and parent marital status.
- The study found statically significant correlation between depressive symptoms and state anxiety symptoms
- The model of stepwise multiple linear regression analysis indicated that the variables, gender and parent marital status were the significant predictors; for depression and parent marital status was the predictor for state anxiety.



## **Chapter Five – Discussion**

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### **5.1 Introduction**

The following chapter discusses the results of the study and attempts to interpret them in light of reviewed literature and considered previous studies.

### **5.2 Discussion of Research Question One**

**What is the prevalence of depressive symptoms among adolescents in the Bethlehem Governorate nongovernmental schools?**

Results indicated (53.6%) of adolescents were not depressed, whereas (46.4%) were suffering from depressive symptoms ranging in severity, as (15.5%) had mild symptoms, (18.6%) had moderate symptoms, and (20.2%) had severe depressive symptoms.

These findings are congruent with (Malik. Et al. (2015), which indicated that the prevalence of depression was high among adolescents in India with a percentage of 52.9%.

As well as (Essawy et al, 2015) which reported similar prevalence of depression among adolescents where 40%. And Dwekat et al. (2012) which indicates that the prevalence of depression among adolescents in Jordan were 41.1% (Dwekat et al, 2012) also Malakeh et al. (2017) pointed that the prevalence of depression was 42.1%. (Malakeh et al, 2017).

On the Palestinian level the current study came into agreement with Zakerson et al (2004) which indicates that 42.3% are suffering from psychological morbidity while 30% suffering from affective disorders.

This high prevalent could be explained by that the data was collected immediately after Covid-19 quarantine, and the mobility restrictions. The isolation of adolescents may contribute to increasing the rates and prevalence of depression among adolescents. This claim could be supported by a study carried out by Zhou et al. (2020) revealed that distance learning was strongly correlated with depression among Chinese female adolescents. (Zhou, 2020).

The findings were not, however, in agreement with other studies, such as (Radwan et al, 2021) recording a much higher prevalence of depression with a percentage of 72.1%. This could be interpreted that Gaza strip is living had hard political, economic and social, situations that may greatly contributed in increasing the rates. This conclusion is in agreement with Rivera et al (2019) study which pointed that the prevalence of depression is higher among adolescents who are living in conflict areas. (Reveral et al, 2019).

### **5.3 Discussion of Research Question Two**

**Are there statistically significant differences in the prevalence of depressive symptoms among adolescents in the Bethlehem Governorate non-governmental schools according to the demographic variables of the study (age, gender, Living area, region of living, school grade, family income, number of siblings, Academic Achievement, Birth Order of the Students, Number of Family Members Living under the Same Roof, and parental marital status)?**

In order to answer this question, results of hypothesis testing for each variable was discussed and presented separately, as shown in the following:

#### **Gender**

Females in this current study were found to have more depressive symptoms than males with a mean of (1.3846) and SD of 0.48821 for females and mean of (1.5287) and SD of (0.50061) for males).

This agrees with most studies such as (DSM-V, 2013), (WHO, 2017), and (Atkinson, 2017) who suggested that depression is more prevalent in females than males. Additionally, this result agrees with (Radwan et al., 2021), which indicated that depression and psychosocial distress among female Palestinian students were significantly higher than their male counterparts.

DSM-IV points that the prevalence of depression in females are 1.5 to 3 more than males, and that occur as a result of the biological changes occurred with the females (DSM-IV, 2013).

Females are generally more vulnerable to depression than men as they have almost more than twice as much likelihood for depression than men do (Albert. 2015; WHO, 2017). Females are also more vulnerable to violence, especially in the Palestinian/Arab community, which increases their likelihood of developing depressive symptoms as a response to traumatic events they experience.

In addition to this, females usually display more sensitivity to interpersonal conflict and distress, which has been linked to development of depressive symptoms and adjustment problems (Salk. 2017).

The cultural background in the Palestinian community is depending on hierarchal structure which puts great pressure and expectation upon women's, as Malter et al (2013) pointed that women are more at prone of developing depressive symptoms more than men due to cultural restrictions and roles. (Malter et al, 2013).

A report For Masarat organization pointed that 45% of the females who had never married faced violence in here live (Masarat, 2020) for other societies, and by (for the Palestinian society. Naturally, the stress endured by young Palestinian females compared to their male peers, particularly as it relates to patriarchal male-dominated customs and norms, is a major component of their mental health.

This is deeply rooted both in socialization and parenting, but also in biology, as most females experience routine hormonal changes, beginning during adolescence, which often impact mood stability and cause depressive symptoms.

## **Region of Living**

Results indicated there were significant differences in the prevalence of depressive symptoms among sample members, according to the region of living variable, in favor of participants from outside the Bethlehem Governorate, compared to those living inside with a mean of (1.4394) and SD of (0.49718) for those who are from Bethlehem and a mean of (1.7143) and SD of (0.46004) for those who are from outside Bethlehem.

This could possibly be related to the main difference, which categorizes these groups, identified in the daily travel from an adjacent governorate (Jerusalem or Hebron) to Bethlehem.

Students, who require routine transportation from home to school and vice versa, may face several problems along their route, especially if they are using methods of public transportation. These problems may include, but are not limited to, travel fatigue, high cost of transport, Israeli checkpoints, settler harassment. They also need to leave home earlier and they always arrive much later than their classmates, and may decrease allocated times for rest, studying, or leisure.

These mentioned difficulties may increase these students' likelihood for developing stress, anxiety, depression, and maladaptation, but further studies are required to look into exploring the role that this variable plays in the development of depressive symptoms.

## **Family Income**

Results indicated there were significant differences in the prevalence of depressive symptoms among the study participants according to their family income, and this was in favor of those with the lowest category of income (less than 2000 NIS), which reported the highest prevalence of depressive symptoms with a mean of (1.6341) and an SD of (0.48765).

This group was followed by the category of an income of more than (4000) NIS, with a mean of (1.5000) and an SD of (0.04834), then the category of an income of (2000-3000) NIS, with a mean of (1.4091) and an SD of (0.49448), and finally the lowest scoring group, with a mean of (1.3875) and an SD of (0.49025), which was the category of income of (3000-4000) NIS, which reported the lowest prevalence of depressive symptoms.

These results agree with studies, such as (Melchior et al., 2010), (XU et al., 2019), (Zou et al., 2020), and which indicated significant differences in depression could be related to an adolescent's family income, and in agreement with (Bor et al., 1997), which also suggested that lower income was positively related to the development of depressive symptoms.

A lower economic income causes psychosocial pressures on the parents and breadwinners of the family. This causes their wellbeing to deteriorate, as they neglect their physical and mental health to provide for their families, which is carried onto the children through close interpersonal contact (Bor et al., 1997; Anderson, 2017).

Adolescents from low income families meet fewer needs, compared to other adolescents, whose families can afford to provide them with essential and leisure requirements. These adolescents, who grow up observing variations in access to services and opportunities, often develop feelings of inferiority and act out of vulnerability.

Additionally, they are much more susceptible to experiences of abuse and bullying, which then further their distress and reinforce their feelings of shame, a dynamic closely linked to the development of depressive symptoms (Abu Lumdi, 2015).

## **Academic Achievement**

Results indicated there were significant differences in the prevalence of depressive symptoms among study participants according to academic achievement. Participants, with poor achievement had the highest mean for depressive symptoms (1.6724), followed by the category of moderate achievement, with a mean of (1.5132), and the category of high achievement, with a mean of (1.3770), which reported the lowest prevalence of depressive symptoms.

These results agreed with (Frojd et al., 2012), and (Lobes et al., 2021), which indicated depressive symptoms could be associated with lower academic achievement for adolescents, twice more so than that in children with higher academic achievement.

This could possibly be linked to the experience of social stigma related to low academic achievement, as it has been found to be directly linked to the development of avoidance behaviours, depressive symptoms, and other mental health complaints (Cruze et al, 2015).

In Palestine, the cultural value of education is linked to personal and family honor, as well as being perceived in the community as successful and valuable. This social norm leads most Palestinian children to grow up under immense pressure to perform well in school, as to not bring shame to the family and to themselves.

Additionally, and to the specific case of Palestinian private school students, a higher academic achievement is expected of students, compared to those studying in governmental schools, as the quality of education in most private schools is the main attraction of parents willing to pay the additional costs of private education. This increases the risk for developing depressive symptoms such as feeling incompetent, ashamed, or guilty towards having lower academic achievement in private school students compared to those in governmental schools, whom often receive the minimum of care possible, as these schools can be over-crowded and lacking in resources.

Furthermore, it should be mentioned that in other studies focused on the relationship between depression and academic achievement, such as (Owens et al., 2012), it has been suggested that depressive symptoms themselves could be leading to lower academic achievement, since depression, and other mental health illnesses, cause individuals to gradually lose functionality and performance efficacy, and require this to be considered clinically significant mental health complaints.

## **Parental Marital Status**

There were statistically significant differences in the prevalence of depressive symptoms among participants according to parental marital status. Participants whose parents were divorced, separated, or widowed, had a higher mean (1.8333) of depressive symptoms, than those, whose parents were married, whom reported a mean of (1.3774) for depressive symptoms.

These results agreed with studies, such as (Hadžikapetanović, 2015), (Wirback, 2018), (Wahyuningsih, 2020), as well as substantial literature on the role of family disruption and dysfunction on the development of depressive symptoms and mental health complaints in adolescents.

One of the main issues of divorce and separation is the rise of conflicts between parents, which directly impacts the functioning and adaptation of children and adolescents (Hadžikapetanović, 2015). This is naturally so, as these children find themselves.

Additionally, to this, in the Palestinian community, children, growing up with the social stigma of divorce, may experience bullying or shaming, and can develop strong feelings of insecurity related to these events, which in turn trigger the onset of depressive symptoms.

The death of a parent can be a major traumatic event in the life of an adolescent, as psychological distress after the death of a parent reduces over time, and makes adolescents more at prone of developing affective disorders.

## **5.4 Discussion of Research Question Three**

What is the prevalence of state-anxiety symptoms among adolescents in the Bethlehem Governorate non-governmental schools?

The results of the Spielberger State-Anxiety Inventory indicated (62.2%) of the participants did not show state-anxiety symptoms, while (38.8%) of them did. These results are consistent with studies, such as (Moksnes, 2011) as well as statements made by (Deb, 2010), suggesting anxiety disorders should be considered one of the most common mental health disorders in school-aged children and adolescents worldwide.

Also, In the Arabic context the result of the study agreed with Dwekat et al (2021) study which indicates that 49.1% of the adolescents in Jordan had anxiety which nearly meets the results on the current study.

While it does not meet Radwan et al (2021) study which indicated that the prevalence of anxiety among adolescents in Gaza strip was 72.1%.

This differentiation between the current study and Radwan study may be due to the fact that Gaza strip live in different economic, political and social situations than west bank. As Mark (2019) mentioned that the prevalence of mental health issues in the armed conflict areas is higher than other areas with less conflicts.

## **5.5 Discussion of Research Question Four**

Are there statistically significant differences in the prevalence of state-anxiety symptoms according to study variables (age, gender, Living area, region of living, school Grade, and family income, number of siblings, Academic Achievement, sibling arrangement, Number of Family Members Living under the Same Roof, and parental marital status) among adolescents in the Bethlehem Governorate non-governmental schools?

### **Gender**

Statistically significant differences were observed in the prevalence of state-anxiety symptoms; results revealed that females had a higher mean (1.4943) of state-anxiety symptoms with an SD of (0.50141), while the mean for males was (1.2517) with an SD of (0.43554). These results were in accordance with (Deb, 2010), (Adhikari, 2015), (Grigore et al., 2020), (Bahrami, 2011), (Zakrison, 2004), and (Adwas, 2019), which suggested gender plays a role in the variation of the prevalence of anxiety symptoms among adolescents, and that it is often so that anxiety symptoms would impact more females than males, since they show more tendency for rumination and concern, and experience a wider range of stressful life events, compared to their male peers.

Also (DSM-V,2013) pints that the women are more at prone of developing anxiety disorders than males. While, McLean et al (2011) points that there where s several studies that females are more prone to neuroticism than men, and that makes anxiety and depression in women more prevalent than men (McLean et al ,2011).

In the adolescence the premenstrual starts with females and that occur along with hormonal changes succoring to the female these changes affect female's mood and makes them more prone to anxiety. (Filaire et al 2001).

Also, family sexiast attitudes from both family and community, could be significant factor in increasing anxiety among females rather than males, as the family and community expectations could contradict with their choices and decisions and instruct their relations heavily (Lui et al, 2013; Abrahams, 2020). Regarding to that the Arab community and the Palestinian spicily rely a huge expectation toward females' sexiast attitudes and that may contribute in developing anxiety among adolescents.

Moreover, Abdulkareem et al (2010) pointed that men are more tendency and resistance to confess their anxiety, while it is more culturally accepted that women confess her anxiety more likely than men. (Abdulkareem et al. 2010).

## **Parental Marital Status**

Results indicated there are statistically significant differences in the prevalence of state-anxiety symptoms among the study participants according to the parental marital status variable. Adolescents, whose parents were divorced, separated, or widowed, had a higher prevalence of anxiety symptoms, with a mean of (1.5667) with an SD of (0.49972), while adolescents, whose parents were married, had a lower prevalence of anxiety symptoms, with mean of (1.3424) with an SD of (0.47544).

These results are in line with studies, such as (Al Gharaiba, 2012), conducted on a similar population, which suggested family separation may lead to hostility and conflict between adolescents and their peers, as they become more distressed by feelings of guilt, fear, lack of support, and shame, related to the separation event, or the impact of the event on family stability.

Feeling a lack of love, respect, and care, is a strong and frequent cause for anxiety disorders, especially among adolescents, whom report increased sensitivity to interpersonal conflict and distress (Geshicaa, 2019).

The lack and disturbance of support for adolescents with widowed, separated, or divorced parents may lead to an increased risk for a mental health disorder, as these parents may often become caught up by the burdens of their own socioemotional issues and struggles, which cause them to become less aware of their children's need for support (Obeid et al., 2021).

The results are also in accordance with (Pappa, 2013), (Geshicaa, et al., 2019), which pointed that marital statues had significant coronation with anxiety among children, as the atmosphere of the family conflict affecting children and makes them much vulnerable to develop anxiety.

## **5.6 Discussion of Research Question Five**

Is there a statistically significant relationship between depressive symptoms and state-anxiety symptoms among adolescents in the Bethlehem Governorate non-governmental schools?

The results indicated a strong significant relationship between depressive symptoms and anxiety symptoms among the participants with a P-value of (0.000).

This is in agreement with (Kalin, 2020), which indicated that there is strong comorbidity between depression and anxiety, as it estimated a range of (20%-70%) of patients suffering from anxiety are also suffering from depression. This is not uncommon, as insights from relevant literature suggested anxiety and depression share common etiological genetic or psychosocial factors, as well as symptomology and impact on physical health (Kim et al., 2021).

It merits mentioning that often-times irritability, restlessness, and other anxiety-related behaviours could emerge during a depressive episode, and in addition, the ongoing strain of anxiety symptoms may trigger a depressive episode, or cause the onset of depressive symptoms alongside states of specific or generalized anxiety.

This is especially the case for adolescents experiencing mental health issues, as the onset of puberty alone causes strain on the child's ability to cope and adapt, triggering early traumas, and causing generalized interpersonal distress.

## **5.7 Recommendations**

### **Recommendations for Schools' Administrations and Policy Makers:**

1. Conducting psychosocial assessment of adolescents and screening for depressive and anxiety symptoms and particularly among female students is an urgent need for the overcoming of these mental health issues and a responsibility of the school counselor.
2. Determining this should be followed by bringing attention this phenomenon and developing proper programs to reduce it.
3. Working with parents by raising awareness to mental health issues such as depressive and anxiety symptoms, as well as modifying parenting strategies can be critical for the reduction of these issues in adolescents.
4. Regular surveys and studies should be conducted in schools for both monitoring of progress of intervention programs conducted for decreasing prevalence of depressive and anxiety symptoms, as well as for the early detection of new cases.
5. Developing mental health awareness programs against stigma or shame related to asking for help, support, and counseling.
6. Increase school's counselors' competency in intervening with students suffering from depressive or anxiety symptoms as well as any other mental health problems.
7. Increasing school counselors' and teachers' capacity regarding providing gender-sensitive services for female students, and especially those, who are suffering from depressive or anxiety symptoms.
8. Attaching a mental health form to each student's file to be taken into consideration when designing care routines or academic plans.

### **Recommendations for Mental Health Practitioners:**

1. Increase accessibility of students, suffering from depressive and anxiety symptoms, to community mental health clinics.
2. Contribute in increasing students' awareness of common psychosocial issues, which are commonly faced during adolescence, and their impact, to motivate them to ask for help and to develop their positive attitudes towards seeking medical and psychiatric intervention for their issues.



3. Assistance in development of school counselors' and teachers' capacities in the management of mental health issues such as depression and anxiety, on an individual, family, or group basis.
4. Contribute in producing awareness-materials regarding depressive and anxiety symptoms, which could be used in psychoeducation lectures, like posters, brochures, etc.
5. Assistance in developing and conducting extracurricular activities, which help to ventilate overwhelming emotions and feelings, as well as build socioemotional capabilities.

### **Recommendations for Future Researchers:**

1. Study other variables that this study did not include such as the influence of the occupation and other factors on adolescents.
2. Conduct comparison studies regarding the prevalence of depressive and anxiety symptoms among adolescents in non-governmental and governmental schools.
3. Conducting qualitative and experimental studies, which identify appropriate intervention programs for children suffering from depressive and anxiety symptoms, as well as portray their internal world and their lived experiences.
4. Conducting research for the prevalence of other psychosocial issues and mental health disorders.

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## Appendixes

### Appendix 1

جامعة القدس

عمادة الدراسات العليا

برنامج الصحة النفسية المجتمعية / مسار العلاج النفسي

رسالة ماجستير

2020

تحية طيبة وبعد:

يقوم الباحث بإجراء دراسة بعنوان " نسب اعراض الاكتئاب والقلق بين المراهقين/ات في المدارس غير حكومية في محافظة بيت لحم"، وذلك استكمالاً لنيل درجة الماجستير في الصحة النفسية المجتمعية / مسار العلاج النفسي ، ولتحقيق هذه الرسالة يضع الباحث بين أيديكم استبانة تتكون من ثلاثة أقسام لجمع المعلومات اللازمة للدراسة.

لذا نرجو من حضرتكم الإجابة على جميع أسئلة وأقسام الاستبانة، واختيار ما يناسبكم من الإجابات والتي تعكس شعوركم خلال الست اشهر السابقة ، دون استثناء وبكل مصداقية وأمانة، مع التأكيد على أن جميع المعلومات ستعامل بسرية كاملة ولن تستخدم إلا لغرض البحث العلمي، وان مشاركتكم في هذه الدراسة طوعية فلا داعي لكتابة الاسم الشخصي على الاستبانة.

شكراً لكم على تعاونكم

الطالب: إبراهيم احمد عواد سليم

المشرف: الدكتورة نجاح الخطيب

## القسم الأول: المعلومات الاجتماعية

ضع/ي إشارة (x) على ما ينطبق عليك:

### Appendix 2

#### 1. العمر :

أ. 15 سنة      ب. 16 سنة      ج. 17 سنة

#### 2. الجنس

أ. ذكر      ب. انثى

#### 3. مكان السكن

أ. مدينة      ب. قرية/بلدة      ج. مخيم      د. غير ذلك: حدد/ي ...

#### 4. منطقة السكن

أ. داخل محافظة بيت لحم      ب. خارج محافظة بيت لحم

#### 5. الصف الدراسي

أ. الصف العاشر      ج. الصف الحادي عشر

#### 6. الوضع الاقتصادي للعائلة

أ. اقل من 2000 شيكل      ب. 2000 – 3000 شيكل      ج. 3001 شيكل - 4000 شيكل

د. اكثر من 4000 شيكل

7. عدد افراد الاسرة الذين يعيشون تحت سقف واحد

أ. اقل من 5 افراد      ب. من 5 – 8 افراد      ج. اكثر من 8 افراد

8. التحصيل الاكاديمي للطالب ( معدل السنة الأخيرة )

أ. راسب      ب. مقبول      ج. جيد      د. جيد جدا      هـ. ممتاز

9. ترتيبك بين اخوتك واخواتك من حيث الميلاد.

أ. الأكبر      ب. الأصغر      د. الوحيد      ج. غير ذلك

10. عدد الاخوة/ات

أ. اقل من 3 اخوة      ب. من 3 – 6 اخوة      ج. اكثر من 6 اخوة

11. الوضع الزوجي للوالدين

أ. متزوجين      ب. مطلقين      ج. منفصلين      د. الوالدين ميتين      هـ. احد الوالدين ميتين

انتهى

### Appendix 3

#### القسم الثاني: المقياس الأول (مقياس بيك للأكتئاب)

اقرأ /ي كل مجموعة على حدة، ثم ضع/ي دائرة حول الرمز أمام العبارة التي تصف حالتك/ي خلال الست أشهر السابقة، تأكد/ي من قراءتك لكل عبارة في المجموعة قبل أن تختار/ي واحدة منها، تأكد/ي من أنك أجبت على كل المجموعات.

أنا أشعر بالحزن	0	المجموعة الأولى
أنا حزين طيلة الوقت ولا أستطيع أن أتخلص من هذا الشعور	1	
أنا لا أشعر بالحزن	2	
أنا حزين/ة أو غير سعيد/ة إلى حد لا أستطيع تحمله	3	
أشعر بأن المستقبل غير مشجع	0	المجموعة الثانية
أشعر بأنه لم يعد لدي شيئاً أتطلع إليه	1	
أنا لست متشائماً في نظرتي للمستقبل	2	
أشعر بأن المستقبل لا أمل فيه وأن الأمور لا يمكن أن تصبح أحسن	3	
أشعر بأنني قد فشلت أكثر من الإنسان العادي	0	المجموعة الثالثة
عندما أنظر إلى حياتي الماضية، فإن كل ما أستطيع رؤيته هو الكثير من الفشل	1	
لا أشعر بأنني شخص فاشل/ة	2	
أشعر بأنني شخص فاشل/ة تماماً	3	
لم أعد أستمتع بالأشياء بنفس الطريقة التي كنت عليها من قبل	0	المجموعة الرابعة
لم أعد أحصل على الشعور بالرضا الحقيقي في أي شيء أبداً	1	
أشعر بالرضا اتجاه ما أفعله في حياتي	2	

أنا غير راضي أو أشعر بالملل في كل شيء	3	
أشعر بالذنب في كثير من الأوقات	0	المجموعة الخامسة
أشعر بالذنب تقريباً معظم الأوقات	1	
لا أشعر بالذنب لما أقوم به من تصرفات	2	
أشعر بالذنب طيلة الوقت	3	
أشعر أنني قد أعاقب	0	المجموعة السادسة
أنني أتوقع أن أعاقب	1	
لا أشعر بأنني أعاقب	2	
أشعر بأنني أعاقب فعلاً	3	
أشعر بخيبة أمل في نفسي	0	المجموعة السابعة
أنا مشمئز/ة من نفسي	1	
لا أشعر بخيبة أمل في نفسي	2	
إنني أكره نفسي	3	
إنني انتقد نفسي في حالات ضعفي أو أخطائي	0	المجموعة الثامنة
إنني ألوم نفسي طيلة الوقت في أخطائي	1	
لا أشعر بحال من الأحوال اسوأ من الآخرين	2	
إنني ألوم نفسي على أي شيء سيئ يحدث	3	
لدي أفكار حول التخلص من حياتي ولكنني لن أقدم عليها	0	المجموعة التاسعة
أرغب في التخلص من حياتي	1	
ليس لدي أية أفكار للتخلص من حياتي	2	
سوف أتخلص من حياتي إذا أتحت لي الفرصة	3	



أصبحت أبكي أكثر من المعتاد	0	المجموعة العاشرة
إنني الآن أبكي طيلة الوقت	1	
لا أبكي أكثر من المعتاد	2	
لقد كان بمقدوري أن أبكي فيما قبل ولكني الآن لا أستطيع أن أبكي رغم أنني أريد ذلك	3	
أنزعج وأتوتر بسهولة أكثر من المعتاد	0	المجموعة الحادية عشر
أشعر الآن بأنني منفعل/ة ومتهيج/ة طيلة الوقت	1	
لست الآن أكثر توتراً أو قلقاً مما كنت عليه	2	
لا أنفعل ولا أتهيج إطلاقاً حتى من الأشياء التي كانت تسبب لي ذلك، في الحقيقة لم أعد أبالي بشيء	3	
أصبح اهتمامي بالناس الآخرين أقل من المعتاد	0	المجموعة الثانية عشر
لقد فقدت معظم اهتمامي ورغبتني في الناس الآخرين	1	
لم أفقد اهتمامي أو رغبتني بالناس الآخرين	2	
لقد فقدت كل اهتمامي ورغبتني في الناس الآخرين	3	
أؤجل اتخاذ القرارات أكثر من المعتاد	0	المجموعة الثالثة عشر
لدي صعوبة في اتخاذ القرارات أكثر من ذي قبل	1	
قدرتي على اتخاذ القرارات لم تتغير تقريباً	2	
ليس بمقدوري اتخاذ قرارات إطلاقاً	3	
أنا قلق لأنه يبدو علي الكبر أو أنني لم أعد جذاب (يقلقني أنني عديم الجاذبية وغير جميل)	0	المجموعة الرابعة عشر
أشعر أن هناك تغيرات دائمة في مظهري الشخصي مما يجعلني أبدو غير جذاب	1	

لا أشعر بأنني أبدو بحال من الأحوال أسوأ من المعتاد	2	
أعتقد بأنني أبدو غير جميل	3	
أحتاج إلى جهد اضافي للبدء في عمل شيء ما	0	المجموعة الخامسة عشر
اضطر لأن أضغط نفسي لأداء عمل ما	1	
باستطاعتي أن أعمل تقريباً بنفس القدرة التي كنت عليها من قبل	2	
لا أستطيع القيام بأي عمل على الإطلاق	3	
نومي لم يعد كالمعتاد	0	المجموعة السادسة عشر
استيقظ ساعة أو ساعتين قبل المعتاد و أجد صعوبة في الاستغراق في النوم ثانية	1	
أستطيع أن أنام كالمعتاد	2	
استيقظ قبل ساعات من المعتاد ولا أستطيع النوم فيما بعد	3	
أشعر بالإرهاق بسرعة أكبر من ذي قبل	0	المجموعة السابعة عشر
أشعر بالإرهاق من أداء أي شيء تقريباً	1	
لا أشعر بإرهاق أكثر من المعتاد	2	
أشعر بأنني في غاية الإرهاق للقيام بأي عمل كان	3	
شهيتي للأكل ليست جيدة	0	المجموعة الثامنة عشر
شهيتي للأكل أصبحت أسوأ بكثير	1	
شهيتي للأكل ليست أسوأ من المعتاد	2	
ليست لدي شهية للأكل على الإطلاق	3	
لقد فقدت أكثر من 2 كيلو غرام من وزني	0	
لقد فقدت أكثر من 4.5 كيلو غرام من وزني	1	

المجموعة التاسعة عشر	2	لم أفقد شيئاً من وزني وإن حصل لم يكن ملحوظ
	3	لقد فقدت أكثر من 6.5 كيلو غرام من وزني
المجموعة العشرون	0	إنني قلق/ة نوعاً ما بشأن مشكلات جسدية مثل الألام، الصداع، آلام في المعدة أو الامساك
	1	إنني قلق/ة للغاية بشأن مشكلاتي الجسدية وأنه لمن الصعب أن أنظر إليها دون أن أقلق
	2	ليس لدي قلق بشأن صحتي أكثر من المعتاد
	3	إنني قلق/ة للغاية بشأن مشكلاتي الجسدية إلى درجة أنني لا أكاد أفكر في أي شيئاً آخر
المجموعة الواحدة والعشرون	0	لدي رغبة في الجنس أو المواضيع الجنسية أقل مما كانت عليه
	1	رغبتني في الجنس أو المواضيع الجنسية أقل بكثير الآن
	2	رغبتني الجنسية أو اهتمامي بالمواضيع الجنسية لم يطرأ عليها أي تغيير
	3	لم تعد لدي رغبة في الجنس أو المواضيع الجنسية على الإطلاق

انتهى

## Appendix 4

### القسم الثالث: ( مقياس سبيلبرج للقلق)

اقرأ/ي كل عبارة بدقة وضع/ي علامة (x) أمام العبارة التي تشير إلى ما تشعر به خلال الشهر السابق وخاصة الأسبوع الأخير بما في ذلك اليوم، كما نرجو ألا تضع أكثر من علامة واحدة أمام كل عبارة.

الرقم	العبارة	أبداً	أحياناً	غالباً	دائماً
1.	أشعر بالهدوء				
2.	أشعر بالأمان				
3.	أشعر بأن أعصابي متوترة				
4.	أشعر الندم				
5.	أشعر بالارتياح وراحة البال				
6.	أشعر بعدم الاتزان				
7.	أشعر بالانزعاج لاحتمال وقوع كارثة، أو محنة لي				
8.	أشعر بالراحة				
9.	أشعر بالقلق				
10.	أشعر بالسرور				
11.	أثق في نفسي				
12.	أنا عصبي المزاج				
13.	أنرفز لأتفه الأسباب				
14.	أشعر بالتوتر				
15.	أشعر بالاسترخاء				

				16. أشعر بالقناعة
				17. أشعر بالضيق
				18. أشعر بأنني مستثار جداً
				19. أشعر بالسعادة
				20. أستطيع ادخال السرور على الآخرين

انتهى



التاريخ: 2021/4/25  
المرجع.

عزيزتي الطالب ابراهيم سليم المحترم  
برنامج: الصحة النفسية المجتمعية

الموضوع: موافقة لجنة أخلاقيات البحث العلمي

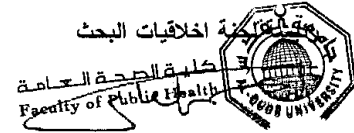
قامت اللجنة الفرعية لأخلاقيات البحث التابعة لكلية الصحة العامة بمراجعة مشروع الرسالة بعنوان:

(The Prevalence of Depressive and anxiety Symptoms Among Adolescents in  
non -Governmental Schools in Bethlehem Governorate)

المقدم من (مشرف الرسالة/ د. نجاح الخطيب). يعتبر مشروعك مستوفياً لمتطلبات أخلاقيات البحث

في جامعة القدس.

نتمنى لكم كل التوفيق في تسيير المشروع.



د. اسمى الامام

نسخة/ أعضاء لجنة البحث  
نسخة/ الملف

