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THE EFFECT OF COVID-19 STUDENTS' MENTAL HEALTH.
CASE STUDY: 3rd YEAR STUDENTS AT TAREK IBN ZIAD
SECONDARY SCHOOL.

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Dedication I

All this work is due to Allah

The most gracious, The most merciful

And we both agree that this work will be dedicated

First to our dear parents

Who sacrificed Everything to make sure

That we are happy, content and most of all

See us in this moment of celebration and graduation

We also dedicate this work to the people

namely our friends and family

for their support, encouragement and effort

that helped us greatly to pass this process of conducting a research study

There are not enough words that express our deep gratitude except

Thank you.

Mehdi Hosni Benmouhoub

Dedication I

This modest work is dedicated to

My beloved mother

My dear father

My brother and my sisters

All my family

All my friends

Djillali Seba

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Abstract

Covid-19 is a major calamity in the twenty-first century, with far-reaching consequences in several aspects of our daily lives and human well-being, this pandemic affects students in colleges and schools in a variety of ways, including economics, society, and education and so on, The symptoms of these pandemic mostly affect students' mental health, which encompasses psychology, psychiatry, and emotional aspects. The major goal of this study is to see how COVID-19 affects the learners' mental health; hence, we conducted research on third-year secondary school learners, focusing on Tarek Ibn Ziad Secondary School in Frenda. A mixed technique approach is used to accomplish this task involving both a questionnaire and a semi-structured interview. The first was utilized to analyze the symptoms and effects of COVID-19 on learners' mental health, and the second to explain about the impacts of this pandemic on learners' emotions and psychology. The final results confirm that Covid-19 has a significant impact on learners' mental health, causing stress, fear, anxiety and other mental disorders. It also has an emotional impact, as students had significant concerns about their future education after the schools were closed, and this lead us to discuss the post-pandemic situation and some potential suggestions to help remedy its effect.

Key words: Covid-19, Pandemic, Mental health, Education, Anxiety, Mental Disorders.

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List of Abbreviations and Acronyms

ADHD: Attention Deficit Hyperactivity Disorder.

APA: American Psychological Association.

COVID-19: 2019 novel Coronavirus Disease.

DID: Dissociative Identity Disorder.

ICT: Information and Communication Technology.

MHF: Mental Health Foundation.

OCD: Obsessive Compulsive Disorder.

PTSD: Post-Traumatic Stress Disorder .

SARS: Severe Acute respiratory Syndrome.

SHEPS: Society for Health Education and Promotion Specialists.

WHO: World Health Organization.

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General Introduction

A pandemic is not just a medical phenomenon; it affects individuals and society and causes disruption, anxiety, stress, stigma, and xenophobia. The behavior of an individual as a unit of society or a community has marked effects on the dynamics of a pandemic that involves the level of severity, degree of flow, and aftereffects. The causative virus, SARS-CoV-2, was identified as a novel strain of Coronaviruses that shares 79% genetic similarity with SARS-CoV from the 2003 SARS outbreak (Anand et al., 2020). On 11 Mar 2020, the WHO declared the outbreak a global pandemic (Anand et al., 2020) The rapidly evolving situation has drastically altered people's lives, as well as multiple aspects of the global, public, and private economy. Declines in tourism, aviation, agriculture, and the finance industry owing to the COVID-19 outbreak are reported as massive reductions in both supply and demand aspects of the economy were mandated by governments internationally (Nicola et al., 2020).

The uncertainties and fears associated with the virus outbreak, along with mass lockdowns and economic recession are predicted to lead to increases in suicide as well as mental disorders associated with suicide. According to McIntyre and Lee (2020b). School closures due to COVID-19 have brought significant disruptions to education across the world, a new education study has identified strategies governments can use to address the disruptions and learning gaps created by school closures and other responses to the COVID-19 pandemic.

This terrible situation had a great effect on different aspect of our lives especially in education because the students are more vulnerable, that is why we have interested in the study if the mental health state of the students in the pandemic.

The main goal of this study is to determine the impact of COVID-19 on students' mental health. We will focus more on students in their third year of secondary school as they are under pressure to have their Bacculaureate examination. This latter is a crucial one to determine their

future academic career; while the pandemic is ongoing, their anxiety and stress coping mechanisms may not be at their best.

The purpose of this study is to look into the impact of COVID-19, particularly in education, which has been severely impacted by the lockdown; this situation has a significant impact on human well-being and students' mental health. This topic as its nature indicate is recent, up-to date and at the center of many studies; we have attempted to address students' mental health in Algeria, more specifically, the case of third-year secondary school students.

The present research tries to answer some research questions that are classified as follows:

1. What is the impact of the pandemic on the learners' well-being and mental health?
2. How does the pandemic affect learners' academic performance?
3. How did the pandemic affect interactions between students and teachers?
4. What will the new post-pandemic normal look like?

To be able to offer a meaningful answer to the above research questions, we have put forward a set of hypotheses organized as follows:

1. The pandemic has had a significant impact on learners' everyday lives in a variety of ways, including socially, economically, and educationally, and has resulted in anxiety, stress, depression, and mental disorders.
2. After the schools were closed due to the pandemic, learners were forced to adapt with distance learning, which was difficult to deal with.
3. Because of the usage of e-learning and platforms and applications such as Google Classroom, teachers- students' contact was tough to maintain; they had a lot of issues with learning processes, assessment, and evaluation.
4. The authorities should be concerned about the students' mental health and psychological well-being, as the pandemic has far-reaching consequences that will last for many years.

In order to check the validity of our hypotheses we followed both quantitative and qualitative

methods. Along with an interview, we have prepared eight questions for 10 participants, and a questionnaire is addressed to third year secondary school learners at “Tarek Ibn Ziad Secondary school”, we have delivered the questionnaire to 51 participants.

The present research consists of two chapters. The first provide a review of literature about previous works We discuss the definition of mental health as well as the impact of COVID-19 on student well-being, then we go into the impact of the pandemic on the learning process, and ultimately we look at Algerian education in the wake of the Coronavirus situation.

The second chapter provides a full description of the methodologies employed in the current study, as well as an analysis and discussion of the research findings, in order to validate or disprove the hypotheses presented.

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1.1. Introduction

With the outbreak of COVID19, education has been severely impacted globally. The virus has created the biggest disruption to education in the world. As a result, educational institutions were closed, this has affected the mental state of students and their performance seemingly in a negative way, yet it also prompted the engagement of technology methods that eased the situation. Consequently, in this chapter, we are going to give a detailed definition of mental health and its relation to learning during the period of the pandemic, this chapter will be divided into three different sections, first, we will attempt to define the state of mental health, mental illness, and mention the latter types, and causes. The second section will solely discuss the phenomena of COVID-19 where we briefly introduce it, and list its various effects on learners' mental health, as well as, learning. The last section is about education in the era of covid-19, where we mention how health educational institutions and educators are adapting to the current circumstance, additionally, what effect corona had on students' cognitive and academic performance.

1.2. Defining Mental Health

It is crucial to grasp the statue of mental health before going to further detailed in concern to its definition Mental health statue is presented in general by the APA dictionary of psychology as a state of mind characterized by emotional well-being, good behavioral adjustment, relative freedom from anxiety, disabling symptoms, and a

capacity to establish constructive relationships and cope with the ordinary demands and stresses of life.

The World Health Organization (WHO) conceptualizes mental health as a state of well-being in which the individual is fully aware and acts healthy, that is to say, it describes a person who can cope with the different normal stresses of life, work in productive and fruitful manner, and being able to contribute to his or her community according to the World Health Organization. Promoting mental health (2004). In addition, the concept of mental health, according to Sartorius, N. (2002). is the absence of disease, in other words the brain as an organism is able to perform all of its functions properly, however, he also adopted another definition, which is the state of balance within oneself and between oneself and one's physical and social environment. Because being mentally health gives a person a sense of self-worth, control, and awareness of both internal and external factors. As illustrated by (Galderisi. 2015)

Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium. (P 3)

(Galderisi. 2015)

Furthermore, according to the Society for Health Education and Promotion Specialists (SHEPS)

Mental health is linked to physical health. Feeling good about oneself and others, as well as being cheerful, joyous, and loving, are all important aspects of health. Individual-society contact becomes increasingly important in the development of healthy societies, which can help people live longer and healthier lives. encourage mental health trust, challenge, competency, accomplishment, and satisfaction are all important aspects of mental health. Humour is one of the abilities that mental health provides, as is the ability to grow psychologically, spiritually, intellectually, and emotionally

(Society for Health Education and Promotion Specialists). (1997).

However, it is partly physical since there are individuals who have deficiency in their cognitive or social functions. For instance, a person who is empathetic and engaged in mutual sharing may be able to compensate for a lack of intelligence. Despite a modest degree of cognitive impairment, and thus they could maintain a satisfactory balance and pursue her/his life goals. Nevertheless, basic cognitive and social skills are regarded as a key component of mental health, for the reason that humans need to possess certain cognitive skills including the ability to pay attention, remember, organize information, solve issues, and make judgments, also, social skills that allow for communication and engagement with people using one's own repertoire of verbal and nonverbal abilities. All of these skills are interconnected and enable people to function in their surroundings. (Moritz. 1995)

Moreover, according to The Mental Health Foundation (MHF) "Mental health is viewed as affecting one's ability to operate and take advantage of available possibilities, as well as fully engage with family, workplace, community, and peers that is to say, the ability to adjust a plan of action in the face of unexpected challenges, change one's thoughts in light of fresh facts, and adapt to changes that different life epochs or contingent conditions may necessitate is referred to as flexibility. Subsequently, Lack of flexibility can cause a lot of pain for someone who is going through a lot of changes in their life, and it's a big part of lot of

psychiatric diseases. The idea behind including a harmonious link between body and mind is that mind, brain, organism, and environment are all heavily intertwined, and one's total experience of being in the world cannot be divorced from how one's body feels in its environment. Psychotic experiences, eating disorders, self-harm, body dysmorphia disorder, and poor physical health can all come from disruptions in this relationship (Klanker et al. 2013).

In short, mental health is characterized by how people think and feel about themselves and their lives, as well as, it affects how people adapt and manage adversity. Besides, Physical and mental health affect each other both directly and indirectly. It is thus possible to suggest that mental health is a state of equilibrium in which an individual is at ease with himself, he and she are able to function effectively socially, and can meet both basic and higher function needs. Positive functioning entails effectively handling change, relationships, and emotions.

1.2.1. Mental Health Illness

There are many types of mental diseases, each with its own set of symptoms, they are characterized by a mix of anomalous thoughts, perceptions, emotions, behaviour, and interpersonal connections. Most mental health symptoms have traditionally been classified as "neurotic" or "psychotic". The term neurotic refers to symptoms that are severe versions of emotional states like despair, anxiety, or panic. Conditions are once known as "neuroses" are now more commonly referred to as "common mental health disorders". Psychotic symptoms disrupt a person's view of reality and may include hallucinations such as seeing, hearing, smelling, or feeling things that no one else can. Mental health issues have an impact on how you think, feel, and act. We have compiled a list of some of the most frequent mental health concerns and illnesses.

A. Neuroses Mental Disorders

Neuroses or Nervous disorders also referred to as psychoneurosis are characterized by anxiety,

depression, or other feelings of sadness or distress that are out of proportion to one's life circumstances. They can impair a person's functioning in almost any area of their life, relationships or outside affairs, but they are not severe enough to incapacitate the person. That is to say, It is a type of functional mental disorder that may not be obvious because is not determined by delusions or hallucinations, or by a behaviour that does not deviate from socially acceptable norms. It's or neurotic disorder.

B. Obsessive-Compulsive Disorder OCD

It is an anxiety disorder. Obsessions are recurrent of unwanted thoughts, images or impulses that are intrusive. Compulsions are time-consuming and distressing repetitive rituals. In other words, OCD is characterized by the irresistible and unwanted ideas, thoughts or feelings being dueled on someone consciousness or by the need to repeatedly perform ritual actions that OCD patient is fully aware and consider it unnecessary or unreasonable. Obsessive thoughts may include repeated violent or obscene thoughts; Compulsive behaviors include rituals such as repeated hand washing or door locking. The drug clomipramine has been shown to be effective in the treatment of many patients with obsessive-compulsive disorder. (Britannica, 2022). OCD treatments include cognitive behaviour therapy and medications.

C. Depression

People with depression feel sad, hopeless, and pessimistic and may be listless, easily fatigued, slow to think and act, lose their appetite, and have trouble sleeping. In addition it can be characterized by feelings of guilt or low self-worth.and poor concentration. It is the most common mental health disorder, since relatively everyone in a particular moment of their life suffer from episodes of depression and it is normal, the main causes can be physical such as people who suffer from disabilities, mental the overwhelming negative ideas and society where a person fail to fit in.

D. Somatoform Disorders

Somatoform or somatic illness includes the so-called hysterical or conversion disorders, manifest as physical symptoms, such as blindness, paralysis, or deafness that are not caused by an organic disease. Hysteria was one of the first syndromes to be understood and treated by psychoanalysts, who believed that such symptoms were the result of fixation or arresting episodes during early psycho-social development. of an individual. In other words, is characterized by physical sensations and physical pain caused by mental illness. These symptoms cause significant distress and may or may not be related to a medical condition, mental disorder, or other substance abuse condition. The symptoms of somatic disorders also tend to cause stress and anxiety and take the person a long time to think about it or act on it. (Megan Hull, 2021).

E. Post-Traumatic Stress Disorder

PTSD or post-traumatic stress syndrome, this disorder occurs in people who have been through a major traumatic event, such as a natural disaster, torture, or incarceration in a concentration camp. Symptoms include nightmares, pervasive anxiety, and guilt for surviving someone else's death. De-personalization disorder is experiencing the world or self as a strange, altered, and unreal, in a mechanical quality. PTSD creates intense feelings of fear, helplessness, or terror as common symptoms where the patient experience the reliving the trauma through upsetting thoughts or memories or, in severe cases, a flashback in which the trauma is recalled with full emotional intensity. People with PTSD often report general feelings of emotional numbness, increased anxiety and alertness, and avoidance of trauma reminders, such as specific situations, thoughts, and feelings. It is normal to experience some degree of such reactions after trauma, and they are not considered symptoms of PTSD unless they persist for at least a month or appear late. People with PTSD may also experience other

psychological problems, especially depression, anxiety, and substance abuse. (Britannica, 2022)

F. Anxiety Disorders

Anxiety probably the main reason of many, if not all mental health problems since in fact it is categorized not as one but a group of mental health disorders that includes generalize anxiety such as social, phobias, specific phobias, panic disorders, obsessive-compulsive disorder (OCD) and (PTSD) post-traumatic stress disorder. Untreated, anxiety disorders can lead to significant impairment in people's daily life or even develop to physical symptoms. In anxiety disorders, anxiety is the main feature, manifesting in relatively brief, sharp panic attacks or in a chronic sense of unnamed terror. People who experience anxiety attacks may experience digestive upset, excessive sweating, headaches, heart palpitations, restlessness, insomnia, appetite disturbances, and difficulty concentrating. agoraphobia, a type of anxiety disorder, is manifested by inappropriate fears that are triggered by specific situations or objects.

G. Psychotic Mental Disorders

Unlike Neuroses People with psychotic disorders completely lose contact with reality and experience a range of extreme symptoms that make them behave in certain ways which are not socially acceptable, symptoms such as Hallucinations that includes hearing or seeing things that are not real, being in a state of delusion in that they believe in things that are not true. Chiefly, psychotic Disorders are a group of serious illnesses that affect the mind. They make it difficult for someone to think clearly, judge well, react emotionally, communicate effectively, understand reality, and behave appropriately. When symptoms are severe, people with psychosis find it difficult to come in contact with reality and often are unable to cope with daily life. Fortunately, even severe mental disorders can often be treated. We will

mention few common psychotic mental disorders as follow:

H. Bipolar Disorder

Bipolar disorder, formerly known as manic-depressive disorder, Typically consists of both manic and depressive episodes separated by periods of normal mood it is a condition that causes extreme mood swings including highs (manic or manic) and depression. Manic episodes involve elevated or irritable mood, over-activity, rapid speech, inflated self-esteem and a decreased need for sleep. In other words, a bipolar person may experience feelings of unusually euphoric, energetic, or irritable. These mood changes can affect sleep, energy, activity, judgment, behavior, and the ability to think clearly. And of equal importance bipolar disorder is a lifelong illness, thus, it is treated with medication and psychological counseling (psychotherapy).

I. Attention-Deficit / Hyperactivity Disorder (ADHD)

ADHD is one of the most common neuro-developmental disorders in children. It is usually first diagnosed in childhood and often persists into adulthood. Children with ADHD may have difficulty paying attention, controlling impulsive behaviors (they may act without thinking about the outcome), or become overactive. This impacts their learning process leading them to be illiterate if left untreated.

J. Schizophrenia Psychoses

Schizophrenia is a severe mental disorder, characterized by persistent or recurrent episodes of psychosis. In the form of distortions in thinking, perception, emotions, language, sense of self and behavior. Major symptoms include hallucinations (usually hearing voices), delusions, paranoia, and disorganized thinking. Other symptoms include social withdrawal,

decreased emotional expression, and apathy. These symptoms often come on gradually, begin in adulthood, and in many cases never go away. The disorder can make it difficult for people since it affect their work, study, and social relationships.

K. Dementia

Dementia is the loss of cognitive activities, such as thinking, memorizing and reasoning, it interferes with daily life. In that, some people with dementia cannot control their emotions and that their personality can change dramatically. Dementia is critical since develops in a fast way which makes it fatal and has no definite cure, that is to say, it starts from affecting the daily activity of a person, to the most serious field, when the person must depend entirely on others in doing anything. . Dementia is caused by a variety of diseases and injuries that affect the brain but it often infect elderly people as they are the most venerable.

L. Dissociative Identity Disorder (DID)

Formerly known as multiple personality disorder (MPD), DID is a mental disorder characterized by having multiple personalities at least two distinct and relatively long-lasting states. In addition, this disorder is accompanied by memory loss beyond what can be explained by normal memory problems. However, the manifestations of the disorder vary. In that, it can be accompanied with neurosis disorders. Moreover, DID can indicate the state of "split personality" and depersonalization disorder are examples of dissociative disorders. in which a person complains of physical and/or emotional symptoms to place the individual in the role of a patient or a person in need of help.

M. Tic Disorders

Tic disorders includes Tourette syndrome, chronic motor or vocal tic disorder, that prevents the person from having a simple communication without saying something that is totally random, similarly, people with tic disorders make sounds or display non-purposeful

body movements that are repeated, quick, sudden, and/or uncontrollable since Ticks are often confused with anxiety behaviour. And it is diagnosed if these symptoms do not decrease. In addition, ticks are treated through a combination of therapy and medication which may help in situations where the tics affect work or school, and stress is a strong trigger that make tics worse or more frequent, thus, techniques to control and manage stress are important as well.

1.2.2. Biological Causes of Mental Illness

Some mental illnesses have been linked to abnormal functioning of nerve cell circuits or pathways that connect particular brain regions. In addition, defects in or injury to certain areas of the brain have also been linked to some mental conditions. Chiefly, Mental illness can be caused by biological factors. As such we will discuss four most common causes including Heredity, Infections, Brain Defects/Injury, and Prenatal Damage according to New Health Advisor (n, d. para. 2).

A. Genetics (heredity)

Mental illnesses sometimes run in families, suggesting that people who have a family member with a mental illness may be somewhat more likely to develop one themselves. Moreover, experts believe that mental illness is the result of abnormalities in different genes rather than just one, which is why some people with a predisposition to mental illness do not develop mental illness. Other factors such as abuse, stress, or a traumatic event can influence or trigger mental illness in a person with genetic susceptibility (New Health Advisor (n, d. para. 2)

B. Infections

Certain infections have been linked to brain damage and the development of mental illness or the worsening of its symptoms. For instance, pediatric autoimmune neuropsychiatric disorder or PANDA. PANDA is linked to the streptococcus bacteria and has been

found to cause obsessive-compulsive disorder (OCD) as well as other mental ailments in children.

C. Brain Defects or Injury

Defects in or injury to certain areas of the brain have also been linked to some mental illnesses. For instance, if a person was directly hit in the head whether in a car accident or some physical alterations it is very likely that he/she will suffer from minor to severe brain damage. However, the brain is known for its ability to continuously change over a lifetime. Called "Neuroplasticity" so fortunately many injuries of the brain can be somewhat healed over time.

D. Prenatal Damage

Some evidence suggests that the consumption of psychoactive drugs such as alcohol, cocaine, heroin, inhalants, and tobacco damages the brain of a newborn baby, as well as, exposing children to trauma, for example, there are a number of cases that record the loss of oxygen to the brain during the process of birth or the inhaling of certain chemicals directly or not may be a factor in the development of certain mental conditions, such as autism, or spectrum disorder. Additionally, poor nutrition or exposure to toxins as a possible result of parental neglect can also lead to mental illness, in addition, substance abuse for long-term periods can make several disorders starting from anxiety and depression to suicidal ideas as many studies before have revealed.

1.2.3. Psychological Causes of Mental Illness

According to Mdweb as was reviewed by Smitha Bhandari, (2020) there are several psychological factors that may contribute to mental illness, such as severe psychological trauma according to "Trauma and Shock".

Psychological trauma is an emotional response to a terrible event or series of events, such as accidents, rape or natural disasters. Reactions such as psychological shock and psychological denial are typical. Longer-term reactions include unpredictable emotions, flashbacks, difficulties with interpersonal relationships and sometimes physical symptoms including headaches or nausea.

American Psychological Association (2022)

Likewise, if trauma occurs to a child, it will range from emotional, physical, to even sexual abuse, besides, shock can take in many forms, such as, the lost of a parent. This can change the emotional state of children as they are so attached to their parents, in that, it makes them refuse reality and fall into depression, also the state of neglect can lead to mental disorders we are in nature social creators, thus, we need to communicate since “no man is an island” it is also linked to having poor ability to relate to others, that is to say, the state of having weak social skills that facilitate interactions with other member of society, family, friends, and soon.

1.3. Effect of Covid-19 on Mental Health

COVID-19 also known as the coronavirus is a deadly fast-spreading and highly infective virus, its first outbreak was in Wuhan, China around December 2019. Thereafter, it has indeed reached every spot in the world, despite the many prevention measures that several countries have taken. As a result of this disastrous repercussion, everyone's daily life is changed. The corona pandemic has raised the issue of keeping people's mental health in check, taking in mind that the most common prevention method is to avoid social gatherings and quarantine.

Thus, schools have switched to e-learning or blended learning methods, workplaces being closed and pretty much people got stuck in their houses, however, even though this methods of prevention has saved lives it's also has amplify or develop new stressors, such as, anxiety and panic for oneself or loved ones. As an example, the quarantine restricted physical

and social activities, and increased feelings of infection worries, frustration, boredom, insufficient resources, insufficient information, financial loss, Although some studies have looked at the corona effect on mental health, the majority of them have focused on health care in general, especially those run by health providers, patients, children, students, and the general public.

Furthermore, researchers discovered higher than normal levels of somatization, obsessive-compulsive disorder, phobic anxiety and paranoid ideation. The impact of the covid-19 pandemic on the prevalence of psychological symptoms was also investigated in cross-sectional research. The corona-virus pandemic is an epidemiological and psychological crisis. Living in isolation, changes in our daily lives, job loss, financial struggle, and mourning over the death of a loved one has the potential to negatively impact many people's mental health and well-being. It's vital to seek social support and connection with people, even in this period of physical separation. It's also crucial to understand the symptoms of anxiety, panic attacks, depression, and suicide so that you can recognize them in yourself, not just in your family, friends, and neighbors (Serafini et al. 2020)

1.3.1. Panic Related to Infection

This is commonly one of the most frequent psychological reactions to pandemics. Several studies demonstrated that those who have been exposed to the risk of infection may develop pervasive fears about their health, worries to infect others and fear of infecting family members. reported that these individuals are more vulnerable than others to manifest worries if they experienced physical symptoms potentially linked to the infection and fear that symptoms are directly associated to actively having the infection even several months after the exposure. Other studies reported that pregnant women and individuals with young children are the most at risk to develop the fear of becoming infected or transmitting the virus.

1.3.2. Pervasive Anxiety

Social isolation related to restrictions and lockdown measures are linked to feelings of uncertainty for the future, and fear of new and unknown infective agents resulting in abnormally increased anxiety. Anxiety may be directly related to censorial deprivation and pervasive loneliness, in this case, first insomnia but later depression and post-traumatic stress occurred. In addition, anxiety is closely associated with fatigue and reduced performance in healthcare workers while boredom and loneliness are directly related to anger, frustration and sufferings linked to quarantine restrictions. Furthermore, additional tragic effects associated with pervasive anxiety in a pandemic period may include the perceived lower social support, separation from loved ones, loss of freedom, uncertainty and boredom and financial crisis.

1.3.3. Frustration and Boredom Distresses

Frustration is directly related to confinement, abnormally reduced social/physical contact with others, and loss of habits. Frustration and pervasive loneliness seem to derive from the inhibition from daily activities, interruption of social necessities, and not taking part in social networking activities. Unfortunately, in this context hopelessness, together with other individual characteristics such as the experience of childhood maltreatment as well as extreme sensory processing patterns may significantly and independently predict suicidal behaviour but even the unbearable anger related to the imposition of quarantine may lead to negative outcomes.

1.3.4. Procrastination

Procrastination is an act that everyone takes a part in everyday, regardless of their situation in life. Everyone from young junior high students to adults who have been out of school for a while participate in procrastination. By definition a social norm is a "rule or standard of behavior shared by members of a social group". The norm in the case of education is to do work and learn in school. Although procrastination is a deviance of the norm of education, there are more students who procrastinate than students who get everything done

as soon as it is assigned (Ferrari et al. 2014).

Moreover, The procrastination serves as major cumbersome of many students, because they fond of postponing what they are expected to do at right time , for instance many students spend much time on social media instead of read their books, even procrastination affect the reading culture among the students. Therefore, many students prefer to postpone the tasks and do pleasure things which they cannot benefit from it .For example, many students fail public examination yearly because they like to postpone the time to read their books, but they lure to spend all their time on social media.

1.3.5. Disabling Loneliness

The final effect of social isolation is pervasive loneliness and boredom, which have potentially dramatic effects on both physical and mental individual well-being. Pervasive loneliness may be significantly associated with increased depression and suicidal behaviour. Unfortunately, the isolation is progressively enhanced by anxiety, panic or collective hysteria. Cognitive functions and decision making are firstly impaired by hyper-arousal and anxiety and later by disabling feelings of loneliness. In addition, social isolation and loneliness are also associated with alcohol and drug abuse. Overall, it is well known that long periods of social isolation or quarantine for specific illnesses may have detrimental effects on mental well-being.

1.4. The Concept of Learning and Its Evolution

Learning is a fundamental factor to the evolution of all mankind, and from the beginning of time till now we are still discovering and building new things by simply passing the application of using skill, knowledge, and experience in resolving problems whether they are expected or not, this has enabled humanity to survive solely because they were able to transfer mechanisms of learning from one generation to another, for instance, we through experience managed to differentiate between poisonous planets, and after accumulating

enough knowledge about them, we figured out how to combine certain kinds together, so as to, encounter certain diseases, what became now known as "modern medicine", which indeed insured our continuity, yet humanity only started to question the very essence of learning the moment Plato invented philosophy, which dates back to ancient Greece.

Plato saw learning as a passive process whereby knowledge with time is integrated into the human soul, that is to say, he linked learning with the experience but Plato in this aspect gave an important question of "how an individual is able to learn something which is brand new? ". thereafter, upon the start of the seventeen century known as the enlightened age John lock attempted to answer Plato by saying that humans are born with a clean slate. Thus, we acquire new things all the time from our birth through sensations and reflections about our environment.

Furthermore, many other historians and linguists alike attempted to give learning a clear definition that has varied across and within various disciplines, the most significant were of research in psychology, neuroscience, behavioural ecology, evolutionary theory, and computer science. subsequently, these variations have alluded learning to be as a concept with no definite meaning, as stated by Andrew, B et al (2015) "Ongoing disputes over the relate learning as a definition of learning generate uncertainty regarding the boundaries of the learning concept and confuse assessments about which phenomena genuinely constitute learning". According to Gallistel, C.R. (2008) "most contemporary theoretical considerations of learning view it as a structured updating of system properties based on the processing of new information". In other words, learning, in general, can reflect the process of acquiring new understandings and inter-winning them with existing knowledge.

To conclude, learning has certainly evolved thanks to the development of education throughout history, in terms of materials used, facilitated methods being

applied, or the ongoing research that is held in an effort to know how people learn best. However, learning is rather innate and behavioural, likewise, researcher promoted this approach saying that learning is usually determined by assessing a person behavioural changes. This eliminates the need for speculative inference about (hidden) underlying processes. Consequently, we can say that Learning is not something done to students, but rather something students themselves do. And it is not a specific process because it is not measurable and it differs from one person, institution to another.

1.4.1. Mental Health Measures in Academic Facilities

Students face a wide range of stressors and obstacles that are unique to academic life. Where mental health can become both a result of the stressful challenging academic and school tasks or a source of stress that hinders students performance. Chiefly, several population-based studies have examined the effects of mental health on academic performance in children and adolescents. In a longitudinal study, Fletcher showed that adolescent depression was associated with school years, control of mental illness, and socio-demographic factors (Fletcher JM, 2010). Besides, Miech et al (1999) found that environmental issues have a direct negative impact on adolescent academic performance.

In summary, according to a study done by (Agnafors, S., Barmark, M., & Sydsjö, G. 2021) previous research shows that mental health problems predict academic performance from childhood to adulthood. However, results seem to vary by type of mental health problem, and no evaluation has yet been performed to determine whether mental health problems from preschool age predict outcomes.

1.4.2. Schools Mental Health Services and Providers

There are significant distinctions between mental health and educational services, including the professional qualifications obtained, funding sources, and the criteria used to

determine a child's eligibility for services and outcomes. A child's conceptualizations can differ, for example, a toddler with Academic failure, disengagement, and even cognitive impairment can all be signs of depression. Alternatively, you could be accused of lacking drive or having low self-esteem. Taking responsibility for one's mental health Children's health in schools is shared throughout service sectors, however, it differs by country. It is a matter of accountability.

Differences in the cultures, goals and social structures of the health and school systems have an impact. Many school-employed professionals in many countries work primarily with students who have educational challenges as a result of emotional and behavioral concerns and may lack training in complex psychiatric presentations. Counseling, social work, occupational therapy, psychology and psychiatry are among the disciplines used by community mental health specialists in schools. Counselor and social workers are more likely than psychologists and psychiatrists to provide school-based mental health services. In some countries, schools can collaborate with psychologists and psychiatrists to provide advice and assistance for specific children with complicated issues.

Teachers can identify mental health problems because they can successfully spot them in students. Although teacher-led mental health promotion and prevention programs have a positive impact, some approaches have had a less significant impact on students' emotional and academic success. Health-led treatments are less effective. On the other hand, teachers are under pressure to support the cause due to the obligations placed on them. Academic achievement of their students, teachers will be unable to fulfil these obligations unless they are provided adequate training and time.

1.5. Effect of Covid-19 on Learning

The corona pandemic has introduced uncertainty into major aspects of national and global society, including schools. For example, it's unclear how school closures impacted

student achievement, or how the rapid conversion of most instruction to an online platform this academic year will affect achievement in the future. The various adaptations and solutions presented must be taken into account to be able to cope with the pandemic's problems. According to a variety of data sources in the field of UNESCO notes that most governments have temporarily closed educational facilities in an attempt to curb the pandemic's spread. Many of them are experimenting with new ways to give continuous education through the use of technology such as the Internet, television, and radio. However, in many low- and middle-income countries, particularly among poor households, access to these technologies is limited (VanderLind. 2017).

1.5.1. Effect on Memory and Thinking

If your memory is affected, you may find it difficult to hold information in your head long enough to use it to make decisions, also you may have trouble recalling events, or you may fail to take medication on time. It is proven that dwelling on covid-19 symptoms reduces a person's attention and concentration. Chiefly, It can be difficult to focus and ignore while you hear about the death of a relative because he or she got infected, or even maintain a conversation while the TV is on, or keep up with fast-paced or multi-person talks. When attempting to concentrate on a task, it may be more difficult to accomplish two things at once and remain unaffected.

1.5.2. COVID-19 Compromises on Brain Functions

The Covid-19 pandemic continues till today 2022 from the first outbreak to perplex doctors and scientists alike. There is no clear relation to how physically COVID impairs the human brain yet there are symptoms like "brain fog" which in turn is a term that describes a cluster of symptoms including; short-term memory loss, poor attention span, and fatigue that affect up to 20 percent of corona patients, weeks after they have recovered from typical cold symptoms like fever, cough and shortness of breath that the virus usually manifests in.

Subsequently, these cognitive impairments, according to researchers, are the result of microscopically occurring inflammatory processes in the brain. However, this has not yet been proven, since "brain fog" has no diagnostic test, and the illness is not noticeable on the brain radio scans. Nevertheless, patients and doctors look for the following signs and symptoms to see if they have post-COVID cognitive impairments such as; Headaches, dizziness, fatigue, short attention span, memory loss, and inadequate executive function.

1.5.3. The Promotion of E-learning During The Pandemic

During the pandemic, e-learning tools were crucial in assisting schools and universities in facilitating student learning during the closure of universities and schools. Staff and student readiness must be assessed and supported while adapting to the new adjustments. Learners with a fixed mindset have a hard time adapting and adjusting but learners with a growth mindset adapt easily to new situations.

For online learning, there is no one size fits all methodology there are a variety of subjects to choose from, each with its own set of requirements. Various disciplines and age groups necessitate various ways of online learning. Physically challenged students can also benefit from online learning because it allows them to participate in learning in a virtual environment with limited movement.

In this rather tough time, educational systems are attempting to provide quality education to all. Many students have experienced psychological and emotional pain at home/in their living quarters, and have been unable to participate meaningfully.

The greatest online homeschooling techniques have yet to be discovered. Furthermore, expertise and exposure to information and communications technology (ICT) for both educators and learners may influence the implementation of appropriate and relevant pedagogy for online education. Educators can design instructional courses, training, and skill development programs using online platforms such as Microsoft Teams, Google Classroom,

Canvas, and Blackboard. They incorporate features such as workplace chat, video conferences, and file storage to keep classes organized and simple to work with. They usually support the sharing of a variety of content like Word, PDF, Excel files, audio, videos and many more. These also allow the tracking of student learning and assessment by using quizzes and the rubric-based assessment of submitted assignments. (Soni. V. D. 2020).

1.6. Algerian Education amid the Pandemic

Algeria, as a part of the world, has been greatly impacted by the pandemic, the real starting of the pandemic in Algeria is reported on “March 1 of two national citizens who came from France in the province of Blida (northern Algeria) which became the epicenter of the epidemic” (Lounis, 2020 , p. 1).

Blida was a first outbreak and the origin of the pandemic in Algeria because since then, a COVID-19 outbreak has started in this province. Other provinces also started to be affected by different imported origins especially in provinces of Algiers, Oran, Setif, Bejaia, Tipaza, Ain Defla, TiziOuzou, Skikda and Soukahras. On April 15, 47 out of 48 provinces has recorded at least one positive case (Lounis, 2020 p. 2), various areas such as economics, health, and especially education which experienced significant changes as a result of the breakdown and we have been forced to propose new approaches and methods in order to overcome this problem and coexist with the current situation.

1.6.1. Online Education in Algeria

The global demand for online education increased as a result of the Coronavirus pandemic. In today's society, using technology to help teaching and learning has become a necessary skill for both teachers and students. Technology is integral to student-teacher connection and communication especially in moments of isolations, quarantines, and lockdowns as a result of health crises and other emergencies. (Onyema et al, 2020, p113).

The lack of an online learning platform at educational institutions and schools, as well as the learner's early age, make online education impractical. This resulted in the suspension of school studies, the cancellation of the remainder of the annual program, the postponement and rescheduling of some official tests, and a drop in the overall success rate.

Several educational apps, platforms, and resources are available to assist parents, teachers, and school administrators in facilitating student learning as well as providing social care and interaction during school closures.

A similar opinion is shared by Jena who argues that the pandemic disrupted education which is vital in the economic development of any country. About the bright side of the pandemic, COVID-19 has promoted teaching in the digital era. Teachers are able to design and deliver lessons by means of various tools such as Zoom, Facebook, YouTube, Skype, etc. Communication can be made between teachers, students, and even parents for better guidance (Jena, 2020).

In Algeria, we have adopted Online education using a variety of educational platforms such as Moodle which Moodle is a free and open-source learning management system (LMS) written in PHP and distributed under the GNU General Public License, Developed on pedagogical principles, Google classroom Google Classroom is a free blended learning platform developed by Google for educational institutions that aims to simplify creating, distributing, and grading assignments, or Zoom application for videoconferencing teaching.

1.6.2. Challenges of Online Education in Algeria

Many educators have not been excited about incorporating new technology into the classroom. This makes educational reforms difficult, especially when the situation is dire, as it is now with the current pandemic. This viewpoint is shared by Nantwi and Boateng, who

believe that transitioning to entirely online teaching and learning will necessitate a significant amount of effort from both instructors and students (2020). The Algerian Ministry of Higher Education has proposed that colleges employ distant learning programs and open educational platforms to reach learners remotely and prevent disruptions in education. Universities were able to publish lectures using this technique.

However, there is still a difficulty with supervised work and practical work that requires physical presence in laboratories in several areas. Students who live in areas with insufficient infrastructure and no access to the internet are also particularly affected. This created many challenges such as: Adapting technology for online teaching in a short period of time, there is no direct technical help available to teachers in the situation of a technical problem during the delivery of an online lecture or an online evaluation, there isn't enough time to prepare for online lectures, and some subjects or lectures aren't appropriate for online instruction, Both teachers and students lack adequate infrastructure, such as properly equipped laptops, internet access, and digital skills.

1.6.3. Mental Health in Algerian Education

Algeria is a developing country which like many other developing countries suffers from health resource shortages and an inadequate basic health infrastructure for many of its 45 million inhabitants. Algerian mental health legislation and policy are discussed in greater depth in the companion Mental Health Law Profile in this issue, thus they are only mentioned briefly here. The mental health legislation is based on the Mental Health Law of 1985, which largely deals with different types of hospitalization. In order to increase the quality and efficiency of psychiatric care, the Health Department created a mental health initiative in 2001.

Minow (2001) discovered that psychological services were not often implemented for students who have emotional disturbance and are in special education because professionals

were diverted to testing and crisis intervention rather than sustained support in an attempt to understand the lack of mental health services delivered to these youth. She also discovered that "many school systems fight the provision of associated services on the grounds that they are medical or psychological in nature, despite the fact that these services are required under the act where essential to permit the student's free suitable public education." When school districts and other local authorities disagree about who should deliver and pay for relevant services, they frequently fail" (Minow 2001, p. 4). These findings point to various challenges regarding the implementation of appropriate mental health services for children with emotional disorders in special education, as well as future research directions.

1.7. Conclusion

Through a number of studies and research conducted about students' mental health, it is becoming clear that many of these mental illnesses are caused by a combination of biological, psychological, and environmental factors. and learning in the era of covid-19 has taken a new turn, in that, it is less sociable, interactive, and it is becoming rather virtual, in this chapter we discussed some theoretical concepts but the most important point is the way corona effecting learners mental health in different perspectives, this will hopefully lead us to figure out the preventive measurements that keeps students mentally healthy and active in their scholarly careers.

Chapter Two: Data Collection and Analysis of findings

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2.1. Introduction

This chapter is dedicated to present research tools used in the methodology of the data analysis approach. A questionnaire and an interview were created for students in this dissertation; in our situation, we are dealing with third-year secondary school pupils. These methods enable us to discover how COVID-19 affects students socially, academically, and financially, and how these aspects have a significant impact on mental health. The questionnaire's results are statistically examined and shown with tables and graphics. Finally, based on the findings of the interview, some suggestions and recommendations will be made.

2.2. Sample Population

The present research population is third-year students at the secondary school "Tarek Ibn Ziad secondary school." The students were chosen from the branches of experimental sciences and foreign languages. We utilized a simple random sampling procedure, which ensures that every member of the population has an equal chance of being chosen. We select 60 participants male and female of various ages that have an average command of the English language and can answer the questions. After 51 people answered to the questionnaire, we conducted an interview with ten students who were chosen at random way, 5 are selected from the branch of experimental sciences and 5 from the branch of foreign languages. They have a good level in English language. .

2.3. Procedures

The outcomes of the study's questionnaire pilot phase were based on participant feedback. The questionnaire's final draft was delivered to 60 students in four third-year secondary school "Tarek Ibn Ziad" classes, including two scientific classes, a class of foreign languages, and a class of letters. The questionnaire was completed by 51 students, with 9 students dropping out.

We chose to distribute the questionnaire utilizing groups of messenger for the first time, but the students did not respond. As a result, we decided to distribute the questionnaire in the classrooms with the support of the school's instructors (we delivered a paper version (printed) of the questionnaire).

A questionnaire was used to conduct a quantitative study to assess the impact of students' mental health. The questionnaire was distributed from March 2nd to March 9th, and it took about a week to complete.

Ten informants were chosen for the interview at "Tarek Ibn Ziad secondary school" for the qualitative study, from 9th April to 17th April.

2.4. Research Design and Instruments

We developed two main instruments in our work: a questionnaire for a quantitative study to assess the impact of COVID-19 on students' mental health and the factors by which they are most affected. An interview was conducted in order to conduct a qualitative study and obtain comments, recommendations, and interpretations of the findings.

2.4.1. Questionnaire

A questionnaire is a research instrument that consists of a set of questions or other types of prompts that aims to collect information from a respondent. A research questionnaire is typically a mix of close-ended questions and open-ended questions.

The importance of questionnaires in research is immense, helping researchers gain relevant information quickly and effectively.

Designing a questionnaire means creating valid and reliable questions that address your research objectives, placing them in a useful order, and selecting an appropriate method for administration.

Open-ended questions are questions that allow someone to give a free-form answer. Closed-ended questions can be answered with “Yes” or “No,” or they have a limited set of possible answers (such as: A, B, C, or All of the above).

Both types of questions are included in our questionnaire, each type is selected for an objective to allow the students give their answers. The first three questions are for a demographic study in which we inquire about age, gender, and whether or not they were affected by the pandemic.

The second part of the questionnaire (4th question to 10th question) The second part of the questionnaire is devoted to determine on which level the students were most affected on and describing how they were impacted (symptoms struggled the students during the pandemic) and attitudes of students both outside the school; their lives with their families and how they dealt with new situation and inside the school; we focus on the case of classroom how they interact, their colleagues and their teachers and how they dealt with e-learning.

We explore another element in the last two questions, and we try to determine if the students think COVID-19 had a positive impact. The last question is an open-ended question, and we offer the students the option to voice their thoughts on the pandemic's positive impact.

2.4.2. Interview

An interview is a procedure designed to obtain information from a person through oral responses to oral inquiries. There are several types of the interview: unstructured interviews, there is generally no set format to follow so that the interview can take various directions. The lack of structure allows the interviewer to ask follow-up questions and pursue points of interest as they develop. Structured interviews, the interviewer list the questions and acceptable responses in advance and may even rate and score possible answers for appropriateness. Semi-structured interview, in which the researcher prepares the questions

during the interview. Our interview is structured face to face addressed to the students of 3rd year secondary school.

We have prepared eight questions for the interview in order to learn more about how students think about the pandemic, how they react, and what the effects and symptoms are. We begin with a simple question about the Coronavirus to warm up the students, then we move on to questions about the pandemic's impacts, signs, and symptoms on mental health in general, the interviews are then asked about the impact on education and academic development; all of these questions are direct and face-to-face, and the final question is an open-ended question about the interviewees' suggestions for dealing with the post-pandemic period.

2.5. The Interpretation of Students' Questionnaire

In this part, we shed light on the numerical and graphical interpretation of the students' questionnaire followed by comments on the findings and the results.

Q1. Age:

Table 2.1.

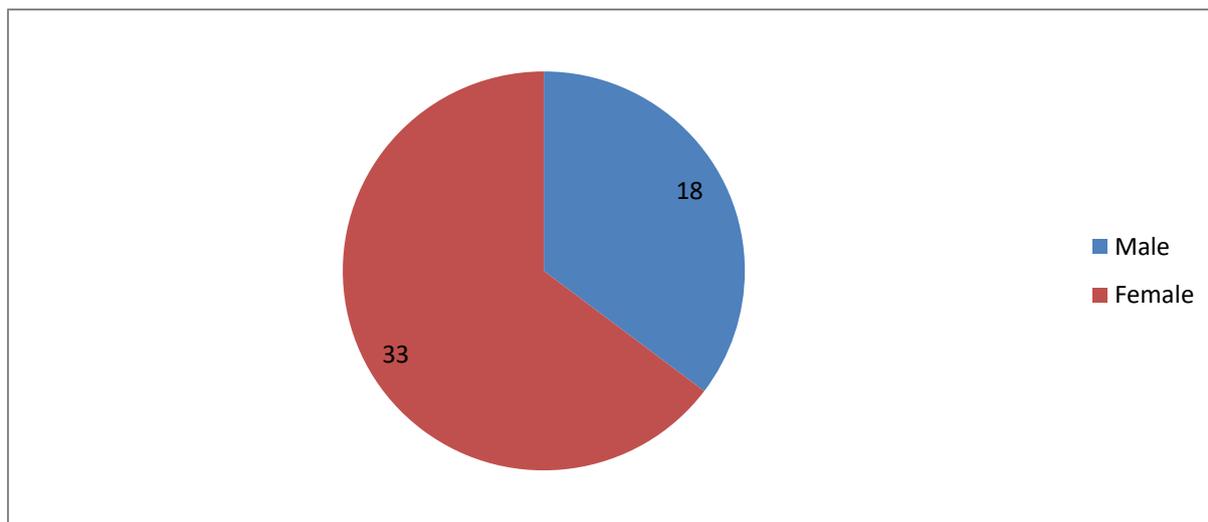
Students' Age

Age	18	19	20
Number	25	17	9
Percentage	49%	33%	18%

Q2. Gender:

Figure 2.1.

Students' Gender



Comments:

We aim to determine the demographic population in this study using the previous graphical presentation, which covers personal information (age, gender) of the respondents.

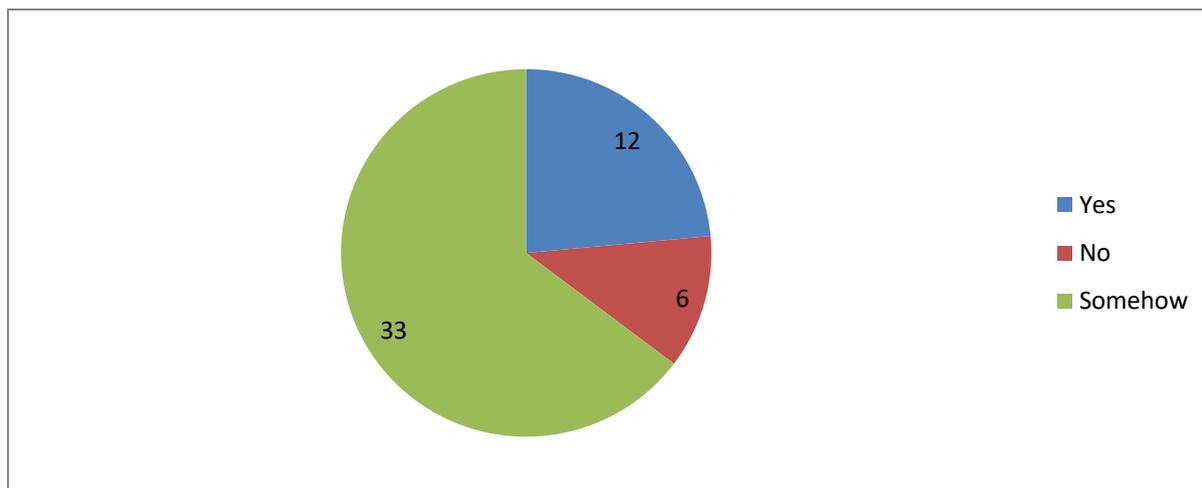
The age of the participants in the questionnaire is shown in Table 2.1; the total number is 51, and the age ranges from 18 to 20, which is natural given that the case study is a third-year secondary school; approximately half of the respondents are 18 years old, a third are 19 years old, and the rest are 20 years old.

Figure 2.1 shows the gender of the respondents. We can see that the bulk of the respondents are female (65%), with only 35% being male.

Q3. Have you been affected by the pandemic?

Figure 2.2.

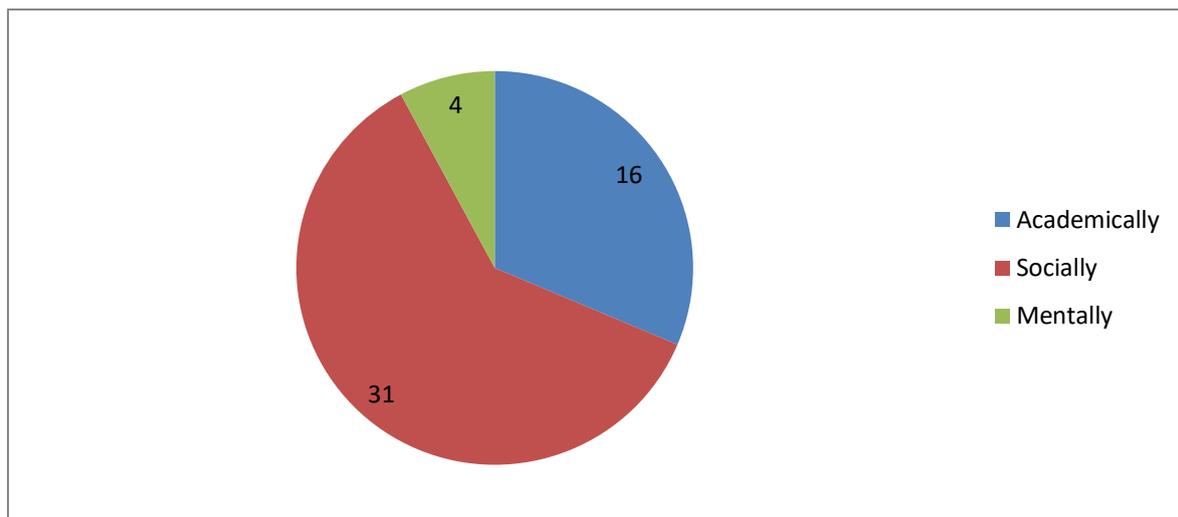
Effect of pandemic on students

**Comments:**

The population is also studied in Figure 2.2, which shows that the majority of the respondents were affected by the pandemic in some form, with only a few individuals that were unaffected by the pandemic. 6 (12%) of the 45 (88%) respondents were affected in some way or another.

COVID-19 has been widely diffused among students; 65 % of those who responded to the questionnaire were impacted, though not badly; they had some symptoms and were influenced in some way. They were certain that 23 percent had been affected.

Q4. On which level did the pandemic affect you most?**Figure 2.3.****Most affected area by the pandemic**



Comments:

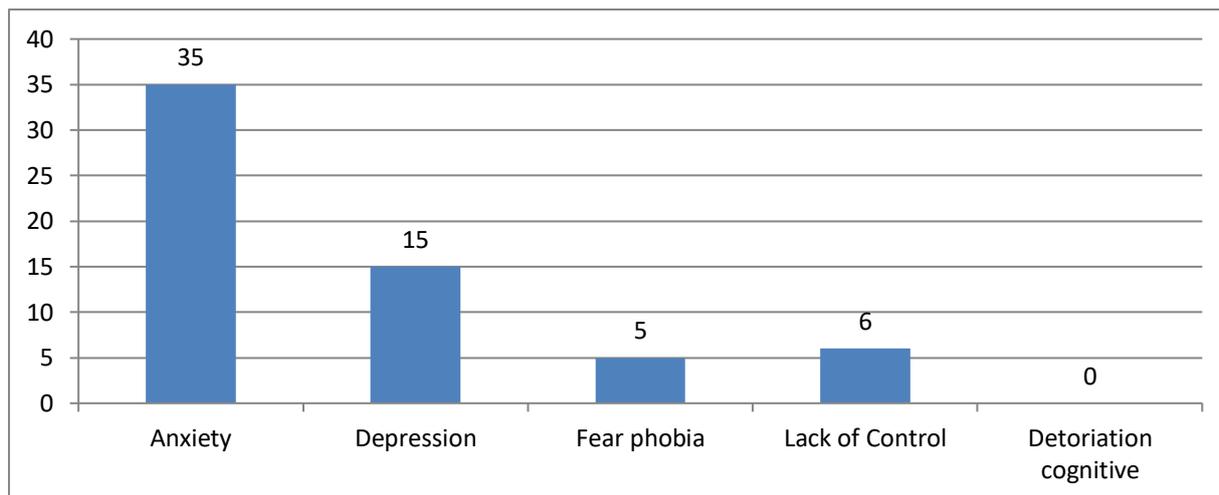
COVID 19 has been widely spread throughout the world, affecting most people in different areas of life such as economics, finance, education, health, and so on. Students, as a vital component of society, have been severely impacted psychologically, academically, financially, and in other ways by the pandemic. Based on the case study, we have identified three areas that were the most affected by the pandemic in our research (Academically, Socially, and Mentally).

Figure2.3 clearly shows that COVID 19 had a great impact on the social side, with 61 %of respondents saying they were impacted socially, 31% saying they were impacted academically, which is a significant percentage, and the rest saying they were impacted mentally, which is a small percentage because unsafe mental can be a domino effect in other words it can be an accumulation of problems in different domain of life.

Q5.Which of these symptoms you struggled with during the pandemic?

Figure 2.4.

Students' Mental Health Symptoms



Comments:

The pandemic had a significant impact on people's views, feelings, and emotions in general, and students in particular. In this question, we strive to learn more about students' mental health symptoms based on our case study.

A considerable percentage of the respondents (59%) had anxiety, a significant amount (29%) had despair, and a small percentage reported fear and phobia, as well as a loss of control. No one suffers from cognitive deterioration in 10% and 11% of the population (respectively).

To summarize, this pandemic has had a detrimental impact on students because it has produced anxiety and depression in a large number of people while causing fear, phobia, and a lack of control in a smaller number of individuals (emotional effect).

Q6. During the pandemic I am:

Table 2.2.

The students' behavior during the pandemic

	Very much	Somehow	Not at all
Afraid to be infected by other constantly	20%	39%	41%

Nervous of the idea of being with large group of people	29%	33%	37%
Losing control on my emotions and tend to react without prior thinking	14%	20 %	66%
Having dark ideas about death and illness	10%	14%	76%
Struggling to control my distractions	20 %	39 %	41%
Struggling to manage my time for my tasks	39%	39%	22%

Comments:

In this question, we used the responses of the participants to gather data on how individuals behave and feel in various situations.

The majority of those who responded to the questionnaire were concerned about being infected by others. 10 have been quite apprehensive, and 20 have had no problems while interacting with people, which is a considerable number.

When we discussed the nervousness of being in a huge group of people, there was form equilibrium in the distribution of the percentage.

There were a few people who lost control of their emotions 8, but the most were aware of what was happening and were able to control their emotions and behavior.

The table above shows that the respondent has no dark ideas about death and illness, and that the majority of them are unconcerned about the pandemic. This population is

represented by 39 respondents, 7 of whom have been influenced in some way by these ideas, and the rest are unconcerned.

We noted that students struggled to manage their time for projects and control their distractions in the last two instances, however the first case (control their distractions 21 respondents) is more than the second (manage time for their tasks 11 respondents).

Q7. Have you expressed your mental problems resulting from the pandemic to others?

Table 2.3.

The students' interaction during the pandemic

Yes	No
43	8

Comments:

According to the respondents on (Q7), the majority of people who experienced problems as a result of the pandemic told their close friends, especially their parents, family, and friends (84%), while the rest hesitate because they lack the courage to discuss such issues with others in general or because they do not believe that expressing their problems has a positive impact on themselves, and others believe that sharing their feelings and emotions as a result of the COVID 19 is unimportant.

Q8. Do you agree that the pandemic will affect our mental health for years ahead?

- Completely: 18%
- May be for a year or two: 31%
- No life will go on normally: 49%

Comments:

This pandemic has impacted practically every aspect of our existence; 25 students believe the effect will fade away in the foreseeable future, while the rest are split between two camps. 9 of the respondents feel that many things will change permanently in our lives and that we will be forced to accept the new situation, while the rest believe that life will return to normal after a year or two.

Q9. Do you think that having a mental health unit will help students adjust post-pandemic?

Table 2.4.

Post-pandemic solutions

Yes	No
49	2

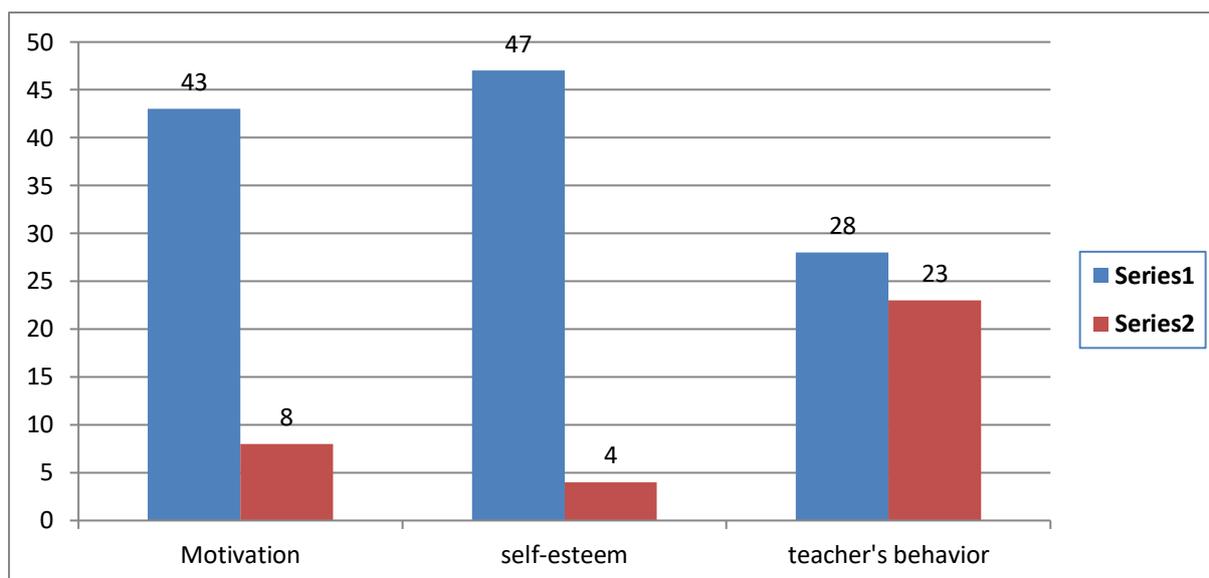
Comments:

96% of students believe that having a mental health unit at the faculty level will help students adjust post-pandemic because it had such a significant impact on students' mental health academically, socially, and mentally.

Q10. During the pandemic COVID-19 affects negatively motivation, self-esteem and affects the behavior of the teacher.

Figure 2.5.

Effect of the pandemic on teachers' behaviour



Comments:

The pandemic does not affect only students but it affects also the teachers' attitudes and behaviors in the classroom.

The majority of instructors have been demotivated as a result of changes in teaching practices as a result of the difficult and sensitive period; 84 % of respondents believe that teachers have been demotivated.

92 % students say their professors have suffered from a lack of self-confidence and self-esteem.

Q11. Is there any positive impact of the pandemic on students' mental health?

Table 2.5.

Positive impact of the pandemic on students' mental health

Yes	No
5	46

Comments:

COVID-19 had a significant impact on students' mental health, but we can observe the pandemic's affects on the other hand, and we can claim that it had a beneficial impact.

Only about five pupils (about ten percent) believe Pandemic had a good impact, while the other ninety percent disagree.

Q12. Cite some of the positive effects of the pandemic

Comments:

- They exploit their time in reading books.
- Increase the autonomy in learning (learning language, improve their communicative skills).
- Increase preventive culture.

2.6. The Interpretation of Students' Interview

Q1. How can you describe the pandemic from your point of view?

The major goal of this question is to learn how students feel about the pandemic, which will help us understand how it has affected their life in general.

The majority of students said they were very attentive in the first days because they were afraid and wanted to learn more about the pandemic and how it affects people; they spent a lot of time in front of the television watching statistics from around the world; one student had a different opinion and said it was like a dream. I couldn't believe that this pandemic had reached our small village in Algeria; accepting the new scenario was difficult because it alters our life, attitudes, emotions, and feelings. It was a war with an opponent we couldn't see or understand, and it was the most dangerous killer of the twenty-first century.

Q2. Do you feel that it has impacted your mental health? How?

The goal of this inquiry was to discuss the effects of the pandemic on students' mental health and how it occurred?

The students were not in a comfortable situation during the pandemic because it affected all areas of finance, economics, education, and so on; the lockdown forced people to stay at home, and they suffered from loneliness, anxiety, fear, and phobia, all of which have an impact on students' mental health. Otherwise, this pandemic affected emotions and feelings because of the bad news; many students were afraid about the future, especially after the Pandemic. Each person had a lot of questions, such as whether we should stay at home for a long period if the experts couldn't find a cure for the virus. Should we accept this situation, who should give up and sacrifice 'herd immunity', in general what about our future?

Q3. Which of the mental disorder symptoms you struggle with the most? Depression, fear, anxiety

This question is mainly devoted to recognize the signs and symptoms of mental illness, as well as how it impacted students' wellbeing.

The majority of respondents gave similar responses, stating that they were greatly affected by the pandemic, that they were concerned about their future, and that they awaited daily statistics on the number of cases and deaths in the hopes of hearing good news. The lockdown has a significant impact on emotions and social interaction (loneliness), causing fear and anxiety. The pupils claimed that their dread did not reach the degree of despair or psychiatric consequence.

Q4. Did you seek help from professionals or people around you?

The aim of this question is to know how people react during the pandemic and whether they sought help to adjust with it.

Because they lacked the courage to seek the advice of doctors or specialists; eight respondents sought assistance from their friends and family, believing that the pandemic would damage their emotions and social interactions, and that the people around them could

provide a remedy. Two respondents believe that professionals can help more since they have more information about the pandemic and that individuals around you can have a beneficial impact, but that we cannot resist without professional assistance.

Q5. Did you experience losing a loved person because of COVID?

The question is if the loss of a loved one has an impact on one's mental health.

Six respondents have had this bad experience, and they said that losing a loved one, especially during this period, is difficult because it increases the level of fear and phobia; two respondents lost their fathers, and they said it was difficult to get through this difficult period; four respondents did not experience this bad feeling, but they said that hearing about people dying from the pandemic had a significant impact on our emotions.

Q6. Did you have suicidal thoughts during the lockdown?

For all of the respondents, the response was clear: 'No, impossible.' They all came from religious backgrounds and feel that this act is forbidden in Islam, therefore they couldn't do it and didn't even think of it.

Q7. In which way the pandemic affected your academic progress?

The purpose of this question is to determine how this pandemic affects academic advancement in general.

The majority of the interviewees believe that school closures have had a significant impact on academic progress because they spend more time at home and are unable to reach their classroom. As a result, the ministry of education has adopted distance learning. All of the respondents stated that they were not prepared for this and that they are unable to use technological tools such as zoom and Google Classroom. Teachers have also suffered as a result of this, They also complain about a lack of equipment and poor internet; some sections

and courses, such as mathematics, cannot be learned in distance; contact between students and teachers is vital in all learning approaches; the evaluation and assessment procedures were extremely difficult; most students said it was impossible to evaluate; and the emotional effects of the pandemic had an impact on students' performance.

Q8. What do you propose for the educational institution to help improve students' mental health after the pandemic?

This is an open-ended question designed to allow interviewees to offer ideas or proposals for improving mental health after the pandemic.

The majority of interviewees believe that every institution should have a mental health unit that assists students in treating their problems, particularly psychological and emotional issues, and that these units should develop tests to measure and diagnose the impact of the pandemic on students' mental health.

2.7. General Discussion

This section is dedicated to the interpretation of the questionnaire and interview findings acquired by the participants.

The respondents are third-year secondary school students, ranging in age from 18 to 20 years old; we chose male and female participants randomly, with the number of females being higher; and the majority of participants have been affected by the Coronavirus, allowing us to treat the impact of the pandemic on students' mental health.

We investigate the demographic population, Coronavirus symptoms, and student conduct during the pandemic in the questionnaire, and then we discuss its impact, particularly on education, and how we should behave in the post-pandemic situation.

Students and teachers have faced numerous obstacles as a result of the COVID-19 pandemic. Students who are already suffering with mental health issues have been particularly sensitive to the changes, and we are now learning about the wide-ranging effects on students as a result of school closures, physical distancing guidelines and isolation, and other unexpected life changes socially, economically and financially.

During this period of life, young adults face a variety of challenges and are exposed to significant risks affecting their health status. Students have been identified as a susceptible group who suffer from severe stress, anxiety, and sadness, negatively impacting their mental health. This uncomfortable situation (Outbreak) is powerful negative environmental factor that can have a variety of psychological consequences on students, including fear, worry, and altered quality of life. Another problem during the lockdown concerned the potentially excessive use of the Internet. Indeed, in times of social isolation, the Internet is an obvious solution to maintain a social link with others. However, students are particularly fond of the Internet and may tend to overuse it.

Several countries and regions temporarily closed their educational institutions that attempted to use educational technology to provide synchronous or asynchronous online learning during the COVID-19 epidemic. These sorts of distance learning have proven to be the most effective way of lessening the impact of the COVID-19 pandemic on student learning while simultaneously giving teachers more flexibility. However, using such teaching approaches can lead to a variety of challenges and problems related to decreased exercise levels and prolonged sitting among students. Students must maintain their social distance while studying at home. They can, however, continue to receive regular updates on the pandemic via both new (platforms and applications) and traditional media (Television). Such updates can put students under undue pressure to keep up with their education.

Students face significant changes to the entire social climate, campus safety, and the general environment during the COVID-19 pandemic, in addition to facing obstacles linked to their basic biological and safety demands. These modifications are centered on the guiding principle of uninterrupted learning. Environmental psychology studies how people and their surroundings interact.

Time management is a crucial concern for students in higher education; it affects how they view and use time, allowing them to arrange their academic responsibilities appropriately. Students sometimes complain about severe academic demands that need more time during the term than they have available. Students can become stressed trying to meet all deadlines due to their hectic daily routines. Increased scholastic responsibilities can be stressful, especially if disorganization is present. When students look for and fail to find crucial information, they waste time. Time is wasted and progress is slowed by recurring chores (such as checking e-mails and social media) and worrying about unfinished work. As a result, it may be difficult for students to discriminate between what is vital and what is not. The ability to manage time effectively and efficiently has been shown to be an effective way to cope with stress.

The pandemic has had an impact on students' mental health as well, as teachers have been under a lot of stress since the beginning of the crisis. Teachers experienced stress during lockdown as a result of having to adjust (in record time) to conduct online lectures. As a result of the increased strain caused by home, this stress is frequently accompanied by symptoms of worry, sadness. Moreover, they found that working from home using Information and Communication Technologies (ICT) can create feelings of tension, anxiety, exhaustion, and decreased job satisfaction and in times of a pandemic these were the only tools that were available to teachers.

We all have distinct demands and coping mechanisms for stressful situations. It is the same for children. Some youngsters will have coped well with the COVID-19 pandemic's restrictions and school closures. Others find it difficult to cope with all of the changes and uncertainties. Some students will return to school with some level of stress, worry, loneliness, or bereavement. Some may have witnessed an increase in domestic violence. Students' transition back to in-person classroom learning, especially after extended periods of school closure, requires the support of school teachers and personnel. Along with continuing to apply the various techniques instructors have been utilizing to assure their kids' learning and emotional well-being while schools were closed.

2.8. Recommendations

Teachers have a unique relationship with young people and as such are often privy to, or made aware of, when students are going through a tough time emotionally. Knowing how to support your own mental health and wellbeing, and that of your students' is essential in providing a supportive learning environment. It is essential for your own wellbeing, and the wellbeing of students in your care, that you are able to deal with these situations appropriately. Even if a student does not seek your assistance, they may be acting in ways that cause you concern. What shall we do?

As the COVID-19 pandemic will likely continue to unfold throughout students will have to learn how to positively cope and commit to their personal and academic goals in spite of ongoing disruption and uncertainty. This capacity is generally known as 'psychological resilience' and is roughly defined as one's ability to cope with adverse situations and bounce back from them, oftentimes stronger. Given the unpredictability of this pandemic and its aftermath, it is now time for universities to develop student support strategies that move students from 'surviving' the effects of the pandemic.

Gathering information concerning students' needs during the pandemic is a key priority, as it is important also to offer new perspectives and strategies on how to cope with these exceptionally challenging times.

- Introduction to resilience: Theoretical and practical dimensions of the concept of 'psychological resilience' should be presented and competencies such as personal efficacy, community building, and usefulness, personal control, agency and continued learning, also supported.

- Academic responses: Interventions should address workload levels and allowances on grading requirements that contribute to alleviating or reducing stress.

- Activate personal resources: Enhancing coping strategies, emotional regulation and boost self-confidence are ultimate goals of any "resilience-building" intervention.

- 'Mental strength' skills training: These interventions are aimed at building skills in areas such as positive thinking, anxiety control, visualization techniques, goal setting and attentional control.

- Focus on self-management: Students frequently seek telehealth applications that allow them independence, anonymity and virtual delivery.

Teachers play an important role throughout this time and have a variety of responsibilities.

- As student return to school, they may have different thoughts and questions about COVID-19. Students want and need factual information.

- Engage children in making the classroom a welcoming, safe and comfortable space. When doing so, make sure to respect school safety procedures and use available material resources.

- Be attentive to changes in learner's behaviours. If you notice significant changes in a student's behaviour and this persists over time.
- Avoid rigid deadlines – try giving homework assignments that are due in two days instead of the following day.
- Developing Effective School Mental Health Programs

Efforts to care for the emotional well-being of students can extend beyond the classroom and into the entire school. School-based mental health programs can focus on promoting mental wellness, preventing mental health problems, and providing treatment.

Effective programs: Promote the healthy social and emotional development of all children and youth, recognize when young people are at risk for or are experiencing mental health problems, and identify how to intervene early and appropriately when there are problems.

2.9. Conclusion

In this chapter, we have discussed the findings and conclusions of the questionnaire and interview, as well as the influence of the pandemic on students' mental health, its symptoms, and the consequences and difficulties. The majority of students was affected by the pandemic and encountered numerous challenges in disciplines like as finance, economics, and psychology. We gathered information on how they dealt these new situations. Finally, we made some suggestions for dealing with the post-pandemic period, as well as how students and teachers should act.

General Conclusion

COVID-19 has changed many things in our daily lives in various areas such as health, education, finance, and so on. This crisis has affected socially, psychologically and biologically people all over the world, changing their attitudes and behaviors, and this is largely due to the pandemic's impact on emotions such as sadness, fear, worry, and so on.

The pandemic had a significant impact on students, and they were the group that was most psychologically affected as a result of school closures. Students felt lonely and worried about their future. The authorities adopted E-learning (remote learning), which has benefits and drawbacks; it was a way that addressed these issues, but teachers and students were not prepared due to a lack of resources and poor internet access, and the majority were unfamiliar with technology.

Algeria, like the rest of the world, has been deeply affected by the pandemic in all of its regions and at all levels. The ministry has adopted the E-Learning methodology using different tools such as platforms (Moodle), applications such as (Google classroom), teachers go to Zoom and Google Meet as an alternative to presential learning, and they also used television to present some important courses for the third year secondary school (Baccalaureate) and BEM (Middle school).

Because there is a gap in this research, students' mental health is an essential subject that should be addressed and discussed, especially in Algeria during the pandemic that has a big influence, We contributed actual data analysis of the influence of students' mental health, case study about third year secondary school learners “ Tarek Ibn Ziad Secondary School”. For this purpose, we designed a questionnaire to explore the demographic population, symptoms, and behavior of teachers and students during the pandemic, as well as the post-pandemic condition and the good impact of COVID-19.

Overall, 51 students have responded on the questionnaire, Because the students did not complete the questionnaire online, we were obliged to distribute the questionnaire throughout the institution. The interview was also utilized as an investigation tool to determine the influence of the pandemic on students in several areas, particularly education. We had a lot of trouble taking meetings with the participants, so we used phone recording. Ten participants were chosen randomly, and statistical analysis was performed to verify the validity of the hypotheses suggested.

We had several issues, such as the respondents' lack of cooperation; they did not answer the questions correctly, and we were obliged to clarify each question to them. We also had a time constraint; we did not have enough time to collect data.

We have dealt with the influence of COVID-19 on students' mental health and how students and teachers interact in the real world using this technique to verify the theoretical findings. The hypotheses proposed have been confirmed, the pandemic has had a profound social, economic, and educational impact on learners, resulting in worry, stress, depression, and mental disorders. Learners were forced to adapt to distant learning after schools were shuttered, which was challenging to deal with.

Teachers-student contact was difficult to maintain due to the use of e-learning and platforms and programs such as Google Classroom; they had a lot of challenges with learning processes, assessment, and evaluation. The authorities should be concerned about the pupils' mental health and psychological well-being, as the pandemic will have long-term implications.

Finally, we discussed some general results before making some recommendations for dealing with post-pandemic situations and future consequences. We may expand this study to include other case studies, such as universities (bachelor's degree, master's degree, doctorate), and we can also analyze the results using various statistical approaches. For example, we study the correlation between the symptoms and the impact of COVID 19 on mental health

using regression method; we used SPSS (Statistical Package for the Social Sciences) for further analyses of the results and findings.

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Appendices

Appendix 1: Students' questionnaire

NB: Please, carefully answer the questions bellow either by:

1. Age**2. Gender:**

Male Female

3. Have you been affected by the pandemic?

- Yes, severely
- Somehow, but not major
- Not at all

4. On which level did the pandemic affect you most?

- Academically
- Socially
- Mentally

5. Which of these symptoms you struggled with during the pandemic?

- Anxiety
- Depression
- Fear and Phobia
- Lack of control on emotions and impulses
- Deterioration and cognitive function

6. During the pandemic I am:

	Very much	Somehow	Not at all
Afraid to be infected by other constantly			
Nervous of the idea of being with large group of people			
Losing control on my emotions and tend to react without prior thinking			
Having dark ideas about death and illness			
Struggling to control my distractions			
Struggling to manage my time for my tasks			

7. Have you expressed your mental problems resulting from the pandemic to others?

- Yes, I discuss them with close people
- No, I do not have the courage

8. Do you agree that the pandemic will affect our mental health for years ahead?

- Completely
- May be for a year or two
- No life will go on normally

9. Do you think that having a mental health unit will help students adjust post-pandemic?

Of course, it is necessary

Not needed

10. During the pandemic

	Yes	No
COVID 19 has ruined your motivation		
COVID 19 lowered your self-esteem		
Did COVID 19 affect the behavior of the teacher		

11. Is there any positive impact of the pandemic on students' mental health?

Yes

No

12. Cite some of the positive effects of the pandemic

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Appendix 2: Interview

We are master two students at the University of Tiaret, We would like to ask you some questions concerning the effect of COVID-19 on students' mental health. The aim of this interview is to better understand the impact of the pandemic on in different areas especially in education, The interview is, into 8 questions, using voice recorder by phone. Shall we begin?

A. How can you describe the pandemic from your point of view?

B. Do you feel that it has impacted your mental health? How?

C. Which of the mental disorder symptoms you struggle with the most? Depression, fear, anxiety.

D. Did you seek help from your professionals or people around you?

E. Did you experience losing a loved person because of COVID?

F. Did you have suicidal thoughts during the lockdown?

G. In which way the pandemic affected your academic progress?

H. What do you propose for the educational institution to help improve students' mental health after the pandemic?

الملخص

تهدف هذه الدراسة إلى معرفة مدى تأثير كوفيد 19 على الصحة العقلية للطلاب. سنبحث ثلاث نقاط رئيسية: تأثير الوباء بشكل عام ، وتأثيره على التعليم بشكل خاص ، وكيف نتفاعل في فترة ما بعد الجائحة. أجرينا دراسة حالة تضمنت كلاً من الأساليب الكمية (الاستبيان) والنوعية (المقابلة) موجهة لطلاب السنة الثالثة ثانوي. أكدت النتائج تأثير الطلاب بالجائحة خصوصاً على المستوى الأكاديمي؛ و عليه يجب تطوير برامج للصحة النفسية و العقلية على مستوى المؤسسات لمساعدة الطلبة على تخطي الجائحة نفسياً و عقلياً.

الكلمات المفتاحية : كوفيد 19، الجائحة، الصحة العقلية، التعليم، القلق، الاضطرابات العقلية.

Résumé:

Cette étude vise à explorer l'impact de Covid-19 sur la santé mentale des étudiants. On examinera trois points principaux : l'impact de la pandémie en général, l'impact sur l'éducation en particulier, et comment nous allons réagir dans la période post-pandémique. Nous avons entretenu une étude de cas qui comportait à la fois des méthodes quantitatives (questionnaire) et qualitatives (interview), en visant des étudiants de troisième année secondaire. Les résultats ont montrés que COVID a eu un impact considérable sur les apprenants surtout au niveau académique ; c'est pour cela, on a besoin de développer des programmes de santé mentale afin d'aider les apprenants à surmonter la pandémie mentalement et émotionnellement.

Mots Clés : COVID19, Pandémie, Santé Mentale, Education, Anxiété, Troubles Mentau

Summary:

This research study aims to investigate the impact of Covid-19 on students' mental health. We examined three main points: the impact of the pandemic in general, the impact on education in particular, and how we react in the post-pandemic period. We conducted a case study that included both quantitative (questionnaire) and qualitative (interview) methods targeting third-year secondary school students. Results reveal that learners were impacted to a large extent due to COVID especially academically; hence, mental health programs need to be developed to help learners overcome the pandemic mentally and emotionally.

Keywords: Covid-19, Pandemic, Mental health, Education, Anxiety, Mental Disorders