Psychological Distress Coping Strategy among University Students During the COVID-19 Pandemic

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Abstract:

The COVID-19 pandemic has had great impact on every aspect of students' lives throughout the world. Since the beginning of the lockdown, students have been   prone to stressful situations.

This study aimed to identify the degree of commitment among the students of the university of Khemis Miliana to the lockdown regulations and how they coped with the psychological distress they experienced during that period.

The study sample consisted of (200) students randomly chosen from the University students Khemis Miliana.

The findings revealed three types of coping strategy used by students, namely, the social strategy, the mental health strategy, and the religious media strategy.

Keywords: coping   strategies, lockdown, COVID-19, pandemic.

1- Introduction

In December 2019 the world experienced a large outbreak of a new virus named « COVID-19 ». This pandemic led to a dramatic loss in human lives worldwide and presented an unprecedented crucial long-term consequences on humanity.

In an attempt to prevent the spread of Covid-19 and minimise the loss of life, a decision for lockdown was urgently implemented all around the world and in all fields.

In the field of higher education this pandemic was also felt to be having a detrimental impact on University students life all around the globe. This situation has led to the massive closure of face-to-face activities of educational institutions in order to prevent the spread of the virus and mitigate its impact. According to data from the United Nations Educational, Scientific and Cultural Organization (UNESCO), by mid-May 2020, more than 1.2 billion students at all levels of education worldwide had stopped having face-to-face classes UNESCO, E. (2020).

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As for the Algerian authorities, there was no other possible decision to be taken in front of such circumstances than to opt for lockdowns and prolonged school and university closures, in order to help apply the safety measures to minimize the risk of possible infections.i.e. remaining out of congregate settings, avoiding mass gatherings, and maintaining distance from others when possible. Since mass gatherings within school settings constitutes a suitable environment for the spread of the epidemic (Methaq, 2020). Quarantine has been proven to be the most effective preventive measure against infectious outbreaks for centuries such as cholera and plague for centuries (Khan & al, 2020)

As a response to the sudden interruption of face-to-face classes, different educational institutions adopted different approaches to sccessfully manage the situation, including adjusting the school calendar and opting for remote learning.

The lockdown was perceived to be a double sword decision. It was very approprite to curb the spread of Covid-19 on the one hand, but it also caused the restriction a large share of university students' mobility and freedom which led to serious psychological problems. disruptions in academic processes due to Covid-19 pandemic have increased student anxiety (Wang et al, 2020).

2. Theoritical Background

According the World Health Organization (WHO, 2020) over 32.7 million COVID-19 cases and 991 000 deaths have been reported to WHO. During the week of 21–27 September, there were more than 2 million new cases and 36 000 new deaths reported.

The COVID-19 pandemic has emerged as the most challenging public health crisis in the current world, apart from Aside from the high death rate, countries around the world are also experiencing a rise in distressing psychological outcomes. (Islam, 2020).

Recent studies on the pandemic have shown that the pandemic is not only causing deaths worldwide but also creating psychological pressure for persons with COVID-19 and healthy individuals (Khan & al, 2020). High levels of stress and anxiety are natural responses towards any sort of unnatural situation (Royand Tripathy, 2020).

Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events (Noorbakhsh & al, 2010).It is also defined as the skills needed to manage and adjust to stressful situations, representing an essential element for the adaptation process to stressful and traumatic situations as well as for the recovery process of patients with severe mental disorders (Tintori et al,2020).

Individuals differ in their choice of coping strategies (Connor-Smith and Flachsbart, 2007).The choice of coping strategies is influenced by the individual's cognitive evaluation of the event, termed secondary evaluation, which involves estimating the resources available and the most effective strategies to deal with the situation (Lazarus and Folkman, 1984).

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Coping strategies are often classified into problem-focused coping, which involves making active attempts to solve a problem, and emotion focused coping, which involves dealing with the emotions generated by the problem (Lazarus & Folkman, 1984).

Lazarus and Folkman theorized that coping could be divided based on its function, into problem-focused coping and emotion-focused coping. Problem-focused coping includes those strategies that involve acting on the environment (e.g, seeking support from others to solve the problem) or the self (e.g, cognitive restructuring). Emotion-focused coping, on the other hand, includes those strategies used to regulate one's stressful emotions (e.g, using substances, emotional ventilation)(Lazarus& Folkman,1984).

coping strategies concentrating on solving the problems or reducing stress, such as seeking social support and collecting more information to tackle problems, may help individuals to rebuilding the meanings of life and integrating the traumatic experience with existing cognitive schemas about self and the world, which have been associated with better psychological adjustment (Ye et al ,2018).

Generally, coping can be categorised into adaptive and maladaptive strategies (Ye & al ,2020). When the coping strategy aligns with the stressors (e.g. aims at reducing the emotional distress and developing positive self-instructions), people experience fewer psychological symptoms (e.g. less ASD) after stressful events (Park et al., 2001). Adaptive coping strategies (e.g. trying to look on the bright side) may help individuals to rebuild the meaning of life and integrate the stressful experience with existing cognitive schemas about the self and the world, which were linked with better psychological adjustment (Ye & al ,2020). On the contrary, maladaptive coping strategies (e.g. using drinking as an avoidance behavior) were closely associated with more dissatisfaction with life and more severe symptoms of psychological responses after the stressful experiences (Dorfel et al., 2008; Tsay et al., 2001).

According to (Tariq & al, 2020), Cognitive restructuring and coping strategies always help people to reduce the level of stress and anxiety. Some recent studies have concluded that students adopt avoidance, isolation, religious practices, domestic skills, and other methods to maintain their well-being during the lockdown. They try to adjust and adapt to this pandemic as much as they can (Tariq & al, 2020). It has been concluded that all coping measures in light of an epidemic disaster can reduce frustration and stress and enhance mental health (Salari et al., 2020; Van Bavel et al., 2020).

During exposure to stressors, different individuals,or the same individual under different conditions, can employ active or passive coping strategies (Carver,1997), it would be necessary to identify the type of strategies the students use to cope with the psychological distress.

To the best of our knowledge, this appears to be the first local study to examine the level of commitment to the lockdown regulations among university students,and to investigate the coping strategies to respond to stresful situations during the lockdown .Two key questions were exmined in this study.

3. Literature Review :

Due to the lack of relevant local literature dealing with the strategies the Algerian university students might have used to cope with psychological problems during the lockdown, we considered local studies that dealt with samples of university teachers instead of student which helped developing the research instrument, in addition to some other foreign studies that dealt with coping strategies university students used during the panademic

A study conducted by Khana (2020) that focused on the impact of the pandemic on students in Bangladesh, from 9 to 23 April 2020, it revealed that 28.5% of participants experienced stress, 33.3% experienced anxiety, 46.92% experienced depression from mild to very severe, and 69.31% experienced special distress from mild to severe in terms of severity.

A study conducted by Son (2020) concluded that among 195 students, 138 (71%) reported increased stress and anxiety due to the COVID-19 outbreak. Multiple stressors have been identified to have contributed to the increased levels of stress, anxiety, and depressive thoughts among students. The symptoms included fear and anxiety about their health and loved ones (177/195, 91% reported negative effects of the pandemic), difficulty in concentration (173/195, 89%), disturbances in sleep patterns (168/195, 86%), and decrease in social interactions due to social distancing, physical (167/195, 86%), and increased concerns about academic performance (159/195, 82%). To cope with stress and anxiety, participants sought support from others and helped themselves by adopting negative or positive coping strategies.

Abdel Karim Melyani and Mustafa Magadi (2020) conducted a study on "Strategies for coping with the psychological stress in quarantine due to the spread of the Covid-19 virus among a sample of higher education teachers coming back home from abroad.The study results revealed that the degree of commitment to quarantine among the sample members as high, as are strategies for coping with psychological stress among teachers of higher education during the quarantine period is a strategy for facing psychological pressure, then a religious moral strategy and finally a preventive health strategy.

A study conducted by Yu & al (2020).It aimed at identifying to investigate the factors influencing psychological distress in China during the outbreak of coronavirus disease 2019 (COVID-19), and to explore the coping strategies, social support and psychological distress among Chinese citizens. Three questionnaires were adminstered on-line to a convenience sample from February 1 to February 4, 2020. After the analysis Of 1588 questionnaires, the results revealed that Nearly one quarter (22.8%) had high levels of psychological distress (K6 score ≥ 13). Individuals with higher psychological distress were more likely to be unmarried, spend more than 6 h per day searching for information about COVID-19, more frequently adopt a passive coping style, and report less social support than those with lower psychological distress.

(Ye & al, 2020) conducted a study on Chinese students.The study aimed to investigate the association of COVID-19-related stressful experiences with ASD and possible psychological mechanisms of the association among college students.

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In order to test the hypotheses, pathway analysis was used.The results revealed that among 7,800 college students, 61.53% were women and their mean age was 20.54 years. Both direct and indirect effects from COVID-19-related stressful experiences to ASD symptoms were significant. The relationship between COVID-19-related stressful experiences and ASD could be mediated by resilience (β = 0.01, p < .001), adaptive coping strategies (β = 0.02, p < .001), and social support (β = 0.01, p < .001); while not being significantly mediated by maladaptive coping strategies.

A sudy was conducted by Charles et al (202O). The study aimed to evaluate the effect of disruption on students' well-being. A sample of 148 students (86.5% female, 49.3% White) completed measures of psychological symptoms, perceived stress, and alcohol use during the spring 2020 semester at a university in the southeastern U.S. Their results were compared to those of 240 students (87.9% female, 64.2% White) who completed the same measures in the fall 2019 semester. Participants in spring 2020 reported more mood disorder symptoms, perceived stress, and alcohol use than did pre-pandemic participants. Worry about COVID-19 was negatively associated with well-being in multiple domains.

A sudy coducted by Tarik et al(2020), it aimed to explore the psychological experience of university students during COVID-19 lockdown in Pakistan.the sample consisted of 20 students from private and public universities.It was concluded that during lockdown, students experienced mixed emotions. Positive emotions were dominant initially, then transfored gradually by negative emotions. Use of coping strategies for adaptation and adjustment played a significant role in maintaining the students' mental health.

4. Research questions:

Question one : What is the degree of commitment of university students to the lockdown regulations ?

Question two : What strategies have been used by university students to cope with the psychological distress during lockdown ?

5-Objectives of the study :

The current study aims to identify the degree of commitment presented by the students of the University of Khemis Miliana during the lockdown, as well as to determine the type of strategies they use to cope with psychological distress during that period.

6. Significance of the research :

This study will provide valuable information about the extent to which unversity students' committed to the lockdown regulations during the panademic as well the strategies used to cope with the psychological distress.This study will also raise awareness in the large community about how to deal with various psychological issues including psychological distress. Students will also

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directly benefit from this research as its findings may encourage them to idenfy the most effective
strategy to cope with the psychological distress under similar conditions.

7. Methods :

7.1 Participants and questionnaire

The study sample consisted of two hundred (200) students randomly selected from the
Department of Social Sciences at the University of Khemis Miliana, during October, 2020.

7.2 The measuring instrument and its psychometric properties :

7.2.1 The measuring instrument :

In order to gather data to meet the objectives of the current study, the researchers developed a
questionnaire. Coping strategy was assessed by asking participants the extent to which they used
each item to cope with problems.The questionnaire consisted of 15 items and reflecting three
types of strategies :1. mental health strategies,2. religious media strategies, 3.and social
strategies.The items were measured on a 5-point Likert scale (see table1).

Table 1. The research 5-point Likert scale response options

Options	Very small degree	small degree	Moderate degree	Large degree	Very Large degree
Value	01	02	03	04	05

Source : the researchers

In order to to create performance standards to determine categories for the participants' coping
responses, we followed the steps below :
The total score of the questionnaire ranges from 15 to 75 based on the number of items and the
value of each response option.
1.(The upper limit of the scale) – (The lower limit of the scale) :(5-1)=4. Based on this equation
three categories of levels were created.
2. Class Length=4/3=1.33
3.The lowest level: 1+1.33=2.33. i.e : the score is between [1-2.33].
4.The moderatelevel: 2.33+1.33=3.66 i.e: the score is between [2.33-3.66].
5.The highest level: 3.66+1.33=5. i.e : the score is between [3.66-5].

7.2.2 Psychometric properties of the questionnaire

A. Validity :

The internal consistency was used to assess the validity evidence of the research instrument. The
internal consistency reflects the extent to which the participants' responses are consistent across
the items on a multiple-item measure. In general, all the items on such a measure are supposed to
reflect the same underlying construct, so people's scores on those items should be correlated with
each other.The values of the research instrument validity are listed below (table 2).

Table 2. Results for the internal consistency validity of the scale

Dimensions	mental health strategies	religious media strategies	social strategies
Total score	**0,46	**0,48	0,39*

** :significant at ($\alpha \leq 0.05$)   * : significant at ($\alpha \leq 0.01$)

Source : the researchers based on the SPSS outcomes.

Table 2 displays the validity index of each sub-scale.It can be concluded that evey sub-scale is significantly correlated to the overall scale.

B. Reliability: To assess the reliability of the research measuring instrument, Alpha Cronbach coefficient was calculated. The questionnaire has shown good reliability with Cronbach's α = .84.

8- Results and discussion.

8.1 Results:

Question one: What is the degree of commitment of university students to the lockdown regulations?

To examine the degree of commitment presented by during quarantine we computed the means and standard deviations of the responses of sample members on each item as shown in table 3.

Table 3. The means and standard deviations for the degree of commitment of university students to the lockdown regulations.

N	Items wording	Mean score	SD	Rating level
1	I use the preventive measures (wearing a mask - sterilization......) to avoid infection	2.95	0.76	Moderate
2	I talk to my family about the dangers of COVID-19	3.11	0.85	High
3	I sometime sresort to taking sedatives.	0.56	.035	Low
4	I listen to the religious lessons and watch them more than I used to.	3.05	.074	High
5	I adhere to the precautionary instructions during the quarantine.	2.72	0.63	Moderate
6	I think about the good things instead of	3.21	.098	High

	worrying about COVID-19			
7	I communicate with others through social media platforms about the COVID-19	2.41	.075	Moderate
8	I commit to reading and listening to the Noble Qur'an more than before.	2.06	.054	Moderate
9	I follow the news of the Covid-19 virus constantly on TV programs	3.34	.089	High
10	I feel free to express my views and opinions to others during the quarantine	3.76	.092	High
11	I spend more time reading	2.67	0.57	Moderate
12	I exercise more than before	2.89	0.61	Moderate
13	I spend many hours browsing social networks	3.75	0.74	High
14	I isolate myself from my family...	2.11	0.54	Moderate
15	I isolate myself from my friends and neighbours	2.25	0.68	Moderate

The descriptive statistics for the research questionnaire denotes that the level of the sample members' commitment to the lockdown regulations was moderate in general, as the overall mean of the participants' responses to the items was (M = 2.726) which is within the category [2.33-3.66]. The mean value denotes a moderate level when referred to the assumed criteria mentioned earlier in this paper.

Question two : What strategies have been used by university students to cope with the psychological distress during lockdown?

 In order to examine this question, the arithmetic means and standard deviations were calculated for the performance of the sample members on each item. The resulting data are shown in table 4:

Table 4 Coping strategies sub-sclale means and standard deviations.

Coping strategies	Mean	SD	Score	Rating level	Rank
mental health strategy	60.53	21.44	2.86	Moderate	2
Religious media strategy	58.21	19.07	2.62	Moderate	3
Social strategy	62.47	12.56	2.97	Moderate	1

According to the descriptive statistics displayed in table 4, it can be concluded that the predominant and most common strategy the participants used to cope with the psychological distress generated by the lockdown regulations was the social strategy, followed by the mental health strategy, and finally the religious media strategy.

8.2 Analysis and interpretation of findings :

The current study aimed to determine the level of commitment to the lockdown regulations among the students of Khemis Miliana university.It was also sought through this research to identify the strategies the students adopted in order to cope with the psychological distress. The results revealed that the participants expressed a moderate level of commitment to the lockdown regulations due to long-term implications of lockdown. In the early stages of the panademic, everyone respected strictly the regulations to prevent overall virus transmission to the community and mainly to parents, but this situation did last longer to start a new era of profound moments of deep boredom and psychological distress. Accordingly,recent evidence suggests that people who are kept in isolation and quarantine experience significant levels of anxiety, anger, confusion, and stress. It can also engender a high prevalence of psychological distress, manifested most frequently by low mood and irritability (Brooks et al, 2020). This can be explained by the fact that the students perception of the situation was different at the beginning of rhe lockdown.They felt relaxed in the beginning stage of COVID-19 lockdown because they had unexpected vacations. They thought that it was a blessing in disguise, as university students seldom get vacations .But this perception was soon followed by growing doubt about the duration of lockdown which ended up in experiencing deep frustration (Tariq et al ,2020).

Charles argues that many college students experienced greater disruption to their living situation, work, and education during the COVID-19 pandemic than did other groups in society (Charles et al, 2021). She added that they may be concerned about the impact of the pandemic on their academic progress and ability to enter the workforce. And for those who were not living with their parents prior to the pandemic may also be troubled by returning to a living environment that may not be as comfortable as their college environment or as conducive to their now-online learning ; further, they may worry about transmitting the virus from their college to their family's household (Charles et al, 2021).

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The first and most common coping strategy the students reported to have adopted to alleviate the severity of the psychological distress caused by the lockdown regulations was the social strategy. This strategy allowed them to be constantly communicating with their colleagues through social media, and helped them express their opinions freely during lockdown. Perhaps it was the most appropriate strategy that allowed students to feel more social support.

The second most important strategy was the mental health strategy.Student tried to get rid of stressors by thinking about good things instead of being preoccupied with the virus and its news, adhering to the preventive rules, and through which they also resorted to exercising as well as reading.

The third strategy, was the religious media strategy where students tended to recite and listen to the Holy Qur'an, and listen to religious speeches as a way to cope with the psychological distress. The results of this study are consistent with the findings of a number of previous studies, where students opted for avoidance, isolation, religious practices, domestic skills, and other methods of self-control during lockdown (Tariq et al ,2020).

9. Conclusion :

All people througout the word have suffered from different types of psychological and emotional problems including the psychological distress due the prolonged period of lockdown caused by the rapid spread of the Covid-19 epidemic. And in order to reduce or even eliminate their psychological problems and maintain their psychological and emotional stabilty, people often tend to use different types of coping strategies.

As for our sample, It was found that the students of the university of Khemis Miliana, like other students, showed a diversification in coping strategies. Despite the importance of findings, the interpretation of the results should be limited to the study sample and cannot be generalized to all Algerian students, especially in this circumstances as it would be better to conduct further studies in different settings to get profound and rich knowledge about the different coping strategies and to determine whether there is a significant difference in these strategies as function of different variables.

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