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ORIGINAL RESEARCH

Lockdown Fatigue and University Students: Exploring the Factors That Play Significant Roles in the Level of Lockdown Fatigue Among University Students in the Era of COVID-19

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Background: Due to the COVID-19 global pandemic, the educational sector has undergone a series of changes which have affected both learners and students alike. As a result, the distortion of the students' daily routine, isolation, social distancing and potential exposure to the COVID-19 virus changed almost all of the aspects of student life which has led to exhaustion of students, with both psychological and emotional challenges. Therefore, the main aim of this study is to determine the factors that have a significant impact on the level of lockdown fatigue among university students in the era of COVID-19.

Methods: A cross sectional was undertaken for this study. A questionnaire was designed and then shared electronically with the respondents of this study. The respondents were 819 students from tertiary institutions in Iraq. Some of the scales used in ranking the responses of the participants are the Lockdown Fatigue scale, Brief Resilience Scale and Coping Behaviours questionnaire. Data analysis was.

Results: Overall, the students had a high level of fatigue due to lockdown-measurement. Emptiness was one of the dominant feelings experienced by the students, along with concern for the safety and well-being of their own families. There was general agreement that students take a long time to return to normal routines after stressful events. The students also indicated that they cope with the lockdown through a variety of activities, ranging from making jokes about the situation to putting their faith in a higher power. Male student were less likely to suffer from lockdown-fatigue, however, studying in public university, being from urban areas, and studying in science field are the most significant factors that increase the level of lockdown. However, lower levels of lockdown fatigue were linked to significantly higher levels of personal resilience and coping abilities.

Conclusion: High level of lockdown fatigue among students is noticed, and several factors have been identified. Therefore, it is helpful for students to consistently work on reinforcing positive habits which would help them to build resilience when they are subjected to stressful conditions and scenarios.

Keywords: lockdown, COVID-19 pandemic, personal resilience, coping behaviours

Introduction

Due to the lockdowns and restrictive measures imposed to contain COVID-19, individuals have faced exhaustion, strain and psychological issues which can be collectively described as lockdown fatigue. Lockdown fatigue encapsulates the exhaustion which individuals face from the exhaustion from coping with the changes which the lockdown has induced. When the lockdown was firstly introduced, it was deemed as a temporal measure in which life would resume to normal within a few weeks. As a result, the populations were hopeful that the lockdowns would swiftly pass and regular daily duties would

commence. However, with the virus spreading across the country and mortality rising; people became increasingly exhausted with living under conditions of a strict lockdown and not having the liberty to move freely as before.²

The concept of lockdown fatigue has been explored in various contexts across the globe. This stems from the observation of how the energy, motivation and performance levels of employees under lockdown have shifted since the imposition of the conditions. One of the primary studies on lockdown fatigue was centred on how the shift in living conditions imposed by the pandemic would affect workers in general. The study indicated that the massive shift in living conditions would place an emotional and psychological toll on the workers which would in turn affect their performance in the organization.³ The workers would be uncertain of how long the lockdown would last, and how their work and personal lives would be affected by the rampage of the virus in the long term. For example, workers previously used to relax after work by going to pubs and other social gatherings. However, due to the lockdown the workers have been unable to participate in the social gatherings and any other activity which has brought them relief from their work and personal life. Therefore, the monotony of their routines would induce higher levels of lockdown fatigue.¹

Lockdown fatigue is induced by the news of impending doom which the individuals would hear. Bereavement and isolation are also factors which contribute to lockdown fatigue. This is intensified or reduced based on whether the individual has experienced the virus in close proximity or not. The lack of connection with friends and family would heighten the negative emotions which an individual is experiencing; which were previously absolved by their company. Additionally, the amount of time which individuals have without anything to do is another factor which would heighten the fatigue; leading to extreme boredom and potentially resorting to destructive behaviour patterns being formed.⁴ Uncertainty regarding the outcome of one's work and educational endeavours is also another trigger of lockdown fatigue, as the individuals in lockdown would be anxious whether their plans would still succeed or not. Therefore, it can be noted that lockdown fatigue is induced by a range of factors which range from contraction of the virus itself to the effect of lockdown measure on future prospects.⁵

As a result of the obvious lockdown, significant changes occurred in the educational sector. Students' daily routines were drastically altered by the lockdown. Students' options for filling their free time were severely restricted because of the ban on other non-essential activities, for example entertainment activities including going to cinema or practicing some sport or exercise activities. This effectively isolated the majority of students from their families, as social gatherings were banned and intercity travel was strictly monitored.⁶ People who had never had mental health issues before the pandemic developed them as a result of the lack of social contact. A lack of alternatives has exposed students to all aspects of the virus, including the loss of life and economic hardship, as they have kept up with the news.⁷

Lockdown fatigue is a result of the students' sense of impending doom, which has resulted in psychological stress and emotional difficulties for them. This result has clearly proved in a previous literature study which reported that university students may experience significant fatigue as a result of mandatory lockdown or home confinement measures to prevent the spread of COVID-19.¹ Furthermore, Students have unavoidably been exposed to trauma as a result of the pandemic's constant reporting on fatalities and the actual witnessing of family members' deaths. However, the way in which different people react to trauma varies widely.⁸ Some people are able to recover quickly from stressful events, while others require more time. For the vast majority of people, adaptability and emotional stability would be essential in these challenging times, but this is not the case because the situation is constantly shifting, presenting new challenges and dynamics.^{8,9}

Several studies have been undertaken on how lockdown fatigue has affected students, and this has yielded a range of views. 1,10,11 However, there is a gap in the geographical context of Iraq which this study seeks to contribute to. Iraq is in the Middle East thus the findings from the region would shed insights on how lockdown fatigue is affecting the students in that region and the findings can be compared and contrasted to those from existing studies. Therefore, this study seeks to expand the range of insights on lockdown fatigue among students as the pandemic is a global issue which would be enhanced from the diverse representation. This study would help policy makers in identifying the common effects of lockdown fatigues and modifying the operations in their institutions to provide increased support for their students during stressful time such as in lockdown. Therefore, the main aim of this study is to determine the factors that have a significant impact on the level of lockdown fatigue among university students in the era of COVID-19.

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Methods

Study Design, Samples, and Setting

Internet-based surveys were conducted in Iraq from December 2020 through April 2021, during the mandatory lockdown imposed by the coronavirus pandemic. Students from various Iraqi provinces who were enrolled in colleges and universities were included in this study. The Qualtrics sample size calculator was used to estimate the sample size needed. A sample size of at least 385 was found to be necessary for three predictors to achieve an 80% power with an effect size of 0.05 and an alpha of 0.05. However, only 819 students out of a total of 1000 from 15 Iraqi universities responded to our online survey (a response rate of 81.9%).

Inclusion and Exclusion Criteria

To be eligible for the study, university students must meet the following requirements: a) adult Iraqi students; b) be currently enrolled in a college or university; c) be full-time students; and d) give their consent to participate in the study. In a contrast, ineligible participants were the followings: i) students who are unwilling or hesitate to participate in the study; ii) students who cannot read and understand English properly; iii) foreigner students; iv) students whose age is less than 18 years old.

Research Instruments

Three different questionnaires, each with five standardised scales, were adopted and used to collect data, including the lockdown fatigue scale, the Brief Resilience Scale, and the Coping Behaviors Questionnaire (CBQ).

Lockdown Fatigue Scale

Symptoms of exhaustion from coronavirus lockdown or home confinement were assessed using this scale. From 1 (never) to 5 (always), participants rated their level of agreement with each of the 10 statements on a 5-point Likert-type scale. Each score was classified as mild (1–15), moderate (16–30), high (31–45), or severe (45–50) based on the maximum possible score. A content validity of 0.91 and test-retest reliability of 0.93 were found for the scale's content validity.

Brief Resilience Scale

It was determined whether or not students could bounce back from the stress of the pandemic and the ensuing lockdown using this six-item scale. To gauge their agreement or disagreement, students used a Likert-type scale with a 0–5 point range (strongly agree to strongly disagree). It was determined that the scale's content validity was at least 0.89 and its test-retest reliability was at least 0.90.

Coping Behaviours Questionnaire

This scale measured how college and university students coped with a mandatory lockdown time period. An eight-item scale was used to measure various aspects of spirituality and other forms of support such as seeking additional information and consulting with others and using humour to detach oneself from the situation. A Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used by participants to answer the questions. The content validity of the scale was 0.94, and the test-retest reliability of the scale was 0.88.

Data Collection

During the data collection period, questionnaire items were created using SurveyMonkey and then survey link was generated as offshore data collection was impossible due to lockdown measurement during the period of data collection (December 2020 to April 2021). The introductory page of the online form included information about the study and a letter requesting their permission to participate. Using the snowball sampling method, the survey link was distributed among the targeted participants via WhatsApp, email, Instagram, and Facebook, among other social media platforms. After the first distribution, two reminders were sent out at three-week intervals to increase the response rate. Respondents' names and current university names were omitted from the survey to protect their anonymity.

Data Analysis

Before entering the data into SPSS version 26, it was double-checked for completeness. We calculated frequencies, standard deviations, and means to quantify the data. The Kolmogorov–Smirnov test was used to confirm the data distribution's normality. Linear multiple logistic regression was used to determine the factors that have a significant impact on the level of lockdown-fatigue. P 0.05 was chosen as the level of statistical significance.

Results

Socio-Demographic Characteristics

This survey's respondents are students from universities and tertiary institutions throughout Iraq. Only over half of the respondents (50.4%) were male, and nearly all were of Arabic ethnicity (95.4%). The Kurdish ethnicity was represented by a smaller proportion of the respondents (4.6%). The majority of the students (91.3%) lived in cities, and STEM was the most popular field of study (80.4%). Humanities, Arts, Literature, and Management were the other fields of study represented among the respondents. The mean age was 23.65, and the mean scores for Lockdown fatigue, Personal Resilience, and Coping skills were just over 3, as shown in Table 1.

Participants' Lockdown Fatigue

The respondents' responses were listed on the lockdown fatigue scale (Table 2), and they received a total score of 33.5 out of a possible 50. The maximum possible score on the scale was 50, and the scores were classified as mild (1–15), moderate (16–30), high (31–45), and severe (46–50) fatigue. Emptiness was one of the dominant feelings experienced by the students, along with concern for the safety and well-being of their own families (40.5%). The students also reported experiencing sadness and depression during the lockdown period, which was exacerbated by the lockdowns and their

Table I Socio	-Demographic	Characteristics	of Respondents	(n=819)
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Characteristic		Frequency (%)	
Gender	Male	413 (50.4)	
	Female	406 (49.6)	
Ethnicity	Arab	781 (95.4)	
	Kurdish	38 (4.6)	
Type of university/	Public	146 (17.8)	
college	Private	673 (82.2)	
Type of residence	Urban	748 (91.3)	
	Rural	71 (8.7)	
Study field	STEM (eg Science, Technology, Engineering and Mathematics)	659 (80.4)	
	Non-STEM (eg Humanities, Arts, Literature and Management)	160 (19.6)	
	Mean	SD	
Age	23.65	6.31	
Lockdown fatigue score	3.34	0.67	
Personnel resilience score	3.36	0.58	
Coping skills score	3.47	0.59	

Table 2 Responses of Participants on the Lockdown Fatigue Scale (n=819)

Items*	Never	Ever	Sometimes	Often	Always
I worry a lot about my personal and family's safety during this pandemic	54 (6.6)	19 (2.3)	246 (30.0)	168 (20.5)	332 (40.5)
I have difficulty concentrating and distracted easily	82 (10.0)	43 (5.3)	357 (43.6)	222 (27.1)	115 (14.0)
I frequently felt weak or tired as a result of this lockdown	65 (7.9)	58 (7.1)	339 (41.4)	217 (26.5)	140 (17.1)
I have been feeling irritable	86 (10.5)	67 (8.2)	309 (37.7)	201 (24.5)	156 (19.0)
I have difficulty falling or staying asleep over thinking about this pandemic	172 (21.0)	106 (12.9)	306 (37.4)	147 (17.9)	88 (10.7)
I have felt sad and depressed as a result of this lockdown	67 (8.2)	65 (7.9)	257 (31.4)	228 (27.8)	202 (24.7)
I have been losing my interests to do the usual things I love	90 (11.0)	71 (8.7)	287 (35.0)	197 (24.1)	174 (21.2)
I have been experiencing a general sense of emptiness	68 (8.3)	67 (8.2)	311 (38.0)	234 (28.6)	139 (17.0)
I have been experiencing headaches and body pains	131 (16.0)	73 (8.9)	304 (37.1)	212 (25.9)	99 (12.1)
I have thoughts that this pandemic will never end soon	91 (11.1)	57 (7.0)	247 (30.2)	242 (29.5)	182 (22.2)

Notes: *Adapted from Labrague LJ, Ballad CA. Lockdown fatigue among college students during the COVID-19 pandemic: Predictive role of personal resilience, coping behaviors, and health. Perspect Psychiatr Care. 2020. Villey Periodicals LLC

restrictive conditions. The students, on the other hand, indicated that the feelings they had the least of were loss of sleep due to the pandemic and any headaches or body aches.

Participants' Personnel Resilience

Participants were asked how they recover from traumatic or unpleasant events related to the pandemic and imposed lockdowns. During the traumatic situations, the respondents expressed that they would struggle to get through the ordeal. Participants indicated that coping with the stressful and difficult times imposed by the pandemic was their most difficult challenge. There was general agreement that students take a long time to return to normal routines after stressful events. According to the responses, participants have a difficult time moving on from traumatic events (Table 3).

Participants' Coping Skills

The participants were asked which activities they used to cope with the mandatory lockdown period. The students indicated that they cope with the lockdown through a variety of activities, ranging from making jokes about the situation to putting their faith in a higher power. The most common action taken by participants to cope during the lockdown was "I put my trust in God." This was followed by a search for answers to any questions they had about the lockdown. Participants also turned to alternative activities to distract themselves from the events that were taking place, as well as seeking emotional support from friends and family. The least common course of action was to turn to alcohol and drugs to feel better (Table 4).

Factors Affecting the Level of Lockdown Fatigue

Logistic regression showed that men are statistically 3 times less likely to have lockdown fatigue compared to their reference, female (OR=3.27; 95% CI=1.47–7.27;p=0.0001). Students who are Arab, studying in public university, from urban area and STEM field are reported to have significantly higher level of lockdown fatigue as shown in Table 5. In addition, lower levels of lockdown fatigue were linked to significantly higher levels of personal resilience (OR=2.06; 95% CI=1.12–3.49) and coping abilities (OR=1.304; 95% CI=1.192–5.731).

Discussion

Lockdown fatigue among individuals is a growing concern for the healthcare industry as the pandemic persists with new variants of the coronavirus emerging. This is a result of the exhaustion which individuals are facing due to the pandemic and the lockdowns imposed by the authorities. The presence of lockdown fatigue has been explored in the study of Murphy (2020) and Perez (2021), and they have both confirmed that the pandemic has taken an emotional and psychological toll on individuals from different walks of life. Employees were exhausted with coping with the pandemic and the evolving scope of employment due to closures, job losses and shift to virtual and hybrid working. Students were frequently concerned about whether or not they would survive the pandemic without contracting the virus, as well as how their educational path would unfold. As a result, this study focuses on lockdown fatigue, as well as personal resilience and coping behaviors among Iraqi students.

One of the key factors which affected lockdown fatigue are gender, where females were found to have higher levels of lockdown fatigue than the males. This can be attributed to how women are deemed to be more sentimental and often have to carry the extra responsibilities within the household. However, this finding is contradicted by the study of Liu et al, which finds that males indicated higher lockdown fatigue levels than the females. The rationale behind these contrasting views is not fully established thus it can be attributed to the specific respondents themselves without any other reason. This could be addressed by the findings of Hendriksen et al, which finds no difference in lockdown fatigue levels between males and females. Therefore, this study could be used to conclude that lockdown fatigue levels are not specifically influenced by gender per se, but it is dependent on the individual's response to stressful events and their coping behaviours.

Additionally, students in STEM were found to have higher lockdown fatigue levels than their counterparts in other faculties. This study indicates how these students felt more trained by the lockdown and learning during the pandemic. This would be attributed to the hands-on approach which STEM students are used to, which was minimised by the lack

Table 3 Responses of Participants on the Brief Resilience Scale (n=819)

Items*	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I tend to bounce back quickly after hard times	76 (9.3)	130 (15.9)	247 (30.2)	264 (32.2)	102 (12.5)
I have a hard time making it through stressful events	49 (6.0)	98 (12.0)	230 (28.1)	324 (39.6)	118 (14.4)
It does not take me long to recover from a stressful event	46 (5.6)	174 (21.2)	204 (24.9)	292 (35.7)	103 (12.6)
It is hard for me to snap back when something bad happens	54 (6.6)	125 (15.3)	193 (23.6)	320 (39.1)	127 (15.5)
I usually come through difficult times with little trouble	45 (5.5)	111 (13.6)	246 (30.0)	315 (38.5)	102 (12.5)
I tend to take a long time to get over setbacks in my life	67 (8.2)	138 (16.8)	179 (21.9)	272 (33.2)	163 (19.9)

Notes: *Adapted from Smith BW, Dalen J, Wiggins K, Tooley E, Christopher P, Bernard J. The brief resilience scale: assessing the ability to bounce back. Int J Behav Med. 2008;15(3):194–200. Copyright © Taylor & Francis Group, LLC.

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Table 4 Participants' Responses on the Coping Behaviours Questionnaire Skills (n=819)

Items*	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I try to get advice from someone about what to do	59 (7.2)	92 (11.2)	186 (22.7)	337 (41.1)	145 (17.7)
When I have a question about the situation, I search for information	36 (4.4)	77 (9.4)	149 (18.2)	322 (39.3)	235 (28.7)
I use alcohol or drugs to make myself feel better	354 (43.2)	111 (13.6)	127 (15.5)	133 (16.2)	94 (11.5)
I put my trust in God	33 (4.0)	34 (4.2)	83 (10.1)	150 (18.3)	518 (63.2)
I turn to work or other substitute activities to take my mind off things	39 (4.8)	77 (9.4)	224 (27.4)	321 (39.2)	158 (19.3)
I eat more than usual to calm myself down	76 (9.3)	137 (16.7)	195 (23.8)	273 (33.3)	138 (16.8)
I enjoy the jokes about the situation	48 (5.9)	112 (13.7)	229 (28.0)	304 (37.1)	126 (15.4)
I try to get emotional support from friends or relatives	61 (7.4)	84 (10.3)	202 (24.7)	280 (34.2)	192 (23.4)

Notes: *Reproduced from Savitsky B, Findling Y, Ereli A, Hendel T. Anxiety and coping strategies among nursing students during the covid-19 pandemic. Nurse Educ Pract. 2020;46:102809. Copyright © 2020 Elsevier Ltd. All rights reserved.

Table 5 Logistic Regression of Factors Significantly Associated with Lockdown Fatigue

Variables	Variable Coefficient (B)	OR (95% CI)	P-value*
Gender (Ref: female) Male	-1.18	3.27 (1.47–7.27)	0.0001
Race (Ref: Kurdish) Arab	1.26	2.8 (1.37–4.52)	0.003
Type of university (Ref: private) Public	0.89	2.5 (1.01–5.93)	0.0001
Type of residence (Ref: rural) Urban	1.59	3.95 (1.84–8.73)	0.0001
Study field (Ref: non-STEM) STEM	0.68	2.13 (1.13–4.15)	0.016
Personnel resilience score mean	-1.63	2.06 (1.12–3.49)	0.0001
Coping skills score mean	-2.69	1.304 (1.192–5.731)	0.0001

Notes: *Statistically significant value (p<0.05). Ref: Reference (constant).

of physical contact with their teachers during lockdown. This is reflected in the study of Lautenbach & Randell (2020), who indicated how STEM educators were facing difficulty in disseminating their lessons and engaging their students during the pandemic.²⁰ It has been noted that when students have difficulty in learning, they are more likely to disengage the learning process, while also experiencing anxiety and other emotional difficulties. This idea is reflective of the study of Mella-Norambuena et al, who noted a stark increase in mobile phone usage by STEM students which would be compensatory of their inadequacies in learning.²¹ Arevalo et al, note that some of the inadequacies which the STEM students faced were their linguistic and reporting skills, which would have been alleviated by comprehensive consultation in physical classes.²² In the study of Zis et al, medical students also faced difficulty in coping with the lockdown as their learning patterns were disrupted and they felt overwhelmed with the increasing burden in keeping up with their studies.²³

Measures, such as virtual learning, have been implemented to ensure educational continuity in the wake of system disruption. Many people believe that virtual learning is more beneficial than it actually is.²⁴ However, despite the fact that it may appear to be an easy transition, it requires a great deal of time and effort and presents its own set of challenges. The findings of Bu et al in the United Kingdom and Reicher and Drury, who studied how studying from home during the pandemic would affect students under stress,^{25,26} are similar to those of the current study findings. There is a lack of stability in many students' homes, making it difficult for them to focus on their studies. As a result, students are struggling to keep up academically and may even become disinterested in learning altogether.²⁷ Since the shift in identifying patterns and facilities has led to an increased level of lockdown fatigue, this study focuses on this.

Students enrolled in public universities and in urban areas experienced high levels of lockdown fatigue. This can be attributed to how modern life was greatly restricted by the lockdown measures, leaving people isolated, strained with expenses and being increasingly fearful of how the pandemic would affect them and their prospects. While the pandemic affected people from all walks of life, lockdown fatigue was mainly pronounced in urban areas due to their behavioural patterns which encourage socialization, frequent movements and higher expenses. This is reflected in the study of Abbassi (2020) which noted how behavioural patterns have a bearing on how one handles the pandemic fatigue. Poor behavioural skills which are mainly based on frivolity are insufficient to sustain one from being worn down by the pandemic, while Baloran (2020) asserts that the development of positive behavioural skills which boost resilience is essential. Therefore, the findings of this study would suggest how college students in urban areas would have to actively develop positive behaviours which boost resilience in a healthy manner. Furthermore, Arab students were noted as having higher levels of lockdown fatigue than their Kurdish counterparts. This finding is the first of its kind as no other studies have investigated the difference in lockdown effect between Arab and Kurdish people. This result suggests that

ethnicity would have been affected at a greater scale than the others by the lockdown fatigue. The rationale behind this finding cannot be easily identified, but it would slightly allude to the manner in which they deal with stressful events and their outcomes.

In order to overcome obstacles and uncomfortable situations, it is necessary to have a high level of personal resilience, according to the results of this study. Students' personal resiliency has been put to the test as they must continue on a common journey, namely their education, during the lockdown. According to the Labrague et al, 2020 study, students' ability to learn and their success rate are evidence of this. Most students have maintained their improved study habits and are now better equipped to conduct independent research and self-study. It's been documented that going back to school despite personal hardships and fluctuating anxiety levels takes a toll on students' minds and bodies.²⁹ This study's findings suggest that when confronted with unpleasant or stressful events, people develop both conscious and unconscious coping mechanisms. This occurs due to the fact that some situations cannot be changed or easily rectified, so the individual must adjust and cope with the tense events.³⁰ Coping mechanisms should ideally be beneficial in terms of assisting the individual in coping without causing direct harm in both the short and long term. Negative coping mechanisms, such as binge-eating, alcohol and drug abuse, momentarily numb the individual from the current situation, but they soon cause harm rather than help.³¹ According to the findings of this study, among the most prevalent coping mechanisms used by students is putting their trust in God, or turning to spirituality to find answers to their problems.³² While everyone's concept of a deity differs, the widely held belief is that turning to a deity in times of stress will result in relief, guidance, and protection. This is consistent with the findings of Molteni et al, who found that in the period preceding the lockdown, people of various faiths became more committed to their respective religions as they sought relief from the pandemic. 33,34

This study finds that humour and making light of the situation at hand is another coping strategy which is adopted in stressful times. Individuals seek to find humour in their stressful situations, making jokes of the developments of the situation such as the wearing of masks, isolation and the various home remedies, as similarly noted in the study of Kant.2021,³⁵ Students have also resorted to sharing jokes of how their life during lockdown has become, drawing similar experiences which lead to a common conclusion that the lockdown has been a time of isolation, boredom and emptiness. Therefore, this study indicates how comic relief can be incorporated as a coping strategy which can be used to alleviate lockdown fatigue and eventually lead

This study highlights how searching for information is a coping strategy which is often used when one is in a stressful situation which has complex features to it. Students cope by researching the COVID-19 pandemic in order to gain insight into how they can effectively deal with the pandemic. Students have been very interested in learning about the various vaccinations that are available and how they work.³⁶ With so much information available on the internet, students enjoy sharing their knowledge with their peers, which leads to lengthy discussions about the pandemic. This would give the person seeking information a sense of control over the situation because they would not be vulnerable to any factors that they are unaware of, as evidenced by the Wasil et al. 2020 study.³⁷

Impact on Practice

The output of this study can be applied to the medical practice, by prescribing lifestyle habits which can be endorsed in order to cope with stressful situations. It is essential for the medical practice to contribute to the treatment of individuals who have undergone stressful events and help them adjust to their usual personal, educational and work routines. This would also provide room for the use of non-medical treatments in coping with high pressure events that would affect the students.

Strength and Limitations of the Study

The strengths of its study lies in its use of the lockdown fatigue scale. The scale provided a comprehensive range of questions which would probe into the varied dimensions of lockdown fatigue which affected the tertiary students in Iraq. This is significant because it provides new insights to the topic of study due to the unique circumstances in the Iraqi region; where this research was undertaken. The study's strength is also drawn from how it is undertaken in comparison with other studies along the same topic, yet from different geographical locations. The wide range of literature used is

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useful in identifying which lockdown fatigue symptoms are common among all students and which ones are particular for the Iraq context; which is useful for application in practice. The evolving scope of the COVID-19 pandemic, as well as the possibility of future lockdowns, are the study's limitations. Another limitation of the study is the uncertainty about the duration of the pandemic. Because the responses in this study are based on emotional responses, they may be biased; however, this is mitigated by selecting a sufficient sample size for the study.

Conclusion

Lockdown fatigue is a psychological condition that has arisen as a result of the COVID-19 pandemic and is affecting an increasing number of students. The exhaustion of trying to deal with the pandemic and its restrictive policies has had a significant impact on the student population. With the pandemic spreading in waves and a surge in new infections, lockdowns are likely. Resilience in students is being tested as they have to continue their educational journey despite the setbacks and interruptions from their previous routines. Students have also had to cope with loss of family members, friends and illness while having to continuously pursue their educational ventures. Coping mechanisms have also been implemented, both consciously and unconsciously to cope with the stressful and unpleasant situations of the pandemic. For students to cope effectively, they would need to develop positive coping mechanisms because the period in which the pandemic and its complexities will last is uncertain. Students must also develop emotional resilience and gain knowledge how to navigate surviving adversity and recovering from loss. This could be facilitated by educational and social institutions providing counselling services to university students. It is also suggested that educational institutions consider the psychological impact of the pandemic on their students and devise context-specific methods to assist their students in recovering from unpleasant experiences during this period.

Data Sharing Statement

The data that support the findings of this study are available from the author "Ali Haider Mohammed" upon reasonable request.

Ethical Approval

All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The Institutional Research Ethics Committee at Al Rafidain University College approved this study's ethics (EC-68-2021).

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The authors declare that there is no conflict of interest regarding the publication of this paper.

References

- Labrague LJ, Ballad CA, Tsaras K. Lockdown fatigue among college students during the COVID-19 pandemic: predictive role of personal resilience, coping behaviors, and health. Perspect Psychiatr Care. 2020;56(2):308–315. doi:10.1111/ppc.12428
- Gold JA, Wong KK, Szablewski CM, et al. Characteristics and clinical outcomes of adult patients hospitalized with COVID-19—Georgia, March 2020. Mortal Wkly Rep. 2020;69(18):545. doi:10.15585/mmwr.mm6918e1
- 3. Volkan E, Volkan E. Under the COVID-19 lockdown: rapid review about the unique case of North Cyprus. *Psychol Trauma*. 2020;12(5):539. doi:10.1037/tra0000809

- 4. Jebril N. Impact of the COVID-19 pandemic on the environment â€"A case study of Iraq; 2020.
- Maatuk AM, Elberkawi EK, Aljawarneh S, Rashaideh H, Alharbi H. The COVID-19 pandemic and E-learning: challenges and opportunities from the perspective of students and instructors. J Comput Higher Educ. 2021:1–18. doi:10.1007/s12528-021-09274-2
- 6. Mahase E. Covid-19: Was the Decision to Delay the UK's Lockdown Over Fears of "Behavioural Fatigue" Based on Evidence? British Medical Journal Publishing Group; 2020.
- 7. Mahase E. Covid vaccine could be rolled out to children by autumn. BMJ. 2021;372. doi:10.1136/bmj.n372
- 8. Field T, Mines S, Poling S, Diego M, Bendell D, Veazey C. COVID-19 lockdown fatigue. Am J Psychiatric Res and Rev. 2021;4(1):27.
- 9. Abbasi K. Behavioural fatigue: a flawed idea central to a flawed pandemic response. BMJ. 2020:m3093. doi:10.1136/bmj.m3093
- Hassan BAR, Mohammed AH, Wayyes AM, et al. Exploring the level of lockdown fatigue and effect of personal resilience and coping behaviours on university students during the covid-19 pandemic: a cross-sectional analysis from Iraq. Curr Psychol. 2022:1–9. doi:10.1007/s12144-022-02779-8
- 11. Moreno-Fernandez J, Ochoa JJ, Lopez-Aliaga I, et al. Lockdown, emotional intelligence, academic engagement and burnout in pharmacy students during the quarantine. *Pharmacy*. 2020;8(4):194. doi:10.3390/Pharmacy8040194
- 12. Smith BW, Dalen J, Wiggins K, Tooley E, Christopher P, Bernard J. The brief resilience scale: assessing the ability to bounce back. *Int J Behav Med.* 2008;15(3):194–200. doi:10.1080/10705500802222972
- 13. Savitsky B, Findling Y, Ereli A, Hendel T. Anxiety and coping strategies among nursing students during the covid-19 pandemic. *Nurse Educ Pract*. 2020;46:102809. doi:10.1016/j.nepr.2020.102809
- 14. Murphy J. Pandemic fatigue; 2020.
- 15. Pérez LM, Castellano-Tejedor C, Cesari M, et al. Depressive symptoms, fatigue and social relationships influenced physical activity in frail older community-dwellers during the Spanish lockdown due to the COVID-19 pandemic. *Int J Environ Res Public Health*. 2021;18(2):808. doi:10.3390/ijerph18020808
- 16. Amanzio M, Canessa N, Bartoli M, Cipriani GE, Palermo S, Cappa SF. Lockdown effects on healthy cognitive aging during the COVID-19 pandemic: a longitudinal study. *Front Psychol.* 2021;12:685180.
- 17. Majumdar P, Biswas A, Sahu S. COVID-19 pandemic and lockdown: cause of sleep disruption, depression, somatic pain, and increased screen exposure of office workers and students of India. *Chronobiol Int.* 2020;37(8):1191–1200. doi:10.1080/07420528.2020.1786107
- 18. Liu S, Xi H-T, Zhu -Q-Q, et al. The prevalence of fatigue among Chinese nursing students in post-COVID-19 era. PeerJ. 2021;9:e11154.
- 19. Hendriksen PA, Garssen J, Bijlsma EY, Engels F, Bruce G, Verster JC. COVID-19 lockdown-related changes in mood, health and academic functioning. Eur J Investig Health Psychol Educ. 2021;11(4):1440–1461. doi:10.3390/ejihpe11040103
- 20. Lautenbach G, Randell N. Through the COVID-19 looking glass: coping skills for STEM educators in the time of a pandemic and beyond. *J Balt Sci Educ*. 2020;19(n6A):1068–1077. doi:10.33225/jbse/20.19.1068
- 21. Mella-Norambuena J, Cobo-Rendon R, Lobos K, Sáez-Delgado F, Maldonado-Trapp A. Smartphone use among undergraduate STEM students during COVID-19: an opportunity for higher education? *Educ Sci.* 2021;11(8):417. doi:10.3390/educsci11080417
- 22. Arévalo M-J, Cantera MA, García-Marina V, Alves-Castro M. Analysis of university STEM students' mathematical, linguistic, rhetorical-organizational assignment errors. *Educ Sci.* 2021;11(4):173. doi:10.3390/educsci11040173
- 23. Zis P, Artemiadis A, Bargiotas P, Nteveros A, Hadjigeorgiou GM. Medical studies during the COVID-19 pandemic: the impact of digital learning on medical students' burnout and mental health. *Int J Environ Res Public Health*. 2021;18(1):349. doi:10.3390/ijerph18010349
- 24. Sharma K, Saji J, Kumar R, Raju A. Psychological and anxiety/depression level assessment among quarantine people during Covid19 outbreak. *J Drug Deliv Ther*. 2020;10(3):198–201. doi:10.22270/jddt.v10i3.4103
- 25. Bu F, Steptoe A, Fancourt D. Loneliness during a strict lockdown: trajectories and predictors during the COVID-19 pandemic in 38,217 United Kingdom adults. Soc Sci Med. 2020;265:113521. doi:10.1016/j.socscimed.2020.113521
- 26. Reicher S, Drury J. Pandemic fatigue? How adherence to covid-19 regulations has been misrepresented and why it matters. BMJ. 2021;372:n137.
- 27. Naddeo A, Califano R, Fiorillo I. Identifying factors that influenced wellbeing and learning effectiveness during the sudden transition into eLearning due to the COVID-19 lockdown. *Work*. 2021;68(1):45–67. doi:10.3233/WOR-203358
- Baloran ET. Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. J Loss Trauma. 2020;25(8):635–642. doi:10.1080/15325024.2020.1769300
- 29. Savitsky B, Findling Y, Ereli A, Hendel T. Nursing students in crisis mode: fluctuations in anxiety during the COVID-19–related lockdown. *Nurse Educ*. 2021;46(3):E33. doi:10.1097/NNE.000000000000955
- 30. Zhang L, Wang L, Liu Y, Zhang J, Zhang X, Zhao J. Resilience predicts the trajectories of college students' daily emotions during COVID-19: a latent growth mixture model. *Front Psychol.* 2021;12:644.
- 31. Khan MA. COVID-19 and the learning, teaching, assessment, and personal experiences of UK-based international students during lockdown. *In Handbook of Research on Lessons Learned from Transitioning to Virtual Classrooms During a Pandemic*. IGI Global; 2021:144–166.
- 32. Kadir AA, Kadir MNA, Mohammed S, Ridzuan AR, Farid M, Hasan AZ. Planned problem-solving strategy, resilience and element of religion in coping of covid 19 disease in Malaysia. *Int J Psychosoc Rehabil*. 2020;24(1). doi:10.37200/IJPR/V24I1/PR200653
- 33. Molteni F, Ladini R, Biolcati F, et al. Searching for comfort in religion: insecurity and religious behaviour during the COVID-19 pandemic in Italy. Eur Soc. 2021;23(sup1):S704–S20. doi:10.1080/14616696.2020.1836383
- 34. Prazeres F, Passos L, Simões JA, Simões P, Martins C, Teixeira A. COVID-19-related fear and anxiety: spiritual-religious coping in healthcare workers in Portugal. *Int J Environ Res Public Health*. 2021;18(1):220. doi:10.3390/ijerph18010220
- 35. Kant R. Covid-19 pandemic: looking in the mind of students during lockdown. Pac Int J. 2021;4(1):22-29. doi:10.55014/pij.v4i2.5
- 36. Chandra Y. Online education during COVID-19: perception of academic stress and emotional intelligence coping strategies among college students. Asian Educ Dev Stud. 2020;10(2):229–238. doi:10.1108/AEDS-05-2020-0097
- 37. Wasil AR, Franzen RE, Gillespie S, Steinberg JS, Malhotra T, DeRubeis RJ. Commonly reported problems and coping strategies during the COVID-19 crisis: a survey of graduate and professional students. *Front Psychol.* 2021;12:404. doi:10.3389/fpsyg.2021.598557

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