Consequences of COVID-19 Lockdown on Lebanese Adolescents' Experience of eLearning: A Call to Action

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Abstract: In general, adolescents are vulnerable to lifestyle changes, with implications on their physical and mental health. During COVID-19 lockdown, mental disorders emerged among the Lebanese youth, with prevalence of psychiatric symptoms related to insomnia, depression, and anxiety. The case of the adolescent population in Lebanon was alarming. Suicidal intentions appeared among Lebanese adolescents from 9th to 12th grades. Our study identifies depressive tendencies, stress and anxiety indicators in the respondents remarks. Our adolescent informants have volunteered a few suggestions for coping strategies. Following knowledge to action theory we provide some insight into call to action. Based on the findings from a qualitative review, we organize some insights to promote the development of the adolescent condition in a challenging eLearning environment. Finally, based on the comments from our students, we suggest that eLearning needs to be personalized, on demand, and gamified to keep our adolescent learners engaged.

1 INTRODUCTION

After its emergence from China in December 2019, the World Health Organization (WHO) declared COVID-19 (Coronavirus Disease) a global pandemic on March 11, 2020. As a result, the WHO imposed a confinement in form of a series of lockdowns that spanned two academic years, to limit the spread of the virus. Consequently, for adolescent learners, distance learning became the option of reference to contain the spread of the virus and to overcome the disruption of the academic year (Salmi, 2020). Diverse psychiatric disorders have alarmingly emerged since, where 1.6 billion children and adolescents were affected by the unprecedented lifestyle changes of the pandemic (Fegert et al., 2020). Stress, depression, post-traumatic stress disorder (PTSD), anxiety and even suicide rates have dramatically increased all over the globe (Shi et al., 2021). Additionally, violence, substance abuse and addictive behaviours were found to be the effects of COVID-19 related to changes in lifestyle and isolation (Mengin et al., 2020).

The setting of this study is in the country of Lebanon. Lebanon has been facing uncertainty due to the political and economic crises, even before the onset of the COVID-19 pandemic (Diwan and Abi-Rached, 2020). On February 29th, 2020, a lockdown was mandated by the education ministry. This left no time for preparation. The education ecosystem of curriculum, schools, teachers, parents and students were unprepared, not ready for the quick transition to virtual eLearning. Due to the COVID-19 lockdown, instead of being at school, making social connections and creating their own personality, adolescents were confined at home, adapting to new ways to learn. School closures and social isolation were enough to subvert adolescents' daily routine (Chaabane et al., 2021). Adolescents adapted to texting to socialize with friends, using social media as a source of information about COVID-19 infection, and playing video games during the lockdown. All have contributed to severe social anxiety (SSA) among Lebanese adolescents (Itani et al., 2021).

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1.1 Motivation

In general, adolescents are vulnerable to lifestyle changes, with implications on their physical health (Fares et al., 2017) and mental health (Younes et al., 2021). During COVID-19 lockdown, mental disorders emerged among the Lebanese youth, with prevalence of psychiatric symptoms related to insomnia, depression, and anxiety (Younes et al., 2021). The case of the adolescent population in Lebanon was alarming. Suicidal intentions appeared among Lebanese adolescents from 9th to 12th grades (Chahine et al, 2020). At the time of this research, we did not find studies covering eLearning impact on Lebanese adolescents during lockdown. As such, this paper explores the experience of the Lebanese adolescent scholars during the Covid-19 lockdown. So we attempt to answer the following questions: *How did the Lebanese adolescents experience eLearning during the COVID-19 lockdown? Moreover, what learnings and call to action can be presented to improve the experience?*

2 BACKGROUND

ELearning, also sometimes referred to as distance learning, nowadays, is a collection of "educational processes that utilize information and communications technology to mediate synchronous as well as asynchronous learning and teaching activities" (Jereb and Smitek, 2006). Synchronous eLearning requires attendance at scheduled meetings or lectures. The participants can interact with each other, exchange knowledge and experience, and get real-time feedback from the audience. Whereas, asynchronous learning happens when the learner, teacher, and other participants are not engaged in the learning process at the same time. They do not benefit from real-time feedback and interaction, but they are able to balance different tasks such as school, work, activities, and family in a way fitting their schedules (Tsolakidis and Fokides, 2002). Schools' systems, worldwide, have shown inconsistent adaptation to eLearning (Salmi, 2020), while teachers have developed different approaches and lesson plans (Commodari and La Rosa, 2021). Among students, adoption of online platforms for learning has increased during the pandemic (Dost et al, 2020).

2.1 Lifestyle Disruption and Social Isolation

ELearning provides flexibility in time and place. Distance learning provides flexibility for travelling and the opportunity for self-paced learning; however, this was relevant to a share of adolescent students worldwide (Dost et al., 2020). International students are able to pursue schooling from their own country. In Malaysia, for instance, two-thirds agreed that eLearning was flexible in time and place, and one-third of students felt that eLearning was easy to understand and use (Ming Moy and Han Ng, 2021). Another study in Indonesia, reports similar outcome (Thamri et al., 2022), identifying that comfort-in-place was conceived as a major advantage of eLearning during the lockdown. From another perspective, spending long hours on online platforms disrupts students' lives and results in serious implications on their well-being, but also on their physical health (Viner et al., 2020). In a sense, physical neck pain or known as "iHunch" can be significantly related to prolonged neck flexion while studying and/or using smartphones and tablets.

Before the pandemic and the wide diffusion of distance learning, studies showed how facing the screen for long hours may lead to bad consequences. Such as, the exposure to cyberbullying, particularly among adolescents, personal stress and sleep disturbance, in addition to several mental health disorders (Sansone and Sansone, 2013). ELearning, social restrictions, and implications for daily life related to COVID-19 lockdown have been found to disrupt sleep habits (Cielo et al., 2021; Viner et al., 2020), eating pattern among adolescents (Martin-Rodriguez et al., 2022), who find themselves on unhealthy eating behaviour, including stress induced food consumption with no hunger feeling; in addition to a decreased physical activity.

Students learning from their homes have reported difficulties in the space available for them to focus on the lessons away from disruption, such as family distractions, noise and other activities with their siblings (Dost et al., 2020). Conversely, others have reported boredom and anxiety when isolated in a closed area all day with extreme cases of depression and suicidal tendencies, due to feeling alone (Mamun et al., 2020).

Further, unprepared and taken by surprise, low income countries, Bangladesh and India for instance (Salmi, 2020), faced serious difficulties related to Information Technology (IT) infrastructure and access to internet services, essential to distance learning. Halfway around the world, Brazil's 69 state

university programs were disrupted, while their host governments scramble to provision solution to extend such infrastructure (Rios-Campos et al, 2021). Incidentally, poor internet connection was connected to increase in anxiety levels of the learners (Dost et al., 2020) and their ability to perform academically (Thamri et al., 2022). Sadly, news of like the one of a 15-year old girl awarded "academic brilliance" by her school, who committed suicide after being unable to participate in the online classes or watch television lessons as she did not have a well-functioning television at home, neither a smartphone, are not rare cases (Lathabhavan and Griffiths, 2020).

2.2 The Double Edged Sword of eLearning

While eLearning is shown to be a protective factor in such health emergencies, researchers found that undergraduates experienced anxiety, depression, changes in quality of sleep, and other mental symptoms due to Covid-19 outbreak (Di Giacomo et al., 2021). Some students feel that eLearning makes it easier for them to understand lessons and interact with teachers and their fellow classmates (Ming Moy and Han Ng, 2021), others gain technological skills by using new digital media tools (Hasan and Bao, 2020) facilitating their interaction with their new virtual environment. Still, however, a significant population of adolescent learners do not receive adequate support from their teachers, in this remote learning setting connected with ineffective interaction, misunderstandings and miscomprehension, students could be more distracted, have difficulty organizing their study (Commodari and La Rosa, 2021). Due to a lack of feedback from students, the absence of face-to-face interaction with teachers may lead to biased conclusions about academic performance in general (Eccles and Roeser, 2009). Those who cannot overcome their bad situations will be at more risk of having negative emotions, thus mental health disorders; affecting then their academic performance (Dost et al., 2020). A stressor event such as academic stress can generate anger, confusion and depression (Zhang et al., 2020). Emotional resilience, the ability to generate positive emotions and recover quickly from negative emotional experiences is then a coping mechanism, especially as adolescents are vulnerable psychologically (Konrad et al., 2013). Having positive emotions creates emotional resilience affecting by so the learning efficiency among middle school students (Zhang et al., 2020).

3 RESEARCH DESIGN

For our qualitative study, we recruited informants between 10 and 19 years old, Lebanese, living in Lebanon and registered at one of the Lebanese schools that adopted e-learning practices during the Covid-19 lockdown. Nineteen students volunteered for this study with a median age of 14 (Table 1). We purposefully selected two private schools one in Saida and one in Beirut administrative for they have different socio-economic status (Yaacoub and Badre, 2012; LRCAS, 2020). We used a voluntary response sampling to gather quality and dependable research data (Murairwa, 2015). Data collection was completed until saturation; adopting semi-structured interviews with open-ended questions. Interviews were private, lasting between 12 and 20 min. each, over a span of three days March, 5th, 2022; May 7th, 2022; and May 30th, 2022; after a period of two academic years of the COVID-19 lockdown.

Table 1: Our Student Sample profile.

Sample Profile (n=19)	
Average Age	13
Median Age	14
Female	8
Male	11
Grade 1 – 6 (Elementary - Ages 6–12)*	32%
Grade 7 – 9 (Intermediate - Ages 12–15)*	42%
Grade 10 – 12 (Secondary Ages 15-18)*	26%
School A	32%
School B	68%

*https://www.scholaro.com/pro/Countries/Lebanon/Education-System

School A: Saint-Joseph school - Saida
School B: Our Lady College of Angels- Beirut administrative

We then coded the response to identify emerging categories, themes and patterns. We used themes from section 2; themes of (1) lifestyle disruption; (2) Depression, anxiety and stress; and (3) coping with eLearning stressor events (Appendix C). We uncovered reports of lifestyle disruption, namely, reduced activity, studying in unfavourable environments, the impactful effects of isolation and changes in appetite and sleep. We also learned about anxiety and depressive tendencies, stress indicators and the consequent coping mechanisms, as we explain in section 4. We finally organize the concepts into a call to action for a better adolescent eLearning experience, in section 5.

4 RESULTS AND DISCUSSION

Students participating in this study appreciated learning from their own place, at first. They perceived at-home-comfort as a major advantage of eLearning during the lockdown. The flexibility and extra time that is not spent commuting to and from school, opened an opportunity for them to pursue extracurricular activities online; "*In my spare time, I was studying online, and also doing something I love, like painting, watching videos about space, etc.*" [S#3]. As the lockdown extended, and reality set in. "*The limitation on outdoor activities drove me stir crazy*", shared Student #6. "*I don't have sisters or brothers. It was boring*", said S#9 with a saddened voice.

4.1 Lifestyle Disruption

Our study reports that students staying alone, in their place, during the whole hours of learning, makes them uneasy, and uncomfortable. When trying to change their sitting, they face difficulties because of the noisy environment, internet connection issues, and undesirable settings (Dost et al., 2020); especially if they want to take notes [S#5].

Spending long hours facing the screen disrupts students' life (Viner et al., 2020). S#1 was "*stifled during online classes. From 9AM till 2PM, daily, in the same place, on that chair without moving*". Our findings are consistent with Viner et al. findings. "*Staying in a room for that long, really changes us*" [S#5]. "*It's like nothing. I study, take a shower, dinner, sleep*", he adds. "It is a waste of time" [S#6].

Eating patterns in general, have also been disturbed among adolescents during COVID-19 lockdown, leading to unhealthy diet and a decreased physical activity (Martin-Rodriguez et al., 2022). Students experienced variations in their weight and appetite despite their cravings all the day. Cravings were due to several reasons. Among them all, late hour sleep at night, easy access to kitchen, no place to go to, boredom, frequent use of smartphones, and online classes. Student#11, mentioned that he ate less because of the high cost of food.

The experience affected students' wellbeing, making them lazy, feeling bodily spasms [S#5], lonely and fatigued [S#6], depressed [S#9] and bored [S#12; #17]. During online classes, all students reported bad virtual interaction, leading them to lose focus [S#18] during sessions. "*I remember when the teacher called on us, no one answered. As if she was speaking to herself. I wanted to answer, but I was not feeling okay. I was lazy to answer*", said S#6.

One student had reversed the daily sleep cycle to meet her new schedule. "*My classes were in the afternoon, I was sleeping late at 2 AM or 4 AM and wake up at 2 PM, I was skipping breakfast, sometimes lunch, so I wait for my parents to have my dinner*" [S#9]. This finding echoes the study of Cielo et al. (2021), showing that changes in sleep habits of adolescent scholars are the results of several stressors. Among them, massive eLearning, social restrictions, and implications for daily life related to COVID-19 lockdown (Viner et al., 2020).

To complicate matters, Lebanon has been under shortage of electric power, due to the existing economic crisis. All students complained from electric power disruption and internet connection issues during online classes. Consequently, missing basic information and misunderstanding the lessons. "*I get disconnected often and I have to re-watch the recordings to understand what I have missed*", a few students exclaimed. "*I sometimes look the lesson material up on YouTube, so to better understand the concepts*", stated another. Those who had internet connection issues feared that teachers would reduce their grades. Teachers were often late to start the session as they also had to deal with interrupted power and internet. When online, the connection would be intermittent, "*adding distortion to the lecture and making it hard to follow*" [S#12]. "*At school, we understand better. We can hear well*" [S#16]. Our findings are consistent with the literature, especially in the context of developing countries, where such challenges are more commonly observed (Dost et al., 2020; Thamri et al., 2022).

4.2 Depression, Anxiety and Stress

One student's words: "*I was trying not to end up here, but I felt depressed. I was feeling like there is nothing to do in life, locked in a place. I was not used to it. I tried many times to overcome it. What really helped me was songs. I was fearing to show my anxiety to my friends, or open social media. They will bully those who are depressed. But I became more active on tiktok*".

High prevalence of stress, depression and low-self-confidence are perceived as results of massive eLearning adoption, and social isolation. Some of the participants reported bad organization of their tasks, leading to accumulation of their studies and confusion in their lesson plans. "*There are many activities and homework that accumulate from course to course and scattered materials*" [S#1] – "*I am finding myself studying all the time and not keeping up*" [S#6]. Another student exclaimed in frustration: "*I was*

cheating during exams, because of my lack of understanding. I was not understanding well".

One student has reported having depression when listening to her teacher's monotonous voice. Others complained of teachers' attitudes during their online classes, feeding into their stress and anxiety. "*I was feeling stress because of the teacher's voice and attitude when she asks me questions in front of the class. Also when reciting, all microphones are muted, I cannot sense their reaction*" [S#11].

Students saw that some of the teachers were not explaining well, unexperienced in digital platforms and not following-up with students as needed. "*I was getting depressed. Studying was no longer my top priority. I was sleeping all day, and I lost interest in studying*" [S#15]. In this case, our study lines up with the findings of (Commodari and La Rosa, 2021).

Luckily, no suicidal intention was reported by students. However, our informants stated that they have experienced anxiety and loss of self-esteem, because they were afraid of bullying. The main mental health issues felt by participants in this study were stress, depression and anxiety. The main reasons of those psychological problems were: fear of bad failure [S#5], daily routine [S#1], exam anxiety [S#7; #10], and stressful frustrations with internet connection issues [S#6] "*to the extent of suffering from insomnia, or sweating, or even tachycardia!*" [S#3].

4.3 Coping with eLearning Stressors

Some students exhibited low self-confidence due to the misunderstanding of lessons, leading them to cheat during exams. However, only one person reported having high confidence, for she was using Tiktok. The application was giving her a sense of motivation [S#13]. Social isolation has driven students#5, 6, 7, 11, 19 to feel depressed and wanted to deal with it slightly, in fear of societal judgement. Nonetheless, to cope and motivate themselves, some rushed to social media, others started listening to music, practicing yoga and meditation, painting, and receiving psychological support from their families. To note, positive emotions, and coping strategies are known to be essential for learning efficiency among students (Zhang et al., 2020). Knowing that, students who cannot overcome their bad situations will be at more risk of having negative emotions, thus mental health disorders; affecting then their academic performance. While the majority of the adolescent students liked the comfort of studying in a warm bed in the morning, staying in pyjamas all day [S#9], and the opportunity to slack off, sleeping during classes,

cheat in exams, two stood out stating that "*online learning has brought in them the sense of responsibility* [S#12].

All in all, students preferred a traditional school setting – some expressed no interest in continuing such online experience and others saw that the online experience saved their academic year.

When asked about their input as opportunities for improvement of the online experience – some stated the desire for a better connection experience (Power and Internet) – ensuring continuous access to resources through resilient communication platforms.

Others suggested more opportunities for teacher-student interaction exercises of blended learning, specifically designed for the adolescent audience – such as subjects of discussion that are more interactive to spar a debate and liven the sessions.

A student came forth with the recommendation to make psychologist services available for students - "*maybe having access to a psychologist once a week for one hour could help*" [S#12].

A suggestion of hybrid, in-school-at-home modality for teaching was popular; "*we can go at least one day per week to school; like, we can go every two days*".

To improve their experience, students recorded their lessons. A suggestion of hybrid, in-school-at-home modality for teaching was a popular ask with a clear expression of need for teachers who are more adept in using technology tools. Students suggested that teachers should be trained on manipulating technology and digital devices, while having more follow-up with students and maybe including 3D technology tools "*to see our teacher in front of us*" [S#17]; to improve the experience - "*better to study with hologram, to see our teacher, like in a virtual reality school*". Great ideas of innovation in using holographic teachers to closely simulate the real experience, in addition to online content delivery, mobile apps for building awareness and multimedia tools to enable captive interaction and reduce feelings of isolation.

Parents of our informants also offered suggestions for opportunities to get closer to the interaction between teacher and student with the opportunity to lessen the burden on the teachers and student and improve the distant learning experience. A parent, who was present at the interview of a student, suggested a more rigorous parent teacher conference during such conditions so that parents could closely supervise the academic progress of their adolescent kid. Another parent, a student's mom, stated that they are supplementing the schooling with a private at

home teacher as she lost confidence in the efficacy of eLearning.

5 CONCLUSION

This study shows how Lebanon was grappling with an education emergency. Our empirical inquiry has identified depressive tendencies, stress and anxiety indicators in the respondents remarks. Unable to become interested or involved, worrying about performance and possible loss of control and intolerance of interruption or delay, are high scorers in the DASS-21 scales, assessing Depression, Anxiety and Stress conditions (Osman et al, 2012). One of the main risk factors for depression during the pandemic is disruption of physical activity (Giuntella et al., 2021). Our findings have uncovered significant effects of isolation, lack of activity, while having to accommodate to an unfavourable study environment. In these trying times, our adolescent student population have joined other university students (Fawaz and Samaha, 2021) who were eLearning during the pandemic in Lebanon. Due to the stressful workload required, students have developed anxiety and depression symptoms as a result of the abrupt shift to exclusive eLearning methods of instruction, notwithstanding issues raised by risks to privacy, cyberbullying, and the increased appetite for plagiarism (Alier, 2021).

In order to curb the effect of this emergency and the potential of more damage in future ones, researchers, stakeholders, public health workers, and educational institutions must set in motion plans for improving educational strategies, setting a preparedness emergency plans for eLearning.

5.1 Call to Action

Knowledge that has been acquired from this small sample could be informative under the theory of knowledge to action (Graham and Tetroe, 2010). We have identified the thematic problem of disengagement and, from the outcome of the study, provide a call to action to remedy this situation for the future. Students have exhibited some evidence for lessons learned in the diversification of learning modality, content, self-motivation, gamification, suggestion to how teachers ought to be trained on managing the knowledge delivery during such disruptive change, introduced by the pandemic.

We use the socio-ecological model of Bronfenbrenner (1977) to organize some insights from our work and promote the development of the human condition in a changing eLearning environment conceived around an ecosystem of individual, community, organizational and policy making (Figure 1).

At the individual level, a creation of a healthy lifestyle program during a health emergency, is a must. Each member of society should be aware of their risks and prevention steps to take with coping mechanisms to apply so to relieve the consequences of a pandemic on their daily life. Students would have resources available to them to use to organize their day, by prioritizing their tasks, eating healthy, sleeping well, avoiding bad behaviours and also providing them with healthy diet plans regarding students' weight, height and health problems, if any. Schools should be always in close contact with teachers and students ensuring a healthy delivery of information that will be used for ever at any time. In doing so, eliminating many potential unsatisfactory consequences.
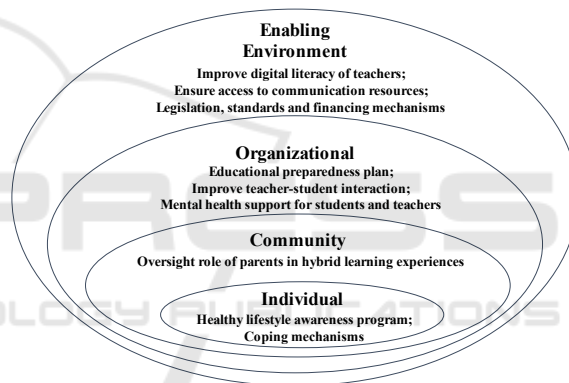

Figure 1: Call to Action for a better adolescent eLearning experience, adapted from Bronfenbrenner (1977).

Further, our work has revealed that parents have an integral role in the improvement of the eLearning experience – they must be encouraged to do so in closer supervision of the interaction between teacher and student, at the community level.

At the organizational level, schools should be elaborating an educational preparedness plan for such health emergencies to be implemented timely and appropriately. Schools must develop opportunities for teacher-student interaction through exercises in blended learning designed for the adolescent, lesson plans designed to liven the sessions, potentially through innovations in 3D technology and gamification. Further, to preserve adolescents' mental health, schools should provide regular mental health assessment not only for their students, but also for their teachers and staff, aiming to prevent, diagnose, and treat any mental health disorder. Thus,

reducing the risk of potential mental health repercussions on the physical health of individuals.

Priority should be given to investing in technological equipment in schools for the majority of students, as well as training teachers in digital competence. Educational institutions in collaboration with ministry of education should provide teachers with more intensive courses related to digital technology to help teachers modify their way of teaching and make it better; by improving their technological skills, academic acuity and adaptability (Hennessy et al., 2021). Private agencies, public service providers must ensure access to communication resources such as power and telecommunications, to ensure the continuity of the experience, while policy makers must legislate around standards and financing mechanisms for successful implementation.

5.2 Contribution and Limitations

Our work is informative, to confirm that Lebanon's adolescents are no different to adolescents all over the world in how they have responded to COVID-19. Some have learnt from the experience, but the overall impact was quite disruptive, our informants disengaged from the learning process, however, many provided good insight into improvement, especially in societies living with low social economic status. We plan to improve on this study via a triangulated statistical analysis in the near future.

We suggest that further research would explore further on complementary contexts of this study, so to address some of the natural limitations in scope and breadth of this study as public school students were not represented in this scope and the sample size was restricted to two private schools. Still however, our paper is a strong seminal work and the sample size is adequate for this successful pilot (Isaacs, 2014) that will undoubtedly spark an interest for further discoveries.

In closing, this study provides some useful advice to lesson planners on how to improve the experience. First, by limiting potential academic disruption if the course modality unexpectedly shifts and providing students with course materials in efficient and accessible ways, potentially gamified by the use of 3D holographic technology, or online videos to supplement the coursework. Students expressed the necessity for more flexibility, control, and options regarding when and how they learn. Allowing faculty to engage in the process of building their courses over time, was also key in the ability to transition modality in course delivery for effective participation.

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APPENDIX

A   Participant Information

Table 2: Participants Profile.

Student	School	Gender	Age	Grade	Student	School	Gender	Age	Grade
S#1	A	Female	15	10 (Bac.1)	S#11	B	Male	12	6
S#2	A	Female	13	9	S#12	B	Male	18	12 (Bac.3)
S#3	A	Female	14	9	S#13	B	Female	18	12 (Bac.3)
S#4	A	Male	15	9	S#14	B	Female	12	7
S#5	A	Male	11	5	S#15	B	Male	14	9
S#6	A	Female	14	9	S#16	B	Male	11	6
S#7	B	Male	16	10 (Bac.1)	S#17	B	Male	12	7
S#8	B	Female	16	11 (Bac.2)	S#18	B	Male	11	6
S#9	B	Female	14	8	S#19	B	Male	11	6
S#10	B	Male	11	6					

B   Questionaire

1. Tell me about yourself (age/place of residence)
2. Do you love to study?
3. Tell me about what was entices you to go to school everyday
4. Tell me about your relationship with your teachers and schoolmates.
5. Do you find school demanding?
6. Tell me about what you did during the lockdown. Have you changed your daily lifestyle?
7. Do you think that eLearning made your life easier when it comes to studying?
8. Do you think distance learning is easy?
9. What challenges did you face?
10. How did you feel during the lockdown? How did you overcome the situation?
11. How do you think we can improve distance learning in Lebanon?

C   Coding Results

Table 3: Consequences of eLearning in Pandemic times with samples from the student interviews (Partial Illustrative Sample).

Lifestyle Disruption	Reduced activity	"The limitation on outdoor activities drove me stir crazy" [S#6]; "…stifled during online classes. From 9AM till 2PM, daily, in the same place, on that chair without moving" [S#1]; "It's like nothing. I study, take a shower, dinner, sleep" [S#5]; "… It is a waste of time"[S#6].
	Unfavourable environment	Noisy environment, internet connection issues, and undesirable settings especially if they want to take notes. [S#5]; "I get disconnected often, adding distortion to the lecture and making it hard to follow" [S#12]
	Effect of isolation	The experience affected the students' wellbeing, making them lazy, feeling bodily spasms. "I don't have sisters or brothers. It was boring" [S#9]; "Staying in a room for that long, really changes us" [S#5]
	Change in Habits (Eat / and Sleep)	"My classes were in the afternoon, I was sleeping late at 2 AM or 4 AM and wake up at 2 PM, I was skipping breakfast, sometimes lunch, so I wait for my parents to have my dinner" [S#9]. "Stifled during online classes. From 9AM till 2PM, daily, in the same place, on that chair without moving" [S#1];
Anxiety		Feared that teachers would reduce their grades; "to the extent of suffering from insomnia, or sweating, or even tachycardia!" [S#3]; "I am finding myself studying all the time and not keeping up" [S#6].
Depressive tendencies		Lonely and fatigued [S#6]; depressed [S#9]; bored [S#12; #17]; lose focus [S#18] during sessions; "I was trying not to end up here, but I felt depressed. I was feeling like there is nothing to do in life, locked in a place…. [S#8]"; "There are many activities and homework that accumulate from course to course and scattered materials" [S#1]; "I was getting depressed, studying was no longer my top priority, I was sleeping all day and lost interest in studying" [S#15].
Stress indicators		"I was cheating during exams, because I was not understanding well!"; "I was feeling stress because of the teacher's voice and attitude when she asks me questions in front of the class…" [S#11]. "When the teacher called on us, no one answered. As if she was speaking to herself. I wanted to answer, but I was not feeling okay. I was lazy to answer"[S#6]