
| RESEARCH ARTICLE

COVID-19-Distance Learning: A Study of the Psychological Impact on Ibn Tofail University English Studies Students

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| ABSTRACT

COVID-19 is a serious pandemic that has changed the world economically, socially, and even educationally. For precautionary purposes, the higher education system in Morocco has decided to go for Emergency Remote Education (ERE) during the academic year 2020-2021. Like many other universities, Ibn Tofail University (ITU) has opted for online platforms to contain the spread of the virus. However, this sudden shift to online classes due to Covid-19 has had tremendous psychological effects on students' wellbeing. Actually, this study sought to investigate stress and anxiety as consequences of ERE affecting Ibn Tofail students, particularly semester (S)1, semester (S)3, and semester (S)5 students majoring in English studies during the Fall session of 2021. The study was also meant to measure the level of stress and anxiety among ITU English students according to their study level, gender, and age. This cross-sectional study was conducted in March by the end of the Fall session of 2021. It used Psychological Stress Scale (PSS) and Generalized Anxiety Disorder (GAD) to test students' stress and anxiety levels. Data were collected from three-levels of students; S1, S3, and S5, n=277, using a survey in Google Form. The survey was sent to students via their institutional emails, Google Classrooms, and Facebook groups. The results were processed and analyzed using SPSS version 26 software which indicated that 31.8% of students experienced severe stress, and 31% showed severe anxiety. Another interesting finding was that female students were more prone to stress and anxiety than male students. Nevertheless, it was surprising that stress and anxiety levels differed among students according to their age and did not vary according to their study level.

| KEYWORDS

Students' Wellbeing, Emergency Remote Education (ERE), COVID-19, Stress, Anxiety.

| ARTICLE INFORMATION

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1. Introduction

The whole world has witnessed tremendous changes after the breakout of COVID-19. "In January 2020, the World Health Organization (WHO) declared the outbreak of a new coronavirus disease, to be a public Health Emergency of International Concern" WHO (2020,1). The virus spread to Morocco on March 2nd, 2020, in Casablanca (Ministry of Health, Morocco), and it continued affecting other cities, including Kenitra. To contain the virus, the ministry of education opted for ERE in both secondary and higher education. The ERE continued in higher education even after the total lockdown to control the spread of the virus among the university's faculty and students. This ERE, due to COVID-19, had an impact on students' psychological health.

As of March 10th, 2021, the number of deaths in Morocco was 8767, and the number of cases confirmed in Morocco was 487 286 Statista (2021). This massive increase in both the number of deaths and confirmed cases compelled the higher education system to carry on with the ERE even after the total lockdown. Therefore, the current study was carried out on March 2021 to investigate the impact of ERE on ITU English studies students' psychological health.

In this article, we investigate if the adoption of ERE in ITU has any psychological effects on English students. We also compare different stress and anxiety levels according to students' gender, age, and study level. Therefore, convenient sampling was adopted to collect data. This study seeks to find answers to the following questions:

1. What are the levels of stress and anxiety of ITU English studies students belonging to different semesters?
2. Is there a difference between ITU English studies students' stress and anxiety level and their gender?
3. Is there a difference between ITU English studies students' stress and anxiety level and their age?
4. Is there a difference between ITU English studies students' stress and anxiety level and their study levels?

The following Null hypotheses were devised to answer the above research questions:

1. There is no statistically significant stress and anxiety level among ITU English studies students belonging to different semesters.
2. There is no statistically significant difference between ITU English studies students' stress and anxiety levels and their gender.
3. There is no statistically significant difference between ITU English studies students' stress and anxiety levels and their age.
4. There is no statistically significant difference between ITU English studies students' stress and anxiety levels and their study levels.

2. Literature Review

2.1. Defining Stress

Stress can be defined in many ways. Current researchers investigate stress using the model of conservation of resources Hobfoll (1989). In our study, we will try to define stress according to this model. Hobfoll (1989) coined the term "the model of conservation of resources" in 1988. Accordingly, he defined stress as "a reaction to the environment in which there is (a) the threat of a net loss of resources, (b) the net loss of resources, or (c) lack of resource gain following the investment of resources" Hobfoll (1989, 516). This definition suggests that people may fall into stress if they lose one of their resources.

According to him, resources are referred to objects, conditions, personal characteristics, or energies that are precious to people. First, objects are related to the socioeconomic status of individuals. Second, conditions refer to things such as marriage, tenure, and seniority. Third, personal characteristics are different personality traits and skills. Finally, energies refer to resources such as time, money, and knowledge.

We adopt this definition because environmental circumstances, according to Hobfoll (1989), in our study, COVID-19, is a major threat to the loss of these resources.

2.2. Defining Anxiety

Anxiety holds many definitions according to the context and procedures of studies. In the following study, we will define anxiety as used by Taylor (2019). He defined it as "health anxiety refers to the tendency to become alarmed by illness-related stimuli, including but not limited to illness related to infectious diseases (Abramowitz and Braddock 2011; Taylor and Asmundson 2004) as cited in Taylor (2019,49). We adopt the above definition because anxiety can be triggered by infectious diseases. In our study, students had to study online because of COVID-19, which is considered by the World Health Organization an infectious disease.

2.3 Previous Studies

2.3.1. Stress and Anxiety Levels according to Students' Gender, Age and Study Level

Many researchers around the world studied stress and anxiety among students during the COVID-19 period. They have investigated mental health problems due to COVID-19, ERE, or distance learning in terms of gender, age, and students' study level. The subsequent paragraphs discuss women and mental health, age, psychological health, and study level and psychological health of students.

Women have been found to experience higher mean levels of stress and anxiety than men (AlAteeq et al., 2020; Chhetri et al., 2021; Debowska et al., 2020; Essangri et al., 2021; Hoyt et al., 2020; Janati Idrissi et al., 2020; Khoshaim et al., 2020; Kostic et al., 2020; Kulakow et al., 2021; Lingawi & Afifi, 2020; Tarquinio et al., 2021). Females have scored high in stress and anxiety due to many reasons. According to AlAteeq et al. (2020), female students score higher in stress because the data they collected contained more female than male students. Also, Hoyt et al. (2020) reported that females were more prone to stress due to their caretaking duties. Indeed, women have more burdens on their shoulders to carry than men do. Thus, they are more likely to experience higher stress and anxiety scores.

In the literature, age is another marker of students' psychological health levels. Researchers have argued that younger students experienced higher levels of stress and anxiety than adult students (Debowska et al., 2020; Khoshaim et al., 2020; Ozamiz-Etxebarria et al., 2020). Ozamiz-Etxebarria et al. (2020, 6) claim that "unexpectedly, according to the results, there was higher mean of stress, anxiety, and depression in the 18-25- year age bracket, followed by the 26-60- year bracket". In fact, younger students experience higher stress and anxiety levels due to their lack of experience and their worries about their future.

Another important indicator of stress and anxiety among students was their level of study. AlAteeq, Aljhani, and AlEesa (2020, 401) claim that "university students scored significantly higher in terms of levels of stress compared to students from intermediate and secondary schools". Another study by Khoshaim et al. (2020) found that anxiety levels differ among the fourth, fifth, and final years. They stated that "one surprising finding was the association between anxiety and the level of study; students in their fourth year were more anxious compared to students in their fifth or final year" Khoshaim et al. (2020, 5).

2.3.2 Factors and Reasons for Psychological Stress among Students

Various factors explain the presence of psychological health among students. One of the first factors affecting students' mental health is the COVID-19 pandemic in itself (Essangri et al., 2021; Hoyt et al., 2020; Kecojevic et al., 2020; Shafiq et al., 2021; Tarquinio et al., 2021). In addition to COVID-19, the idea of distance learning, or ERE, was another element leading students to psychological health (Chhetri et al., 2021; Rahali et al., 2020; Shafiq et al., 2021). Other researchers mentioned other reasons, such as Internet stability (Hoyt et al., 2020), financial problems, and loss of income (Shafiq et al., n.d). In fact, distance learning, which resulted from COVID-19, remains the number one factor influencing students' stress and anxiety.

3. Statement of the Problem

Numerous researchers investigated students' psychological health during the COVID-19 outbreak. As mentioned above, they concluded that distance learning which was a reaction to the worldwide health situation, impacted students' stress and anxiety levels negatively. They studied stress and anxiety levels among students taking into account their gender, age, and study level. However, to our best knowledge, up to now, there has not been any study conducted about ITU English students' psychological health due to ERE. Therefore, we are considering three educational study levels during Fall session 2021, namely S1, S3, and S5.

4. Purpose of the Study

The objective of this study was to investigate stress and anxiety as consequences of ERE affecting Ibn Tofail students, particularly S1, S3, and S5 students, majoring in English studies during the Fall session of 2021. The study was also meant to measure the level of stress and anxiety among ITU English students according to their gender, age, and study level.

5. Methodology

5.1 Research Design

Data in this study were collected using a cross-sectional survey that was sent to ITU English students via their institutional emails, Google Classroom, and different social media platforms. Therefore, n=277 filled it out using a convenient sampling method. The Google Form survey was administered on Wednesday, March 10th, and closed on Sunday, March 21st, 2021.

5.2 Data Collection Instruments

The online survey consisted of three components to test students' stress and anxiety. It started with a demographic section, followed by Psychological Stress Scale (PSS-10) and finally Generalized Anxiety Disorder (GAD-7).

The first section was meant to collect demographic data. It contained gender (male or female), age (Under 18, 18-24 years old, 25-34 years old, 35-44 years old, 45-54 years old, and Over 54), and their educational study level (S1, S3, and S5).

The second part included PSS-10, which was developed by Cohen, Kamarck, and Mermelstein (1983). PSS contains 10 questions whose objective is to measure stress levels asking about the feelings and thoughts of the sample being studied over the last month. PSS uses a 5-point Likert scale ranging from never to very often. The following values are given to each item: (never (0), almost never (1), sometimes (2), fairly often (3), very often (4)). PSS scores are calculated by reversing the positive items 4,5,7, and 8. The total mean of the scores is calculated in the following way: 0-13 is low stress, 14-26 is moderate stress, and 27-40 is high stress. In our study, the questions were adapted from "over the last month" to "over the last semester" for clarity purposes.

The last section deals with collecting data about students' anxiety using GAD-7. GAD uses seven questions on a 4-point Likert scale ranging from "not at all" to "nearly every day". Scores 0, 1, 2, and 3 are aligned with the following response categories "not at all", "several days", "more than half the days," and "nearly every day". GAD-7 asks students about their feelings and emotions during the previous two weeks on a total score ranging from 0 to 21. Results range between: 0-9: mild anxiety, 10-14: moderate anxiety, and 15-21: severe anxiety Spitzer et al., (2006)

5.3 Data Analysis

Data were statistically analyzed using the Statistical Package for Social Sciences (SPSS) version 26 software. Descriptive statistics were used to calculate the mean and get the total scores of PSS and GAD. Moreover, the Mann-Whitney U test was used to compare PSS and GAD levels among gender. In addition, One-way ANOVA was used to compare PSS and GAD levels among students according to their age and study level.

6. Results

6.1 Reliability Tests

6.1.1 PSS-10 Reliability Test

To test reliability, Cronbach's Alpha Reliability test was used. The test showed that there is a good statistically significant internal consistency of the 10 items in the scale (PSS-10) as of $\alpha = .801$. Since the Alpha level is greater than .7, we conclude that our respondents' answers in this study are internally reliable.

6.1.2 GAD-7 Reliability Test

Using the same test as PSS, Cronbach's Alpha reliability test showed that there is a good statistically significant internal consistency of the 7 items used in this scale ($\alpha = .878$). Thus, the participants' answers are reliable because the Alpha level is greater than .7.

6.2 Sociodemographic Characteristics

A total number of $n=277$ filled out the survey questionnaire, as demonstrated in Table 1. Female students (54.2%) who responded to the survey are more than male students (45.8%). As far as age is concerned, the most dominant age groups are 18-24 years old (66.1%) and 25-34 years old (18.4%). The average age of the participants is $\bar{x} = 25.1$.

Table 1.
Socio-demographic Characteristics of Participants (N=277)

	N	%
Gender		
Male	127	45.8
Female	150	54.2
Age		
Under 18	4	1.4
18-24 years old	183	66.1
25-34 years old	51	18.4
35-44 years old	27	9.7
45-54 years old	9	3.2
Over 54	3	1.1
Study Level		
Semester 1	80	28.9
Semester 3	62	22.4
Semester 5	135	48.7
Total	277	100.0

6.3 Perceived Stress Scale (PSS-10)

Table 2 illustrates the participant's responses to the 10 items of PSS. During last semester, 53.4% of students responded "sometimes" to being upset because of something that happened unexpectedly, followed by 15.9% of students who responded "fairly often" to the same question, whereas only 9.4% "never" felt the same way.

About 47.5% of students responded to feeling unable to control the important things in their life by "sometimes," and only 9.7% have "never" felt this as far as feeling nervous or stressed question, about 28.9% of students answered "very often" while 36.1% answered "sometimes" to the same question.

When answering the question of how often you have felt confident about your ability to handle your personal problems, 30.7% responded "very often," and 3.2% said "never". 45.5% of students felt that "sometimes" during last semester, things were going their way, and 12.6% responded with "very often," and 17.3% of students responded "almost never" to things going their own way. 46.6% of respondents found that "sometimes" they could not cope with things that they had to do, and 13.7% of respondents said that they "almost never" could not cope with things they had to do.

While 49.5% of students felt the ability to “sometimes” control irritations in their life, 9.4% of students “almost never” were able to do so. About 6.9% “never” felt they were on top of things, while 13.0 % felt “very often” on top of things.

Whereas 5.1% “never” have been angered because of things that happened outside of their control, 17.0% said that they “very often” felt this way. About 44.4% of students have felt difficulties were “sometimes” piling up so high that they could not overcome them, while only 6.9% “never” felt the same.

Table 2.
Responses to the perceived stress scale (PSS-10) (n=277)

Perceived Stress Scale	Never	Almost Never	Sometimes	Fairly often	Very often
1. In the last semester, how often have you been upset because of something that happened unexpectedly?	26 (9.4%)	26 (9.4%)	148 (53.4%)	44 (15.9%)	33 (11.9%)
2. In the last semester, how often have you felt that you were unable to control the important things in your life?	27 (9.7%)	28 (10.1%)	131 (47.5%)	42 (15.2%)	49 (17.7%)
3. In the last semester, how often have you felt nervous and "stressed"?	12 (4.3%)	23 (8.23%)	100 (36.1%)	62 (22.4%)	80 (28.9%)
4. In the last semester, how often have you felt confident about your ability to handle your personal problems?	9 (3.2%)	19 (6.9%)	96 (34.7%)	68 (24.5%)	85 (30.7%)
5. In the last semester, how often have you felt that things were going your way?	12 (4.3%)	48 (17.3%)	126 (45.5%)	56 (20.2%)	35 (12.6%)
6. In the last semester, how often have you found that you could not cope with all the things that you had to do?	12 (4.3%)	38 (13.7%)	129 (46.6%)	66 (23.8%)	32 (11.6%)
7. In the last semester, how often have you been able to control irritations in your life?	12 (4.3%)	26 (9.4%)	137 (49.5%)	65 (23.5%)	37 (13.4%)
8. In the last semester, how often have you felt that you were on top of things?	19 (6.9%)	50 (18.1%)	119 (43.0%)	53 (19.1%)	36 (13.0 %)
9. In the last semester, how often have you been angered because of things that happened that were outside of your control?	14 (5.1%)	31 (11.2%)	111 (40.1%)	74 (26.7%)	47 (17.0%)

10. In the last semester, how often have you felt difficulties were piling up so high that you could not overcome them?	19 (6.9%)	46 (16.6%)	123 (44.4%)	54 (19.5%)	35 (12.6%)
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Note. PSS items were changed from “in the last month” to “in the last semester” to suit our study. The last semester ended less than a month ago.

6.4 Generalized Anxiety Disorder (GAD-7)

Table 3 demonstrates the participant’s responses to the 7 items of GAD. It shows that about 40.4 % felt nervous, anxious, or on edge for “several days,” 24.2% “nearly every” day felt so, and only 13.4% of respondents answered “not at all” to this question.

About 22.4% of participants “nearly every day” felt that they were not being able to stop or control worrying, while 34.3% felt so “several days”. About 32.5% have been bothered by worrying too much about different things “nearly every day,” while 14.1% were “not at all” worried.

37.9% of respondents had trouble relaxing for “several days,” and 22.0% “nearly every day” had the same problem. About 17.3% have been bothered by Being so restless that it is hard to sit still “nearly every day,” and 39.7% of respondents felt so “several days”. 38.3% of participants became easily annoyed or irritable for “several days,” and 12.0% “nearly every day” felt the same way. Finally, 29.6% felt afraid, as if something awful might happen “nearly every day,” and 30.3% felt so “several days”.

Table 3.
Responses to Generalized Anxiety Disorder (GAD-7) (n=277)

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	37 (13.4%)	112 (40.4 %)	61 (22.0%)	67 (24.2%)
2. Not being able to stop or control worrying	70 (25.3%)	25 (34.3%)	50 (18.1%)	62 (22.4%)
3. Worrying too much about different things	39 (14.1%)	94 (33.9%)	54 (19.5%)	90 (32.5%)
4. Trouble relaxing	54 (19.5%)	105 (37.9%)	57 (20.6%)	61 (22.0%)
5. Being so restless that it is hard to sit still	73 (26.4%)	110 (39.7%)	46 (16.6%)	48 (17.3%)
6. Becoming easily annoyed or irritable	64 (23.1%)	106 (38.3%)	46 (16.6%)	61 (12.0%)
7. Feeling afraid, as if something awful might happen	68 (24.5%)	84 (30.3%)	43 (15.5%)	82 (29.6%)

6.5 Total Scores of PSS-10 and GAD-7

6.5.1 PSS-10

The mean value of the total PSS scores was \bar{x} = 2.03, with an absolute range of 3.80, mode of 1.80, and inter-quartile range of .10 -3.90. The cut-offs limit for 33, 66, and 100 were 1.8, 2.3, and 3.9, respectively. As shown in Table 4, 88 students showed severe stress resulting in 31.8% of the participants, 79 students showed moderate stress, about 28.5% of the sample, and 110 students showed low stress resulting in 39.7% of the student’s participants.

Table 4.
Total Score of the PSS-10 (n=277)

Perceived Stress Scale	Frequency	Percent (%)
Low Stress (0-13)	110	39.7
Moderate Stress (14-26)	79	28.5
Severe Stress (27-40)	88	31.8
Total	277	100.0

6.5.2 GAD-7

The mean value of the total GAD scores was \bar{x} = 1.46, with an absolute range of 3, mode of 2, and inter-quartile range of 1-3. The cut-offs limit for 33, 66, and 100 were 1.0, 1.85, and 3.0, respectively. As shown in Table 5, 86 students showed severe anxiety forming 31% of the participants, 96 students showed moderate anxiety, about 34.7% of the sample, and 95 students showed mild anxiety resulting in 34.3% of the students' participants.

Table 5.
Total Scores of GAD-7 (n=277)

General Anxiety Disorder (GAD 7)	Frequency	Percent (%)
Mild anxiety (0-9)	95	34.3
Moderate anxiety (10-14)	96	34.7
Severe anxiety (15-21)	86	31.0
Total	277	100.0

6.6 Comparing PSS and GAD Levels among Gender, Age, and Study Level

6.6.1 Comparing PSS Levels among Gender, Age, and Study Level

Mann-Whitney U test showed that female students were more stressed than males. Results showed that females ranked higher than males on the Perceived Stress Scale with a sum rank of R1=15752.00 (males) and R2: 22751.00 (females). As for the mean rank, males scored \bar{x} = 124.03 while females ranked \bar{x} = 151.67. Indeed, females scored higher in the PSS than males based on our sample. This can be due to the overrepresentation of females (54%) compared with males (45%). Because P-value; P=0.004 is less than alpha= 0.5, we would reject the Null hypothesis of equal mean ranks and state that there is a statistically significant difference between female and male students. We can then conclude that females have higher PSS than males.

The results of one-way ANOVA on the perceived stress scale (PSS) showed the difference between age groups is statistically significant. The P-value was set at .05, and the sig was .000. In other words, the more the sig level is less than .05, the more significant the variance among age groups. Thus, the results reject the Null hypothesis stating that there is no statistically significant difference between different age groups and their PSS. This leads us to the alternative hypothesis, which is illustrated by the mean plot and Post Hoc Tukey HSD that shows a significant difference between age groups, with the under-18 category as the highest, followed by 18-24 years old, 45-54 years old, 25-34 years old, 35-44 years old and over 54, respectively.

Unlike previous studies (AlAteeq et al., 2020; Beltran et al., 2020; Cheung et al., 2020; Khoshaim et al., 2020; Kulakow et al., 2021; Shafiq et al., 2021), we found that there is no statistically significant difference between the three study level groups. Therefore, we failed to reject the Null hypothesis stating that there is a difference between different study levels. The sig level was set at .339, which is greater than the P-value (.05). This leads us to conclude that the three semesters show significant stress levels.

6.6.2 Comparing GAD Levels among Gender, Age, and Study Level

Using the Mann-Whitney U test, females rank higher than males in GAD with a sum rank of R1=15166.50 (males) and R2: 23336.50 (females). In fact, results show that females score higher on the GAD scale than males based on our sample. Because P-value; P=0.000 is less than alpha =0.5, we would reject the Null hypothesis of equal mean ranks. We can then conclude that females are more anxious than males.

One-way ANOVA test results show that there is a statistically significant difference in GAD levels among different age groups. Indeed, age groups differ in their anxiety level. The P-value was set at 0.05 and the sig level at 0.000. Therefore, the sig level is less than the P-value. We conclude then that there is a statistically significant difference between different age groups. The mean plot shows that the age category under 18 years old scored the highest in terms of anxiety level. It was followed by 18-24 years old, 45-54 years old, 25-34 years old, 35-44 years old, and over 54, respectively.

Unlike previous studies (Cheung et al., 2020; Khoshaim et al., 2020), the following sample demonstrates that there is no statistically significant difference in GAD levels among different semesters. Therefore, we failed to reject the Null hypothesis stating equal mean ranks between different study levels. In other words, students belonging to different study levels are anxious with no clear difference.

7. Discussion

To our best knowledge, this is the first study to examine the Perceived Stress Scale, and Generalized Anxiety Disorder among ITU English studies students during ERE. It uses a convenient sampling method in which n=277 participants from three study levels answered the online questionnaire. The results yielded by the statistical analysis used were divided into two categories: PSS and GAD results.

To start with, PSS results show that most students responded with “sometimes” to the questionnaires’ positive and negative items. This choice affected the general results of stress among students. Therefore, low stress was widespread among 110 students in our sample; 88 students showed severe stress, and 79 students showed moderate stress.

PSS showed significant results in low, moderate, and severe stress levels. Similar to the current study’s results, (AlAteeq et al., 2020; Chhetri et al., 2021) found that students showed low stress category as the most prevailing one, followed by severe, then moderate stress. However, (Beltran et al., 2020; Hoyt et al., 2020) found that the moderate category was the highest, followed by intense, mild, then severe. In another study by Kostic et al. (2020), students showed high stress levels in the context of South-east Serbia.

As far as PSS is concerned, a huge number of students (39.7%) showed low stress, but this is in itself something that should be taken into consideration, given the fact that we are still in the early stages of confinement in Morocco. The low level of stress among students shouldn’t make us overlook that the next category who were prone to moderate stress (28.5%) are of great number too, let alone the severe category (31.8%).

As far as GAD is concerned, results generated high anxiety scores in mild, moderate, then severe anxiety. A previous study by Khoshaim et al. (2020) found that 35% of students experienced moderate to extreme levels of anxiety in Saudi Arabia. Similar to the previous study, Lingawi & Afifi (2020) found that students showed moderate and severe anxiety reported in 17% and 4% of dental students in Saudi Arabia. One possible reason for high anxiety among Moroccan students during COVID-19 confinement can be traced back to lack of sleep Janati Idrissi et al., (2020).

The current study results showed that females were more stressed and anxious than males. Many studies yielded similar results (AlAteeq et al., 2020; Chhetri et al., 2021; Debowska et al., 2020; Essangri et al., 2021; Hoyt et al., 2020; Janati Idrissi et al., 2020; Khoshaim et al., 2020; Kostic et al., 2020; Kulakow et al., 2021; Lingawi & Afifi, 2020; Tarquinio et al., 2021). This can be explained by the fact that the data collected contained more women than men. However, this is not the only reason because Hoyt et al. (2020) found that women were more stressed because of their caretaking duties. Also, Moulton (1980), as cited in Hobfoll (1989,517), “argued that women are vulnerable to stress because they are often challenged with new expectations prior to the acquisition of relevant resources”.

As far as age is concerned, the current study yielded a significant difference in age levels in terms of PSS and GAD scores. Results showed that younger students were more prone to stress and anxiety than older students. Previous studies (Khoshaim et al., 2020; Ozamiz-Etxebarria et al., 2020) found the same results as the current study.

Unlike previous studies (AlAteeq et al., 2020; Beltran et al., 2020; Cheung et al., 2020; Khoshaim et al., 2020; Kulakow et al., 2021; Shafiq et al., 2021), we found that there is no statistically significant difference between the three study level groups in terms of their PSS scores. Similarly, the following sample demonstrates that there is no statistically significant difference in GAD levels among different semesters, unlike previous studies (Cheung et al., 2020; Khoshaim et al., 2020).

8. Implications

The results of the following study can be used as a baseline to deal with future pandemics similar to COVID-19. We are recommending that the ministry of education should pay close attention to this issue by applying several ways to help students suffering from psychological health. First, Moroccan universities require mental health centers where counselors and psychologists will be available for students who want to talk about their psychological problems. Indeed, students need counselors to listen to their worries and lift them when they are not feeling good. Second, students need workshops and training instructing them about their mental health to achieve the energy resources mentioned by Hobfoll (1989). There is a huge difference between a psychologically well-educated student and another who does not know how to deal with their stress and anxiety, for instance. Unlike the latter, the former will have more chances to ask for help or even know how to get themselves on the path.

There are several solutions that students can do to decrease levels of stress and anxiety. Physical activity can lower anxiety and stress, according to Škrlec et al. (2021,4). They state that “based on the results obtained, we can say that higher physical activity is related to lower levels of anxiety, stress, and depression”. Another way that can help students improve their psychological health is by designing applications that can help with this issue. Amanvermez et al. (2020,5) claim that “we expect that the findings of the study will be informative for designing psychological interventions and developing cutting-edge mental health applications in higher education”.

Stress and anxiety due to COVID-19 ERE affect students’ well-being. Thus, it is recommended to create a connection among those who connect directly with students, such as their mentors, teachers, family, and friends. Such circumstances need the presence of a support system that is close to students. In this way, students will gain the conditions resources Hobfoll (1989) talked about.

9. Limitations and Further Research

One of the limitations of the current study is the convenient sampling method which limits the generalizability of results using an online questionnaire. In other words, there are threats to external validity. To put it further, this study cannot be generalized to other contexts because students belong to a specific university in Morocco. Another drawback is reporting bias because participants may interpret PSS and GAD items in their way and answer them according to their feelings and emotions.

Furthermore, the following suggestions can be considered for further research. Researchers can anticipate and do more research for future pandemics like this one. They may also replicate the same study in different contexts to ensure external validity. This can also call for a longitudinal study to evaluate other psychological disorders such as depression and suicidality.

10. Conclusion

In this paper, we investigated stress and anxiety disorders among ITU English studies students during COVID-19 ERE. The ministry of education has opted for ERE to contain the spread of COVID-19. However, this urgent adoption has had a negative impact on ITU English studies students’ psychological health. The current study used PSS-10 and GAD-7 psychological tests to measure ITU English studies students’ stress and anxiety. Results demonstrated low (33.7%), moderate (28.5%), and severe stress (31.8%). It also showed mild (34.35), moderate (34.7%), and severe (31.0%) anxiety levels among ITU English studies students. Moreover, females and younger students were more prone to stress and anxiety than males and older students. This can be explained by the dominant representation of women (54%), and younger students (66.1%) in the sample studied. However, it should be noted that there was no difference in PSS and GAD scores in terms of different semesters.

The findings of the current study can be used to highlight the importance of considering the psychology of students for future emergency plans. Indeed, students’ mental health shouldn’t be a peripheral issue when deciding on embarking on new projects. It is needless to say that effective education is not only about teaching-learning the syllabus, but it is about considering students’ psychological health.

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