American Academic Scientific Research Journal for Engineering, Technology, and Sciences

ISSN (Print) 2313-4410, ISSN (Online) 2313-4402

http://asrjetsjournal.org/

Stress and Anxiety Levels of the College of Teacher Education students and their Motivation to Learn: An Input to an Intervention Program

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Abstract

The stress and anxiety experienced by many students during this pandemic affect their motivation to learn in this new normal education set up. Motivation is one of the major concerns irrespective of which study model is adopted whether online, blended, hybrid or a myriad variation. This descriptive-correlational study determined the perceived levels of stress, anxiety and academic motivation to learn during this Covid-19 pandemic situation of the 191 students selected though simple random sampling of the College of Teacher Education and the relationship between student-respondents' level of stress and anxiety and their level of academic motivation. To assess students' perceived stress, anxiety and academic motivation, the COVID-19 Student Stress Questionnaire (CSSQ), Generalized Anxiety Disorder (GAD-7) and Academic Motivation Scale were utilized. The questionnaires were administered through google forms. Findings revealed that more than 40 % of the students perceived that their relationships with their relatives, colleagues and university professors as somewhat stressful; 40 % perceived the risk of covid-19 as moderately stressful; 20 % perceived their academic studying experience very stressful and more than 15 % found the risk of contagion and social isolation very stressful. Moreover, 38 % exhibit moderate anxiety, 29 % are experiencing mild anxiety while 28 % had severe anxiety and only 5 % minimal anxiety level. Results revealed that all the indicators of motivation have *positive significant relationships* with the stress indicators.

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For future research, similar study can be conducted to determine the relationship of demographic profiles of the respondents to the stress, anxiety and levels of motivation to learn and adopt the intervention program so the students of the college may cope up with the challenges of Covid 19 pandemic.

Keywords: Anxiety; Motivation; Pandemic; Social Isolation; Stress.

1. Introduction

The outbreak of coronavirus diseases (COVID-19) has been substantially influencing the lives of people across the world, especially after the declaration of a global pandemic by the World Health Organization in the second week of March 2020 [1]. On March 16, 2020, the Philippine government imposed an enhanced community quarantine (ECQ) in Luzon (including its associated islands), which is effectively a total lockdown to ensure "social distance" through "home quarantine", thus restricting the movement of the population except for necessity, work, and health circumstances. Additional restrictions mandated the temporary closure of non-essential shops and businesses. This came in after two days of the implementation of the community quarantine in Metro Manila.

All education institutions were closed initially from March 16, 2020 across the country (nations of the world) and is still extended during the conduct of this research. According from [1], this unprecedented experience of 'home quarantine' under lockdown with the uncertainty of academic and professional career has multifaceted impacts on the mental health of students. The author [2] mentioned that college students are especially prone to feelings of loneliness, and they experience higher rates of anxiety and depression compared to the general population. Moreover, the long period of social isolation, uncertainty, and abrupt transitions, further worsen these feelings. The students feel less connected with their friends, due to the absence of social support system and extracurricular activities. organizations, and hobbies. Related to this, they worry about their future, their own health, and the health of their friends and loved ones. They observed that the situation they are living through is stressful and anxiety provoking, as there is a constant fear of the unknown in addition to a loss of control, making them especially vulnerable to developing mental health concerns.

The pandemic has interrupted the learning of more than one billion students in 129 countries around the world according from the United Nation's Educational, Scientific, and Cultural Organization (UNESCO). Many universities worldwide have moved to emergency remote teaching (ERT) via online platforms, further inducing anxiety among the students. Studies on the effect of COVID-19 and lockdowns on college students in China reported significant adverse effects on the students' psychological well-being and high levels of anxiety [3:4:5]. To date, several studies have been conducted on the effects of the COVID-19 pandemic and lockdowns from the public health perspective.

Moreover, the author [6] emphasizes that anxiety can be fueled by uncertainty and by fears of risk of harm to self or others. Anxiety is still undiagnosed and under-treated in the global context. Further, anxiety patients may also experience other physiological symptoms, such as feeling weak, fainting, pain or nausea, shivers, rapid breathing, etc. [7]. Anxiety impairs focus and concentration, memory, and visual motor skills. The stress and

anxiety levels may affect the motivation of the students to learn in this new normal education set up. Motivation plays a crucial role in learning. It not only sets in motion the activity resulting in learning, but also sustains and directs it. It is "the central factor in the effective management of the process of learning" [8]. The author [9] defines motivation as an internal process. Whether it is defined as a drive or a need, motivation is a condition inside individual that desires a change, either in the self or the environment. When everybody taps into this well of energy, motivation endows the person with the drive and direction needed to engage with the environment in an adaptive, open-ended, and problem-solving sort of way. Since students are at the core of learning process, a study tailored to their motivations and strategies and factors hindering their learning is imperative as students themselves play pivotal roles in shifting their own learning and acquiring enhanced academic achievement.

Accordingly [10] acknowledged that research on student motivation is central to research in learning and teaching settings. Positive motivational beliefs are positively related to higher levels of self-regulated learning. Relative to this, [11] stressed that there is a growing pedagogical need to comprehend how students develop the capability and motivation to regulate their own learning. The author [11] believed that when students monitor their responding and attribute outcomes to their strategies, their learning becomes self-regulated, and they exhibit increased self-efficacy, greater intrinsic motivation, and higher academic achievement. The authors [12] noted that motivation plays an important role in learning because it greatly explains academic performance.

The study determined the relationship between College of Teacher Education students' levels of stress and anxiety and their level of academic motivation during this Covid-19 pandemic situation.

2. Materials and Methods

The correlational research designs [13] are used by researchers to describe and measure the degree of relationship between two or more variables or sets of scores. The study determined the relationship between stress and anxiety levels and the teacher education students' level of motivation to learn.

The population involved 191 from the 380 College of Teacher Education students of the Laguna State Polytechnic University, Los Banos Campus, Philippines who were officially enrolled during the first semester of Academic Year 2020-2021. The researchers decided to set the margin of error at 5% and the confidence level at 95%. The respondents included 191 students selected through simple random sampling and those with access to the internet.

The study is limited to the determination of the anxiety and stress levels of the students and their level of academic motivation during the pandemic.

The study adopted the COVID-19 Student Stress Questionnaire (CSSQ) [14]. This was specifically developed to assess university students' perceived stress during the Covid-19 pandemic lockdown. It consists of 7 items on a 5-point Likert scale ranging from zero "*not at all stressful*" to four "*extremely stressful*".

Perceived stress was operationalized based on transactional models of stress [15]. Each item was developed to cover different domains that could have been subject to variations due to the COVID-19 pandemic lockdown,

and, therefore, that may be potentially perceived as sources of stress (i.e., risk of contagion; social isolation; relationship with relatives; relationship with colleagues; relationship with professors; academic studying; couple's relationship, intimacy and sexual life). The scale provides a Global Stress score ranging from 0 to 28.

Anxiety was evaluated by using the Generalized Anxiety Disorder (GAD-7). The academic motivation of student-respondents was determined by adopting the Academic Motivation Scale (AMS) developed by [16]. The objectives are: (a) what motivates students to study at university, and (b) if the recent Covid-19 social distancing measures demotivated students to continue studying in university. On a 7-point Likert Scale, the students' degree of agreement on the questions was assessed.

Mean and standard deviation were employed to evaluate the respondents' levels of stress, anxiety, and academic motivation. To determine the significant relationships between these variables, Pearson correlation coefficient was utilized.

Ethical considerations were observed to ensure confidentiality and anonymity in handling the data. The survey was conducted from the second week of December 2020 to January 2021. Students enrolled in the different courses of the College of Teacher Education served as the population. Adopted questionnaires were used to collect basic information on stress, anxiety, and level of motivation. Google form was used to distribute the e-questionnaires.

3. Results

Table 1 presents the stress level of the students at the College of Teacher Education. The indicator on "how they perceive their academic studying experience during this period of Covid- 19" obtained the highest mean of 3.16 (*SD* 1.00) and interpreted as *moderately stressful*. Meanwhile, the indicator which states "how they perceived the relationships with your relatives during this period of COVID -19 pandemic" got the lowest mean of 2.15 (SD 0.93) and is likewise interpreted as *moderately stressful*.

The students are moderately stressed since they can still attend their classes; meet their classmates in the virtual classroom and somehow had contact with professors; and since they stayed in their homes, continue their studies though experiencing intermittent internet connection, they are not alone since relatives are also in a work from home set up.

The author [17] found out that students faced uphill tasks in terms of technological infrastructure, mainly poor internet connection. Moreover, some students attended 6 to 8 hours of daily online classes using their mobile phones, which further contributed to stress and health issues. In addition, the overwhelming expectations from their instructors, with multiple assignments and no flexible deadlines, added to the students' anxiety. Uncertainty regarding their exams, completion of their semester and graduation, and the need to juggle household chores and take care of siblings while concurrently attending online classes had a huge impact on their anxiety levels.

The fear of contacting the virus also contributed to the stress level as many were hospitalized due to infection by

the virus. The student respondents were moderately stressed also as a result of being isolated from their colleagues and friends because of the safety protocols enforced by the Department of Health and other agencies in-charge of the plans and programs on how to control this pandemic that have affected all sectors of society due to limited movements.

Students, especially those graduating, were also distressed because they were helpless in their plans to launch their careers. Moreover, although universities promptly implemented remote online classes, most instructors still used the same curricula and learning outcomes meant for face-to-face teaching.

Indicators	Mean	SD	Descriptive Interpretation
How do you perceive the risk of contagion during this	2.94	0.89	Moderately Stressful
period of covid-19 pandemic?			
How do you perceive the social isolation during this	2.75	0.89	Moderately Stressful
period of covid-19 pandemic?			
How do you perceive the relationships with your	2.15	0.93	Moderately Stressful
relatives during this period of covid-19 pandemic?			
How do you perceive the relationships with your	2.42	0.89	Moderately Stressful
university colleagues during this period of covid-19			
pandemic?			
How do you perceive your relationships with your	2.43	0.98	Moderately Stressful
university professors during this period of covid-19			
pandemic?			
How do you perceive your academic studying	3.16	1.00	Moderately Stressful
experience during this period of covid-19 pandemic?			
Overall	2.64		Moderately Stressful

Table 1: Perceived Stress Level of Teacher Education Students

Legend: 1.0-1.5-Not at all Stressful; 1.51-2.50-Somewhat Stressful; 2.51-3.0-Moderately Stressful; 3.51-4.50-Very Stressful; 4.51-5.0-Extremely Stressful

Figure 1 illustrates the percentage contribution of each indicator to the overall assessment of students' stress level. Among the indicators, more than 40% of the students perceived their relationships with their relatives, colleagues, and university professors as *somewhat stressful*. More than 40% also perceived that the risk of COVID-19 contagion and academic studying experience during this period of covid-19 pandemic *moderately stressful*. However, almost 20% perceived their academic studying experience *very stressful* and more than 15% found the risk of contagion and social isolation during this pandemic period *very stressful*. As social beings people enjoy doing various activities with the people they want to be with. This social engagement had been greatly reduced during this time when everyone is talking about the fast infection rate of the virus, self-quarantine, social distancing etc.

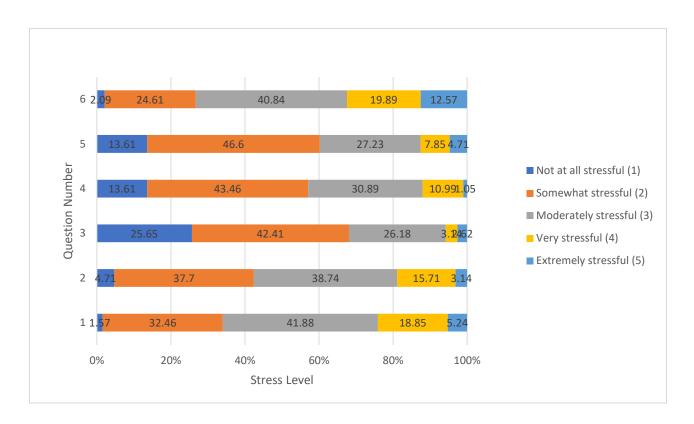


Figure 1: Stress Level of Teacher Education Students, AY 2020-2021

Figure 2 reflects the percent distribution of Teacher Education students' anxiety level. The results showed that 38% exhibited *moderate anxiety*, 29% experienced *mild anxiety*, while 28% had *severe anxiety*, and only 5% had *none-minimal anxiety level*. The result implies that majority (67%) of the students experienced mild to moderate anxiety level only during this time of pandemic which is manageable.

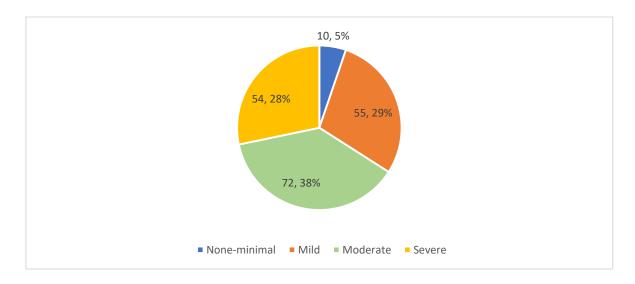


Figure 2: Percent distribution of Teacher Education students' anxiety level

Legend:< 5=none-minimal; 5-9=mild; 10-14=moderate; ≥15=severe

Indicative Statement			
Over the last four months, how often have you been bothered by any of the following problems	Mean	SD	Descriptive Interpretation
Feeling nervous, anxious or on edge	2.69	0.86	Moderate
Not being able to stop or control worrying	2.59	0.90	Moderate
Worrying too much about different things	2.83	0.92	Moderate
Trouble relaxing	2.64	0.84	Moderate
Being so restless that it is hard to sit still	2.51	0.99	Moderate
Becoming easily annoyed or irritable	2.70	0.96	Moderate
Feeling afraid as if something awful might happen	2.74	0.89	Moderate
Overall	2.67		Moderate

Table 2: Anxiety Level of Teacher Education Students
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Legend: .1.0- 1.50- none-minimal; 1,.51-; 2.50- mild; 2.51-3.50-moderate.; 3.51-4.0 -severe

The findings were consistent with the research done [18] which looked at the anxiety level of university students in Saudi during COVID-19 and the results indicated that about 35% of the students experienced moderate to extreme levels of anxiety. Moreover, it is more or less similar to what was reported about students in Saudi Arabia before COVID-19 [19]. This indicates that the level of anxiety was almost consistent with pre-pandemic status. The author [20] reported a higher level of anxiety. Looking outside Saudi Arabia [4] found that 0.9% of college students experienced severe anxiety during COVID-19, while around 24% experienced mild to moderate levels, which presents a low level of anxiety compared to previous literature on college students in general. Home-quarantine, loneliness, worrying and fear experienced by students during pandemic can increase health anxiety as shown by the moderate level of anxiety among the student respondents.

Table 3: Motivation Level of Teacher Education Student	S
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Indicative Statements	Mean	SD	Descriptive Interpretation	
1. I study because I experience pleasure and satisfaction while	4.52	1.77	Somewhat Agree	
learning new things.				
2. I study for the pleasure I experience while surpassing myself in	4.34	1.69	Somewhat Agree	
my studies.			_	
3. I study to prove to myself that I am capable of completing my	4.96	2.05	Somewhat Agree	
college degree.				
4. I study because I believe that college education will help me	5.09	2.07	Somewhat Agree	
better prepare for the career I have chosen.				
5. I study because when I succeed in university course I feel	4.62	1.85	Somewhat Agree	
important.				
6. I study because I want to have a good life later on.	5.22	2.10	Somewhat Agree	
7. I study for the pleasure that I experience in broadening my	4.76	1.81	Somewhat Agree	
knowledge about subjects which appeal to me.			_	
8. I study for the satisfaction I feel when I am in the process of	4.70	1.84	Somewhat Agree	
accomplishing difficult academic activities.				

9. I study because my studies allow me to continue to learn about	4.92	1.93	Somewhat Agree
many things that interest me.			
10. I study for the high feeling that I experience while reading	4.71	1.80	Somewhat Agree
about various interesting subjects.			
11. I study because the university allows me to experience personal	4.64	1.79	Somewhat Agree
satisfaction in my quest for excellence in my studies.			
12. I study to have a better salary later on.	4.81	1.82	Somewhat Agree
13. I Study because this will help me make a better choice	4.98	1.92	Somewhat Agree
regarding my career orientation.			
14. I study in order to obtain a more prestigious work later on.	4.92	1.89	Somewhat Agree
15. I study for the pleasure that I experience while I am surpassing	4.85	1.80	Somewhat Agree
myself in one of my personal accomplishment.			
16. I study because with a high school diploma I would not find a	4.47	1.68	Neither agree nor
high paying job later on.			disagree
17. I study for the pleasure I experience when I discover new	4.82	1.83	Somewhat Agree
things never seen before.			
18. I study because it will enable me to enter a work/job in which I	4.97	1.87	Somewhat Agree
really like.			
19. I study for the pleasure I experience when I read interesting	4.62	1.68	Somewhat Agree
authors.			
20. I study because I believe that college education will improve	5.11	1.99	Somewhat Agree
my competence as a worker.			
Overall	4.80		Somewhat Agree

Legend: 1.0-1.5- Strongly disagree; 1.51-2.50- Disagree; 2.51-3.50- Somewhat disagree; 3.51-4.50- Neither agree nor disagree;

4.51-5.50 Somewhat agree; 5.51-6.50 - Agree; 6.51-7.0- Strongly agree

Based on the findings, the indicative statements "I study because I want to have a good life later on" with a mean of 5.22; "I study because I believe that college education will improve my competence as a worker" with a mean of 5.11; and "I study because I believe that college education will help me better prepare for the career I have chosen" with a mean of 5.09 were interpreted as somewhat agree. The result implies that there are other criteria not included in the study which maybe their major motivation why they want to continue their studies.

In a study [21], results showed that motivation, critical thinking, and academic stress positively predicted academic performance. Furthermore, motivation moderated the effects of academic stress on academic performance, mitigating the negative effects of stress. These results have been described in a research with university populations, high school students, and distance learning students. These findings could be explained by the fact that metacognitive strategies are procedures that facilitate information processing by selecting, organizing, and regulating cognitive processes, students need to show a strong interest in the subject (i.e., an internal motivation towards it), as it requires a conscious planning and use of these strategies, which facilitate academic performance. In the same way, critical thinking requires a high degree of effort on the part of students, who are only willing to invest if academic achievement is attainable. Therefore, students will be willing to try to think critically if they perceive a high degree of control over their academic achievement.

Table 4: Stress and Motivation – Relationship

Motivation/Stress		social	relationships	relationships	relationships	academic
		isolation	with your	with your	with your	studying
	risk of		relatives	university	university	experience
	contagion			colleagues	professors	
				0	1	
	r	r	r	r	r	r
Experience pleasure and satisfaction while	.26*	.07	.07	.13	.01	.19*
learning new things.						
Pleasure I experience while surpassing	.26*	.13	.11	.17*	.04	.19*
myself in my studies.						
prove to myself that I am capable of	.25*	.13	.12	.17*	.06	.32*
completing my college degree.						
Believe that college education will help me	.24*	.14	.10	.14	.02	.33*
better prepare for the career I have chosen.						
when I succeed in university course I feel	.23*	.17	.15	.20	.04	.23
important.						
I want to have a good life later on.	.26*	.18*	.15*	.28*	.07	.35*
pleasure that I experience in broadening my	.27*	.17*	.08	.18*	.07	.24*
knowledge about subjects which appeal to						
me.						
satisfaction I feel when I am in the process	.23*	.16*	.07	.13	.02	.23*
of accomplishing difficult academic						
activities.						
my studies allow me to continue to learn	.25*	.17*	.04	.12	.02	.29*
about many things that interest me.						
high feeling that I experience while reading	.22*	.17*	.10	.17*	.05	.27*
about various interesting subjects.						
the university allows me to experience	.20*	.13	.05	.12	.03	.27*
personal satisfaction in my quest for						
excellence in my studies.						
to have a better salary later on.	.30*	.22*	.03	.20*	.12	.33*
this will help me make a better choice	.26*	.20*	.09	.15	.06	.35*
regarding my career orientation.						
in order to obtain a more prestigious work	.21*	.16*	.04	.13	.07	.35*
later on						
The pleasure that I experience while I am	.25*	.15*	.08	.12	.02	.33*
surpassing myself in one of my personal						
	l	1	1	1	l	

accomplishment						
with a high school diploma I would not find a high paying job later on.	.19*	.08	.003	.08	.02	.24*
Pleasure I experience when I discover new things never seen before.	.21*	.15*	.06	.14	.03	.29*
enable me to enter a work/job in which I really like.	.21*	.18*	.09	.14	.05	.36*
pleasure I experience when I read interesting authors.	.16*	.10	.05	.15*	.06	.22*
I believe that college education will improve my competence as a worker.	.21*	.12	.03	.14	.04	.36*

*- significantly related at p<.05

Results of significant relationship between motivation and stress level of the college of Teacher Education students as shown in Table 4 revealed that all the indicators of motivation have *positive significant relationships* with the stress indicators "risk of contagion and academic studying experience during this period of COVID-19 pandemic at p < .05. This means that the students were more motivated as stress level of the risk of contagion increases as well as academic studying experience during this pandemic. The respondents are more motivated also in most of its indicators which were *significantly related* to the stress level due to social isolation and relationships with university colleagues during this period of COVID-19 pandemic. Only two indicators of motivation "when I succeed in university course I feel important" and "I want to have a good life later on" were found to be *significantly related* to stress level on relationships with relatives during this covid-19 pandemic at p < .05. No *significant relationship* was revealed between motivation and relationship with university professors during this period of COVID-19 pandemic.

In terms of anxiety level and motivation, it was only on the motivation indicator "experience pleasure and satisfaction while learning new things" and anxiety indicator "fully nervous, anxious or on edge" that a *negative* significant relationship was found at p < .05. This implies that the more nervous, anxious or on edge is the student, the less pleasure and satisfaction while learning new things. This means that the certain anxiety indicator *negatively affects* the students pleasure and satisfaction in learning new things.

5. Conclusion

The results showed that the motivation of the student respondents to study has been affected somewhat negatively by the pandemic. This can be due the adverse effect of the pandemic which may preoccupy the mind of the students instead of focusing on their studies.

In the light of the findings, it is recommended to determine the relationship of the demographic profiles of the respondents to the stress, anxiety and levels of motivation to learn and adopt the intervention program so the students at the college may cope with the challenges of COVID-19 pandemic

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