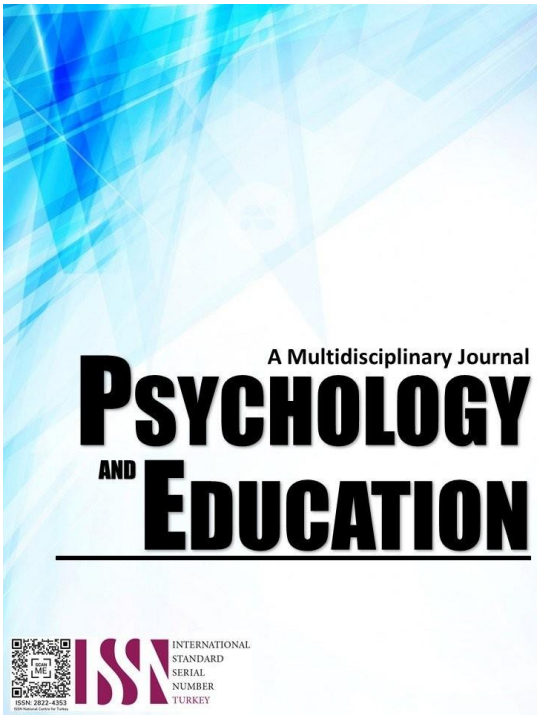
ACADEMIC STRESS ON STUDENTS' SELF-EFFICACY AND ACADEMIC PERFORMANCE IN SCIENCE IN THE NEW NORMAL



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 20
Issue 9
Pages: 1175-1191
Document ID: 2024PEMJ1923
DOI: 10.5281/zenodo.11672753
Manuscript Accepted: 05-10-2024

Psych Educ, 2024, **20**(9): 1175-1191, Document ID:2024PEMJ1923, doi:10.5281/zenodo.11672753, ISSN 2822-4353

Research Article

Academic Stress on Students' Self-Efficacy and Academic Performance in Science in the New Normal

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Abstract

This study determined the influence of academic stress on self-efficacy and academic performance in Science of Grade 7 students in Timoteo Paez Integrated School, Younger Street, Balut, Tondo, Manila during the School Year 2021-2022. With explanatory sequential method as research design and 93 male and 114 female Grade 7 students as respondents of the study, findings showed that the pressure from study, workload, worry about grades, self-expectation and despondency were assessed by the students as moderately stressful. Students' academic self-efficacy was described as high. The academic performance of male students in Science was described as "satisfactory" while female students' academic performance in the same subject was described as "very satisfactory." Based on the findings of the study, the following conclusions were drawn: There is a significant difference between the male and female students' academic stress in this new normal. Male students had a greater level of academic stress in terms of workload. Moreover, there is a significant difference between the male and female students' academic self-efficacy. Female students had a greater level of academic self-efficacy in terms of persistence. There is a significant difference among the students' academic stress when they are grouped according to their parents' income. Students whose parents' income ranged from 10,000 and below had greater level of academic stress in terms of pressure from study, workload, worry about grades and despondency. On the other hand, students whose parents' income ranged from 50,001 and above had greater level of academic stress in terms of self-expectation. There is a significant difference among the students' academic self-efficacy in terms of perceived control, competence and persistence when they are classified according to their parents' monthly income. Students whose parents' income ranged from 50,001 pesos and above per month had greater level of self-efficacy. There is a significant relationship between the academic stress and academic self-efficacy of Grade 7 students. Students who are free from stress had a greater level of academic self-efficacy in Science. There is a significant relationship between Grade 7 students' academic stress and their academic performance in Science. Students who are free from stress had a greater chance of getting higher grades in Science.

Keywords: *academic stress, self-efficacy, academic performance*

Introduction

There was an abrupt shift in the classroom set up during the novel corona virus outbreak. In 2020, mass gatherings were cancelled resulting in all the schools here in the Philippines being forcibly closed to prevent the spread of the disease. This event has changed the way of teaching and learning. Filipino students in public schools were never ready for the transition in the same day and age when many parents had lost their jobs due to the virus. This caused problems in supporting the educational needs of the students in terms of providing gadgets and stable internet connection for their children. Several studies linked to stress and performance during this new normal set up arouse as the adjustment period has been witnessed to be extremely tough for the students.

In March 2020, there were seven reported cases of COVID-19 after the first three confirmed cases in January to February 2020. From there, the cases of corona virus in the country had become out of control. The government imposed several levels of community quarantine regulations depending on the number of cases in each location. Following the omnibus rules for community quarantine implementation in the Philippines, as amended as of December 14, 2020, face-to-face or in-person classes shall be suspended for Academic Year 2020-2021. The Department of Education resorted to the implementation of Distance Learning, the provisions of DO 12, s. 2020 on the Basic Education Learning Continuity Plan (BE-LCP) appreciate the importance of contextualized flexibility in the learning process. The Department of Health imposed safety protocols including social distancing, mandatory use of face masks and face shields to prevent the spread of the virus. However, despite all these protocols, COVID-19 cases remain at their peak. At present, the Philippines has confirmed more than 2.4 million coronavirus cases and approximately 160,000 are active.

As the country had been battling the pandemic, the education sector was exceedingly affected. Timoteo Paez Integrated School became one of the quarantine school facilities in Manila due to the continues increase in active cases. The impact of COVID-19 on the students is irreversible inasmuch as the students suffer the depreciation of their self-efficacy levels, which can be linked to their academic stress and science performance.

Academic stress is described as the body's reaction to academic demands that surpass students' adaptive capacity. Academic stress is estimated to affect 10–30% of students at some point during their academic careers. Academic stress was one of the most significant health barriers to college students' academic success. Oral presentations, academic overload, a lack of time to satisfy responsibilities, and taking exams are the most regularly mentioned stressors in the academic setting (Alsulami, 2018).

Self-efficacy is a person's belief in his or her ability to accomplish tasks. This ability bridges the gap between information and action, where an individual utilizes methods that are essential to handle the problems, he or she is currently facing which has an impact on his

or her mental landscape, behavioral preferences, and emotional reactions (Arslan, 2017). In terms of understanding individual differences, self-efficacy is believed to be more important than actual abilities and skills. This is because self-efficacy is highly associated with emotional prominence. A student who has higher levels of self-efficacy more likely copes up with emotional experiences that he or she faces along the way compared to a student who has lower self-efficacy. Bandura et al. (as cited by Arslan 2017) mentioned that the concept of self-efficacy allows a person to heal negative emotions and turns into positive emotions. With a positive mindset, a person can function properly and finish outlaid tasks more efficiently than a person who experiences negative emotions as these feelings can interfere with the person's energy to accomplish their responsibilities abruptly.

There are two types of self-efficacy mentioned in the study of Arslan, 2017: "regulatory emotional self-efficacy and emotional self-efficacy" (p.1737) both of which aim to make a person understand his or her emotional abilities. Regulatory self-efficacy focuses on healing negative emotions and believing only on positive emotions. Emotional self-efficacy on the other hand has two components: regulating negative consequences and expressing positive emotions (Arslan, 2017). This way, a person can address the emotion and manage it accordingly depending on the situation. The person does not turn his or her back on the negative emotions rather, he or she expresses feelings of anger, sadness, guilt, and frustration to release and heal from it. The person was also able to show happiness and pride upon redeeming himself or herself from a negative situation.

As self-efficacy has been concerned, one of the triggers of negative emotions on a person is stress. Per definition, When an individual's environment is dangerous, exceeding his or her resources, or putting his or her well-being at risk, this is referred to as stress (Lazarus & Folkman, 1986 in Hernandez et al., 2019). Stress may be due to a traumatic life events like the death of a loved one, continuous difficulties as in economic or financial problems, and daily life problems such as argument with friends (Hess & Copeland, 2006 in Arslan, 2017). In education, stress may be referred to as academic stress which appears when the student judges that a subject is stressful because it creates a disequilibrium that make him or her implement actions and coping mechanisms to bring back a state of equilibrium (Barraza, 2006 in Hernandez et al., 2019). In class, examinations, conflicts with teachers, peer competition, and deadlines are the main sources of students' stress (Fernández, González & Tiranes, 2015; Sheykhjan, 2015; in Hernandez et al., 2019) which may result in lower academic performance and deterioration in the students' physical and mental health if not addressed properly.

Academic performance has long been considered a measure of a students' success in class. Students who perform well in their studies receive higher ratings and grades from their teachers as these students were able to accomplish all necessary tasks on time with exceptional output. Academic performance is the totality of the knowledge gained by the students based on the marks given by the teacher through evaluation and assessment of the educational goals achieved by the students on a specific period of time (Narad & Abdullah, 2016 in Abaidoo, 2018).

Nevertheless, academic performance alone shall not be considered as an indicator of success among students as the student's performance during and beyond class hours is heavily influenced by several factors including of which are self-efficacy and academic stress. These factors shall be considered when assessing the totality of the learner's performance so that they will not be judged solely with basis on their marks they received. As far as self-efficacy and academic stress are concerned, these are dependent on

An individual's emotional intelligence is described as their capacity to recognize and communicate their own and others' emotions (Petrides & Furnham, 2006 in Arslan, 2017).

These varies depending on how an individual handles and expresses negative emotions as well as how he or she convey positive emotions. The influence of self-efficacy and academic stress in the academic performance in science is subjective on the individual's emotional and cognitive abilities. It is important that the students may have these indicators measured to help them cope up with the academic related problems that they are faced with.

Several studies on self-efficacy, academic stress, and academic performance have been conducted but these studies fail to address these indicators specifically concerning academic performance in Science. There were several reported cases of depression and suicide among students who failed to achieve and accomplish their tasks at school. This means that self-efficacy and academic stress are valid and shall be taken into the public interest for further discussion and studies.

The urge to understand the influence of the student's self-efficacy and academic stress levels and its effect on academic performance prompted the researcher to conduct this study using a mixed method design to evaluate the causes and identify the figures contributing to the number of students affected by academic stress specifically during this new normal mode of learning.

Research Questions

This study determined the influence of academic stress on self-efficacy and academic performance in Science of Grade 7 students in Timoteo Paez Integrated School, Younger Streeet, Balut Tondo Manila during the School Year 2021-2022. Specifically, it sought answers to the following questions:

1. How may the Grade 7 students be described in terms of;
   1.1. sex; and
   1.2. parent's income?
2. How may the academic stress of Grade 7 students in the new normal be described in terms of:

2.1. pressure from study;
2.2. workload;
2.3. worry about grades;
2.4. self-expectation; and
2.5. despondency?

3. How may the academic self-efficacy of Grade 7 students in the new normal be described in terms of:
3.1. perceived control;
3.2. competence;
3.3. persistence; and
3.4. self-regulated learning?
4. How may the Grade 7 students' academic performance be described in terms of their grades in Science in the first grading period?
5. Is there a significant difference between and among the academic stress and academic self-efficacy of the Grade 7 students in the new normal when they are grouped according to sex and parent's income?
6. Is there a significant relationship between the academic stress and academic self- efficacy of Grade 7 students?
7. Is there a significant relationship between Grade 7 students' academic stress and their academic performance in Science?
8. How does academic stress influence the students' academic self-efficacy and academic performance in Science in this new normal?
9. What program of activities can be crafted from the findings of the study?

Methodology

Research Design

This study utilized the explanatory sequential mixed methods research design where it began with data collection and analysis of quantitative data. It was then followed by data collection and analysis of qualitative data in determining the influence of academic stress to the junior high school students' academic self-efficacy and academic performance in Science in the new normal set up.

In this design the quantitative and qualitative strands took place in two distinct, yet interactive phases. In the first phase, quantitative data was collected and analyzed and took priority for addressing the research questions. Following the quantitative phase is the collection and analysis of qualitative data. The results of the quantitative phase were used to inform data collection and analysis in the qualitative phase. The qualitative results are used to gain insight into the quantitative findings (Creswell & Plano Clark, 2018). Using the same topic as provided above, quantitative data were collected and analyzed with the purposes of identifying the influence of academic stress on students' academic self-efficacy and performance in Science in the new normal. In order to gain a more in-depth understanding of the influence of academic stress in the context within which they occur, researchers conducted interviews with the Grade 7 students.

Participants

The respondents of the study were chosen by applying purposive sampling technique. The purposive sampling technique, also called judgment sampling, is the deliberate choice of an informant due to the qualities the informant possesses. It is a nonrandom technique that does not need underlying theories or a set number of informants. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Lewis & Sheppard).

Table 1. *Respondents of the Study*

Section	*Enrollment*	*Male*	*Female*
De Ocampo	47	19	28
Gomez	45	22	23
Lara	45	22	23
Quisumbing	35	13	22
Umali	35	17	18
Total	207	93	114

The researcher decided to use the population of the 5 sections (207) being handled by the researcher because of the fact that he would be able to get more reliable responses from this group of students.

For the qualitative part, 2 students (1 male and 1 female) in each section were asked to participate in the semi-structured interview.

Instruments

Before the data collection process of the study, the researcher sought permission from the Schools Division Superintendent of Manila to allow him to conduct this study in Timoteo Paez Integrated School. Upon receipt of the authorization to conduct this study, the researcher created an online platform that allowed him to contact the participants remotely given that the present situation did not

permit face to face interviews or answering of survey questionnaires. The Messenger group chat served as the researcher's official mode of communication with the participants.

There are two types of data – quantitative and qualitative that were collected through a survey and an interview. For the first part, the participants answered the academic stress survey using a scale that has different levels of responses as adapted from Dixon, J and Sun, J. (2018): 5 - Always True of Me (AT); 4 - Frequently True of me (FT); 3 - Sometimes True of Me (STM); 2 - Seldom True of Me (ST); and 1 - Never True of Me (NT). The second part of the survey is on academic self-efficacy which has different levels of reactions that corresponds to 5 - Strongly Agree (SA); 4 - Agree (A); 3 -Moderately Agree (MA); 2 - Disagree (D); and 1 - Strongly Disagree (SD). The survey is adapted from Dullas, AR (2018).

A follow up interview with the junior high school students was conducted through a phone or messenger call depending on the availability of signal and internet connection on the participants' end.

Finally, the academic performance in science was based on the grades or marks received by the junior high school students within the specific period of time that the study was conducted. This is to ensure that the levels of academic stress and self-efficacy has a direct predisposition over the academic performance of the students on the present time.

Data Analysis

After collecting all the questionnaires, these were organized, tallied, tabulated, and analyzed using some statistical tools.

Weighted mean was computed to describe the students' academic stress and academic self-efficacy amidst pandemics.

Descriptive statistics such as range, mean and standard deviation were computed to describe the students' academic performance in Science in the new normal.

Correlation analysis was performed to determine if significant relationship existed between the independent variables academic stress) and dependent variables (academic self-efficacy and performance in Science).

For the gathered qualitative data, thematic analysis was used for interpretation. Thematic analysis is a method of analyzing qualitative data. It is usually applied to a set of texts, such as interview transcripts. The researcher will closely examine the data to identify common themes – topics, ideas and patterns of meaning that come up repeatedly (Nowell, Norris1, White and Moules, 2017).

Results and Discussion

This section deals with the presentation, analysis and interpretation of the data collected and the results of the statistical treatment employed in the study with the purpose of determining the influence of academic stress on students' self-efficacy and academic performance in Science.

Demographic Profile of the Grade 7 Students

A population's demographics are its traits. Race, ethnicity, gender, age, education, profession, occupation, income level, and marital status are examples of demographics that are commonly used in surveys.

The demographic profile of the Grade 7 students in terms of sex and parents' monthly income is presented in Tables 2 and 3.

Sex

"Sex" refers to the physical disparities between males, females, and intersex people. At birth, a person's sex is usually assigned based on physiological traits such as genitalia and chromosomal composition..

Table 2. *Distribution of the Respondents when Classified According to Sex*

Sex	*f*	*%*
Male	93	44.93
Female	114	55.07
Total	207	100.00

The distribution of the Grade 7 students when they are grouped according to sex in shown in Table 2.

It can be seen from the table that majority or 55.07 percent of the student respondents are female. Meanwhile, 44.93 percent of these respondents are male.

Results of the analyses imply that most of the students who enrolled in Grade 7 are female. Thus, female dominates the students enrolled in the aforementioned grade level.

Parents' Income

The income shared by people living in the same household is referred to as family or household income. In economics, the home is the unit where economic resources are shared and joint consumption occurs to some level.

Table 3. *Distribution of the Respondents when Classified According to Parents' Income*

Monthly Income	*f*	*%*
50, 001 and above	21	10.14
40,001 – 50,000	15	7.25
30,001 – 40,000	36	17.39
20,001 – 30,000	31	14.98
10,001 – 20,000	40	19.32
10,000 and below	64	30.92
Total	207	100.00

Table 3 presents the frequency and percentage distribution of the respondents when they are classified according to parents' family income.

It can be noted from the table that almost one-third or 30.92 percent of the students' parents earned ten thousand pesos or less per month. Meanwhile, almost one-fifth or 19.32 percent of the parents earned from 10,001 to 20,000 per month; 14.98 percent earned from 20,001 to 30,000 in a month; 17.39 percent earned from 30,001 to 40,000 pesos per month; 7.25 percent have a monthly income of 40,001 to 50,000 pesos per month; and the remaining 10.14 percent claimed that their monthly income ranged from 50,001 and above. The results imply that though there are many low-income families in the respondents, still there are some families who receive more and who can provide the needs of their children despite the pandemic. Due to the fact that the other family receive more income, this is enough to support their children's education.

The Academic Stress of Grade 7 Students in the New Normal

Academic stress is described as the body's reaction to academic demands that surpass students' adaptive capacity. An excessive amount of academic stress during this stage might have far-reaching and long-term consequences.

The assessments of the Grade 7 students with regard to their academic stress in terms of pressure from study, workload, worry about grades, self-expectation and despondency are summarized in Tables 4 to 8.

Pressure from Study

Pressure from study is properly described as an experience in which a student is pressed for time and energy to meet certain academic objectives. This pressure can come from a variety of places and have a range of emotional and academic consequences for pupils.

Table 4. *The Academic Stress of Grade 7 Students in the New Normal in terms of Pressure from Study*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I feel a lot of pressure in my daily studying.	3.60	FT	3.66	FT
2. There is too much competition among classmates that brings me a lot of academic pressure in Science.	2.96	STM	2.61	STM
3. Future education and employment bring me a lot of academic pressure.	3.61	FT	3.68	FT
4. My parents care about my academic grades in Science too much which brings me a lot of pressure.	3.05	STM	2.81	STM
5. My teacher expected me to get high grades in Science.	2.99	STM	2.63	STM
Overall Mean	3.24	STM	3.08	STM

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

Table 4 presents the assessments of the Grade 7 students as regards their academic stress in terms of pressure from study.

Shown from the table that item "Future education and employment bring me a lot of academic pressure" received the highest computed weighted mean of 3.61 (Frequently True of me) from the male respondents and 2.61 (Frequently True of me) from the female respondents. Meanwhile, item "There is too much competition among classmates that brings me a lot of academic pressure in Science" got the lowest computed weighted mean of 2.96 (Sometimes True of Me) from the male respondents and 2.61 (Sometimes True of Me) from the female respondents. A closer look at the table reveals that an overall mean of 3.24 (Sometimes True of Me) was computed for the male students which is bigger than the registered overall mean of 3.08 (Sometimes True of Me) for the female student respondents.

These results imply that since Grade 7 students at their young ages are already thinking of their future, they experienced pressure which

eventually resulted to academic stress.

In the same vein. Reddy et al. (2018) reported that Due to the multiple internal and external expectations placed on students' shoulders, stress has become a component of their academic lives. Adolescents are especially prone to the problems linked with academic stress since they are going through personal and social transitions. It is consequently critical to comprehend the causes and consequences of academic stress in order to develop appropriate and effective therapeutic measures.

In the conducted interview with the Grade 7 students, they were asked about the pressure that they encountered in studying Science in this new normal. Further they were asked about their strategies to overcome these pressures. These students replied that "Yes, because of the new settings now that I need to study on my own and always meet the deadline in the submission of modules, I feel pressured in Science. I was able to solve this problem (pressure) by doing schedule and allot more time in Science. Moreover, I frequently used the internet which help me a lot in understanding Science concepts."

Workload

When students can rapidly become overwhelmed if they feel there is more work to be done than they have time for. This can lead to negative consequences such as stress, physiological problems, and mental health problems.

Table 5. *The Academic Stress of Grade 7 Students in the New Normal in terms of Workload*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I feel like there is too much Science homework.	3.13	STM	2.48	ST
2. I feel like there is too much schoolwork in Science.	3.14	STM	2.55	ST
3. I feel like there are too many tests /exams in Science.	2.80	STM	2.25	ST
4. I feel like there are too much exercises in the Science module.	2.95	STM	2.47	ST
5. I feel that there are too much to research in order to answer the modules in Science.	3.22	STM	2.69	STM
Overall Mean	3.05	STM	3.49	ST

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

Table 5 exhibits the assessments of the Grade 7 students regarding their academic stress in terms of workload.

It can be noted from the table that " I feel that there are too much to research in order to answer the modules in Science" received the highest computed weighted mean of 3.22 (Sometimes True of Me) from the male respondents and 2.69 (Sometimes True of Me) from the female respondents. Meanwhile, item "I feel like there are too many tests /exams in Science" got the lowest computed weighted mean of 2.80 (Sometimes True of Me) from the male respondents and 2.25 (Seldom True of Me) from female respondents. Further perusal of the table reveals that an overall mean of 3.05 (Sometimes True of Me) was computed for the male students which is higher than the registered overall mean of 2.49 (Seldom True of Me) for the female students.

The results imply that students in this new normal experienced problems with regard to too much work given to them. As a result, these students suffered from academic stress which can affect their academic performance in Science.

Similar to the present findings, Suhaimi (2016) reiterated that Because of the quantity of academic work they have to do, students have traditionally been seen as anxious persons. Heavy academic workloads can produce apprehensive and worried feelings, which can lead to stress if they last for a long time. This is in conformity with the other study by Ganesh et al. (2012) on factors that contribute to student stress found that exam stress is the most common cause of stress, accounting for 63 percent of all stress (50 percent). Weerasinghe et al. (2012) found that excessive academic pressure is the most significant factor determining student stress levels in public universities, accounting for 90 percent of the top ten stressors.

In the conducted interview with the students, they were asked to describe their workload in this new normal. Moreover, they were asked they consider workload a stressor. Male students replied that, "My workload in this new normal is too hectic. I need to help my parents in doing some housework, I am hanging up and playing with my friends, and at the same time doing school tasks. This made me cram because of so many activities that I am attending to and need to accomplish. To solve this problem, I set a priority for my activities." On the other hand, when the same question was asked to female students they answered "workload is sometimes a problem to me. However, I was able to solve it easily by making a to-do list. In this way I can properly managed my day-to-day activities."

Based on the observations of the researcher as their subject teachers the female respondents are more inclined with time management than the male respondents. Most of the female respondents can submit their task on time while male respondents have more responsibilities at home that becomes a hinder in their early submission of task.

Worry about Grades

Parental and school pressure to earn excellent grades has resulted in worry about grades and stress levels among students are so high, beginning in elementary school, that some educators consider it a health epidemic.

Table 6 displays the assessments of the Grade 7 students about their academic stress in terms of worry about grades.

It can be observed from the table that item "Academic grade in Science is very important to my future and even can determine my whole life" received the highest computed weighted mean of 3.33 (Sometimes True of Me) from male respondents and 3.94 (Sometimes True of Me) from female respondents. In the same vein, item "I feel that I am useless when I get lower grades in Science" got the lowest computed mean of 3.04 (Sometimes True of Me) from male respondents. Additionally, male and female respondents also gave their lowest assessments to item "I feel that I have disappointed my parents when my Science test/exam results are poor" with a mean of 3.04 (Sometimes True of Me). Further observation of the table shows that an overall mean of 3.28 (Sometimes True of Me) was computed for the female students which is a little bit higher than the registered overall mean of 3.19 (Sometimes True of Me) for the male students.

Table 6. *The Academic Stress of Grade 7 students in the New Normal in terms of Worry about Grades*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I feel that I have disappointed my Science teacher when my test/exam results are not ideal.	3.30	STM	3.12	STM
2. I feel that I have disappointed my parents when my Science test/exam results are poor.	3.04	STM	3.25	STM
3. Academic grade in Science is very important to my future and even can determine my whole life.	3.33	STM	3.94	FT
4. I am a grade conscious student especially in Science.	3.24	STM	3.34	STM
5. I feel that I am useless when I get lower grades in Science.	3.04	STM	2.75	STM
Overall Mean	3.19	STM	3.28	STM

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

The results imply that students are stressed because of parental and school pressure to achieve good grades. Academic parental pressure will only make children anxious. When they receive a high grade on a test, they are concerned about the next one or that someone has received a higher grade. If their grade isn't the highest, they'll have the impression that they're not good enough.

The work of Chen (2021) supported the findings of the present study. Chen opined that when parents are only concerned with their children's grades during their formative years, they are causing high stress and anxiety. Stress and the feeling that they aren't as good as they could be can eventually lead to bad behavior. She also stated that too much pressure will cause children to try to get good grades by any means possible. They may cheat, turn to drugs, and their relationships with classmates will suffer as a result.

In the conducted interview, the students were asked if grades are stressor for them. These students replied that "I did not consider grade a stressor because I always submit my accomplished Science modules on time."

Students are doing their modules during Wednesday due to the fact that this day is the midweek break for them, they don't have class during Wednesday that gave them the time to make their science task and accomplished it on time.

Self-Expectation

Expectation is described as thinking that something will occur or that something should occur in a specific manner. Expectations become difficult when they take students out of the present and force them to focus solely on the future. When students' self-expectations do not match reality, they can cause significant stress.

Table 7. *The Academic Stress of Grade 7 Students in the New Normal in terms of Self- Expectation*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I feel stressed when I do not live up to my own standards in Science.	3.18	STM	3.34	STM
2. When I fail to live up to my own expectations in Science, I feel I am not good enough.	2.86	STM	3.26	STM
3. I usually cannot sleep because of worry when I cannot meet the goals I set for myself in Science.	2.75	STM	2.69	STM
4. I feel ashamed when I do not get my expectations in Science.	2.94	STM	3.26	STM
5. I set high standards for myself in Science in this new normal.	3.23	STM	3.36	STM
Overall Mean	2.99	STM	3.18	STM

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

Table 7 summarizes the assessments of the Grade 7 students regarding their academic stress in terms of self-expectation. It can be examined from the table that item "I set high standards for myself in Science in this new normal" received the highest computed mean of 3.23 (Sometimes True of Me) from male respondents and 3.36 (Sometimes True of Me) from female respondents . In similar vein, these groups of respondents gave their lowest assessments to item "I usually cannot sleep because of worry when I cannot meet the goals I set for myself in Science" with a computed mean of 2.75 (Sometimes True of Me) from male respondents and 2.69 (Sometimes True of Me) from female respondents. Further examination of the table reveals that an overall mean of 3.18 (Sometimes True of Me) was computed for the female students which is more than the registered overall mean of 2.99 (Sometimes True of Me) for the male

students.

The results imply that since students gave so much effort and time in doing their Science tasks, they expect that their teachers will give them higher grades.

In the same manner, De Leon (2017), that Filipino students, male and female, face a variety of academic stresses, with one type of academic stress stemming from expectations. This is because adolescent self-expectations, as well as the expectations of others, such as parents and teachers, are especially prominent in the Asian context.

In the conducted interview, students were asked to describe their self-expectation in Science in this new normal. These students replied that they do not expect too much that they receive higher grades in Science. Moreover, they added that "I know my strengths and weaknesses especially in Science so I expect only the grade that I deserved."

Most of the students are not questioning the grades that they received from their Science teacher, this is due to the fact that the teacher explains all the needed requirements, grading system and the students understand their situation very well.

Despondency

Despondency is a sad emotional state — much like depression. If the students are in a state of despondency, they are feeling hopeless and super bummed out. Despondency is one of many emotional states that are not pleasant — it's a kind of extreme sadness.

Table 8. *The Academic Stress of Grade 7 Students in the New Normal in terms of Despondency*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I always lack confidence with my academic scores in Science.	3.01	STM	3.21	STM
2. I am very dissatisfied with my academic grades in Science.	2.69	STM	2.58	ST
3. It is very difficult for me to concentrate on my Science modules.	2.90	STM	2.53	ST
4. I can't accomplish my Science modules on time.	2.96	STM	2.57	ST
5. I have low spirits that I can get high grades in Science in this new normal.	3.06	STM	2.97	STM
Overall Mean	2.92	STM	2.77	STM

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

Table 8 indicates the assessments of the Grade 7 students as regards their academic stress in terms of despondency.

Manifested from the table that male respondents gave their highest assessment to item "I have low spirits that I can get high grades in Science in this new normal" with a computed mean of 3.06 (Sometimes True of Me). On the other hand, their lowest assessment was registered to item "I am very dissatisfied with my academic grades in Science" with a computed mean of 2.69 (Sometimes True of Me). Meanwhile, the item "I always lack confidence with my academic scores in Science" received the highest computed mean of 3.21(Sometimes True of Me) from the female respondents, while their lowest assessment was given to item "It is very difficult for me to concentrate on my Science modules" received the lowest computed mean of 2.53 (Seldom True of Me). An overall mean of 2.92 (Sometimes True of Me) was recorded for the male respondents which is bigger than the computed overall mean of 2.77 (Sometimes True of Me) for the female respondents.

The results imply that due to many problems and obstacles that the students experienced in the new normal, some of them felt hopeless and depressed which made them stressed .

In accordance to this, Koyama et al., (2014) stated that between 19 and 42 percent of adolescents in grades 10th, 11th, and 12th had depression, anxiety disorder (11 percent), and specific phobias (10 percent). Learning or educational problems, family conflict, and drug abuse are all factors that contribute to poor mental health. Thai students spend a lot of time in the classroom and many extra hours after school for tutorial classes, which can cause stress and have a negative impact on their health because students are focused on academic excellence.

In the conducted interview with the respondents, they were asked to describe their confidence in learning Science in this new normal. These respondents replied that during the first implementation of distance learning, they were not confident that they will be able to pass Science. However, after few months of adjustments, they became confident and be able to accomplish all Science tasks by themselves.

Because of the new set up for education as the students move towards distance learning, it is noticeable that they are having hard time due to the new system but as time goes on, during the third quarter of the academic year 2021-2022, they are now coping with the situation, and they have already adjusted their knowledge on how to adapt to this change in education system.

The Academic Self-Efficacy of Grade 7 Students in the New Normal

A student's confidence in their ability to plan, execute, and regulate performance in order to solve a problem or complete a task at a specified level of skill and ability Academic self-efficacy is a person's belief (conviction) that they can successfully complete an

academic task at a certain level or attain a specific academic goal. The assessments of the Grade 7 students with regard to their academic self-efficacy in terms of perceived control, competence, persistence and self-regulated learning are reflected in Tables 9 to 12.

Perceived Control

People have a sense of perceived control when they consider that, in general, personal action controls results (internal locus of control) and that they have the skills to carry out those actions (self-efficacy). As a result, perceived control can be divided into two components. ("there are effective responses for people in general" and "I can enact them") or calculated as a composite belief ("I can take action to get what I want").

Table 9. *The Academic Self-Efficacy of Grade 7 Students in the New Normal in terms of Perceived Control*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I will succeed in Science because I can improve my study habit.	3.85	A	4.18	A
2. I will be able to pass Science subjects because I am smart enough to do so.	3.39	MA	3.26	MA
3. Passing a Science subject depends on how well I perform.	3.83	A	4.23	SA
4. The future depends on what I do now in Science.	3.25	MA	3.61	A
5. My Science teacher gives me high marks because I deserve it.	3.59	A	3.81	A
6. Because I develop good study habits, I learn more in Science.	3.68	A	3.91	A
7. My Science teacher sees me as a good student.	3.63	A	3.47	A
8. I believe that I can pass Science subject because I have the ability to do so.	3.77	A	3.89	A
9. I can successfully control the outcome written works in Science.	3.41	A	3.53	A
Overall Mean	3.60	A	3.77	A

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

The assessments of the Grade 7 students as regards their academic self-efficacy in the new normal in terms of perceived control are shown in Table 9.

The table shows, item "I will succeed in Science because I can improve my study habit" received the highest computed mean of 3.85 (Moderately Agree) from the male respondents while item "Passing a Science subject depends on how well I perform" obtained the highest computed mean of 4.23 (Strongly Agree) from the female respondents. A closer look at the table shows that item "The future depends on what I do now in Science" received the lowest assessment from the male respondents with a computed mean of 3.25 (Moderately Agree), while item "I will be able to pass Science subjects because I am smart enough to do so" got the lowest computed mean of 3.26 (Moderately Agree) from the female respondents. An overall mean of 3.77 (Agree) was recorded for the female respondents which is slightly higher than the registered overall mean of 3.60 (Agree) for the male respondents.

Results of the analysis imply that even though students are doing all their Science tasks on their own, they still hope and believe that they can succeed in the subject.

Accordingly, Parrrila et al. (2019) agreed that Students who have a strong sense of efficacy are more likely to take on difficult tasks and to be intrinsically motivated. These students will work hard to meet their commitments and will attribute failure to factors within their control rather than blaming external factors. Self-efficacious students recover quickly from setbacks and are more likely to achieve their personal goals in the long run.

Competence

Perceived competence is the degree to which a person believes he or she possesses the necessary characteristics to succeed. Personal effectance, or the perceived need to effect change and achieve valued outcomes, is included in the concept of perceived competence.

Table 10. *The Academic Self-Efficacy of Grade 7 Students in the New Normal in terms of Competence*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. In whatever I do in Science, I strive to attain excellence.	3.58	A	3.92	A
2. I do things creatively and it helps me get a good mark in Science.	3.55	MA	3.87	A
3. During exams in Science, I do not feel anxious because I know I can pass the test with high marks.	3.12	A	2.78	MA
4. Compared with my classmates, I think that I am a better academic performer in Science.	2.85	MA	2.50	D
5. I can do excellent job in my Science subjects.	3.41	A	3.40	MA
6. I do not worry about the assigned task to me in Science class.	3.05	A	2.83	MA
7. I can get good grades in my Science modules.	3.34	A	3.64	A
8. I can pass my Science quarterly assessment such as periodical test.	3.47	A	3.61	A
9. I am competent to pass Science subject.	3.53	A	3.75	A

Overall Mean	3.32	A	3.37	MA

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

The assessments of the Grade 7 students with regard to their academic self-efficacy in the new normal in terms of competence are manifested in Table 10.

As the table reveals, item "In whatever I do in Science, I strive to attain excellence" received the highest computed mean of 3.58 (Agree) from male respondents and 3.92 (Agree) from female respondents. On the other hand, item "Compared with my classmates, I think that I am a better academic performer in Science" garnered the lowest computed mean of 2.85 (Moderately Agree) from male respondents and 2.50 (Disagree) from female respondents. Meanwhile, an overall mean of 3.37 (Moderately Agree) was computed for the female respondents which is almost the same with the registered overall mean of 3.32 (Moderately Agree) for the male respondents.

Findings of the study imply that students in this new normal still believe that they can achieve their goals in Science. Moreover, they believed that they are competent enough to attain higher grades in the subject. Due to the local government support, each student are given the opportunity to have tablet and internet for online learning, this opportunity increases their competence in doing science related activities online.

Similar to the above findings, Marginson, (2020) reiterated that the widespread adoption of the COVID-19 has undoubtedly altered the global educational landscape. Furthermore, the pandemic has hampered not only student mobility and competence, but also student development and learning experience due to the abrupt transition of traditional face-to-face classes to online learning regardless of instructor and student readiness. Students reported that stress and mental wellbeing have a negative impact on them on university campuses around the world.

Persistence

Persistence is essential for non-routine problem solving and proving. It enables one to proceed despite making arguments in seemingly unhelpful directions until one eventually makes progress and achieves a successful outcome.

Table 11. *The Academic Self-Efficacy of Grade 7 Students in the New Normal in terms of Persistence*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. Despite the pandemics, I still continue to study hard in Science.	3.76	A	4.13	A
2. In spite of obstacles in this new normal, I continue to maintain my good grades in Science.	3.59	A	3.97	A
3. I manage to pull through even when others think there is no hope in passing Science.	3.53	A	3.85	A
4. When I'm having a hard time understanding the Science lesson, I never stop trying.	3.78	A	4.02	A
5. I know how to help myself and that is persistently working hard in Science.	3.56	A	3.80	A
6. I consistently figure out how to do the most difficult class works in Science.	3.43	A	3.52	A
7. If I don't give up, I can do almost all hard tasks in Science.	3.62	A	3.64	A
8. I am persistent to pass Science subject.	3.66	A	3.91	A
9. Despite obstacles, I am able to accomplish my Science modules.	3.67	A	4.08	A
Overall Mean	3.62	A	3.88	A

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

The assessments of the Grade 7 students regarding their academic self-efficacy in the new normal in terms of persistence are indicated in Table 11.

As manifested in the table, item "Despite the pandemics, I still continue to study hard in Science" yielded the highest computed mean of 3.76 (Agree) from male respondents and 4.13 (Agree) from female respondents. On the other hand, item "I consistently figure out how to do the most difficult class works in Science" garnered the lowest computed mean of 3.43 (Agree) for male respondents and 3.52 (Agree) from female respondents. Meanwhile, an overall mean of 3.88 (Agree) was calculated for the female respondents which is bigger than the registered overall mean of 3.62 (Agree) for the male respondents.

Findings of the study imply that since both groups of students agreed that they are persistent to learn Science in spite of the pandemic, they will be more motivated and be able to obtain higher grade in the subject. The eagerness of the students to learn science is triggered by the fact that even in young age they are already thinking of their future. They seem to be inclined with the motivation to make their life successful however they also think that they need to study well in Science because Science good grades is one of the major requirements for them to take the strand STEM in senior high school.

This confirms with Burns et al., (2020), confirmed that amidst the backdrop of the COVID-19's already mounting challenges in the development of student competence, the effects of the COVID-19 pandemic are amplified on students' mental and physical well- being. The transition from traditional face-to-face classrooms to online learning has tested students' ability to learn under COVID-19 conditions.

Self-Regulated Learning

Self-regulated learning is a recurring process in which students plan for a task, keep an eye on their performance, and then reflect on the results. The sequence is then repeated as the student regulates and articulates for the next task. The process should be tailored to individual students and specific learning tasks rather than being generalized for all.

The assessments of the Grade 7 students on their academic self-efficacy in the new normal in terms of self-regulated learning are summarized in Table 12.

Table 12. *The Academic Self-Efficacy of Grade 7 Students in the New Normal in terms of Self-Regulated Learning*

Item Statement	*Male (N=93)*		*Female (N=114)*	
	Mean	*VD*	*Mean*	*VD*
1. I can adjust whenever there are hard activities in Science class.	3.53	A	3.62	A
2. I can study on my own in Science.	3.19	MA	3.11	MA
3. Whenever there are suggestions with regard to my negative study habits in Science, I welcome it to change.	3.81	A	3.82	A
4. I can monitor my learning development in Science.	3.52	A	3.48	A
5. I can submit my requirements in Science before the deadlines.	3.39	MA	3.64	A
6. I am motivated to pass Science.	3.66	A	4.00	A
7. I plan my school activities in Science.	3.35	MA	3.69	A
8. I arrange my study room to learn Science without distractions.	3.17	MA	3.62	A
9. I can motivate myself to learn more in Science.	3.61	A	3.97	A
Overall Mean	3.47	A	3.66	A

Legend: 4.21 – 5.00, Always True of Me (AT)/Very Stressful; 3.41 – 4.20, Frequently True of me (FT)/Stressful; 2.61 – 3.40, Sometimes True of Me (STM)/Moderately Stressful; 1.81 – 2.60, Seldom True of Me (ST)/Slightly Stressful; 1.00 – 1.80, Never True of Me (NT)/Not Stressful

As indicated in the table, item "Whenever there are suggestions with regard to my negative study habits in Science, I welcome it to change" received the highest computed mean of 3.81 (Agree) from the male respondents while item "I am motivated to pass Science" obtained the highest computed mean of 4.00 (Agree) from the female respondents. Further perusal of the table shows that item "I arrange my study room to learn Science without distractions" received the lowest computed mean of 3.17 (Moderately Agree) from the male respondents, while item "I can study on my own in Science" got the lowest computed mean of 3.11 (Moderately Agree) from the female respondents. An overall mean of 3.66 (Agree) was recorded for the female respondents which is higher than the registered overall mean of 3.47 (Agree) for the male respondents.

Results of the analysis imply that since online learning has been implemented for almost two years, high school students were able to adapt to the new settings of education in the country. They were able to regulate their own learning and made themselves motivated to accomplish all school tasks which eventually resulted to obtaining higher academic performance.

In conjunction to the present findings, Nguyen (2015), stated that online learning is an effective and efficient method of knowledge delivery. Furthermore, Beaudoin et al. (2019) discovered that higher education students in the United States, Mexico, Israel, and Japan were generally satisfied with their online learning experience. Because it is flexible, online learning improves student learning outcomes, particularly for students in higher education.

The Grade 7 Students' Academic Performance in Science in the New Normal

The academic performance of the Grade 7 students which was measured in terms of their average grades in Science in the first and second grading periods are presented in Table 13.

Table 13. *Frequency Distribution of Students' Academic Performance in Science*

Grade	*Male (N=93)*		*Female (N=114)*		
	f	*%*	*f*	*%*	*Verbal Description*
90 and above	7	7.53	17	14.91	Outstanding (O)
85 – 89	45	48.39	56	49.12	Very Satisfactory (VS)
80 – 84	22	23.66	31	27.19	Satisfactory (S)
75 – 79	11	11.83	4	3.51	Fairly Satisfactory (FS)
74 and below	8	8.60	6	5.26	Did Not Meet Expectations (DNE)
Range	72 – 91		73 – 92		
Mean	83.92		85.01		
VD	Satisfactory (S)		Very Satisfactory (VS)		
SD	4.32		4.43		
	t-value = -1.513		p-value = 0.132		not significant

It can be noted from the table that the grades of the male students ranged from 72 to 92. Meanwhile, the mean was computed at 83.92

which is verbally described as satisfactory. The standard deviation which measures the spread of the students' grades from the mean was registered at 4.32. These results indicate that 63 male students registered grades from 79.60 to 88.24.

Meanwhile, the female grades in Science ranged from 73 to 92. The mean was computed at 85.01 while the standard deviation was calculated at 4.43. These results indicate that 78 female students registered grades that ranged from 81 to 89.

When the academic performance of the male and female Grade 7 students in Science were compared, no significant difference was found. This no significant difference was taken about by the fact that the calculated probability value of 0.132 is greater than the 0.05 significance level.

The results disclose that the academic performances of Grade 7 male and female students in science are the same. Further, this implies that sex is not a factor on students' performance in Science in this new normal. This is also due to the fact that the sectioning of the students are homogenous class, which means that all students with the same level of academic performance are grouped into one section.

In contrast to the findings of the present study, Yang (2020) reported that in the academic accomplishment, various studies have investigated the academic gender gaps, most results showed that the male outperform female in science, and the gaps are large in number. It has been stated that the male are relatively better than girls in biology, general science, and physics, while girls are superior in language ability.

The Difference between the Academic Stress and Academic Self-Efficacy of the Grade 7 Students when they are Grouped According to Sex

Table 14 presents the results of the independent t-test analyses which were performed to determine if significant difference existed between the assessments of the Grade 7 male and female respondents as regards their academic stress and academic self- efficacy in this new normal.

Table 14. *Results of the t-test Analysis*

Item	*Mean*		*Mean Diff.*	*t-value*	*p-value*
	Male	*Female*			
Academic Stress					
pressure from study	3.24	3.08	0.16	0.573ns	0.582
workload	3.05	2.49	0.56	5.369**	0.001
worry about grades	3.19	3.28	-0.09	-0.443ns	0.670
self-expectation	2.99	3.18	-0.19	-1.224ns	0.256
despondency	2.92	2.77	0.15	1.014ns	0.340
Academic Self-Efficacy					
perceived control	3.60	3.77	-0.17	-1.281ns	0.218
competence	3.32	3.37	-0.05	-0.227ns	0.823
persistence	3.62	3.88	-0.26	-3.361**	0.004
self-regulated learning	3.47	3.66	-0.19	-1.670ns	0.114

*Legend: ** = highly significant (p≤0.01) ns = not significant (p>0.05)*

Noted from the table that highly significant difference was found between the assessments of the male and female Grade 7 students with regard to their academic stress in terms of workload. This highly significant difference was brought about by the fact that the computed probability value of 0.001 for these variables is less than the 0.01 significance level. Results disclosed that male students had greater academic anxiety in so far as workload is concerned. This may due to the fact that male students have more activities as compared to female students that may added to their workload problems. One of these activities are working at their store to help their parent because most of the respondents parent's income is below 10,001 pesos, they need to work at a young age in order provide for them. This has a big impact on the male respondent's learning, they tend to be academically stressed due to lack of time in doing their task and also, they tend to compromise when it comes to online classes. As the academic stress hinders the students in doing their best, it will surely affect the academic performance of the students.

In accordance to the present findings, Richards and Randolff (2018) made as their final observation that, "notable differences [exist] between male and female students' workload management". They found that female students are more organized in scheduling their daily activities.

Further perusal of the tabulated results reveals that highly significant difference was found between male and female students' academic self-efficacy in terms of persistence. This highly significant difference was manifested by the computed probability value of 0.004 which is less than the significance level of 0.01. Results also reveal that female students are more persistent to learn Science as compared to male students.

This can be attributed to the fact that female students are more positive to overcome learning difficulties than males, which also led to

their significantly more engaged in online learning than males. Due to other task at home, male respondents need to multitask, some of them are working to provide for their family and themselves this activity reduces their time in studying that resulted to a negative thinking that they don't have enough time for studying therefore, they will have difficulties in learning the subject.

In conjunction to the discoveries of the present study, Alghamdi et al., (2020) also found that females achieve more in terms of learning outcomes than males because they were more persistent and exert greater commitment than males.

The Difference among the Students' Academic Stress and Academic Self-Efficacy when they are Grouped According to Parent's Income

In this part of the study, Table 15 summarizes the results of the analysis of variance which was performed to determine if significant difference existed among the students' academic stress and academic self-efficacy when they are classified according to their parents' income.

Table 15. *Results of the F-test Analysis*

Item	*F-value*	*p-value*
Academic Stress		
pressure from study	18.23*	0.028
workload	28.56**	0.000
worry about grades	19.41*	0.014
self-expectation	32.01**	0.000
despondency	16.58*	0.045
Academic Self-Efficacy		
perceived control	26.32**	0.008
competence	32.48**	0.000
persistence	41.02**	0.000
self-regulated learning	2.08ns	0.614

*Legend: ** = highly significant (p≤0.01) * = significant (p≤0.05) ns = not significant (p>0.05)*

It can be examined from the table that significant to highly significant differences were found among the students' academic stress when they are grouped according to their parents' income. Results of the analyses disclose that students whose parents' income ranged from 10,000 and below had greater level of academic stress in terms of pressure from study (p=0.028), workload (p=0.000), worry about grades (p=0.014) and despondency (p=0.045). This may due to the fact that students who lack financial support will have more pressure, they have more worries about the workload and grades and higher level of despondency. Moreover, students who belong to this income level are more involved in various household chores which is a great factor to fully focus on their studies.

However, students whose parents' income ranged from 50,001 and above showed greater level of academic stress in terms of self-expectation. This can be attributed to the fact that since these students are well-provided, they expect that they would be able to obtain higher grades in Science. This imply self confidence and trust in themselves.

Further examination of the same table shows that highly significant differences were found among the students' academic self-efficacy in terms of perceived control (p=0.008), competence (p=0.000) and persistence (p=0.000) when they are classified according to their parents' monthly income. Results of the analyses disclose that students whose parents' income ranged from 50,001 pesos and above per month had greater level of self-efficacy.

The results imply that students who are well-provided by their parents are more positive about their beliefs that they can be successful in their studies. They expect more of their academic achievement. In this new normal, gadgets and internet connection are necessary for the learning process, students that are well provided by the materials needed in order to attend online classes shows greater output than the students who don't have gadgets at home. This is due to the fact that they have a better access to information therefore they have the confidence to believe that they can to more and achieved success in Science.

Similarly, Seyedi-Andi (2019) discovered that academic self-efficacy and field of study had a positive relationship with socioeconomic status variables such as gender, family income, and parents' educational attainment, and a negative relationship with anxiety.

The Relationship between the Academic Stress and Academic Self-Efficacy of Grade 7 Students

Table 16 presents the results of the correlation analysis which was done to determine if significant relationship existed between the Grade 7 students' academic stress and academic self-efficacy in the new normal.

Seen from the table that highly significant relationship was found between the students' academic stress in terms of pressure from study, workload, worry about grades, self-expectation, and despondency and their academic self-efficacy in terms of perceived control, competence, persistence and self-regulated learning. This significant relationship is manifested by the computed probability values that range from 0.009 to 0.000 which are less than the 0.01 level of significance. Further perusal of the table reveals that inverse relationship existed between the variables as indicated by the negative sign of the correlation values that range from 0.385 to 0.863. These results

disclose that as the level of students' academic stress decreases, the level of their academic self-efficacy increases.

Moreover, these results imply that when the Grade 7 students' level of stress in this new normal is low, their academic self-efficacy will be more developed. Their beliefs that they can succeed in Science will be greater if they do not have stress. As a result, they will be more motivated and obtain higher grades in the subject.

Table 16. *Results of the Correlation Analysis on the Relationship between Academic Stress and Academic Self-Efficacy of Grade 7 Students*

Academic Stress	*Academic Self-Efficacy*			
	perceived control	*competence*	*persistence*	*self-regulated learning*
pressure from study	-0.715** (0.000)	-0.819** (0.000)	-0.614** (0.000)	-0.649** (0.000)
workload	-0.419** (0.007)	-0.385** (0.009)	-0.485** (0.008)	-0.501** (0.004)
worry about grades	-0.745** (0.000)	-0.619** (0.000)	-0.741** (0.000)	-0.812** (0.000)
self-expectation	-0.821** (0.000)	-0.748** (0.000)	-0.758** (0.000)	-0.709** (0.000)
despondency	-0.863** (0.000)	-0.820** (0.000)	-0.749** (0.000)	-0.817** (0.000)

*Legend: ** = highly significant (p≤0.01) Numbers in the upper entry are correlation values*
Numbers enclosed in parentheses are probability values

Chiu (2014), confirmed similarly to the current study's findings, that in terms of the relationship between academic stress and academic self-efficacy, researchers discovered that academic stress has a direct negative effect on academic self-efficacy among students. Lee and Jeon (2015) conducted research on 191 fourth-grade and 250 sixth-grade elementary school students and discovered that children's life stress, including academic stress, was negatively related to academic self-efficacy and subjective well-being. In terms of the direct impact of academic self-efficacy on academic burnout, researchers found that academic self-efficacy was negatively associated with academic burnout among students (Charkhabi et al., 2013).

In the conducted interview with the students, they were asked about the effect of stress on their academic self-efficacy. These respondents replied that "I firmly believed that stress really negatively affects everything that we do even our academic self-efficacy. When we are stressed the level of our self-efficacy decreases. We lost our self-confidence, and our beliefs that we can survive if we are stress. To relieve from stress, usually I talked to my friends and family. In doing this, we were able to divert our attention on the happy moments that I shared with them." Moreover, there are some who stated that they "pray whenever they feel stress and some others replied that they engaged themselves in some sports activities to relieve from stress"

To lessen the burden of the new normal set up of education to the students, they were given a midweek break which is every Wednesday in order for them to have time doing their modules, also, in grade 7 their task is given in a google form in order answer the task easily.

The Relationship between the Students' Academic Stress and Academic Performance in Science

Table 17 exhibits the results of the correlation analysis which was done to determine if significant relationship existed between the Grade 7 students' academic stress and academic performance in Science in the new normal.

Table 17. *Results of the Correlation Analysis on the Relationship between Academic Stress and Academic Performance in Science of Grade 7 Students*

Academic Stress	*Correlation Value (r-value)*	*Probability Value (p-value)*
pressure from study	-0.789**	0.000
workload	-0.812**	0.000
worry about grades	0.754**	0.000
self-expectation	-0.715**	0.000
despondency	-0.614**	0.000

*Legend: ** = highly significant (p≤0.01)*

Observed from the table that highly significant relationship was found between the students' academic stress in terms of pressure from study, workload, worry about grades, self-expectation, and despondency and their academic performance in Science in the new normal. This significant relationship is manifested by the computed probability values which are all equal to 0.000 that are less than the 0.01 level of significance. Further perusal of the table reveals that inverse relationship existed between the foregoing variables as indicated by the negative sign of the correlation values that range from -0.812 to -0.614. These results mean that as the level of students' academic stress increases, the level of their academic performance in Science in the new normal decreases, and vice-versa.

The results imply that when students suffer from academic stress, their academic performance in Science will be negatively affected. If students are experiencing pressure from study, so much workload, worry about grades, and despondency, these factors give stress that can prevent students from performing at their best.

In conformity to the present findings, controversial results of Sanders and Lushington (2020) there has been some research done on the relationship between stress and academic performance in students. According to the findings of their studies, students who reported higher levels of stress had lower grade point averages (GPAs). However, Crego et al., (2016) claimed that their study found no

correlation between stress and academic performance among dental students. Furthermore, they stated that the role of stress in academic performance may vary depending on the level of stress.

In the conducted interview with the students, they were asked about the effect of stress in their academic performance in Science and their ways and strategies to handle this stress. Majority of the students replied that they "strongly believed that stress affected their academic performance in Science in a negative way". Additionally, they said that "when they are stress, they don't have the motivation to do anything in science". In order to overcome stress, these students stated that "they stop doing Science tasks and do something (listen to their favorite music, doing sports activities, sleeping and taking a bath) that will refresh their minds and that will make more focus of their activities".

Students recognized how stress can be a hindrance to them in learning Science, however, they tend to be more realistic and divert the stress they are feeling by doing the best that they can and by simply making their life more enjoyable by not focusing on academics only but they tend to stop once they feel that they need to take a break, with these, the students were able to conquer the stress that they went through and be more productive in doing their Science task.

Intervention/s or Program of Activities could be Crafted from the Results of the Study

Results of this study revealed that the male students are more stressed when it comes to workload compared to female students since female students are more persistent when it comes to their studies. Hence, on a matrix below, the researcher proposed an action plan that will increase their academic performance and increase their self-efficacy in the new normal.

Table 18. *Proposed Program of Activities*

Objective	*Action*	*Timeline*	*Persons Involved*	*Expected Output*
To open conversations about mental health; to normalize its prevalence in the school and at home; and	Conduct a mental health awareness seminar for the parents and students.	First quarter of Academic Yeare 2022-20223	Researcher, Science Teachers, Guidance Counselor, Head Teacher and Principal	At the end of the program parents and student should be able to understand and improved/ enchanced their mental health condition.
To equip parents and students with tools to create a safe, engaged, and conducive to learning environment.	Use Quipper School as Intervention program. Provide a written summary of the scores they received from the intervention with a verbal summary of what they learned.			
To be able to encourage students finished their task in a systematic manner.		In every quarter of Academic Year 2022-2023	Researcher, Science Teachers, Guidance Counselor, Head Teacher and Principal	At the end of the intervention, thE students increase their performance in Science.

Conclusions

Based on the findings of the study, the following conclusions were drawn: There is a significant difference between the male and female students' academic stress in this new normal. Male students had a greater level of academic stress in terms of workload. Moreover, there is a significant difference between the male and female students' academic self-efficacy. Female students had a greater level of academic self-efficacy in terms of persistence.

There is a significant difference among the students' academic stress when they are grouped according to their parents' income. Students whose parents' income ranged from 10,000 and below had greater level of academic stress in terms of pressure from study, workload, worry about grades and despondency. On the other hand, students whose parents' income ranged from 50,001 and above had greater level of academic stress in terms of self-expectation.

There is a significant difference among the students' academic self-efficacy in terms of perceived control, competence and persistence when they are classified according to their parents' monthly income. Students whose parents' income ranged from 50,001 pesos and above per month had greater level of self-efficacy.

There is a significant relationship between the academic stress and academic self- efficacy of Grade 7 students. Students who are free from stress had a greater level of academic self-efficacy in Science.

There is a significant relationship between Grade 7 students' academic stress and their academic performance in Science. Students who are free from stress had a greater chance of getting higher grades in Science.

In light of the findings and conclusions of the study, the following recommendations are hereby presented:

Since male students were more stressed as compared to female student in terms of workload, the school may offer a short lecture for the male students that will focus on time management and work organization in the new normal.

Parents and teachers may work hand-in-hand to improve the students' academic self-efficacy in terms of competence.

For future researchers, further research along this line may be conducted. They may use senior high school as respondents to further validate the results of the present study.

References

Abaidoo, A. (2018). Factors contributing to academic performance of students in a Junior High School. A thesis presented to the Institute of Educational Development and Extension, University of Education, Winneba; accessed on https://www.grin.com/document/450284.

Alghamdi, A., Karpinski, A. C., Lepp, A., & Barkley, J. (2020). Online and face-to-face classroom multitasking and academic performance: Moderated mediation with self- efcacy for self-regulated learning and gender. Computers in Human Behavior, 102, 214–222.

Alyami, M., Melyani, Z., Johani, A., Ullah, E., Alyami, H., Sundram, F., Hill, A., & Henning, M. (2017). The impact of self-esteem, academic self-efficacy and perceived stress on academic performance: A cross-sectional study of saudi psychology students. The European Journal of Educational Sciences, 04(04). doi:10.19044/ejes.v4no3a5.

Arslan, N. (2017) Investigating the relationship between educational stress and emotional self-efficacy. Universal Journal of Educational Research 5(10): 1736-1740, doi: 10.13189/ujer.2017.051010

Beaudoin, M., Kurtz, G., & Eden, S. (2019). Experiences and opinions of e-learners: What works, what are the challenges, and what competencies ensure successful online learning. Interdisciplinary Journal of E-Learning and Learning Objects, 5(1), 275–289.

Berman, E. (2017). An exploratory sequential mixed methods approach to understanding researchers' data management practices at UVM: Integrated findings to develop research data services. Journal of EScience Librarianship, 6(1), e1104. doi:10.7191/jeslib.2017.1104

Burns, D., Dagnall, N., & Holt, M. (2020). Assessing the impact of the COVID-19 pandemic on student wellbeing at universities in the United Kingdom: A conceptual analysis. Frontier in Education, 5(October), 1–10. https://doi.org/10.3389/feduc.2020.582882

Charkhabi, M., Abarghuei, M. A., & Hayati, D. (2013). The association of academic burnout with self-efficacy and quality of learning experience among Iranian students. Springerplus, 2, 677-681.

Chen Y (2021) College students' stress and health in the COVID-19 pandemic: The role of academic workload, separation from school, and fears of contagion. PLoS ONE 16(2): e0246676.

Chiu, S. I. (2014). The relationship between life stress and smartphone addiction on Taiwanese university student: A mediation model of learning self-efficacy and social self-efficacy. Computers in Human Behavior, 34, 49-57.

Crego A, Carrillo-Diaz M, Armfield JM, Romero M. (2016). Stress and academic performance in dental students: the role of coping strategies and examination- related self-efficacy. J Dent Educ. 2016;80:165–72

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd ed.). Sage Publications.

De Leon, HM (2017). An assessment of academic stress among high school students.Educational Research and Review, 3(2), 43-60

Dixon, J and Sun, J. (2018). Validation of the Educational Stress Scale for Adolescents (ESSA). Asia-Pacific Journal of Public Health, 2(3), 31-44.

Dullas AR (2018) The Development of Academic Self-Efficacy Scale for Filipino Junior High School Students. Front. Educ. 3:19. doi: 10.3389/feduc.2018.00019

Fernández, L., González, A., & Trianes, M. (2015). Relationships between academic stress, social support, optimism-pessimism and self-esteem in college students. Electronic Journal of Research in Educational Psychology, 13(35), 111-130. https://doi.org/10.14204/ejrep.35.14053

Fong, C., Davis, C., Kim, Y., Kim, Y. W., Marriott, L., and Kim, S. Y. (2017). Psychological factors and community college student success: a meta-analytic investigation. Rev. Educ. Res. 87, 388–424. doi: 10.3102/0034654316653479

Ganesh, G., U. Kavitha, B. Anandarajan and M. Chandrasekar, (2012). A study to analyze various factors contributing to stress in first year MBBS students during examination. Int. J. Biomed. Adv. Res., 3: 700-703.

Grøtan, K., Sund, E. & Bjerkeset, O. (2019). Mental health, academic self-efficacy and study progress among college students – The SHoT Study, Norway. Frontiers in Psychology, 10, 45. doi:10.3389/fpsyg.2019.00045.

Gutierrez, I. A., & Park, C. L. (2015). Emerging adulthood, evolving worldviews: How life events impact college students' developing belief systems. Emerging Adulthood, 3(2), 85–97. doi:10.1177/2167696814544501

Gutiérrez-García, A. G., & Landeros-Velázquez, M. G. (2017). Evaluación de funciones ejecutivas en estudiantes universitarios con

niveles de autoeficacia percibida baja [Assessing executive functions un university students with low levels of perceived self-efficacy]. Revista Electrónica de Psicología Iztacala, 20(2), 397–426. Retrieved from www.revistas.unam.mx/index.php/repi

Hernández, A., Escobar., S., Fuentes., & Eguiarte, B. (2018). Stress, self-efficacy, academic achievement and resilience in emerging adults. Electronic Journal of Research in Educational Psychology, 17 (1), 129-148. ISSN:1696-2095. 2019.

Kornely, D., & Halfmann, K. (2020). Psychosocial stress and attitudes toward substance use among college students: An exploratory study. Psi Chi Journal of Psychological Research, 25(4), 338–348. doi:10.24839/2325-7342.jn25.4.338

Koyama A, Matsushita M, Ushijima H, Jono T, Ikeda M. (2014). Association between depression, examination-related stressors, and sense of coherence: The ronin-sei study. Psychiatry Clin Neurosci. 2014;68(6):441–47.

Lee, S.-H., & Jeon, W.-T. (2015). The relationship between academic self-efficacy and academic burnout in medical students. Korean Journal of Medical Education, 27(1), 27-35.

Lewis, J.L. & S.R.J. Sheppard. (2006). Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? Landscape and Urban Planning 77:291–313.

Marginson, S. (2020). The world is changing: Higher education and the COVID-19 pandemic [Paper presentation]. Global Higher Education Webinar Series, Lingnan University, Hong Kong. https://ln.edu.hk/sgs/global-higher-education-webinar- series-01-highlights

Moore, A., Nguyen, A., Rivas, S., Bany-Mohammed, A., Majeika, J., & Martinez, L. (2021). A qualitative examination of the impacts of financial stress on college students' well-being: Insights from a large, private institution. SAGE Open Medicine, 9, doi.:10.1177/20503121211018122

Nguyen, T. (2015). The effectiveness of online learning: Beyond no significant difference and future horizons. MERLOT Journal of Online Learning and Teaching, 11(2), 309–319.

Nowell, LS, Norris1, JM, White, DE. and Moules, NJ. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. International Journal of Qualitative Methods, Volume 16: 1–13

Parrila, R. K., Laroche, A., and Deacon, S. H. (2019). Effects of peer-led training on academic self-efficacy, study strategies, and academic performance for first-year university students with and without reading difficulties. Contemp. Educ. Psychol. 56, 25–39.

Reddy K. J, Menon K. R, Thattil A. (2015). Academic Stress and its Sources Among University Students. Biomed Pharmacol J 2018;11(1).

Richards, S., & Randolff, A. (2018). Gender-related differences in workload management among high school students. Journal of Continuing Education and Lifelong Learning, 5 (3): 55-72.

Sanders AE, Lushington K. (2020). Effect of perceived stress on student performance in dental school. J Dent Educ. 2020;66:75–81.

Seyedi-Andi, JA. (2019). The relationship between self-efficacy and some demographic and socioeconomic variables among Iranian Medical Sciences students. Advances in Medical Education and Practice, 10 645–651.

Sheykhjan, T. M. (2015). Health education strategies for coping with academic stress. research scholar in education. Kottayam: Online submission. Retrieved from https://files.eric.ed.gov/fulltext/ED565791.pdf

Suhaimi, AB. (2016). Relationship between Academic Workload and Stress Level among Biomedical Science Students in Kuala Lumpur. Journal of Applied Sciences, 16: 108-112.

Watson, J. C., & Watson, A. A. (2016). Coping self-efficacy and academic stress among hispanic first-year college students: The moderating role of emotional intelligence. Journal of College Counseling, 19(3), 218–230.doi:10.1002/jocc.12045

Weerasinghe, T.D., C.K. Batagod, K.A.C. Chandrika and W.K.C.U. Siriwardans, 2012. Prevalence and determinants of stress among undergraduates: A study of public universities in Colombo region. Proc.-Social Behav. Sci., 59: 704-708.

Yang, T. (2020). The Gender Differences in Science Achievement, Interest, Habit, and Creativity. Science Education International, 31(2), 195-202.

Zhang,L., Qin,S., Yaoa,Z., Zhang,K. & Wu,J. (2016). Long-term academic stress enhances early processing of facial expressions. International Journal of Psychophysiology, 109, 138–146.

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