Academic Stress Level Determination among College Students in Times of Covid-19 Pandemic: Basis for an Intervention Scheme

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ABSTRACT
This study measured the level of academic stress among students regarding personal inadequacy, fear of failure, interpersonal difficulties with teachers, and inadequate learning resources in times of Covid-19 pandemic. Using a descriptive-comparative approach, Slovin’s formula was used to identify the respondents with a stratified random sampling technique to generate the required sample size of the study. The results revealed that the level of academic stress in times of the Covid-19 pandemic is high. It is also revealed that there is no significant difference in the level of academic stress when respondents are grouped according to sex, year level, and the number of hours spent for modular learning per day and provided significant difference when grouped according to course. Demographic profiles show that most of the students belong to the poor classification of monthly family income and with a low allowance for internet subscriptions. It also shows that with the intensity of requirements in the course pack, most students allocated many hours to answer the lessons per day. Present findings suggest that the institution must address intervention schemes through academic and non-academic services.

INTRODUCTION
In more than 190 countries and all continents, the COVID-19 pandemic has contributed to the most significant disturbance in the educational system in history, affecting almost 1.6 billion students. School and other learning areas have influenced 94 percent of the world's student population and up to 99 percent in low and lower-middle-income countries (United Nations, 2020). With this disruption, many educational institutions around the globe shifted and adapted new learning modalities, which resulted in academic stress among college students. According to Chandra (2020), the sudden shift from the physical classroom to the virtual space disrupts students. Moreover, the COVID-19 pandemic came out as the most devastating and challenging crisis for public health in the contemporary world. Apart from the soaring mortality rate, nations across the globe have also been suffering from a spike of excruciating psychological outcomes, i.e., anxiety and depression among people of all ages (Islam, Barna, Raihan, Khan & Hossain, 2020) and the sudden shift from the physical classroom to virtual space are disrupting students (Chandra, 2020).

In India, while most schools and colleges have transitioned to online classes and evaluation to avoid disrupting educational services, the digital platform remains uncharted territory for most people.
in a low-middle income country. More importantly, the dissemination of learning through a digital portal would require access to a laptop/computer for the students, which, given the disparity amongst the socio-economic strata, remains unattainable for low-income students (Mahapatra & Sharma, 2020).

In the Philippines, the article was written by Sape, Aquino, and Olivá (2020); with a mental health pandemic, digital divide, inadequate learning resources, and personal struggles cutting deeper into our educational system, an "academic freeze" must be considered until and unless the curve has flattened and mass testing has been made and proven effective. At most, a vaccine against COVID-19 should be prepared. Furthermore, many reports of suicide incidents among students due to their stress in flexible learning modalities. Moreover, this will make them vulnerable to dropping out, future unemployment, and an increased incidence of psychiatric disorders such as depression, anxiety, and substance use disorders (Pascoe, Hetrick, & Parker, 2020). Student mental health in higher education has been an increasing concern, and the COVID-19 pandemic has brought this vulnerable population into renewed focus (Son, Hegde, Smith, Wang & Sasangohar, 2020). In the study of Montano (2020), COVID Stress Scales should continually be used to understand the pandemic stress of the Filipinos and its correlations. The said scale covers many facets that the participants said they could relate to, and future studies can look at other mental health concerns aside from anxiety, stress, and depression.

In order to address the research gap, previous studies related to academic stress among college students highlighted only a few in terms of blended learning modality and in times of Covid-19 Pandemic. Thus, this urges the researchers to conduct the Monkayo College of Arts, Sciences, and Technology study to develop an intervention program.

**Theoretical Framework**

This study was anchored on the researcher's concepts and theories critically examined from which relevant variables were taken. These theoretical foundations have helped the researcher refine the research problem and develop the conceptual framework of this study. The theory adopted was the Academic Stress Theory by Campbell-Phillips, Halder, & Hasib (2020), which states that personal inadequacy, fear of failure, interpersonal difficulties with teachers, teacher-student relationships, and inadequate study facilities were concerns of academic stress. COVID-19 outbreak in terms of psychological outcomes, without addressing and identifying specific sources of stress related to relational and daily life, changes students' focus on studies. Indeed, the COVID-19 pandemic-related experiences induced fears of contagion and social isolation and significant modifications in several aspects of daily routine other than academic life (Zurlo, Cattaneo, & Vallone, 2020). Personal inadequacy describes a student's academic and behavioral problems from low ability, negative self-concept, anxiety, maladjustment, or environmental influences such as peer group, classroom conditions, curricular inadequacies, relationships with the teacher, home support, and more on (Al-Methen & Wilkinson, 1992). Fear of failure has been defined as the tendency to anticipate embarrassment under circumstances of failure (Conroy, Willow & Metzler, 2002). Although there seems to be a consensus that occasional failure is necessary to make subsequent progress in most contexts, in the academic context, failure can be problematic. It is more likely to occur when an individual anticipates that failure is likely to be aversive, and under those circumstances, the person delegates control to others, searches for approval, or fears disapproval from others (De Castella, Byrne, & Covington, 2013). Irrespective of the cause of the fear, students tend to desire to protect their self-esteem should their performance not reach expectations, and the long-term effect of this type of fear is for the individual to experience diminished intrinsic motivation and feelings of uneasiness (Crocker, Luhtanen, Cooper, & Bouvrette, 2003; Zuckerman & Tsai, 2005). The most common characteristic associated with fear of failure does not involve negative personal feelings but rather the negative social stigma associated with the appearance of incompetence (Hernández, Moreno-Murcia & Espin, 2020).

Moreover, positive psychology constructs of grit and growth mindset may solve this challenge as both are associated with psychological resilience. A growth mindset describes people's underlying beliefs about the malleability of intelligence, and grit refers to dedication to long-term goals (Mosanya, 2020). Interpersonal difficulties with teachers refer to adaptation in daily interactions among students to teachers to deliver teaching outcomes. The teacher-student relationship is associated with student cognitive learning domains, and the daily interaction is a building block of teacher-student relationships (Pennings, Brekelmans, Sadler, Claessens, Want & Tartwijk, 2017). Negative interpersonal relationships

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have been proposed as a triggering factor against stress and risk, detrimental for tasks, the emotional burden in daily life, hopelessness in shared activities, and a basis for social and emotional confusion (Martin, 2014). Inadequate learning resources refers to lack of support, technology, resource availability, accessibility, the culture of education, learning style, among others, related to the effective utilization of e-learning (Oluyinka, 2015). Other factors are personally driven, such as lack of confidence and experience with computers, lack of time management skills and self-motivation (Pirani, 2004), lack of user touch and feel in their e-learning platforms (Allen, 2003; Ostlund, 2005). It is more aggravated when the low-income groups could not afford to invest in the internet and other learning devices.

**Conceptual Framework**

Based on the literature and studies reviewed, this study adopted the following dimensions of the academic stress scale as depicted in Figure 1. The dependent variable is Academic Stress with the indicators: Personal Inadequacy, Fear of Failure, Interpersonal Difficulties with Teachers, and Inadequate Learning Resources. Despite the early stage in implementing the blended learning modality, there is still a need for a systematic investigation and theorizing of the prominent factors that will serve as the basis for intervention program or policy enhancement that the institution will implement times Covid-19 Pandemic. These dimensions need refinement that is centered on how students correspond to the situation.

Various researchers identified sex, year level, and course as the most influential variables influencing academic stress as the mode of delivery shifted from face-to-face to blended learning. Moreover, monthly family income based on the classification of the Philippine Institute for Development Studies and the internet allowance per week will identify socio-economic-related factors that will support the investigation of this study. However, the researcher analyzed only sex, year level, course, and the number of hours spent in modular learning per day for comparative analysis in this study.
METHODS

Research design

This study was descriptive-comparative in approach. According to Creswell (2014), this design embodies inferential questions that ask for the difference in the characteristics of specific variables of interest between groups of respondents, usually categorized according to their profiles. It is primarily a quantitative research technique in which the researcher administers a survey questionnaire to a sample or an entire population of individuals to describe their attitudes, opinions, behaviors, experiences, or other characteristics of the population.

Research Locale

The study was conducted at the Monkayo College of Arts, Sciences, and Technology located in Monkayo, Davao de Oro, Philippines. Monkayo College of Arts, Sciences, and Technology is one of the Davao Region’s local colleges, operated by the Local Government Unit of Monkayo under the Municipal Ordinance No. 19-2009. The Commission recognizes the institution on Higher Education and a recipient of Free Tuition Law/Unifast and the Tertiary Education Subsidy. It is also recognized as level I accredited by the Association of Local Colleges and Universities-Commission on Accreditation (ALCUCOA), and some of its major programs are now working for Level 2 accreditation. It is one of the top 30 performing schools in the Philippines during the 2019 Licensure Examination for Teachers for the elementary and secondary level by the Professional Regulation Commission (PRC). For the Academic Year 2020-2021, the total population of the local college is 2,151. Figure 2 showing the research locale of the study.

Respondents of the Study

The researchers distributed an adapted survey questionnaire to a minimum of 327 respondents across all degree programs in Monkayo College of Arts, Sciences, and Technology. These degree programs are; Teacher Education (with BSED-Social Studies, BSED-English, BSED-Mathematics, BEED), Bachelor of Science in Business Administration (major in Marketing, Financial & Human Resource Management), and Bachelor of Agricultural Technology. Samples of respondents were drawn based on the population of each department randomly.

Sampling Techniques

Stratified Random Sampling was utilized in determining the respondents of this study. Identifying a population of interest and developing a systematic way of selecting cases was not based on advanced knowledge of how the outcomes would appear but on increasing credibility and not fostering representativeness based on the population. Hence, this study used the population of the students for the First Semester of the Academic Year of 2020-2021. Regardless of the population in each department, this study utilizes general responses from the respondents. The researcher utilized Slovin’s (1960)
sampling formula, applied in large populations to generate a representative sample size. This sampling formula was employed mainly by determining a sample from 2,151 students in Monkayo College of Arts, Sciences, and Technology.

**Statistical Treatments**

In presenting, interpreting, and analyzing the data gathered, various statistical tools and techniques were used. Statistical Package for Social Sciences (SPSS) version 23 was utilized in the analysis of the data. Descriptive statistics such as frequency counts and percentages were used to determine the respondents’ profiles. Grouped mean score comparisons were made across the respondent’s profile attributes (sex, year level, course, number of hours spent on modular learning per day) using Analysis of Variance (ANOVA) and t-test.

**Data Collection Procedure**

The respondents were selected to participate in an adapted survey questionnaire where they were asked to provide answers in the most precise and insightful manner possible. The respondents were randomly selected in each department of this institution. The survey took two days to complete and collect all the required data, and the researchers utilized google forms. There was a minimum of 3 enumerators who assisted in the conduct of the study. Enumerators underwent an orientation on the purpose of the study, the process of the random sampling distribution, the number of respondents required in each specific department, the questionnaire items, and to ensure consistency of the data collection method. Quantitative data was used to present the profile of the respondents. A 5-point Likert scale was utilized to determine the level of academic stress and analyze the independent variables. The indicators for each factor were assessed and evaluated using the Likert Scale as follows (Table 1):

| Table 1. Description of Rating Scale Used for the Survey Questionnaire Tool |
| --- |
| **Rating Scale** | **Mean Score Range** | **Response Anchor** | **Descriptive Level** |
| 5 | 4.20 to 5.00 | Strongly Agree (SA) | Extreme Stress |
| 4 | 3.40 to 4.19 | Agree (A) | High Stress |
| 3 | 2.60 to 3.39 | Neither Agree nor Disagree (NA/ND) | Moderate Stress |
| 2 | 1.80 to 2.59 | Disagree (D) | Slight Stress |
| 1 | 1.00 to 1.79 | Strongly Disagree (SD) | No Stress |

**Ethical Considerations**

The research study complied with the standards set by the Monkayo College of Arts, Sciences, and Technology’s Guidelines for Ethics in Research. The researcher strictly adhered to reaching the maximum level of ethical action or consideration in the scientific research approach. Research ethics involved with requirements on actual data gathering, the protection of the respondents, and the publication of the information were in adherence to the guidelines set by the college. The compliance with these guidelines assured the respondents’ rights, dignity, safety, and welfare. It also guaranteed the credibility of the research results and the ethical principles of beneficence, justice, and autonomy. Hence, the researcher adhered to the full compliance to the standards of conducting institutional research and corresponding ethical review following the study protocol assessments and standardized criteria. It was with the highest sense of responsibility that the researcher complied with the requirements of the ethical standards not limited to:

1. **Voluntary participation.** All respondents were given the free will to participate without any form of force or intimidation. The respondents were carefully considered and adhered to the purpose and benefits of the study voluntarily.

2. **Respect for anonymity and confidentiality.** The confidentiality and anonymity of all respondents were strictly adhered to in this research. The rights of beneficence, respect for dignity, and fidelity...
were of utmost consideration in the conduct of this study. The researcher assumed complete management of private information in order to protect the respondents’ identity.

3. **Informed consent process.** Respondents offered their approval in this research knowingly, willingly, and intelligently, and in a clear and manifested manner. Free and informed consent needed in this study incorporates an introduction to the study and its purpose and an explanation about the selection of the research respondents and the procedures followed. The questionnaire produced by the researcher was free of complex terms and was readily understood by the research respondents. After conducting the research offered a clear perspective of the advantages that the researcher can produce to the general public and the Monkayo College of Arts, Sciences, and Technology. The questionnaires were administered with the college authority’s approval and support. Therefore, no study questionnaire was provided without authorization from the authorities that the vital elements of the informed consent process administered clear disclosure, understanding, competency, and voluntariness of respondents.

4. **Risks.** The research was no intention of difficult circumstances on physical, psychological, or socio-economic implications among the respondents during the conduct of this study.

**RESULTS**

**Demographic Profiles of the Respondents**

Among the 833 respondents, 71% are females, and the rest are males. More than 60% of the respondents are first year and second year, and the remaining are third-year and fourth-year. More than 40% of the respondents are under Business Administration, the same percentage is also gathered from Teacher Education, and the rest are under the Bachelor of Agricultural Technology. Since this study analyzed the monthly family income, allowance of internet load per week, and the number of hours spent for modular learning per day, tables 2, 3, and 4 show the frequency and percentage of each demographic characteristic.

**Monthly Family Income.** 91.60% of the respondents belong to a monthly family income of Less than PhP10,957, categorized as inferior. Less than 10% of monthly family income belongs to lower-income but not poor and lower middle income.

| Monthly Family Income          | Frequency | Percentage |
|-------------------------------|-----------|------------|
| Less than PhP 10,957 (Poor)   | 759       | 91.10%     |
| Between PHP 10,957 and PHP 21,914 (Low Income but not Poor) | 12       | 1.40%     |
| Between PHP 21,914 and PHP 43,828 (Lower Middle) | 62       | 7.40%     |
| **Total**                     | **833**   | **100.00%**|

**Allowance of Internet Load Per Week.** 50.50% of the students belong to the PhP50 allowance for internet load per week. It implies poor investment in data connection among the students. 50% belongs to the PhP100 or more allowance for internet load per week.

| Allowance for Internet Load per Week | Frequency | Percentage |
|--------------------------------------|-----------|------------|
| PhP 50                               | 421       | 50.50%     |
| PhP 100                              | 255       | 30.60%     |
| PhP 150                              | 67        | 8.00%      |
| PhP 200                              | 52        | 6.20%      |
Allowance for Internet Load per Week | Frequency | Percentage
---|---|---
PhP 300 | 23 | 2.80%
PhP 350 | 2 | .20%
PhP 500 | 13 | 1.60%
Total | 833 | 100.00%

**Number of Hours Spent for Modular Learning per Day.** Almost 4 out of 10 students spent more than 8 hours of modular learning per day and 3 out of 10 students engage in modular learning of 7-8 hours, and 3 out of 10 students belong to 1-2 hours or 2-4 hours spent for modular learning per day. It implies that the student’s pacing differs in time allocation in complying with the modules’ activities, analysis, and application.

| No. of Hours Spent for Modular Learning Per Day | Frequency | Percentage |
|---|---|---|
| 1-2 hours | 114 | 13.70% |
| 3-4 hours | 188 | 22.60% |
| 7-8 hours | 221 | 26.50% |
| More than 8 hours | 310 | 37.20% |
| Total | 833 | 100.00% |

**Results on the Level of Academic Stress among Students in the Context of Blended Learning Modality in times of Covid-19 Pandemic.**

Table 5 shows the level of academic stress among students regarding personal inadequacy, fear of failure, interpersonal difficulties with teachers, and inadequate learning resources. Results show that fear of failure is high (mean of 3.74), inadequate learning resources (mean of 3.55), personal inadequacy (mean of 3.41), and interpersonal difficulties with teachers as moderate (mean of 2.94).

The overall mean is 3.41, with a descriptive equivalent of high. It means that the students experienced high academic stress in times of the Covid-19 pandemic as the institution shifted from the traditional mode of learning into a blended learning modality.

| Academic Stress Dimensions | Sample Size | Mean Value | Standard Deviation | Descriptive Equivalent |
|---|---|---|---|---|
| Personal Inadequacy | 833 | 3.41 | .817 | High |
| Fear of Failure | 833 | 3.74 | .883 | High |
| Interpersonal Difficulties with Teachers | 833 | 2.94 | .805 | Moderate |
| Inadequate Learning Resources | 833 | 3.55 | .871 | High |
| Over-All Mean | 833 | 3.41 | .697 | High |

**Test of Significant Difference on the Level of Academic Stress among Students when respondents are grouped according to sex, year level, course, and the number of hours spent in modular learning per day.**
Tables 6, 7, 8, 9, 10, and 11 provide results regarding the test of significant differences between respondents’ responses when grouped by sex using t-test and grouped by year level, course, and the number of hours spent in modular learning per day using variance analysis (ANOVA).

**Summary of Significant Difference when Respondents are Grouped According to Sex**

Table 6 summarizes variables that resulted in significant differences in respondents’ responses when grouped according to sex. Testing the data through the t-test resulted in no significant difference among responses in terms of academic stress, which was primarily identified under Levene’s Test (p-value of .779 equal variances assumed).

Thus, there were no significant differences between male and female responses regarding academic stress towards blended learning modality (p-value of .337 under equal variances assumed on t-test for equality of means) at a .05 level of significance.

**Table 6. Test of Significant Difference on the Level of Academic Stress when respondents are grouped according to sex**

| Sex                        | Levene’s Test for Equality of Variances | t-test for Equality of Means | Interval of the Mean Difference |
|----------------------------|-----------------------------------------|-----------------------------|---------------------------------|
| Academic Stress            | F  .078 Sig. .779 t  .960 df 831        | Sig. (2-tailed) .337         | Std. Error Difference .051104   |
| Equal Variances Assumed    |                                         |                             | Interval of the Mean Difference |

**Summary of Significant Difference when Grouped According to Year Level**

Presented in Table 7 is the ANOVA summary of significant differences in the level of academic stress towards blended learning modality when grouped according to year level. As shown on the p-value of .058, it had no significant difference in academic stress towards learning modality when grouped according to year level. Thus, the null hypothesis, "Ho1: There is no significant difference on the level of academic stress towards blended learning modality when analyzed based on year level," was accepted.

**Table 7. Test of Significant Difference on the Respondents’ Level of Academic Stress Towards Blended Learning Modality when respondents are grouped according to Year Level**

| Year Level       | Sum of Squares | df | Mean Square | F   | Sig. |
|------------------|----------------|----|-------------|-----|------|
| Between Groups   | 3.630          | 3  | 1.210       | 2.500 | .058 |
| Within Groups    | 401.154        | 829| .484        |      |      |
| Total            | 404.784        | 832|             |      |      |

**Summary of Significant Difference when Grouped According to Course**

Presented in Table 8 is the ANOVA summary of significant differences in the level of academic stress towards blended learning modality when grouped according to course. As shown on the p-value of .008, it had a significant difference in academic stress towards learning modality when grouped according to course.

Thus, the null hypothesis, "Ho1: There is no significant difference on the level of academic stress towards blended learning modality when analyzed based on year course," was rejected.
Table 8. Test of Significant Difference on the Respondents’ Level of Academic Stress Towards Blended Learning Modality when respondents are grouped according to course

| Course                          | Sum of Squares | df | Mean Square | F   | Sig. |
|--------------------------------|----------------|----|-------------|-----|------|
| Between Groups                 | 4.688          | 2  | 2.344       | 4.863 | .008 |
| Within Groups                  | 400.096        | 830| .482        |      |      |
| Total                          | 404.784        | 832|             |      |      |

Since Anova shows a significant result, a follow-up test is needed to prove this difference in pairs using a post hoc test. Based on the Test of Homogeneity of Variance (Table 9), the Sig. is greater than the desires alpha (.05), then the equal variance is assumed.

Table 9. Test of Homogeneity of Variance

| Levene Statistic | df1 | df2 | Sig.  |
|------------------|-----|-----|-------|
| 1.858            | 2   | 830 | .157  |

Therefore, the table results above with a p-value of .157 indicates the equal variance is assumed. Hence, from the two chosen tests of Tukey HSD and Tamhane, the results of Tukey will be considered instead of Tamhane (see Table 10).

Table 10. Post Hoc Test

| Academic Stress | (I)Course: | (J) Course: | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | Lower Bound | Upper Bound |
|-----------------|------------|-------------|-----------------------|------------|------|-------------------------|-------------|-------------|
| Tukey           | BSBA       | BSED/BEED   | -1.53817035*          | .0511886866| .008 | -.274003988             | -.033630082 | .274003988   |
|                 | BAT        |             | -1.140552539          | .0793565071| .180 | -.326875288             | -.199059825 | .274003988   |
| BSED/BEED       | BSBA       | BAT         | -1.405525391          | .0793565071| .180 | -.045770210             | -.172530833 | .274003988   |
|                 | BAT        | BSED/BEED   | .1405525391           | .0793565071| .985 | -.045770210             | -.172530833 | .274003988   |

* The mean difference is significant at the 0.05 level.

The Academic Stress of BSBA is significantly different (p-value of .008) from BSED/BEED; the academic stress of BSBA is not significantly different (p-value of .180 from BAT; and the academic stress of BSED/BEED is not significantly different (p-value of .985) from BAT.

Thus, the null hypothesis of no significant difference in academic stress:
1. Between BSBA and BSED/BEED is rejected.
2. Between BSBA and BAT is not rejected (or accepted).
3. Between BSED/BEED and BAT is not rejected (or accepted).

Summary of Significant Difference when Grouped According to Number of Hours Spent in Modular Learning Per Day

Presented in Table 11 is the ANOVA summary of significant differences in the level of academic stress towards blended learning modality when grouped according to the number of hours spent in modular learning per day. As shown on the p-value of .051, it had no significant difference in the level of academic stress towards learning modality when grouped according to the number of hours spent in modular learning per day. Thus, the null hypothesis, "Hₐ: There is no significant difference on the level
of academic stress towards blended learning modality when analyzed based on the number of hours spent in modular per day,” was accepted.

Table 11. Test of Significant Difference on the Respondents’ Level of Academic Stress Towards Blended Learning Modality when respondents are grouped according to number of Spent for Modular Learning per day

| No. of Hours Spent for Modular Learning Per Day | Sum of Squares | df | Mean Square | F         | Sig. |
|-----------------------------------------------|----------------|----|-------------|-----------|------|
| Between Groups                                | 3.765          | 2  | 1.255       | 2.595     | .051 |
| Within Groups                                 | 401.019        | 829| .484        |           |      |
| Total                                         | 404.784        | 832|             |           |      |

In summary, the results reveal that the level of academic stress towards blended learning modality among the students in the context of Covid-19 Pandemic provides no significant differences in respondents’ responses in terms of sex, year level, and the number of hours spent in modular learning per day and provided significant difference when analyzed according to course. Therefore, the decision is to reject the null hypothesis (Ho1) that there is no significant difference in the level of academic stress towards blended learning modality when respondents are grouped according to sex, year level, course, and the number of hours spent per modular learning per day about Research Objective 3.

DISCUSSION

The research investigates the level of academic stress among college students in times of the Covid-19 Pandemic and analyzes it comparatively based on chosen demographic profiles. Although sex, year level, and course are presented in the results, the monthly family income, allowance of internet load per week, and the number of hours spent for modular learning per day are the highly significant demographic characteristics that correspond to the existing condition of the students. The study’s results are consistent with several prior studies that low monthly family income, low allowance of internet load per week, and more hours spent for modular learning per day are critical factors that will trigger academic stress. Further, the study provides evidence that academic stress is high, which means that the students experienced personal inadequacy, fear of failure, inadequate learning resources, and interpersonal difficulties with teachers. Adil and Ghayas (2019) explained that students deeply engaged in their studies may become more vulnerable to academic stress owing to their increased sensitivity towards their academic goals. However, academic stress is not a new phenomenon because many authors mentioned that the Covid-19 is a source of stress. It has become a source of debate whether the shift from traditional learning into blended or flexible elevates stress or just the Covid-19, and its domino effect into mental health or economic difficulties among students will add academic stress. Among the dimensions of academic stress, interpersonal difficulties with teachers posited moderate stress among students. It highlights the synchronous session, detailed syllabus, and consultation hours allocated by each faculty towards its class. When the institution is ready with the instructions and guidelines for the academic program, this will allow students to have better communication with the teachers and meet the deadlines of the subjects.

Moreover, the findings reveal that the level of academic stress towards blended learning modality among the students in the context of Covid-19 Pandemic provides no significant differences in respondents’ responses in terms of sex, year level, and the number of hours spent in modular learning per day and provided significant difference when analyzed according to course. Although previous studies of Banu, Deb, Vardhan, and Rao (2015) provided a significant sex difference, this confirms that the course provided a significant difference in terms of academic stress. The extended syllabus and background of the students in terms of cognitive abilities and communication skills might be some of the prime reasons for higher academic stress for students, including the dilemma about the retention
policy and board examination-related courses. A desire for better academic excellence among education and agricultural technology students may cause academic stress among them.

**Proposed Intervention Program**

In this research, an intervention program is necessary to address the high academic stress among students. The sense of responsible togetherness and belonging to the academic community seem critical elements to be fostered when the aim is to achieve a more satisfying and inclusive college experience for students, which can sustain them in managing their academic duties and tasks, reducing their stress rates even during hard times such as a Covid-19 pandemic (Academic community in the face of emergencies: Sense of responsible togetherness and sense of belonging as protective factors against academic stress during COVID-19 outbreak, 2020). Yang, Chen, and Chen (2021) stressed that schools play an essential role in providing students with educational materials and opportunities to interact with teachers and students. Schools should also provide guidelines and principles for effective online or blended learning and ensure that content meets educational requirements.

Nevertheless, it is also important not to overburden students. The results of the study are significant for intervention programs related to academic and non-academic services. With this, table 12 provides a proposed intervention program based on the results of the study.

**Table 12. Intervention Program**

| Strategic Priority                        | Activities                                                                 | Responsible Persons                  |
|-------------------------------------------|---------------------------------------------------------------------------|--------------------------------------|
| **Guidance and Counseling Program**       | Online Webinar and Consultation on Resolving the Feeling of Inadequacy and Fear of Failure among Students/ Stress Management Seminar | Guidance Counselor Program Heads     |
| **Academic Review Program**               | Consultative Meeting with the Faculty and the Students                    | Program Heads                        |
|                                           | Review on the Policies of Blended Learning Modality and as to the Curriculum Delivery | Senior Faculty Members Selected Students Academic Council Board of Trustees |
| **Student Services**                      | Consultative Meeting with the Students Supreme Government and the Administrative Council on the Student Subsidy Program for Internet, Books, Laptops, other devices. | Student Supreme Government Members of the Administrative Council OSS Head |
| **Learning Resources, Technological Infrastructure, and Strategic Partnerships** | Develop Partnerships and Linkages on Resource Mobilization and Subsidy Program for Learning Resources | OSS Head Alumni President Community Extension & Linkages Head SSG President |

**CONCLUSION**

Implementing the blended learning modality in times of the Covid-19 pandemic is critical to the learning process among the students. In summary, the result concludes that academic stress is influenced by monetary issues affecting students' studies, which will influence the capacity to invest in learning resources. Moreover, the allowance for internet load per week exacerbates academic stress. It concludes that most students struggle with the pre-paid data connection for submitting
output and attending synchronous sessions weekly. Measuring the level of academic stress, this study concludes that academic stress among students is high. Generally, the students experienced high academic stress towards the blended learning modality in the context of the Covid-19 Pandemic. Since this study compares the level of academic stress across chosen demographics, this concludes that there is no significant difference in the level of academic stress towards blended learning modality when respondents are grouped according to sex, year level, and the number of hours spent for modular learning per day and provided significant difference when grouped according to course. It manifests that regardless of sex, year level, and the number of hours spent for modular learning per day, the blended learning modality provided academic stress to the students in times of the Covid-19 pandemic. However, when grouped according to course, academic stress differs in each program when compared between BSBA, BSED/BEED, and BAT. The different instructional delivery approaches since BSED/BEED and BAT are board courses, and BSBA is not a board course. The pressure is much felt among board courses about the retention policy of the institution. The basis for intervention programs should prioritize personal inadequacy, fear of failure, and inadequate learning resources among students and moderate priority to interpersonal difficulties with teachers. Developing study habits, mental health awareness, and financial capacity on investing with internet and ICT must be prioritized in implementing blended learning modalities in the Covid-19 pandemic.

Recommendations

Based on the detailed and significant evaluation of results, the researcher recommends the following:

1. To Monkayo College of Arts, Sciences, and Technology- This study suggests that the institution review the existing guidelines and policies of blended learning modality in times of Covid-19 Pandemic. The institution should review the volume of lessons and the questions provided in the analysis and application part. It is also high time to intensify the Guidance and Counselling Program of the institution addressing the students’ Mental Health. It may coordinate the barangay level of developing an Internet or Learning Resources free or provide lesser cost for the students.
2. To the Commission on Higher Education- Review existing guidelines and flexible or blended learning participatory policies among students and parents. Policies should engage with students and parental engagement. It is also a need to review the policies about face-to-face interaction among students and teachers, especially with significant and complex subjects.
3. The study suggests that academicians include the blended learning modality in Professional Education Subjects to the Academicians. The cases or literature can be a source of Special Topics for the courses under Teacher Education Programs.
4. To Future Researchers- To conduct studies related to coping strategies and academic performance among students in blended learning modalities in the Covid-19 pandemic. It is also suggested to conduct the study more extensively by comparing private HEIs into SUCs and LUCs. The use of monthly family income and allowance of internet load per week can compare the academic stress among students, which are not included in the context of this study.

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