

Stressors and Stress-Coping Mechanisms of Academic Scholars in HEIs: A Basis for Stress Management Plan Formulation

Ruth G. Luciano

College of Information and Communications Technology, Nueva Ecija University of Science and Technology, Philippines
E-mail: rcgluciano@gmail.com

Mickel John Salvatierra

Department of Education (DepEd), Schools Division of Nueva Ecija, Philippines

Received: 05 January 2022; Accepted: 13 March 2022; Published: 08 June 2022

Abstract: This study aims to describe the stress coping mechanism of the academic scholars from the College of Education (COEd) in one of the private higher education institutions in Cabanatuan City, Philippines. This is an action research that focuses on the assessment of the academic scholars' stressors and their correlates. It involves systematic observations and data collection that enables the researchers to reflect, decide and develop a training plan for stress management. The findings show that monthly family income and economic-related stressors were highly correlated. This further explains that students with high family income are less likely to experience frequent stress. In contrary, students who belong to low-income families are more prone to experience frequent stress. In other words, students who belong to poor families are more vulnerable to stress. Likewise, monthly family income and physiological responses to stress had high interdependence, which means that students with higher socio-economic status are less likely to experience severe anxiety, while students belonging to low-income families tend to experience severe anxiety. The results of this quantitative analysis served as basis in designing or preparing the stress management plan for these students.

Index Terms: Coping mechanism, education, stress, stressors, stress management

1. Introduction

Stress pervades in everyone's life irrespective of age, gender, economic and educational standing and race, and stress ranges from mild to very severe depending on the stressors and how well individuals cope with them. This is to say that what is stressful for one person may not be stressful for another and what is mild for one may be severe for others. Experts are in agreement that stress in its milder form serves as spice in life; the anxiety that it brings prompts a person to move to bring life back to its normal and comfortable state, but in its severe form, stress brings hazard. In the words of Fink (2017), "stress has a different meaning for different people under different conditions" [1].

As former instructors in the College of Education (COEd) in one of the higher education institutions (HEIs) in Cabanatuan City, Nueva Ecija, Philippines, where most, if not all students under them are economically-deprived academic scholars, they wonder how these students are able to surmount in the midst of difficulties they are facing in their own personal lives and in their academic endeavors which include challenging and overwhelming school activities coupled with high expectations of people around them. What is the magical power in them? How may the instructors like the researchers be of help in boosting and pushing them further to their respective limits so that they can fly higher and the COEd could attain and maintain the 100% pass rate in the Licensure Examinations for Teachers (LET), a national licensure examination given by the Professional Regulation Commission (PRC). The most recent performance of the College in the LET was good enough, but apparently there is still room for improvement and big need to maintain its good standing considering that it is eyeing for higher level of accreditation on its BSED and BEED programs. These are the concerns that the researchers and their co-instructors are trying to iron out. One way to do this is to find out what their stressors are, how mild or severe they are, what they do to counter them and how effective or ineffective their own ways are. At the time this study is conducted, there is no available data on the stressors that possibly affect the

performance of these academic scholars. When these data are collected and analyzed, the College can devise specific intervention program/s that will help ease or combat this problem.

According to Pascoe et al. (2020), "...students in secondary and tertiary education settings face a wide range of ongoing stressors related to academic demands." [2] Sawyer et al. (2012) mentioned that good stress-management skills are important to young people considering that many long-term health-related behavior and patterns are established during the adolescence and early adulthood stages have the potential to benefit young people in an ongoing manner throughout their lives, given that many long-term health-related behaviors and patterns, both positive and negative, are established during adolescence and early adulthood. [3]

A number of studies had found the significant relationship between stress and poor academic performance. In addition to these, severe stress has been found to have negative impacts on some people's mental and physical health. It is within this context that this study is explored.

With this study, the researchers developed a plan for COEd academic scholars highlighting better approaches to combating stress; hopefully to reduce it to the very minimum level to keep them more productive in their academic endeavor.

A. *Research Questions and Hypothesis*

This is a descriptive survey on the stressors and the stress-coping mechanisms of COEd academic scholars for academic year 2014-2015 and their correlates, i.e., socio-demographic profile, possible stressors and extent of stress, and usual or common responses to stress. The same correlates are present in the study of Gadzella in 1991.

Specifically, the researchers attempted to answer the following questions:

1. How may the COEd academic scholars' socio-demographic profile be described in terms of:
 - 1.1 place of residence;
 - 1.2 gender;
 - 1.3 age;
 - 1.4 number of siblings; and
 - 1.5 family monthly income?
2. How may the COEd academic scholars' extent of stress in relation to the following possible stressors be described:
 - 2.1 academic- related;
 - 2.2 economic- related
 - 2.3 social-related; and
 - 2.4 self-imposed (something that one requires of himself / herself?)
3. Which of the following are their usual / common responses to stress:
 - 3.1 physiological;
 - 3.2 emotional;
 - 3.3 behavioral; and
 - 3.4 cognitive?
4. How may the COEd academic scholars' stress-coping mechanisms be described?
5. Is there a significant correlation between the COEd academic scholars' socio-demographic profile and their:
 - 5.1 stressors; and
 - 5.2 responses to stress?

The following null hypothesis was tested: There is **no** significant correlation between the COED academic scholars' socio-demographic profile and the (1) stressors; and (2) extent of stress.

2. Methodology

Normative survey was used in determining the socio-demographic profile, academic-related and non-academic-related stressors, extent of stress and their stress-coping mechanisms of the respondents. Normative survey according to Bitonio, as cited by Luciano (2020), is commonly used to explore opinions of the research participants that can represent a whole population [4].

In addition to the survey, the researchers also used **correlation method** in an attempt to determine the extent of correlation between the participant scholars' socio-demographic profile and their stressors, extent of stress and stress-coping mechanisms. David (2005) defined **correlational study** as collecting numerical data to determine whether, and to what extent, a relationship exists between two or more quantifiable variables. [6] If a relationship exists between variables, it implies that scores on one variable are associated with or vary with the scores on another variable.

This is action research focusing on the COEd academic scholars' stressors, extent of stress and their correlates (i.e., demographic profile variables) which were used as bases in designing a stress management plan for them. It is hoped

that said plan would further improve their academic performance particularly their ratings in the Board Licensure Examinations for Professional Teachers (BLEPT).

A. Participants of the Study

The participants of the study were all the first to third year COEd students who are academic scholars enrolled in the locale where this study was conducted. These students were taking Bachelor in Elementary Education (BEED) and Bachelor in Secondary Education (BSED) programs for academic year 2014-2015 (see Table 1). The fourth-year academic scholars were not included since they could no longer be among the beneficiaries of the Stress Management program/plan which is the output of this study. There were 26 academic scholars in the two (2) COEd programs during the year, but only 20 were available during the actual survey.

Table 1. The Participants of the Study

Curriculum Year Level	BEED	BSED	Total Academic Scholars
First Year	6	5	11
Second Year	2	3	5
Third Year	2	2	4
Total	10	10	20

B. Research Instruments

The researchers used a structured questionnaire composed of two parts. According to David (2005), structured questionnaire limits the responses of the participants. [6] It requires a lower cognitive load on the respondent and reduces the amount of thinking that a respondent needs to undertake to complete the task. This generally leads to higher response and more accurate data. In addition, it is easier for the researcher to code and analyze data.

The researchers purposely modified the original Student-Life Stress Inventory (SSI) of Gadzella (1991). [7] The modified SSI I or Survey Tool I was divided into several parts consisting of the following:

- socio-demographic profile,
- possible stressors and extent of stress,
- usual or common responses to stress, and
- stress-coping mechanisms.

The possible stressors (Part A) were categorized into academic-related (2 items), economic-related (3 items), social-related (3 items), and self-imposed (6 items). For the usual or common response to stress (Part B), the categories were physiological (15 items), emotional (4 items), behavioral (5 items), and cognitive appraisal (2 items). The different categories under the possible stressors and usual or common responses to stressors were rated by the participants as a whole using such descriptions as **severe**, **moderate** or **mild**. On the other hand, the stress-coping mechanisms were categorized into **problem-focused** and **emotional-focused** coping mechanisms wherein the participants could list as many examples as possible from the given list of stress-coping mechanisms.

The SSI II contained the same items except for stress coping mechanisms. It assessed the participants' experiences in all items per category to determine whether stress occurred **always**, **occasionally**, **seldom** or **never**.

For this study, instead of the original 5-point Likert scale, the researchers used only 4-point scale, that is, **1 = never**, **2 = seldom**, **3 = occasionally**, and **4 = always** to avoid participants' tendency to respond at the mid-point. The dry-run of the modified instrument was done by administering it to a group of student-scholars enrolled in other academic programs of the school where this study was conducted.

C. Data Collection Procedure

Prior to the conduct of the study, the researchers' hand-carried a request letter to the Head of the Student Personnel Services (SPS) Office to provide them a copy of the official list of COEd academic scholars from first to third year, school year 2014-2015. After identifying the academic scholars, they were informed by the researchers through text messages, cellular phone calls and Facebook that they had to be present in the specific venue in the school where data collection was scheduled. They were gathered together in the HEI's mini-Amphitheatre for the administration of the questionnaire which was done personally by the researchers. Before the actual administration of the research instrument, they informed the participants regarding the purpose of the study and oriented them on how to accomplish the questionnaire. The contents of the Consent Form were also read and explained to them before they were requested to sign indicating that they agreed to participate in the study. For anonymity, seat plan was prepared and each participant was given unique number so that they could be tracked easily in case of clarifications or follow-up questions. The administration of the questionnaire took an hour.

D. Data Analysis

To analyze the answers to research questions 1 (academic scholars' socio-demographic profile) and 3 (usual or common responses to stress), the researchers used frequency count and percentages.

For research questions 2 (stressors and extent of stress), weighted mean was used.

For the extent of stress, the following scale was used:

Scale	Range	Verbal Interpretation
3	2.34 - 3.00	Severe (S)
2	1.67 – 2.33	Moderate (Mo)
1	1.00 – 1.66	Mild (M)

For research question 4 (stress-coping mechanisms), data were ranked and described based on the responses of the participants.

To determine the extent of correlation between COEd academic scholars' socio-demographic profile and stressors as well as their responses to stress (research question 5), the Statistical Package for Social Sciences (SPSS) was used. This statistical tool is widely used in social sciences, health, education researches, and the like.

The stress management plan, which is the output of this research study, is developed based on analysis of the significant findings/results. They utilized the institutional template for program/project planning in preparing the said plan.

In this case, before the researchers conduct research in this class, the researcher made a test consist of 25 questions of multiple choice, and then the researcher asked two experts to give correction about this test, such as style, lay out the test, grammar, vocabulary and content. After that, the researcher revises this test and tried it out to 9 students to know the reliability of the instrument. The researchers used SPSS 16.0 version to account the data collected. The computed Cronbach's alpha is 0.80 reliability. This means that the instrument is reliable and that it can be used to gather significant data for the study.

3. Results and Discussion

This research project was completed through descriptive correlational approach. Data were gathered through the use of the modified he following is the significant results of the study.

A. Demographic Profile of the Participants (Problem no. 1)

To show a picture of COEd academic scholars' socio-demographic profile, the data are presented in Table 2. These data are expected to provide some insights to the faculty members and Dean of the school where this study was done. It gives them ideas on the kind of academic scholars they have been dealing with.

As shown in Table 2, 16 or 80% of the participants were residents of Cabanatuan City, Nueva Ecija, Philippines (participants 1-5, 8-12, 14, and 15-20), while three or 15% (participants 6, 7 and 12) resided outside of Cabanatuan City and one or 5% (participant 13) resides outside of the province of Nueva Ecija, Philippines.

Table 2. COEd Academic Scholars' Demographic Profile

Participant	Gender	Age	Number of Siblings	Family's Monthly Income
1	F	17	4	20,000.00
2	F	18	4	7,000.00
3	M	17	2	3,500.00
4	F	26	3	20,000.00
5	F	17	3	10,000.00
6	F	19	5	6,000.00
7	F	22	3	6,000.00
8	F	16	3	10,000.00
9	F	19	2	6,000.00
10	F	17	3	4,000.00
11	F	31	3	12,000.00
12	F	19	2	20,000.00
13	M	16	4	15,000.00
14	F	19	5	4,000.00

15	F	29	5	15,000.00
16	F	18	4	15,000.00
17	F	20	3	8,400.00
18	F	19	2	15,000.00
19	F	18	5	15,000.00
20	F	17	5	15,000.00

Out of the 20 participants, only two (10%) were male and the remaining 18 (90%) were female. They varied widely in age ranging from 16 years old (the youngest) to 31 years old (the oldest), giving a mean age of **20**. Their family monthly income also varied widely, ranging from Php3, 500.00 to Php20, 000.00 or an average monthly family income of **Php11,345.00** for an average of **three** siblings in a family.

B. COEd Academic Scholars' Stressors and Extent of Stress (Problem no. 2)

The Coed academic scholars' stressors and extent of stress in relation to stressors are presented in Table 3. The possible stressors were categorized into academic-related, economic-related, social-related and self-imposed. While the extent of stress was categorized as **severe**, **moderate** and **mild**.

Extent of stress was scaled as follows:

Scale	Range	Verbal Interpretation
3	2.34 – 3.00	Severe (S)
2	1.67 – 2.33	Moderate (Mo)
1	1.00 – 1.66	Mild (M)

Table 3. Academic Scholars' Stressors and Extent of Stress in Relation to Stressors

Possible Stressors	Severe (S)		Moderate (Mo)		Mild (M)		WM	VI
	F	%	f	%	f	%		
1. Academic-related	8	40	11	55	5	5	2.55	S
2. Economic-related	4	20	13	65	3	15	2.05	Mo
3. Social-related	2	10	8	40	10	50	1.60	M
4. Self-imposed	9	45	9	45	2	10	2.35	S
General Mean							2.14	Mo

Taking into account the percentage distribution, a significant majority of the COEd academic scholars considered academic-related, economic-related and self-imposed stressors as moderately to severely stressful, but based on their weighted means, academic-related and self-imposed stressors were **severely stressful** while economic-related stressors were **moderately stressful**. In general, the COEd academic scholars' extent of stress was **moderate (AWM= 2.14)**.

The academic-related and self-imposed stressors were severely stressful which could be attributed to the high expectations of their parents, teachers, friends, relatives, and so forth, while the economic-related stressors had caused moderate stress to some of the scholars who belonged to families with meager income (please see Table 2). The mild stress that they experienced in their interaction with people around them suggests that they have high self-esteem and high respect for others in spite of some academic and economic difficulties, and these are true marks of scholars.

Lazarus and Folkman (1991; 1993) elaborated that stress is a specific stimulus-response transaction that threatens an individual. [8] The stress one experiences is not in a situation (event) or in a person, but is an interaction between the situation and the person depending on how the person appraises the situation and adapts to it. In other words, the environment produces the stressors and the individual finds ways to deal with these. Thus, stress ranges from **mild** to very **severe** depending on the stressors and **how well individuals cope** with them. This is to say that what is stressful for one person may not be stressful for another and what is mild for one may be severe for others. In effect, responses to stress may **vary** from person to person depending on how he/she **appraises** it.

In addition, Sanders (2002) and Kuhn (2008) stated that student stress has a negative effect on academic performance because learning and memory is being affected. [9-10] Students who experience large amounts of stress in their lives often have trouble with memory retention. They are more likely to forget the facts and figures presented in class, and be less likely to successfully recall this information on tests, and laboratory works. Kaplan and Sadock (2000) cited that an **optimal level of stress can enhance learning ability** [11]; however, **too much stress** can cause **physical and mental health problems** (Laio, Lu & Yi, 2007; Choi, Abbott, Arthur & Hill, 2007; Hofer, 2007; Marcos & Tillema, 2006; Rafidah, Azizah & Noraini, 2007; Robbins, Allen, Casillas, Peterson, & Lee, 2006; Was, Woltz, & Drew, 2006;

Watering & Rijt, 2006) which may affect the academic achievement of students leading to poor grades or performance. [12-19]

The Yerkes-Dodson Law (1908) postulates that individuals under **low** and **high** stress *learn the least* and that those under **moderate** stress *learn the most*. [20]

C. COEd Academic Scholars' Usual / Common Responses to Stress (Problem no. 3)

Stress responses are dependent on actual expectancies that persons manifest with regard to the significance and outcome of a specific encounter (Krohne et al., 2000; Krohne, 1996; Krohne, Hock & Kohlmann, 1992; Krohne, 1993). [21-23] In effect, responses to stress may vary from person to person depending on how he/she appraises it (Lazarus, 1991; 1993). [24-25]

The COEd Academic Scholars' usual / common responses to stress were categorized as physiological, emotional, behavioral and cognitive and scaled as **Always**, **Often**, **Seldom**, and **Never**. Responses in each category were counted, tallied and their average weighted means were calculated (see succeeding Tables).

Table 4. Physiological or Physical Responses

Physiological Responses: During stressful situations, I experienced the following:	WM	VI
1. sweating (body, palms, forehead, under arm)	2.30	Seldom
2. stuttering (not being able to speak clearly)	2.00	Seldom
3. trembling (being nervous, biting fingernails)	2.50	Seldom
4. rapid movements (moving quickly from place to place)	2.20	Seldom
5. exhaustion (worn out, burn out)	1.45	Never
6. irritable bowels, stomach cramps	1.60	Never
7. asthma, bronchial spasm, hyperventilation	1.35	Never
8. back aches, muscle cramps, teeth-grinding	1.95	Seldom
9. skin itching, allergies	1.45	Never
10. migraine, headaches, rapid heart beat	3.40	Always
11. muscle/joint pain	2.20	Seldom
12. viruses-cold, flu	1.80	Seldom
13. weight loss (can't eat)	1.80	Seldom
14. weight gain (eat a lot)	1.90	Seldom
15. sleeplessness (interrupted sleep)	2.90	Often
General Mean	2.05	Seldom

The scholars' physiological responses to stress (Table 4) vary from **Never** to **Always**, but overall, these negative physical responses **Seldom** happened (**AWM = 2.05**), except for **migraine, headaches** and **rapid heartbeat** which happened **Always** or **Every Time** they experienced stress, and **sleeplessness (interrupted sleep)** which occurred **Often** when they were under stress. These hazardous physical responses occurred in their attempts to find possible solutions to their problems. If not properly managed, these may compromise their immunity system which will serve as a predisposing factor for acute and chronic diseases.

The student-participants' emotional responses to stress also vary from **Seldom** to **Often** as shown in Table 5, but as whole, these occurred **Often** (**AWM = 2.75**) particularly **fear, anxiety** and **sadness** due to high expectations of several people in their environment, including their parents, relatives and friends.

Table 5. Emotional Responses (n=20)

Emotional Responses: When under stressful situations, I experienced:	WM	VI
1. fear, anxiety	3.15	Often
2. anger	2.35	Seldom
3. guilt	2.25	Seldom
4. sadness	3.25	Often
Average Weighted Mean	2.75	Often

When it comes to behavioral responses to stress, variations and extent of occurrence were also evident as shown in Table 6. For instance, they **Never** experienced abusing others (physically and/or verbally), abusing self (or inflicting

pain, using drugs) and attempting suicide which are good signs. These imply that they have high self-esteem; they have lucid minds and they have high respect for others because they did not abuse other people verbally or physically. What occurred **Often** was **crying** which is a normal response to stress for females such as those involved in this study.

According to Syed, et. al (2013) people experiencing stress undergo a lot of problems. The level of performance of stress takers decreases with time if they don't take precautionary measures.[26]

Being **irritable towards others** got a rating of **occasionally** or **seldom** which is a sign of a socially maladaptive behavior which may be overcome in due time. According to Zulueta (2005), there is a need to regard others with dignity and respect and deal with them as fellow human beings. [27] Having a harmonious relationship with others is crucial in doing certain tasks that need collaboration and cooperation especially those which are academic-related.

Table 6. Behavioral Responses

Behavioral Responses: When under stressful situations, I	Wm	VI
1. cried	2.55	Often
2. abused others (physically and/or verbally)	1.30	Never
3. abused self (inflict pain, used drugs)	1.30	Never
4. was irritable towards others	2.25	Seldom
5. attempted suicide	1.00	Never
General Mean	1.68	Never

Cognitive appraisal (Table 7) was among the commonly used responses to stressful situations. The student participants used this **Often** which indicates that they are after permanent and long-term solutions to problems. They try to find alternative solution(s) in case the first strategies used do not work well.

Table 7. Cognitive Appraisal

Cognitive Appraisal: With reference to stressful situations, I	WM	VI
1. thought about and analyzed how stressful the situations were	3.25	Often
2. thought and analyzed whether the strategies I used were most effective	3.25	Often
Average Weighted Mean (AWM)	3.25	Often

D. Stress-Coping Mechanisms of COED Academic Scholars in Relation to Stressors (Problem 4)

As shown in Tables 8 and 9, stress-coping mechanisms are categorized into problem-focused and emotion-focused. For *problem-focused* coping mechanisms of COEd academic scholars, seeking help from friends seemed to be the most common approach to solving a problem. Based on their responses during the interview, they were more comfortable to tell their problem(s) to their friends rather than to their parents because they were afraid, they might be scolded especially when the stress was academic-related. They referred their problems to their parents only when they could no longer solve them or when the problems were already solved to impress their parents that they could handle the situation themselves.

Table 8. Problem-focused Coping of COEd Academic Scholars in Relation to Stressors

Specific Responses	Freq	Rank
Seek help from friends	7	1
Seek help from selected teachers	5	2
Seek help from parents	4	3
Think several ways to solve problems	3	4
Search for solution in the internet	2	5
Save money	1	6

They also admitted that some of their teachers were among the sources of academic-related stress, that is why they only sought help from selected (not all) teachers when they needed assistance in their academic problems.

Surfing the internet for possible solutions to academic-related problems could be a good option so long as the students have the capability to select and process the most reliable information. Better if web sources are teacher-recommended to have an assurance of quality.

Saving money or being economical as a way to cope with economic-related problems and to lessen financial burden was made part of their practical life.

According to McLeod (2009), problem-focused coping targets the causes of stress in practical ways which tackles the problem or stressful situation that is causing stress, consequently directly reducing the stress. [28] The problem-focused coping is **best**, as it removes the stressor by dealing with the root cause of the problem which will result to a long-term solution. However, it is not always possible to use problem-focused strategies because they will not work in a situation where it is beyond the individual's control to remove the source of stress. They work best when the person can control the source of stress (e.g., exams). This is in support to what Nes and Segerstrom (2006) stated that problem-focused coping is not a productive method for all individuals because not all people are able to take control of a situation, or perceived a situation as controllable. [29] For example, positive (optimistic) people who tend to have positive expectations of the future are more likely to use problem-focused strategies, whereas negative (pessimistic) individuals are more inclined to use emotion-focused strategies.

Aside from using the problem-focused strategies, the student-participants also used some emotion-focused coping mechanisms for temporary relief of their stressful feelings or emotional burdens. Among these was hanging **out in nearby malls** though they had no intention to buy certain things. They simply walked and cooled-off themselves from the problem for a moment. They admitted that after "cooling-off" they immediately focused on and gave time to the solution of their problems. Similarly, watching television for several hours enabled them to forget their problems as well as their sadness for a while especially when the television segments or shows were funny. However, some of them stayed late at night and slept longer than usual while others experienced interrupted sleep. Sleeping longer hours than usual made them skip meals or eat less especially breakfast.

Socialization via Facebook was their common way to interact with their friends who use the same. Commenting on the post of their friends made them forget temporarily the stress that they experienced.

Table 9. Emotion-focused Coping of COED Academic Scholars in Relation to Stressors

Specific Responses	Frequency	Rank
hang-out in mall	11	1
watching television	9	2
sleeping	8	3
eating less	6	4
using Facebook	5	5
listening to soft music	4	6
reading books/ pocketbooks	3	7
doing house chores	2	8

Some said that listening to soft music soothed their minds, and reading books/pocketbooks induced them to sleep while doing household chores released their anger, muscle tension, nervousness.

Emotion-focused coping is a realistic option when the source of stress is outside the person's control though it is often **less effective** than the problem-focused methods (Penley, Tomaka, & Weibe, 2012) because it just provides temporary relief to problems.[30] If problems linger for a long time, one's health and eventually one's life is at risk.

It has been reported that women tend to use emotion-focused strategies than men (Billings & Moos, 1981), but the difference was small when studying men and women in similar situations (Brannon & Feist, 2009).[31-32] In general, women tend to employ emotion-focused coping and the "tend-and-befriend" response to stress, whereas men tend to use problem-focused coping and the "fight-or-flight" response, perhaps because societal standards encourage men to be more individualistic, while women are often expected to be interpersonal (Washburn, Hillman, & Sawilowsky, 2004). [33]

In a different perspective, coping is flexible in that, in general, the individual examines the effectiveness of the coping on the situation; if it is not having the desired effect, he/she will, in general, try different strategies (Aldwin, 2007). [34]

E. Correlation of COEd Academic Scholars' Socio-demographic Profile with Stressors and Responses to Stress (Problem 5)

Table 10 shows the correlation of socio-demographic profile and stressors – *academic-related, economic-related, social-related, self-imposed*, and their responses to stress – *physiological, emotional, behavioral and cognitive appraisal*.

Table 10. Correlation of COEd Academic Scholars' Socio-demographic Profile to Stressors and Usual/Common Responses to Stress

Stressors	Age	Gender	No. of Siblings	Family's Monthly Income
Academic-related	.091	-.281	.056	.306
Economic-related	.090	-.044	.347	-.772**
Social-related	-.035	.066	.145	-.287
Self-imposed	.091	-.230	.185	-.249
Responses to Stress				
Physiological	-.150	.306	-.133	-.586**
Emotional	-.254	.000	.286	-.142
Behavioral	-.409	-.028	.166	-.343
Cognitive appraisal	-.279	.068	-.184	-.333

** Correlation is significant at the 0.01 level

The results show that monthly family income and economic-related stressors were highly correlated. This explains that students with high family income are less likely to experience frequent stress. In contrary, students who belong to low-income families are more prone to experience frequent stress. In other words, students who belong to poor families are more vulnerable to stress.

Likewise, monthly family income and physiological responses to stress had high interdependence, which means that students with higher socio-economic status are less likely to experience severe anxiety, while students belonging to low-income families tend to experience severe anxiety.

The findings presented above were used as bases in the development of the proposed stress management plan that can be used by the researchers and other faculty members of the College where these students are enrolled.

4. Conclusion and Recommendations

In conclusion, low monthly family income is highly contributory to the academic scholars' stress; individual responses to stress vary from one another depending on how they appraise the stressor, but the most common among such responses were physiological and behavioral responses.

Indicative of their being scholars is the use of problem-focused coping for long-term solutions to problems, though some seek temporary relief at times. This coping mechanism is said to be the **best** according to experts because it addresses the very root of the problem, however, it is not always possible to use this particularly when it is beyond the individual's control to remove the source of stress.

Based on the findings of the study, the researchers recommend that the proposed module for stress management be considered. The said module is designed as an output of this study in an effort to optimize assistance to the scholars who constitute the great majority of the student-population in the COEd where the researchers are working as instructors. This is a training module that will serve as a guide not only for the researchers but also for their colleagues in the department/college so that they can work as a team in fostering a better academic environment for their students.

References

- [1] Fink, George. (2010). Stress: Definition and history. *Stress Sci.* 3-9. 10.1016/B978-008045046-9.00076-0.
- [2] Pascoe, Michaela C., Sarah E. Hetrick & Alexandra G. Parker (2020) The impact of stress on students in secondary school and higher education, *International Journal of Adolescence and Youth*, 25:1, 104-112, DOI: 10.1080/02673843.2019.1596823
- [3] Sawyer, S. M., Afifi, R.A., Bearinger, L. H., Blakemore, S. J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, 379, 1630–1640.
- [4] Luciano, Ruth G. (2020). Assessment of the IT Skills of BSIT Students: A Basis for Training Plan Development. *International Journal of Scientific and Technology Research (IJSTR)*, Volume 9, Issue 3 ISSN 2277-8616.
- [5] David, F. (2005). *Understanding and doing research*. (Rev. edition). Panorama Printing Inc.: Jaro, Iloilo City, Philippines
- [6] David, F. (2005). *Understanding and doing research*. (Rev. edition). Panorama Printing Inc.: Jaro, Iloilo City, Philippines
- [7] Gadzella, B. M., Fullwood, H. L., & Ginther, D. W. (1991). Student-life Stress Inventory. Paper presented at the Texas Psychological Convention, San Antonio, TX. (ERIC 350 345).
- [8] Lazarus, R S and Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer
- [9] Sanders, A. E. and K. Lushington. (2002). Effect of perceived stress on student performance in dental school. *Journal of Dental Education* Vol. 66 (1)
- [10] Kuhn, Elizabeth (2008). Student Stress and Academic Performance: Seven Ways in Which Too Much Stress Can Affect Your Grades. Date retrieved: May 17, 2015 in <http://www.articlesbase.com/education-articles/student-stress-and-academic-performance-seven-ways-in-which-too-much-stress-can-affect-your-grades-467673.html>
- [11] Kaplan, H.I. & B.J. Sadock (2000). *Learning theory: Synopsis of psychiatry: Behavioral sciences/clinical psychiatry*. Philadelphia: Lippincott

- [12] Laio, K., J. Lu & Y. Yi (2007). Research on humanized web-based learning model. *International Journal of Innovation and Learning* 4 (2) pp. 186-196
- [13] Choi, Y.B., T.A. Abbott, M.A. Arthur & D. Hill (2007). Towards a future wireless classroom paradigm. *International Journal of Innovation and Learning*, 4(1), pp. 14-25
- [14] Choi, Y.B., T.A. Abbott, M.A. Arthur & D. Hill (2007). Towards a future wireless classroom paradigm. *International Journal of Innovation and Learning*, 4(1), pp. 14-25
- [15] Marcos, J.J. M. & H. Tillema (2006). Studying studies on teacher reflection and action: An appraisal of research contribution. *Educational Research Review*, 1(2) pp. 112-132
- [16] Rafidah, K., A. Azizah & I. Noraini (2007). Stress and academic performance among the pre-science students in UiTM Negeri Sembilan. *Proceedings of the Conference of Scientific and Social Research (CSSR)*, Kuala Lumpur, Malaysia.
- [17] Robbins, S.B., J. Allen, A. Casillas, C.H. Peterson & H. Lee (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of Educational Psychology* 98(3) pp. 598-616
- [18] Was, C.A., D.J. Woltz, & C. Drew (2006). Evaluating character education programs and missing the target: A critique of existing research. *Educational Research Review* 1(2) pp. 148-156
- [19] Watering, G.V.D. and J.V.D. Rijt (2006). Teachers' and students' perceptions of assessments: A review and a study into the ability and accuracy of estimating the difficulty levels of assessment items. *Educational Research Review* 1(2) pp. 133-147
- [20] Yerkes, Robert M., and J. D. Dodson. (1908). The Relation of Strength of Stimulus to Rapidity of Habit-Formation. *Journal of Comparative and Neurological Psychology* 18 (November 1908): pp. 459-482
- [21] Krohne, H W, Egloff, B, Varner, L J, Burns, L R, Weidner, G and Ellis, H C, (2000). The assessment of dispositional vigilance and cognitive avoidance: Factorial structure, psychometric properties, and validity of the Mainz Coping Inventory. *Cognitive Therapy and Research* (24) pp. 297-311
- [22] Krohne, H W, (1996). Individual differences in coping. In M Zeidner and N S Endler (Eds) (1996). *Handbook of Coping: Theory, Research, Applications* pp. 381-409 New York, USA: Wiley.
- [23] Krohne, H W, (1993). Vigilance and cognitive avoidance as concepts in coping research. In H W Krohne (Ed), (1993). *Attention and Avoidance. Strategies in Coping with Aversiveness* pp.19-50. Seattle, WA: Hogrefe & Huber.
- [24] Krohne, H W, Hock, M and Kohlmann, C.W. (1992). Coping dispositions, uncertainty, and emotional arousal. In K. T. Strongman (Ed), (1992). *International Review of Studies on Emotion Vol. 2* pp. 73-95
- [25] Lazarus, R. S, (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- [26] Syed, Faiza Ayub (2013). An Efficient Framework based on Emotional Intelligence to Improve Team Performance in Developing Countries. *IJ. Modern Education and Computer Science*, 2013, 12, 16-23 Published Online December 2013 in MECS (<http://www.mecspress.org/>, DOI:10.5815/ijmecs.2013.12.03)
- [27] Zulueta, Francisco M. (2005). *Sociology: Focus on the Philippines*. National Book Store: Mandaluyong City: Philippines.
- [28] McLeod, S. A. (2009). Emotion Focused Coping. Retrieved from <http://www.simplypsychology.org/emotion-focused-coping.html>
- [29] Nes, L. S., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and social psychology review* 10 (3) pp. 235-251
- [30] Penley, J. A., Tomaka, J., & Wiebe, J. S. (2002). The association of coping to physical and psychological health outcomes: A meta-analytic review. *Journal of behavioral medicine* 25 (6) pp.551- 603
- [31] Billings, Andrew G.; Moos, Rudolf H. (1981). "The role of coping responses and social resources in attenuating the stress of life events". *Journal of Behavioral Medicine* 4 (2): pp. 139-57
- [32] Brannon, Linda; Feist, Jess (2009). *Health Psychology: An Introduction to Behavior and Health: An Introduction to Behavior and Health* (7th ed.). Wadsworth: CEngage Learning. p. 125.
- [33] Washburn-Ormachea, Jill M.; Hillman, Stephen B.; Sawilowsky, Shlomo S. (2004). "Gender and Gender-Role Orientation Differences on Adolescents' Coping with Peer Stressors". *Journal of Youth and Adolescence* 33 (1) pp. 31-40
- [34] Aldwin, Carolyn (2007). *Stress, coping and development*. 2nd Ed. New York: The Guilford Press.

Stress Management Plan

Schedule		Objectives	Activities	Persons Involved	Budget/Materials Needed
Month	Date				
October 2021	2 nd week	At the end of each session, students are able to: Discuss clearly the theories and nature of stressors. Describe the general and specific effects of stress in relation to physiological, behavioral, emotional and cognitive aspects	Stress Mgt. Session 1 (Exploring the Nature of Stress)	* Researchers * Guidance Counselor * COED Students	* LCD projector * Whiteboard marker
	4 th week	Recognize personal strengths and weaknesses Recognize the importance of lessening one's weaknesses and sustaining personal strengths	Stress Mgt. Session 2 (Knowing Oneself)	* Researchers * Guidance Counselor * COEd Students	* LCD projector * Whiteboard marker * Ball pen * Pieces of paper
November 2021	2 nd week	Identify the different stress coping techniques Compare and contrast the different stress - coping techniques Develop skills to properly combat specific stress	Stress Mgt. Session 3 (Stress Coping Techniques)	* Researchers * Guidance Counselor * COEd Students	* LCD projector * Whiteboard marker * Cartolina * Permanent pen * Ball pen * Pieces of paper
	4 th week	Distinguish the different channels and barriers for effective process in communicating problem with other people Establish protocols on how to communicate problems with other people Conform to the protocols in communicating problems with other people	Stress Mgt. Session 4 (Communicating Problems)	* Researchers * Guidance Counselor * Coed Students	* LCD projector * Whiteboard marker
December 2021	1 st week	Properly identify individuals that can provide social support Practice seeking social support whenever there is a problem	Stress Mgt. Session 5 (Seeking Social Support)	* Researchers * Guidance Counselor * Coed Students	* LCD projector * Whiteboard Marker
	2 nd week	Adhere to proper diets, breathing exercise and good sleeping habits to lessen/ control stress and in turn foster physiological and cognitive wellness.	Stress Mgt. Session 6 (Proper Diet, Breathing Exercise and Good Sleeping Habits)	* Researchers * Guidance Counselor * COEd Students	* LCD projector * Whiteboard marker * Cartolina * Permanent pen * Ball pen * Pieces of paper

Authors' Profiles



Dr. Ruth G. Luciano is a full-time college IT instructor at the Nueva Ecija University of Science and Technology College of Information and Communications Technology located in Cabanatuan City, Nueva Ecija, Philippines. She has been in the teaching profession for 20 years now. She worked as a private school instructor for 17 years and in 2018 she joined the NEUST's teaching workforce. She is also a lecturer at the MSIT program of the Graduate School of the same University.



Mr. Mickel John Salvatierra is a former Teacher-Education faculty member of the Manuel V. Gallego Foundation Colleges, Inc. At present, he is working as a Senior High School Teacher in one of the secondary high schools in Santa Rosa, Nueva Ecija, Philippines where he teaches social science subjects.

How to cite this paper: Ruth G. Luciano, Mickel John Salvatierra, "Stressors and Stress-Coping Mechanisms of Academic Scholars in HEIs: A Basis for Stress Management Plan Formulation", *International Journal of Education and Management Engineering (IJEME)*, Vol.12, No.3, pp. 1-12, 2022. DOI: 10.5815/ijeme.2022.03.01