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Academic Procrastination: Its Effect On The Learning Productivity Of Senior High School Students In Mindanao State University-Sulu

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ABSTRACT

Procrastination became common practices to many students which has affected their learning productivity. This study was conducted for the purpose of gathering facts and information about procrastination and how it affected the students in academic aspect. This study aimed to accomplish the following objectives: to determine the effect of procrastination on the learning productivity, to discover the factors that cause procrastination, and to identify if there is any significant difference of academic procrastination on the learning productivity of the respondents when they are grouped according to gender.

The researchers used descriptive research method in gathering data. Convenience sampling was applied to select the respondents composing of 50 students from all section of Grade 12 STEM strand. Weighted arithmetic mean and independent t-test are the statistical tools used to answer the entire research question. The data gathered was computed using a computer programming called Statistical Package for Social Sciences (SPSS) and analyzed and interpreted with aide of the statistician. In view of the findings and analysis, the following recommendation are hereby presented, students must set deadlines to be more productive and should eliminate distraction when doing school works; parents must not fail to monitor the academic tasks of their children. Parental motivation, guidance, and advice would be much help in light of the modular learning in order to motivate and boost the students to do their work; and teachers alongside student leaders must initiate a seminar addressing time management to overcome procrastination among students.

1. Introduction

In today's generation, people are severely attached to a lot of things that actually just wasting their time without them knowing, especially students who find wasteful things as their comfort zone. This reason might become one of the sources of procrastination that can have a possibility of them taking a less care about their studies. Postponing of academic task becomes number one factor why they do not excel on academics. In fact, students were already aware what this academic procrastination brings. They already know since the very beginning how postponing of academic tasks affects them and what can it do that might lead

for achieving a lower grades. But due to the pleasure and satisfaction they acquire from consuming their time on some of the unnecessary deeds, they neglect the idea of academic procrastination having a bad outcomes to their academic status. As such hobbies of procrastinators like too much playing games, surfing on the internet, daydreaming, and whatnot. Also, procrastinators may have something wrong with regards about their mentality.

At present, education under this so-called new normal can cause procrastination to the students. Consequently, the new method of learning presents an

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unexpected challenge to youth, specifically to students. Students only rely on self-directed learning, where teachers only provide instruction through chats otherwise written on the module. Hence, the amount of discussion between students and teachers lessens. As a result, the amount of their learning productivity making academic tasks decreases. Thus, in this study the researchers explored on how the academic procrastination affects the students' learning productivity.

According to Ojo (2019), procrastination is an act everyone takes a part in everyday, regardless of their situation in life. Everyone from young junior high students to adults who has been out of school for a while participate in procrastination. Some people would say that it is a form of deviance because by definition deviance is "any violation of norms" and avoiding what should be done is a violation of norms. In today's world of technology and the Internet, however, people procrastinate all the time. It seems that procrastination is now more of a social norm than a deviance.

Obviously, the problem of procrastination affects many students in secondary schools. However, many students do not know that their inability to read is problem of postponing their time to study, but they are engaged more on pleasurable things in which they cannot benefit from it. Moreover, the students who study their books perform better than those who are not serious (Thomas 2014).

As a result, the researchers find this topic as interesting specially these days; COVID-19 pandemic is in line, academic procrastination in students where learning is carried out through online and modular approach. To be able to know why some of the students' delay task in terms of their academics that may tend to affect their learning productivity. Hence, the

researchers conducted this study to help prevent the development of academic procrastination in students.

Statement of the Problem

The study focused on the effects of procrastination on the learning productivity of STEM 12 students in Mindanao State University-Sulu. Specifically, it aimed to answer the following questions:

1. What is the effect of procrastination on the learning productivity of STEM 12 students in Mindanao State University- Sulu?
2. What are the factors that cause students' procrastination?
3. Is there any significant difference of academic procrastination on the learning productivity of STEM 12 students in Mindanao State University-Sulu when they are grouped according to gender?

Objectives of the Study

In this study, it aimed to accomplish the following objectives:

1. To determine the effect of procrastination on the learning productivity of the STEM 12 students in MSU- Sulu.
2. To discover the factors that causes procrastination on STEM 12 students in Mindanao State University-Sulu.
3. To identify if there is any significant difference of academic procrastination on the learning productivity of the STEM 12 students in Mindanao State University - Sulu when they are grouped according to gender.

2. Related Literature

Procrastination is a self-handicapping behavior occurs when people delay completing a task they intend to complete, potentially leading to lost productivity, poor performance, and increased stress (Steel, 2007). In this review, the concept of

procrastination and more specifically academic procrastination will be examined. Procrastination is a pervasive human event that there are over 600 self-help book addressing solutions to this phenomenon (Ferrari, 2010). This behavior is so significant that in 2010 alone, 120 new books were written and published on this topic (McRaney, 2010). Even though procrastination is a common occurrence, the behavior is not fully understood.

Academic procrastination is considered a domain-specific form of self-regulation failure although academic procrastination is the form of procrastination most often researched; there is much to be explored. In addition, there is a significant lack of literature regarding the prevalence of high school and college students who procrastinate in international settings, and more specifically in the United States. This review will also examine literature regarding the relationship between academic procrastination and achievement. It is hoped that this review will contribute to research to assist educators in constructing interventions tailored to an individual student's specific profile and needs to minimize academic procrastination. This review will begin by discussing procrastination's history.

History of Procrastination

Ancient Egyptian hieroglyphics demonstrate that as early as 1400 BC people struggled with basic time management Ronald Leprohon, an Egyptologist at the University of Toronto, translated a hieroglyphic that reads: "Friend, stop putting off work and allow us to go home in good time" as cited in Konnikova from 2014. Six hundred years later, in 800 B.C., the Greek poet Hesiod stated. "Do not put your work off till tomorrow and the day after, for a sluggish worker does not fill his barn, nor one who puts off his work" (Hesiod, trans. 2008). In Agrarian societies, of farmers delayed gathering their crops for winter the family would not have enough to eat and would

need the help of others in order to survive the winter. This failure to gather their crops impacted the community negatively and was bothersome to the other members of the group (Ferrari, Johnson, & McCown, 1995).

Romans also documented experiencing problems with procrastination. In 23 BC, Quintus Horatius Flaccus wrote Odes and in Book 1.11 used the phrase "Carpe diem quam minimum credulapostero" which has been translated in various ways such as "Seize the present: trust tomorrow e'en as little as you may which is known carpe diem or seize the day (Horace, trans. 1882)." This ode ribes the opposite of procrastination and stresses the importance of making the most of each day and to live in the present. The phrase also suggests people should not rely on the future because it is unknown.

Although procrastination negatively affected people in agrarian times, procrastination's impact became even more significant during the industrial revolution (Steel, 2007). In the 1750s, time and efficiency became key concepts due to the newly developed manufacturing processes. Dr. Samuel Johnson, who wrote the first comprehensive American English dictionary, occasionally discussed procrastination in a periodical called the Rambler. Johnson (1751) described procrastination as "The folly of allowing ourselves to delay what we know cannot be finally escaped is one of the general weaknesses which, in spite of the instruction of moralists, and the remonstrance of reason, prevail to a greater or less degree in every mind" (The Samuel Johnson Sound Bite Page, para. 3, 1751). Thus, Johnson found procrastination to be a pervasive weakness in which most people engage in during their life.

History has clearly shown procrastination handicaps not only an individual person but also negatively impacts societies. Also, history illustrates that as society advances the impact of

procrastination is greater as the number of commitments and deadlines increase and become more complicated. Thus, history suggests that procrastination's impact will become more substantial in the future due to procrastination being pervasive.

Definition of Procrastination

Procrastination is a common event and is often unavoidable because there are thousands of potential tasks that we could be doing at any time.

Due to procrastination having timeless origins and being a common-language term. Researchers define procrastination in a multitude of ways. Currently, there is no absolute consensus among researchers for procrastination's definition because different researchers highlight various aspects of the behavior. However, the definition has evolved as more research has been conducted, and therefore, deeper understanding of procrastination has been reached. The term procrastination is composed of two parts: "pro" in sense of "forward" and "crastinus" meaning "tomorrow" and "until tomorrow" (Steel, 2005). Thus, procrastination translates to delaying something until tomorrow.

Furthermore, the Oxford English Dictionary defines procrastination as "the action or habit of postponing or putting something off." Nevertheless, these definitions are not adequate because a person could put off a task without having any intentions to work on the task. Thus, to exclude people who have no intention of completing a task a layman's definition for procrastination is to be slow or late about doing something that should be done: to delay doing something until a later time because you do not want to do it because you are lazy, etc." (Merriam-Webster Dictionary, n.d.). In other words, procrastination is to put off intentionally the doing of something that should be done. Therefore, many researchers include in the definition the

concept that a person must intend to delay completing a task.

Consequently, procrastination cannot be simply defined as a person intentionally delaying completing a task due to people having differing perceptions regarding delay (Van Eerde, 2003). In addition to a person intending to delay a task, another component to the definition is that procrastination is "needless" in nature or avoidable. This concept is needed because some people delay completing a task on purpose in order to complete more important tasks. Thus, when more important tasks need to be completed delaying working on smaller or less important tasks would not be considered procrastination. When people delay completing the smaller tasks, a person is managing their time efficiently. An example of procrastination being avoidable is when person chooses to delay completing an important task in order to a more favorable and less important task such as socializing with friends.

In addition to the concept of intentionally avoiding a task, many researchers frequently include various additional concepts such as the delay being dysfunctional or a person experiencing emotional upset (Schouwendburg, 1995). Likewise, Solomon and Rothblum (1984) define "procrastination as the act of needlessly delaying tasks to the point of experiencing subjective discomfort" (p. 503). Ferrari (2010) uses a similar definition and defines procrastination as "the process of delaying is voluntary or purposeful and deliberate. And the process feels uncomfortable, experiencing emotional unease from delaying" (p. 17). In addition to the delay aspect, many times there is also some aspect of psychological pain involved.

However, some research definitions do not include the aspect of psychological pain. While many people who delay completing a task will feel

stress and other negative emotions, others may not. Many researchers debate whether people need to experience negative effects such as discomfort from anxiety or diminished performance to be classified as procrastinating (Steel, 2007). Therefore, research is burgeoning that examines a subtype of people who do not experience negative effects when procrastinating (Chu & Choi, 2005). This population reports they work better under pressure and their work quality does not suffer due to the delay. Thus, due to this emerging population, one proposed criteria for a behavior to be classified as procrastination is being counterproductive, needless, and delaying (Schraw, Wadkins, & Olafson, 2007). Therefore, the most commonly used definition that includes these criteria is "to voluntarily delay an intended course of action despite expecting to be worse off for the delay" (Steel, 2007, p. 66). Thus, this definition includes all three aspects of procrastination: delay, counter-productivity, and needlessness.

Related Studies

One of the studies that had been conducted similar to this study is a research entitled "Relationship between Academic Procrastination and Academic Performance of Middle School Students", authored by Xing-Chun Xu and Cai-xia Wang. Stated in their study that the level of academic procrastination was no so high. The academic level of male students was significantly higher than that of female. The academic procrastination and performance were negatively related, but the coefficients were. And the higher of the level of procrastination, the lower the academic performance was.

Procrastination is a common human behavior that has historically emerged as early as preschool. Another study conducted by Walter Mischel at Stanford University which examined people's ability to delay gratification and to exert

self-control in the face of strong situational pressures and emotional temptations. Mischel was best known for his longitudinal study called "the marshmallow experiment" with over 600 preschoolers. Results clearly indicated that children who were able to overcome their desire for short-term reward in favor of a better outcome later were financially and educationally different than the children who picked the short-term reward.

"The marshmallow experiment" examined children's ability to forego immediate gratification and to wait instead for a larger desired, but delayed, reward. Each trial used 4 children (2 males and 2 females) who sat at a table in front of a bell and some treats. The children could pick a pretzel, a cookie, or a giant marshmallow. The researchers told the young children that they could either eat the treat right away or wait a few minutes for the examiner to run an errand. In addition, the children were told that if they waited, they would double their payoff and get two treats. If any of the children could not wait, he or she could ring the bell and the researcher would end the experiment for that child. Some children made no attempt at self-control and ate their treats right away. Other children stared intensely at the object of their desire until they gave in to temptation. Many writhed in anticipation, twisting their hands and feet while looking away. Results of the study indicated that only a third of the children could wait the full time needed to double their treats (Mischel & Ayduk, 2004). Mischel described the children that could wait as displaying "goal-directed self-imposed delay of gratification." However, by itself, this experiment did not yield significant results that could be applied to understanding procrastination's impact.

In follow-up studies that occurred twelve to fourteen years later, this study which examined young children's ability to delay gratification

demonstrated significant information when studying procrastination. In 1989, follow-up studies indicated that the preschool children who had delayed gratification later were financially and educationally different than the children who picked the short-term reward. These adolescents were described by their parents as significantly more competent in life. They were more physically fit, more social, more successful academically and professionally, and more able to cope with stressful situations (Mischel & Ayduk, 2004).

Longitudinal results showed that children's ability to delay gratification also correlated with higher scores on the Scholastic Aptitude Test (SAT) and behavior such as attention and social skills (Mischel, Shoda, & Mendoza-Denton, 2002). Children who waited the fifteen minutes had SAT scores approximately 210 points higher than those who could wait only thirty seconds. Children who rang the bell quickly, in addition to their lower SAT scores, were found to have significantly more behavioral problems, both in school and at home, struggled in stressful situations, frequently had trouble paying attention, and found it difficult to maintain friendships. Examining children's abilities to delay gratification yields significant information when studying procrastination because results suggested that procrastination could be considered to be about choosing between wants over obligations. Therefore, procrastination could be the equivalent of eating a marshmallow, or in other words, giving into an impulse such as avoiding working on an arduous project. Thus, procrastination frequently occurs when people cannot self-regulate their behavior and give into temptation for short-term gratification. Also, research has repeatedly demonstrated that when people delay completing a task it is a maladaptive response.

Moreover, Ellis and Knaus (2010) regard procrastination as an – interactive dysfunctional

and behavior avoidance process, characterized by the desire to avoid an activity, the promise to get to it later, and the use of excuse making to justify the delay and avoid blame. Research has consistently demonstrated that procrastination is one of the leading hindrances to academic performance of the students at various educational levels. Nonetheless, students have reported that procrastination typically accounts for more than one third of their daily activities is often and carried out through sleeping, reading or watching television (Psychyl et al., 2000).

Furthermore, researchers have identified six different aspects/domains of life where people procrastinate: academic and work, everyday routines and obligations, health, leisure family and partnership, and social contacts (Gröpel & Kuhl, 2006; Klingsleek, 2013). Each domain possesses different prevalence rate and correlations with other constructs, reasons, and consequences. Thus, each domain should be analyzed independently to fully understand its characteristics, impact, and theoretical approaches. This review will focus specifically on the domain of academic procrastination.

Academic procrastination is the most researched procrastination domain (Jorke, Thau, Fries, 2011). This form of situational procrastination occurs when a person is passive in completing academically related tasks such as studying for an exam or talking to an instructor. People who procrastinate academically may be consciously or unconsciously aware they are engaging in the behavior. The most accepted definition used for academic procrastination is "intentionally delaying or deferring work that must be completed" (Schraw et al. 2007). This definition is similar to that which has been proposed for general procrastination in that it incorporates the aspects of intending to delay, lack of productivity, and availability, but this definition relates to the

academic domain.

Correspondingly, some research found that academic procrastination can predict learning performance and evoke psychological problems (Hussain & Sultan, 2010). Academic procrastination brings painful feelings and negative learning experiences (Sirois & Pychyl, 2013). Moreover, it might have an adverse effect on homework completion (Grunchel et al., 2012), and even influence the decision to drop out distance learning courses. For example, when learning at a distance, procrastinators often feel motivated to work on their course at the beginning, but then feel like dropping out after some time (Michinov et al., 2011). These studies considered procrastination in distance learning before the coronavirus outbreak. Since the outbreak, teachers have needed to increase their use distance online learning, but only limited number of studies has explored the relationship in these circumstances.

Clearly, procrastination has a negative impact on an individual, but the actual profile of a person who procrastinates varies. Thus, due to the wide range of characteristics there may be no typical profile of academic trait procrastinators, but there are some similarities that occur.

Summary of Literature Review

To sum it all up, this chapter is the collection of the related review and studies which it provides information to the proponents that their research study has similarities with other system which is widely used. As stated that procrastination handicaps not only an individual person but also negatively impacts societies. And is suggests that procrastination's impact will become more substantial in the future due to procrastination being pervasive.

Moreover, the collection of studies in this

chapter is related in the area of academic procrastination that affects students' learning productivity. There were many researches that coincide with this study up-to date – supporting this research and giving some evidence to strengthen this study.

3. Methodology

This chapter presents the methods and procedures applied in the study.

Research Design

This study used descriptive research method as the method in the study. McCombes (2019) states that descriptive research is a type of research that describes a population, situation, or phenomenon that is being studied. It can answer what, where, when and how questions, but not why questions. The method is very appropriate since the purpose of this study is to know the relationship between the variables.

Locale of the Study

The setting of the study was conducted at Mindanao State University Sulu- Senior High School department campus which only focused on STEM 12 Strand, which is located at Capitol Site, Jolo, Sulu.

Research Instrument

This study used the Likert Scale Questions to measure the level of agreement of their respondents with various statements about some opinions, attitudes, etc.

The researchers chose the close ended type of questionnaire as the research instrument of the study. The questionnaire was consist of 20 questions which was checklist in type. While the rating scale was classified as the following: (5) Strongly Agree, (4) Agree, (3) Slightly Agree, (2) Disagree, (1) Strongly Disagree as verbal description.

The following rating scale was used in the analysis and interpretation of the data collected.

Table 3.1. Rating Scales and Intervals with the Verbal Description

Rating Scale	Rating Interval	Verbal Description
5	4.50 - 5.00	Strongly Agree
4	3.50 - 4.49	Agree
3	2.50 - 3.49	Slightly Agree
2	1.50 - 2.49	Disagree
1	1.00 - 1.49	Strongly Agree

Validation of Research Instrument

The researchers submitted the first draft to their research adviser for corrections and suggestions. There was a little revision in some parts by adding up more statements. The revised form was then validated by their research critics.

Research Sampling

In this study, the researchers used convenience sampling to select the participants of the study. Convenience sampling is a type of non-probability sampling in which people are sampled simply because they are “convenient” sources of data for researchers.

The researchers selected fifty (50) students, ten (10) respondents each section in Grade 12 STEM strand of Mindanao State University-Sulu in determining the effect of procrastination on the learning productivity of the students.

Research Respondents

The respondents of this study were the Grade 12 STEM Strand Senior High students from all section in Mindanao State University-Sulu. They are composed of fifty (50) students who are presently enrolled during the school year 2020-2021.

Statistical Treatment

For the analysis of data, the researchers used weighted arithmetic mean to answer problem one and two and t-test for independent samples for the last problem. The researchers utilized the assistance of the statistician in the analysis and interpretation of the data.

Data Gathering Procedure

The researchers sent a letter to the MSU-Sulu SHS Director, Dr. Norman A. Abdurahman to ask for permission to conduct the research survey. Then they made and sent a letter to the respective advisers of grade 12 STEM 1-5 asking their permission to conduct a survey. After the letter was approved the researchers started to conduct the survey via Messenger. A short introduction and briefing about the research was made first, and then the researchers explained the direction to the respondents on how to answer the questionnaire after that, the researchers started sending the questionnaire that contains 20 questions.

The researchers assured the respondents that the information that they have given would be treated with outmost confidentiality. The other members of the group assisted and entertained some clarifications from the respondents. After the respondents accomplished answering the survey questionnaire, the researchers retrieved it and ended by giving thanks to the respondents.

Data Processing Method

The researchers used the aid of the statistician in the computation, analysis, and interpretation. The data gathered was organized. The researchers made an evaluation on the enumerate variables. Weighted arithmetic mean was utilized to answer the problem one and two. The data collected were computed and analyzed through the use of the computer programming called Statistical Package for Social Sciences or also known as SPSS.

4. Results

This chapter includes the presentation of result, analysis and interpretation of data gathered from 50 respondents from STEM 12 students in Mindanao State University- Sulu academic year 2020-2021.

The effect of procrastination on the learning productivity of the STEM 12 students in Mindanao State University-Sulu.

Table 4.1. Effect Of Procrastination On The Students' Learning Productivity

Indicators	Mean	Description
1. I cannot think properly whenever I'm pressured.	3.88	Agree
2. I know that whenever I procrastinate, I will inevitably get lower grade.	3.82	Agree
3. I have difficulty in focusing tasks at the same time.	3.48	Slightly Agree
4. I have difficulty in identifying my priorities because I mostly like to delay my school works.	3.32	Slightly Agree
5. I have difficulty in determining which task to start first.	3.32	Slightly Agree
6. Procrastination decreases my productivity level.	3.26	Slightly Agree
7. My learning skills and writing skills decrease.	3.04	Slightly Agree
8. I do less important tasks before I do the important one.	2.88	Slightly Agree
9. I rarely get tasks accomplish.	2.84	Slightly Agree
10. I get started on projects on the last minute.	2.82	Slightly Agree
Grand Mean	3.266	Slightly Agree

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Slightly Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

Table 4.1 shows the identified effect of procrastination on the learning productivity of the STEM 12 students in Mindanao State University- Sulu. The respondents agreed that the effect of procrastination on the students' learning productivity made them feel like they are pressured with the tasks, they cannot think properly which got the highest obtained mean of 3.88. Followed with the obtained arithmetic mean of 3.82, the respondents also agreed that there is an effect of procrastination towards their academic performance. Whereas, the rest of the respondents slightly agreed on statement number 8 that got a 3.48 mean, having difficulty in focusing their tasks at the same time. Struggling in determining which task to start first and hardly identifying their priorities both got a 3.32 arithmetic mean. Their learning skills and writing skills decreased and do the less important task before the important one got a 3.04 and 2.88, respectively. Statement number 3 and 6 obtained a 2.84 and 2.82 arithmetic mean for the

students who rarely get the task accomplish and get started their projects on the last minute of their time. Conclusively, the overall mean for this is 3.266, which means that the students slightly agreed on the identified effects mentioned.

Similar to the study of Grunchel et al., (2012) that procrastination might have an adverse effect on homework completion and even influence the decision to drop out distance learning courses. For example, when learning at a distance, procrastinators often feel motivated to work on their course at the beginning, but then feel like dropping out after some time.

On the present study, academic procrastination discovered that there is an effect on students' learning productivity. Specifically, it has a negative effect on students' learning productivity since the researchers only cited a negative effect on their research survey questionnaire.

The factors that cause students' procrastination.

Table 4.2. Factors that cause Students' Procrastination

Indicators	Mean	Description
1. Exposure to gadget	3.82	Agree
2. Lack of concentration	3.58	Agree
3. Anxiety and frustration	3.56	Agree
4. Lack of time management	3.54	Agree
5. Lack of motivation	3.54	Agree
6. Lack of comprehension	3.52	Agree
7. Loss of interest	3.30	Slightly Agree
8. Lack of comprehension	3.14	Slightly Agree
9. No proper guidance from parents	3.06	Slightly Agree
10. Over confidence	2.92	Slightly Agree
Grand Mean	3.40	Slightly Agree

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Slightly Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

The table 4.2 presented the data accumulated from 50 respondents. As shown in the table above, the respondents agreed on the following factors; exposure to gadget with weighted mean of 3.82, lack of concentration with weighted mean of 3.58, and anxiety and frustration with weighted mean of 3.56. Synchronously, the factors - lack of motivation and lack of time management got the same weighted mean of 3.54. Lastly, respondents agreed on identified factor which is lack of comprehension which got a weighted mean of 3.52. On the contrary, the respondents did not fully agree on the following factors; loss of interest with weighted mean of 3.30, lack of discipline with weighted mean of 3.14, no proper guidance from parents with weighted mean of 3.06 and as well as over confidence that got a weighted mean of 2.92. As a result, the obtained overall mean of 3.40, which means that the respondents were slightly agreed on the factors mentioned above.

Psychel et al., (2000) asserted that students have reported that procrastination typically accounts for more than one third of their daily activities is often and carried out through sleeping, reading or watching television. In addition, Jorke et al., (2011) stated that academic procrastination is the most researched procrastination domain. This form of situational procrastination occurs when a person is passive in completing academically related tasks such as studying for an exam or talking to an instructor. People who procrastinate academically may be consciously or unconsciously aware they are engaging in the behavior.

Based on the identified factors, the result revealed that the respondents slightly agree on the factors mentioned. As a matter of fact, the result shows an overall mean of 3.40.

The significant difference of academic procrastination on the learning productivity of the STEM 12 students in Mindanao State University-Sulu when they are grouped according to gender.

Table 4.3.1. Academic Procrastination when Grouped according to Gender

Statements	Sex Male Mean	Description	Sex Female Mean	Description
1. I cannot think properly whenever I'm pressured.	3.71	Agree	3.97	Agree
2. I rarely get tasks accomplish.	2.71	Slightly Agree	2.91	Slightly Agree

3. I have difficulty in identifying my priorities because I mostly like to delay my school works.	3.41	Slightly Agree	3.27	Slightly Agree
4. I have difficulty in determining which task to start first.	3.24	Slightly Agree	3.36	Slightly Agree
5. I get started on projects on the last minute.	2.88	Slightly Agree	2.79	Slightly Agree
6. Procrastination decreases my productivity level.	3.47	Slightly Agree	3.15	Slightly Agree
7. I have difficulty in focusing tasks at the same time.	3.47	Slightly Agree	3.48	Slightly Agree
8. My learning skills and writing skills decrease.	2.65	Slightly Agree	3.24	Slightly Agree
9. I do less important tasks before I do the important one.	3.41	Slightly Agree	2.61	Slightly Agree
10. I know that whenever I procrastinate, I will inevitably get lower grade.	3.82	Agree	3.82	Agree
Mean	3.277	Slightly Agree	3.26	Slightly Agree

Legend: 4.50-5.00 = Strongly Agree; 3.50-4.49 = Agree; 2.50-3.49 = Slightly Agree; 1.50-2.49 = Disagree; 1.00-1.49 = Strongly Disagree

The Table 4.3.1 indicated both male and female slightly agreed on the identified effects mentioned. Therefore, there is no significant difference of procrastination on the learning productivity of the STEM 12 students in MSU-Sulu when they are grouped

according to gender. This entails that male and female have the same perception on procrastination, that they slightly agree that they practiced procrastination and have had experienced its effect in one way or in another.

Table 4.3.2. T-test on Academic Procrastination when Grouped according to Gender

Statements	t-computed	p-value	H ₀ Decision
1. I cannot think properly whenever I'm pressured.	-.939	.352	Accept H ₀
2. I rarely get tasks accomplish.	-.783	.437	Accept H ₀
3. I have difficulty in identifying my priorities because I mostly like to delay my school works.	.506	.615	Accept H ₀
4. I have difficulty in determining which task to start first.	-.492	.625	Accept H ₀
5. I get started on projects on the last minute.	.312	.756	Accept H ₀
6. Procrastination decreases my productivity level.	1.086	.283	Accept H ₀
7. I have difficulty in focusing tasks at the same time.	-.052	.959	Accept H ₀
8. My learning skills and writing skills decrease.	-1.881	.066	Accept H ₀
9. I do less important tasks before I do the important one.	3.116	.003	Reject H ₀
10. I know that whenever I procrastinate, I will inevitably get lower grade.	.017	.986	Accept H ₀
Total	0.089	0.5082	ACCEPT H₀

The p-value 0.5082 is greater than the significant level of confidence 0.05.

Table 4.3.2 showed the computation of the independent t-test for significant difference of procrastination on the learning productivity of the STEM 12 students in MSU-Sulu when they are grouped

according to gender. The t-test statistics value 0.089 with p-value 0.5082 is greater than the significant level of confidence 0.05. Thus, the data suggests that the null hypothesis is accepted. There is no enough

evidence and there is no need for further computation. The data indicated that there is no significant difference of procrastination on the learning productivity of the STEM 12 students in MSU-Sulu when the data are grouped according to gender. This entails that even if we grouped male and female, the effect of procrastination towards learning productivity is the same. Its effect is negative as specified in the questionnaire on the statement of the problem one.

As contended by Özer et al., (2009), in Study 2, 784 students (363 women, 421 men; M age = 20.6 years, SD age = 1.74 years) completed the validated Turkish Procrastination Assessment Scale-Students. The results were that 52% of students self-reported frequent academic procrastination, with male students reporting more frequent procrastination on academic tasks than female students. Significantly more female students than male students reported greater academic procrastination because of fear of failure and laziness; male students reported more academic procrastination as a result of risk taking and rebellion against control than did female students.

5. Summary of Findings

The primary theme of this study is the effect of procrastination on the learning productivity of STEM 12 students in Mindanao State University-Sulu. In which it aims to accomplish the following objectives: To determine the effect of procrastination on the learning productivity of the STEM 12 students in MSU- Sulu; To discover the factors that cause procrastination on STEM 12 students in Mindanao State University-Sulu; and to identify if there is any significant difference of academic procrastination on the learning productivity of the STEM 12 students in Mindanao State University - Sulu when they are grouped according to gender. Mean and description and independent t-test were the statistical tools used to answer all three research questions.

The findings showed that respondents slightly agreed that procrastination has effects on the students' learning productivity. Coincidentally, students also slightly agreed on the factors which cause them to procrastinate. Nonetheless, it was also found out that there is no significant difference in academic procrastination on the learning productivity of the STEM 12 students in Mindanao State University - Sulu when the data are grouped according to gender.

6. Conclusion

The following were the result of the study; this study showed that the respondents agreed to that statement that there is effect of procrastination on their academic learning. Every time they feel pressured in finishing the given tasks, they cannot think properly, so if they cannot deliberate the way they need to, it might affect their grades. Diversely, the respondents slightly agreed that whenever there are tasks given, they cannot focus for they were struggling to determine what their main priorities are. Therefore, it would be hard for them to start academic tasks. Moreover, when they do not know where to begin, their productivity level will decrease as well as their learning and writing skills. For this reason, they will tend to do the less essential tasks before the important ones. When this happens, they rarely get their task accomplish for the last minute.

Simultaneously, the respondents also slightly agreed on the factors which cause them to procrastinate. When they are exposed to technology, they will likely lose the interest for learning. Hence, it will be the factor of their anxiety and frustration. If they are anxious about their studies, their motivation to strive hard will be deprived which causes them to lose their sense of time management, and if time management diminish, procrastination will occur and ruin their productivity.

Nevertheless, the computation and analysis revealed that there is no significant difference of academic procrastination on the learning productivity

of the STEM 12 students in MSU-Sulu when they are grouped according to gender.

7. Recommendation

The researchers recommend the following:

1. Students must set deadlines to be more productive and should eliminate distraction when doing school works.
2. Parents must not fail to monitor the academic tasks of their children. Parental motivation, guidance and advice would be much help light of the modular learning in order to motivate and boost the students to do their work.
3. Teachers alongside student leaders must initiate a seminar addressing time management to overcome procrastination among students.

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