De La Salle Santiago Zobel School
Senior High School
Science, Technology, Engineering and Mathematics Strand

Factors that influenced the effectiveness of DLSZ-V Grade 11 STEM student's time management skills in relation to academic performance 2016-2017

Submitted to
Sir Fritz Ferran

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Research 2: Quantitative Research in Daily Life

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CHAPTER 1. BACKGROUND OF THE STUDY

1.1 Introduction

Time management is the process and practice of proper planning and organizing of time for activities to be done day to day. Time management is a key component for a proper balance of responsibilities especially to students with extracurricular activities. These factors are distinct and plays a unique role in time management. Responsibilities is a huge factor that affects time management, mainly because of an individual's priorities and what they value to be done the most. As for social environment, this refers to an influential aspect within the individual's peers. Lastly, the Academic Standing focusing on the student's quantifiable academic achievements and failures.

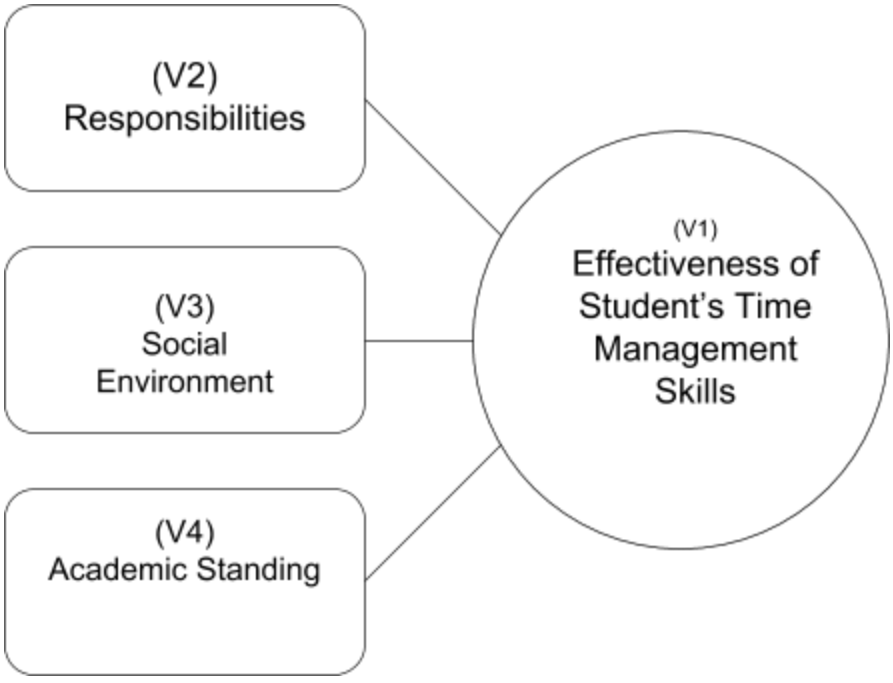
However, the research articles of each factor mainly focused or were connected to a different variable and not necessarily within a student. Thus having limited resources in certain factors. Each factor provided/delivered different sorts of own information despite the connection between another variable. Nonetheless, this research paper aims to establish a clear relationship between the factors and the student's time management skills.

It continuously becomes an issue due to the multiple platforms or variables that affect one's time management skills. By the practice, it is beneficial for an individual's

mental and physical state given it increases productivity, less stress, more and greater opportunities. Given the number of benefits, there are also certain outcomes to expect for those who do not value time management, given, poor quality of work and high stress levels.

This quantitative research aims to identify the influence of certain factors to the effectiveness of a student's time management skills. How certain factors are considered big components that may affect a student's time management and priorities. Also central of the research is mainly focusing on the factors, to further identify why these factors take such parts in time management. Where in factors may be detailed down into other positive and negative outcomes.

1.2 Conceptual Framework



According to Maslow's hierarchy of needs, it specifies that the most important agenda is being prioritized than the rest. In which one's time management is purely based on the individual's responsibilities but ordered from the most important one to the least important.

According to Jackson-Crossland (2000), he stated the connection of the student's empowerment and responsibilities gives a good result in their academic standing. The teachers also affect the student's learning capabilities as the better the guidance is, the better the results of the student's academic performance.

Based from The Mcgraw Center for teaching and learning (2016), one's habit gives a huge impact to making their works easier through the effectiveness of their productivity by means of their time management skill that is being affected by the social milieu.

Based from the opportunity thinking theorem, students grab any vacant time to accomplish their tasks. It can be ahead of their schedule in which their time management improves because it is affected by the social milieu. Where in it can either be the vacant time their professor gave or the motivation which is given by their social peers. Therefore, this may lead to either a positive or negative effect in their time management.

The perception of a student's social environment may depend on their healthiness and comfortability. Hinkle (1974) stated, "Those who had many illness were more likely to find work confining and boring and were unhappy with their lot in life and in their families. Thus, the personalities of the healthy insulated them." This means that those with complications in their health may perceive a different and negative social milieu or environment.

As stated from Mcgraw Center (n.d.), the principle of having pursue fun with vengeance happens when a student is enjoying academics making their agenda easier as their time management skills is positively affecting through enjoying it by having fun or creatively organizing their schedule which leads to academically improving and by being less stressed and pressured.

This is further supported by Pintrich, P. (2003). He states that students who are willing to learn, achieve and follow classroom rules are more likely to be motivated to study perform better academically.

According to Rice University (n.d.), the trick to student's successful time management is by having the proper self-discipline to work on the scheduled tasks resourcefully as the work becomes lighter and being less stressful. This will be the basis

of the study whether the students have the right skills of effectively managing their time and what are the factors that will contribute to effectively improve their skills.

1.3. Statement of the Problem

It is a universally known fact that students must learn how to effectively manage their time to cope to their responsibilities, factors and needs. Given the biggest factors that affect a student's time management skills. Every student must properly practice time management and how to organise and focus on priorities. Although, with the amount of academic works and and extra curricular activities a student has, it affects the proper process of organising his or her set of priorities. A comprehensive research must be done in order to properly identify the possible solution for proper time management for young students.

Specifically, it seeks to answer these questions:

1. How does responsibilities affect the effectiveness of a student's time management skills?

2. How does the social environment influence the effectiveness of a student's time management skills?

3. How does a student's academic standing affect the effectiveness of a student's time management skills?

1.4. Significance of the Study

To understand how these common factors affect a student's time management is undoubtedly essential into the creation and implementation of improved learning

systems and methods that adapt to the current state of time management in the average Grade 11 DLSZ-V student. Factors such as responsibility and social-environment may influence effectiveness in time management in relation to their academic performance. These factors can therefore be studied and individually analyzed through our instruments to see just how much they individually affect the overall academic performance and time management of a student. The data collected can then be used for future references and research.

1.5 Scope and Delimitations

This research paper aims to analyze the factors that influence the effectiveness of a random sampling of Senior High School students, specifically Grade 11 in A.Y. 2017-2018. Although there are multiple strands in the current Grade 11 curriculum our research does not generally focus on respondents from a specific strand; instead the research aims to equalize and diversify the number of respondents from each strand. It should also be stated that respondents are selected in an equalized matter such that both genders of students are picked equally. Through this way of respondent selection, the research is able to compare and differentiate the different demographic results in an orderly manner.

1.6 Definition of Terms

The following terminologies will be used throughout the paper:

1) Academic Standing

Academic standing marks your progression in the current program one is enrolled in. This quantifies the student's achievements over failures as it detects the qualification if the student is eligible enough to proceed towards the next course.

A student's cumulative academic performance rating in a grade point system within a scale of 0-100. A student with an excellent performance rating would usually have a score of around 90-1.

2) Responsibility

It is the state or fact of having a necessary duty, task or action that needs to be done with high priority and implementation. Student responsibility usually mean: homework, projects, schoolwork, extracurricular and even personal or family matters.

3) Social Milieu

Social Milieu can be also called as the social environment, this refers to a person who is exposed to the kind of social interaction or the culture of their surroundings, this includes their interactions that takes place can either be in any type of group they are in. This affects their perspective in different things.

4) Time Management

The process of planning and managing tasks and responsibilities. Effective time management can be achieved if a student is able to properly balance their academics and other responsibilities. Time management is the procedure of dividing the works

creatively to easily fulfill the agendas. This helps make a person work smarter in their works to finish the scheduled tasks in time as they maximize the usage of their limited time.

CHAPTER 2. REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter, review of related literature, accounts the sources or rather literature primarily about the factors and time management skills that are published by accredited authors/researchers. Provided that these articles further justifies and supports the main points/factors of the research. In order to identify deeper into the factors that influence an individual's time management skills. Based on the research the researchers have gathered, there are several factors that affect one's time management, such as responsibilities, social environment and academic standing.

2.2. Body

Time Management Skills

According to Tracy, B. (2013), one's proper time management determines the success or failure of the career. Time moves in its own pace and can never be recovered. Mastering time management eliminates one's anxiety, pressure and gain peace to one's self. The more effective of one's time management skills gives more time to be able to rest and gain energy to be more creative and productive in work.

As stated by MDT Training (2010), successful time management helps maximize one's control towards having a separate time for their career and to family. It gives a comfortable amount of time to be able to focus on on their career and have sufficient

time to enjoy their moments with their family. It goes on until the improvement of this skills be efficient enough to have a successful career and family.

Based from the study of Rice University (n.d.), one's proper discipline towards accomplishing the scheduled agendas with ease is one of the best tactic for the students to be able to attain successful time management. It acquires less pressure and stress as the load of the work is lesser of the heaviness because it was executed inventively. This will show as the justification whether the student's time management skills is efficient towards their academic performance.

Responsibilities

According to Pintrich, P. (2003) in *A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts*, there is no easy generalization to state what type of goals motivate student responsibility and academic orientation. From a goal-oriented perspective, students who want to learn, achieve, are willing to follow classroom rules and take full responsibility for their learning seem to be more more motivated in their studies and therefore perform better academically.

A study by Moes-Zirkes, S. (1999) infers that student responsibility can be measured with some degree of reliability and validity. Furthermore, it is commonly assumed that students who take greater responsibility for their learning achieve greater

results (Frymier, 1982). This therefore provides a very strong evidence for a link that correlates academic achievement with student responsibility and time management.

A paper by Jackson-Crossland, B. (2001) entitled *The relationships between teacher empowerment, teachers' sense of responsibility for student outcomes and student achievement* reveals that there is a statistically significant relationship between empowerment and responsibility for positive academic student outcomes. Student achievement is a complex construct and not entirely dependent on a student's responsibility. Jackson-Crossland, B. (2000) also states that the efficacy of a teacher's empowerment can affect a student's learning and responsibility. The higher the teacher's self-efficacy the higher the student's academic achievement and therefore willingness to become much more responsible.

Social Environment

A paper published in the year 1998 by Hanrahan, M. entitled "The effect of learning environment factors on students' motivation and learning" is a qualitative study on the learning environment of Grade 11 students. Based on the research, students were motivated to study based on intrinsic and extrinsic factors in the classroom setting. The article concludes that based on the implications of a classroom's social milieu, factors such as, good planning/training for small group works, valued student learning and more choice, voice and involvement students are essential in creating a sustainable learning environment for high school students.

According to Hanrahan, M. (1998), this research paper focuses mainly on the social factors affecting one's academic performance. This is in relation to a student's time management as this is merely the cause of why a student must balance their extra-curricular and outside activities with their academics. This study's findings show that the following are the main social factors affecting one's time management: Relationships, Sport activities and Involvement in clubs and organizations.

As stated by Mushtaq, I. & Khan S.N. (2012) "The students face a lot of problems in developing positive study attitudes and study habits. Guidance is of the factor through which a student can improve his study attitudes and study habits and is directly proportional to academic achievement." (Mushtaq & Khan. 2012, p. 03). This article mainly shows how proper guidance from your peers such as parents, friends, etc. is a big influence on your study habits and attitude towards studying.

Student's Academic Standing

Based from Khan (2016), the student's academic standing is measured through the availability of the factors that are present in the library such as the e-books , articles and such and can also be found within the school grounds. This gives out the results in which it indicates the skill level of the students academically whether it is poor, average or advance.

According to the University of New South Wales (2016), it states that the academic standing of a student shows the result of the previous performance of the term as this gives a heads-up towards the student and the faculty members to activate and improve on the factors that negatively affected the poor performance to be able to get a better grade due to the improvement of the student's adjusted performance to attain graduating from the course.

According to the University of New South Wales (2016), academic standing shows the level of the students in the enrolled course in which it determines whether they passed the course or not. This provides a basis to be able to let the student work on their weak side and improve on them as their previous performance if it was not good enough with regards to their personal level of achievement and with the school level of passing grade.

Science, Technology, Engineering and Mathematics (STEM)

According to Cruz, I. (2014), the STEM students have core subjects two of those are "Earth Science" and "Disaster Readiness and Risk Reduction" such that the students are taught the different kinds of disasters and they have a specific approach towards minimizing the destruction it may contain as this is learned more in detail by the STEM student takes up more advanced subjects than the other academic strand such as the ABM, HUMSS and Arts and Design. There are also many Mathematics challenges in which the STEM students must overcome as there are huge numbers of

job offers in the STEM field. As there are lacking number of Science teachers and also scientist in the world as this gives up a high chance for STEM students to be able to get a decent and well paid job.

Based from the article of Hademenos, G. (2017), the best way to make the STEM students have more than the normal efficient learning as it is before it to make the classrooms more innovative such as using the power point presentations to be able to summarize the topics of the subject in which that it will make the work both for the teachers and the students organize and easier to understand and to keep track on what the current topic of the subject is all about, the usage of computers is not required as the shelf materials is enough for the students innovative learning as the teachers just needs to discipline their students in the right way such that they can connect and learn productively in which the STEM student will be able to answer their questions using their fundamental skills and reasoning skills.

Based from Steele, M. (2008), there are various of ways in which this will be a great help to the STEM student sin regarding with their research as either can be in relation to any topics that is covered in the STEM strand. This can either be done by the advisors arranging meetings of the STEM students with the professionals and collaborate with them, in which it will be a great support for the supposed research of the students being able for them to be exposed in different surroundings developing their communication skills.

According to Booth, C. (2015), she stated the the STEM education is important now and in the future, it helps recognize the priorities and to be able to focus on it more. As the STEM students develops in their skills, they tend to contribute also in the society in which the simple technology is required to have some STEM education and this leaves the students to being successful and becoming a great leader in the future because they were able to fully develop their reasoning skills and most importantly the hands-on work.

2.3 Synthesis

Having the right time management skills have positive changes on the student's academic performance as they can withstand the loads of work that is given because they can easily find ways to creatively and productively plan their schedule in order to meet-up with the agenda. However, there are present factors which can negatively distract the student from meeting up their assigned agendas such as the social milieu. Their social milieu may motivate and help them first with the set of responsibilities to be able to overcome and minimize the negative factors that is present, the social milieu may positively help develop the student's personalities to attain the desired in improving on their academic performance in which it dictates whether they can graduate from the course or not. Being a Science, Technology, Engineering and Mathematics or a STEM students costs more time for the students of the strands because their subjects are the core for the Senior High School and also advance in which the students double times in their work to be able to reach a good academic standing.

CHAPTER 3. METHODOLOGY

3.1 Introduction

Our research paper aims to further distinguish how certain factors influence the effectiveness of a student's time management skills in relation to their academic performance. In this chapter, several components are indicated to further establish the proper system or method of collecting data given the research design (Correlational) that was used for the study. This chapter aims to provide information about the setting, respondents, population, nature of data analysis and sample size including instruments chosen for the research study which are varied depending on the data to be collected. In general, a correlational research allows the study to provide a detailed comparison and relation between two(2) or more variables in a quantitative perspective. Therefore, the validity of this correlational research should be highly dependent on the sample size of the population.

3.2 Research design

This research is based on a correlational design. This is a quantitative procedure in which the researchers will be looking for a relationship (correlation) between 2 or more variables from the same group of participants. (Waters, J., 2017) They will be further studying how responsibilities, social milieu, and academic standing affect the time management skills of a student. After going through the research procedure the

researchers will then be able to determine if the said factors leave an impact on the time management of the students.

3.3 Setting and Participants

The population is consisted of all Science, Technology, Engineering and Mathematics or also known as STEM strand for senior high school students in De La Salle Santiago Zobel School - Vermosa. This incorporates only the Grade 12 students of the Batch 2018. During the duration of the research the STEM sections have of 159 students in total. This number of STEM students are dissected into four sections of Grade 12 as the population of each sections are listed in Table 3.1.

Table 3.1 Population of Senior High School Students of STEM (Batch 2018, AY 2017-2018)

Grade 12 Sections	Population
12 - A	41
12 - B	39
12 - C	39
12 - D	40
Total	**159**

Note: Student enrollment statistics were acquired from the DLSZ Office of the Registrar

The purpose for selecting this population is that they are the first batch of STEM students in the Senior High School ever since the implementation of the K-12 program in the Philippines by the national government in 2011. The Science, Technology,

Engineering and Mathematics or know to be the STEM strand offers more advanced topics than the other strands such as the Accountancy, Business and Management, Humanities and Social Sciences and lastly the Arts and Design. Using the *Slovin's formula*, the population of the 4 sections were at 159, product of 159 as the population size multiplied with the squared of 0.05 as 5% margin of error was presented to get the maximum level of the accuracy of the results and added 1 and was lastly divided by 159 as the population size of the STEM sections and resulted with 113.77 in total, to get the percentage the product of 113.77 was divided by 159 and resulted at 0.72 multiplied by 100 to get it in percentage form and resulted with 72%. The sample size of each section are different from each other because they had different population size and each of the section were multiplied by 0.72 to get the 72% sample size of each section and as listed in Table 2.

Table 3.1 Sample size of Senior High School Students in STEM (Batch 2018, AY 2017-2018)

Sections	Sample Size
A	30
B	28
C	28
D	29
Total	**115**

Note: Solved through Slovin's Formula ($n = \frac{N}{(1+Ne2)}$) with a 95% of confidence level
n = no. of samples, N = total population, e = margin of error

The students were chosen from each of the four sections to be able to vary of difficulty in managing their time as they are set to have different schedules. For each section, varying on their sample size, the students were chosen randomly by the *Random Choice Generator* using their class numbers as they are the participants of the survey. The sample size is approximately at 72% of the population of each of the STEM sections, section A got the sample size of having 29.52 or 30 respondents as their population was 41 and was multiplied with 0.72, section B received the sample size of 28.08 or 28 respondents as their population was at 39 and was multiplied with 0.72, on the other hand section C had the same number of respondents as section B with the total of 28.08 or 28 respondents as the sample size with 39 as their population size and lastly, section D had the total of 28.8 or 29 respondents as their sample size due to their population size was at 40 and was multiplied with 0.72 to get the sample size. The results of the sample size per section was satisfactory enough for a comprehensive deep understanding in the researched work. For the sampling procedure, stratified random sampling was used to to group the participant with a similar attribute as they are part of the STEM strand and there were grouped into four sections in the DLSZ-V and were current grade 12 students.

3.4 Data Collection Procedure

This study is heavily based on a correlational design and structure in which the research aims to determine the relationship between two or more variables related to the topic at hand. Since the data obtained will be sourced from official tests and grades

that the school has (respectively) administered and recorded the research will be using pre-collected data as it's main instrument of measurement and source of data as well as adopted instruments such as online tests and surveys that the students will take during data collection procedures. Pre collected or available data will be gathered through the permission of students.

3.5. Instrumentation

To begin data collection, the researchers first constructed a letter requesting for the students' permission to allow the gathering and recording of their online grades from academic year 2016-2017 (Grade 11). Survey questions regarding/related to the student's academic standing will also be established by the researchers to further give scale and appropriate numerical value to help analyze and the establishment of a relationship between multiple variables.

Since this is a quantitative research, data gathered from variables use scales which can be broken down to numerical values and analyzed from a mathematical or statistical standpoint. The type of scale used for each variable is listed below as follows:

Variables	Type of Scale
(IV1) Responsibilities	Ordinal Scale
(IV2) Academic Standing	Ordinal Scale
(IV3) Social Environment	Nominal Scale
(DV1) Time Management	-

*Note: The **dependent** variable cannot be measured through instruments because it relies on the data of the in**dependent** variables.*

Each variable excluding **(DV1)** has a specific statistical treatment measured through a type of scale, namely *ordinal and nominal*. **(IV1)** and **(IV3)** use the *ordinal* scale because of the way variable/s can be assigned a numerical value that can be ranked/ordered in a certain manner. Stevens (1946) states, “The *ordinal* scale arises from the operation of rank-ordering.”. **(IV3)** on the other hand makes use of a nominal scale as results from these variables are mainly qualitative, subjective and has no real ranking/order.

Stevens (1946) states that the nominal scale represents the most unrestricted assignment of numerals and are *displayed* through numbers, labels, words and/or letters.

3.6 Statistical Treatment

Statistical treatment is an important component to ensure a proper and organise method of collecting data. This is to be able to delineate the appropriate data or conclusion for the study. Provided that the research design of this study is correlational, different correlation coefficients are used for each independent variable with the dependent variable to further distinguish the degree of relation between the two.

Slovin's Formula

Getting the acquired percentage was solved through Slovin's Formula which is composed of ($n = \frac{N}{(1+Ne2)}$) with a 95% of confidence level, n represents the number of samples which were presented at the previous page in the *Setting* and *Participants*, N represents the total population which was composed of 159 STEM students who were grouped into 4 by sections and lastly e represent the margin of error which was 0.05 and was divided by 159 as the population size to get the point percentage for each of the four sections in the STEM strand. Each population size of the section was multiplied by the product percentage which was 0.72 or 72% was needed as the sample size per section to have attain the highest confidence level as much as possible.

The research study merely focuses on the relationship between the independent variables and dependent variable. This is to further determine if these independent variables influence the dependent variable. Correlation Coefficients are to be used for this research study regarding certain factors and its influence towards the effectiveness of a student's time managements skills. Given the various ways and types of data to be gathered. Correlational Coefficient is a measure that determines degree and is mainly towards two variables to properly and clearly determine the relationship of the two. The research design, correlational design provides extensive correlational connection between an independent variable to an dependent variable.

Stated that the statistical treatment to be followed is correlation coefficients each. It'll help determine how the variables are connected and may exhibit either positive, no or negative correlation. Therefore, each variable has a individual correlation coefficient and depends on the type of data to be gathered. Pearson- Correlation Coefficient is used for the measurement of responsibility. Provided that this is an adopted instrument, Personal Control and Responsibility measure. Which is between two quantitative variables in regarding its linear relationship. Social environment is measured through an online questionnaire, Phi - Correlation Coefficient will be used, given that two binary variables are present. Where in the measurement goes through a positive or negative outcome depending on the data and where it fall through the diagonal. Lastly, Spearman Correlation Coefficient which focuses on two ranked variables, as these are for the Subject Grade Letter Equivalent results of Grade 11 SHS STEM students of A.Y. 2016 - 2017. The Spearman Correlation Coefficient also measures the direction of the two ranked variables. Given that there are different statistical treatments for each question, having an orderly sample size and relationships between two variables shows that Correlation Coefficient is the suitable statistical treatment to be used for this research study.

CHAPTER 4. DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis and findings of data collected through the adopted questionnaires from Grade 12 students. Data gathered are organized to clearly analyze the data of each variable of the study. The main purpose of this study is to determine if certain factors stated have influenced the effectiveness of a student's time management skills from last academic year, 2016 - 2017. In order to accurately interpret the data gathered, we sought to answer the following research questions.

The respondents were from the STEM strand in which they are clustered into four groups through sectioning, in each of the four sections that was chosen to participate, the students were randomly selected by using the *Random Choice Generator* in which it was used to avoid being biased during the distribution of the survey. In a total of 159 students in the four sections the *Slovin's Formula* was used to determine the ratio of the respondents with a total of 95% confidence level to ensure the research's validity to the precisions of the results. At the total of 115 respondents in the four sections, all of the surveys were distributed and the collection of the data were accordingly and complete.

Table 4.1 Descriptive Statistics

	Mean	Std. Deviation	N
TimeManagement	47.1754	7.16338	114
Responsibility	3.9320	.52090	114
SocialEnvironment	3.7189	.99062	114
AcademicStanding	1.34	.607	114

Table 4.1 presents the summarized data of the sample and measures of the variables in the study. As seen above all variables are present in the table and shows the summarised results of our study from the dependent variable, Time Management to the independent variables namely, Responsibility, Social Environment and Academic Standing. From the 115 STEM students that participated in the study, the results above were drawn. Through the use of the SPSS software, the data gathered are all organized and summarized.

4.2 Research Question 1: How does responsibilities affect the effectiveness of student's time management skills?

Table 4.2 Correlation between responsibility and time management

	correlation coefficient	*p – value*
Responsibility	0.250	0.004

Table 4.2 presents the correlation between responsibility and time management. There is a positive low correlation between responsibility and time management (r = *0.250)* and this relationship is statistically significant (p = *0.004).* As stated in our review of related literature, Pintrich, P. (2003), It is merely in a goal-oriented perspective, when a students who want to learn and achieve seem to be more motivated and excel in their academics. Moes-Zirkes, S. (1999) stated that responsibility can be measured through some degree of reliability and validity. Lastly, Jackson-Crossland, B. (2000) also stated that the efficacy of a teacher's empowerment can affect a student's learning and responsibility. With the data above, we can *see* that responsibility shows a low

correlation, therefore, does have a minor effect towards a student's time management skills.

4.3 Research Question 2: How does one's social environment affect the effectiveness of student's time management skills?

Table 4.3 Correlation between social environment and time management

	correlation coefficient	*p – value*
Social Environment	0.75	0.214

Table 4.3 presents the correlation between social environment and time management. There is a positive high correlation between social environment and time management (*r = 0.75)* and this relationship is statistically significant (*p = 0.214).* In previous studies, Hanrahan M, (1998) stated that students were motivated to learn because of certain intrinsic and extrinsic factors. With the conclusion that based on a classroom's social milieu certain factors such as good planning and valued student learning is essential for a sustainable learning environment for high school students. Stated as well that the main factors that affects one's time management skills are relationships, sports activities and involvement in clubs and organisations. From the data table above, we can *see* that Social Environment shows the high correlation of the variables, therefore, social environment does have an effect towards a student's time management skills.

4.4 Research Question 3: How does a student's academic standing affect the effectiveness of student's time management skills?

Table 4.4 Correlation between student's academic standing and time management

	correlation coefficient	*p – value*

Academic Standing	0.053	.287

Table 4.4 presents the correlation between academic standing and time management. There is a positive low correlation between academic standing and time management (r = 0.053) and this relationship is statistically significant (p = 0.287). In previous studies regarding academics, Khan (2016), one's academic standing is measured through the availability of certain resources and therefore indicated the skill level of students. As stated from the University of New South Wales (2016), the result of a student from the previous term gives a heads-up to the student and faculty members to easily or properly manage on how to activate and improve on certain factors that negatively affect the performance of the student in order for the individual to achieve a better grade or in general, perform better academically. Given the table above, we can see that a student's Academic Standing shows low correlation therefore, does have a minor effect towards a student's time management skills.

4.5 Research Question 4: Which among the independent variables, Responsibilities, Social Milieu and Academic Standing is a predictor of the dependent variable, time management?

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	455.490	3	151.830	3.126	.029[b]
	Residual	5343.001	110	48.573		
	Total	5798.491	113			

a. Dependent Variable: TimeManagement
b. Predictors: (Constant), AcademicStanding, SocialEnvironment, Responsibility

The ANOVA Table reports that there is an independent variable that is a predictor of the dependent variable (*F = 3.126, p = 0.029).*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.280[a]	.079	.053	6.96941	.079	3.126	3	110	.029	2.273

a. Predictors: (Constant), AcademicStanding, SocialEnvironment, Responsibility

b. Dependent Variable: TimeManagement

The model summary result generated by the IBM SPSS Software using Multiple Stepwise Regression shows that the predictor contributes 7.9% influence to the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	28.992	6.053		4.789	.000					
	Responsibility	3.709	1.283	.270	2.892	.005	.250	.266	.265	.963	1.038
	SocialEnvironment	.521	.662	.072	.787	.433	.075	.075	.072	1.000	1.000
	AcademicStanding	1.238	1.100	.105	1.126	.263	.053	.107	.103	.963	1.038

a. Dependent Variable: TimeManagement

The coefficient table shows which independent variable is considered as predictor of the dependent variable. Table 4. 5 presents that responsibility is a predictor of the dependent variable Time Management (*t = 2.892, p = 0.005)*. As for Social Environment and Time Management *(t = 0.787, p = 0.433)*. Lastly, for the variables Academic Standing and Time Management *(t = 1.126, p = 0.263).*

CHAPTER 5. CONCLUSION AND RECOMMENDATION

5.1 Introduction

With the findings and analysis of data from the previous chapter, this chapter presents the drawn conclusion and recommendations for the study. Certain limitations that were experienced through this research are further discussed which also includes other related concerns. This chapter closes the research study provided the summary of the value.

Given the biggest factors that affect The STEM student's time management skills and with the amount of academic works and extra curricular activities a student has, it affects the proper process of organising his or her set of priorities given over a period of time in which it affects the student's academic performance.

5.2 Conclusion

The research thus states that the different factors such as responsibilities, social milieu, and academic standing have a rather positive impact on time management if utilized properly.

5.2.1 Research Objective 1

The study of the relationship of Time Management to Responsibilities, as presented in Chapter 4, tackled all the results and findings involved in the third research

question. Through the data used with SPSS, the relationship of Responsibilities to Time Management resulted into a positive low relationship and is therefore significant.

The accomplished set of responsibilities are accordingly manage through proper time management of a student, majority of the responses of the selected STEM students stated that they are precisely upgrading themselves to the set of responsibilities given to them as a task by their teachers, as they creatively fix their schedules to accordingly basing their due dates.

Majority of those students to attain their responsibilities stated that they are properly managing their time as they attained the score of 45-75 in which their results stated that they are efficiently managing their time as they take their task creatively to make them to maximize the use of their time in order to fix their schedules and for them to prioritize on which must be prioritized on their responsibilities wisely. According to Pintrich, P. (2003) in *A Motivational Science Perspective on the Role of Student Motivation in Learning and Teaching Contexts*, From a goal-oriented perspective, students who want to learn, achieve, are willing to follow classroom rules and take full responsibility for their learning seem to be more more motivated in their studies and therefore perform better academically.

5.2.2 Research Objective 2

The study of the relationship of Time Management to Social Environment, as presented in Chapter 4, tackled all the results and findings involved in the third research question. Through the data table from SPSS, the relationship of Social Environment to Time Management shows a positive high correlation and has a significant relationship.

As stated in the analysis, the social milieu of a student greatly influence the effectiveness of their time management. The majority 48 of participants in the range 3-3.6 declared that the effectiveness of their time management is greatly influenced by their social environments, this suggest that the student's social environment creates an influential effect on their effectiveness of time management. As stated by Mushtaq, I. & Khan S.N. (2012) "The students face a lot of problems in developing positive study attitudes and study habits. Guidance is of the factor through which a student can improve his study attitudes and study habits and is directly proportional to academic achievement." (Mushtaq & Khan. 2012, p. 03). This article mainly shows how proper guidance from your peers such as parents, friends, etc. is a big influence on your study habits and attitude towards studying.

5.2.3 Research Objective 3

The study of the relationship of Time Management to Academic standing, as presented in Chapter 4, tackled all the results and findings involved in the third research

question.From table given in SPSS, the relationship of Academic Standing to Time Management shows a positive low correlation and has a significant relationship.

In conclusion, it was determined that consisting the right set of skills for attaining good time management shows that prioritizing the activities based from how important they are, how close the due date is, or how much time it will occupy for it to be accomplished beforehand or on time is a great factor to the academic standing of the students due to this makes the schedule more organize and less likely to procrastinate.

By interpreting the data, majority of the students who got A or advance in their academic standing shows that they manage their time properly in which their score were high in the test, this states that the students fix their schedule ahead of time to maximize the use of time in each of their activities and for them to be able to be versatile in their own time at their own pace. However, some of the students who got P or AP (proficiency or approaching proficiency) are still incapable of improving their time management due to their results were an average of good or they still need to improve in order for them to avoid any negative factors that increases the percentage of them likely to unable to coordinate with their time and activities and it will result to unfavorable results. Based from Khan (2016), the student's academic standing is measured through the availability of the factors that are present in the library such as the e-books , articles and such and can also be found within the school grounds. This gives out the results in

which it indicates the skill level of the students academically whether it is poor, average or advance.

The overall results of the study which includes all the presented factors actually have a significant influence on the STEM students time management, as they are connected with each other, a study to support this conclusion is from MDT Training (2010) in which successful time management helps maximize one's control towards having a separate time for their career and to family. It gives a comfortable amount of time to be able to focus on on their career and have sufficient time to enjoy their moments with their family. It goes on until the improvement of this skills be efficient enough to have a successful career and family. One's proper time management determines the success or failure of the career. Time moves in its own pace and can never be recovered. Mastering time management eliminates one's anxiety, pressure and gain peace to one's self. The more effective of one's time management skills gives more time to be able to rest and gain energy to be more creative and productive in work, according to Tracy, B. (2013),

Recommendation

The following recommendations are proposed and presented for other related literatures and studies relating to the factors that affect a student's time management skills. This quantitative research study observes several different relevant literatures

and data gathered using scales in relation to the factors affecting one's time management skills such as Social Milieu, Responsibilities, and Academic Standing.

Survey questionnaires were distributed in order to determine the level of effectiveness a student's social milieu and responsibilities have in association to their time management skills. Future researches may utilize studies and questionnaires regarding time management in relevance to a student's personality and how much it may be affecting them. A student's personality reflects how he/she will manage the responsibilities/tasks laid upon him/her. This leads to the overall academic performance shown while tackling different roles as a student.

The margin of error aids in the reliability of the data thus decreasing it in succeeding studies may produce a more precise study. In doing so, future studies perhaps should also widen their range of respondents to more batches so as to acquire a higher amount of perceptions in different ages. Having a sufficiently higher sample size may help with a more accurate thesis paper as it is a bigger representative of the population. It is also essential in order to produce results that have a significant difference to the variables.

The group was able to confront and finalize the research study in a span of a month or so. For a more valid thesis, the researchers recommend a higher amount of time in performing this study. This will assist in making a well thought of paper and

improve on the instruments (such as related literature, survey questionnaires, etc.) used for the data gathered.

1. Time management in relation to the student's personality.
2. The students eagerness to pass and not about much of learning.
3. More time in performing and constructing this research study.
4. Extend the responses to other batches to get different perceptions in different age categories.
5. Decrease the margin of error to improve on the precision of the results.

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