



TIME MANAGEMENT SKILLS AND ACCADEMIC SUCCESS OF STUDENTS IN HIGHER EDUCATION

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Abstract

This paper examines the association between time management competencies and academic performance of university students. Time has been defined as an invaluable resource that when well managed through planning and prioritization will result in high productivity and better academic performance, including better Grade Point Average (GPA). On the contrary, lack of proper time management usually leads to stress, dislike of tasks and failure in school. The study employed quantitative approach to the research and the data were collected using a structured 44 item questionnaire to a sample of students at the University of Gujrat. The survey was conducted with a final sample of 119 students and the research tool had an outstanding internal consistency (Cronbach Alpha = 0.987). The theoretical concept applied was the Production Function Approach (PFA) that incorporates time management and student motivation as inputs to the result of academic achievement. The results have proven positive and significant association of time management practices such as goal setting, planning, and avoidance of procrastination and academic performance. The research finds that students who manage their time well will get higher grades compared to those who will poorly manage their time resulting in poor performance. Suggestions are institutional programs to support self-regulations strategies and provide training of teaching staff to help students to develop effective time management tools.

Keywords: *Academic Success, Higher Education Students, Scale Development, Self-Regulation, Time Management Skills, Validity and Reliability*

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1. Introduction

One of the most valuable things is time. This competitive life has innumerable things we must and would like to do. We cannot control the time but we can choose how we spend our time in both personal and business and those who do not manage their time wisely in personal and business life, they will lead a miserable life and fail (Mercanlioglu, 2008).

Time is highly significant in the life of individuals. It educates individuals in time management and organization of their lives. Time is very important to the student life. Students should be able to cope with time in their everyday activity (Abban, 2011). Majority of the university students when an assignment is given to them, and become upset not completing their assignment before the last date, complain that they lack time yet the other students have plenty of time to have fun with their friends and manage to complete their assignments in time since they are great time managers.

Time management can never go wrong, thus leading to satisfaction and contentment in our day to day lives. Aduke (2015) contends that time management is an organizing, planning, arranging and accounting their time skill to develop more productivity and efficient work. Whether or not to allocate and distribute time-between competing demands depends on priorities as we cannot lay time away to be available during future and can never add or detract time to 24 hours. Also by Chaturvedi (2016) it is argued that time management, particularly on the part of a university student is very crucial since it will assist in making them more productive and more in terms of grades. The problems mostly encountered by most of the students include uncertainty, aversion of the tasks and thus they begin to delay or postpone owing to the absence of good management skills hence they will lose focus since they will not handle their tasks in the order of their importance. Students not only need to be aware of time management abilities but also practice since it is one of the most effective means of increasing GPA.

Khanam et al. (2017) refers to Aduke (2015) that the result of education is academic achievement which is typically measured with the help of periodic assessment or exams but there is no universal opinion about the best way to test it or according to which aspects this test is more significant. Students have time allocations in which they are assigned goals depending on their major assignments and projects. Good management of time is associated with good performance academically. According to Druker (1994) we have to know where our time spent first and we have to set activity or our most important works or projects on our priority and have to ensure that we have made time to finish the projects as per their ranking.

Aduke (2015) went on to argue that prioritizing our work can help make work and studying enjoyable and less intimidating. Academic pressure is due to inefficiencies, anxiety or during those moments students are under the pressure of studying to pass exams

and need less sleep. Similarly, Nisis et.al (1998) also claims that good time management skills or skills in good time management reduce worry and stress of the students as well as enhances their productivity and grades. Therefore time management is a requisite. Not everyone manages their time, others are good at it. Everyone must learn time management techniques and to have achievement implemented not only in student life but also in entire schedule. Claessens et al. (2005) time management is achievable through the means of thorough performance and motivation, ability and self-motivation.

Time management empirically some studies indicate that time management has an impact on academic achievement. Seviri and Kandy (2011) believe that even after being aware on the effect of time management on academic performance, students do not attach significance on the relationship between the two. In most Universities and colleges, grades are largely based on completion of certain activities like assignments and deadlines. Also, grades are based on the quality of effort applied in doing the tasks. Kaushar (2013) asserts that time management also assists the authorities of higher education institutions to make the cost-effective educational policies.

1.1. Statement of Problem

Time management will be a critical consideration among students as well as employees in institutions of higher learning to perform better. Time management poses various issues to students since it may be a possible direct factor on their performance. The policy instruments, on the time management perspective, at the university level both to students and employees are quite silent over the years. The identification of the significant factors at personal and institutional level is quite plausible, which helps to enhance the policy tools on institutional time management at the level of institute.

1.2. Research Objectives

This research will read through the next objectives:

- a) To find out the preferred area of the students when handling their time.
- b) To determine the amount of time that students spend on study and other study related activities.
- c) To test the correlation among time management and academic of students' performance.

1.3. Research Questions

After researching widely on time management and student achievements at school, several questions can gain a social level of concern that require very clear explanation within the societal environment. Proposed study will request Student time allocation and academic Achievement, will answer the following queries:

- a) Which is the favorite area of the student when it comes to the time management?
- b) What are the hours that students spend at study and other study related activities?
- c) How time management relates to academic performance of the students?

1.4. Research Significance

This research project seeks to explore the time management and factor affecting student time management among students are University level. The study has a policy ramification based on the time management that the students will have with the report being expected to frame the students time to work positively towards their academic performance.

1.5. Key Terms

1.5.1. Time Management Skills

Time management is the ability to plan and consciously manage the quantity of time devoted to certain activities, and maximize efficiency and productivity. Time management has a number of important elements, some of which are goal, prioritization, planning, scheduling, and task execution. Time management involves more than just time allocation, but the proper utilization of time in terms of quality work and also the effectiveness of time allocation and utilization in relation to individual and academic objectives (Claessens et al., 2007).

The management of time in education- Time management skills are vital in education so that students can handle the many demands of their schooling life, like attending lectures, writing assignments and revision. When students form good time management practices, they tend to be more successful in managing their academic life as well as extracurricular activities and personal life (Macan et al., 1990). The studies have also indicated that students who have a time management ability have less stress and have a higher chance of attending their academic deadlines which also helps in promoting their overall performance (Britton and Tesser, 1991).

1.5.2. Important Features of time Management

Goal Setting: The skill of formulating specific, precise and attainable objectives is the key in time management. Goal setting enables students to remain focused and organized and they will be able to spend adequate time on activities that will bring about academic success.

Prioritization: Prioritization means differentiating between the urgent and important tasks so that a student will be able to work on the activities which have the greatest academic benefit. Students that do prioritize tasks can easily use their time efficaciously.

Planning and Scheduling: Good planning and scheduling is about developing a programmed way of being able to control your time. Schedulers (planners, digital tools, calendars, etc.) are found to have enhanced academic results among the students who use them to plan out their studying schedule.

Procrastination Avoidance: Procrastination is among the most prevalent impediments towards time management. Unless they succumb to procrastination, by

following schedules and internal deadlines, students have higher chances to perform better in academics.

1.6. Academic Success

Academic success is a multidimensional phenomenon and can be measured in various measures, i.e., in terms of grades, test achievements and degree completion rate. It can be defined as the capacity of the students to perform and far even more than what is required of them by their educational institutions. Although more common indicators of academic success, like Grade Point Average (GPA), are often employed, success may also be understood as broader, i.e., skill development, mastering of knowledge, and interest in the learning process (Schneider and Preckel, 2017).

In this review, academic success can be stated as achievement in high academic performance, as well as, a student as a person who is capable of successfully handling academic problems, persevering in the face of adversity and also capable of self-directed learning. The important indicators of academic success are:

Motivation: The desire to attain academic objectives either internal or external. Intrinsic motivation that arises out of internal interest with the aim of facilitating deeper involvement and substantive learning. External and goal-oriented achievement motivated by extrinsic rewards like grades, recognition and motivation.

Self-Regulated Learning: One is able to plan, monitor and assess personal learning. It includes planning, self-motivation, time management and performance reflection. Students that engage in self-regulated learning tend to be more independent, disciplined and effective in making academic achievements.

Access to Resources: Students have more access to their resources, which is an important factor in their academic success. With increased access to academic resources, students can achieve more through independent learning, do research successfully and complete homework productively.

Level of Interest: As learner develop their own interest in a subject, they are more likely to become more engaged, curious and motivated to explore concepts. Interest level is very high and this increases concentration, persistence and memorization.

1.7. Academic Success Factors

Academic success can be attributed to a number of factors, which include the individual factors (motivation, self-efficacy, etc.) or the environmental ones (good quality of teaching and accessibility of resources etc.) (Chemers et al., 2001). The capacity of the students to learn through self-regulated learning and taking responsibility in their learning process managing their time and goal setting are also critical to their academic success (Zimmerman, 2002).

1.8. The Relationship Between Time Management and Academic Success

1.8.1. Empirical Evidence

Many studies have been done to investigate the linkage between time management and academic achievement. Britton and Tesser (1991) conducted one of the earliest studies which identified positive correlation between time management behaviors and academic performance. Students who planned their time i.e. studied out their schedules and priority scored higher GPA scores as opposed to those who did nothing to plan their time. Likewise, Macan et al. (1990) have found that a college student exhibiting time management behavior (e.g., planning, task prioritization, goal setting) was more successful in academics and had lower levels of stress.

Claessens et al. (2007) have reviewed literature on time management comprehensively and have discovered that there is repeated evidence in support of the fact that time management has a positive impact on academic performance. This research resulted in the conclusion that academic performance was strongly associated with behaviors that are used to manage time, including tasks scheduling and prioritization. Also, time management was found to mediate the consequences of other individual aspects (e.g., motivation and self-regulation) on academic success.

In more recent research study by Ramsay, Tranter and Gannon (2007) it came out clearly that when students who portrayed high time management skills were somehow capable of attaining higher academic results, they also noted to have been more satisfied with their academic experience. Time management resulted in more proper preparation towards exams, less missed time, more productive study time, which had a positive effect on study success.

1.8.2. The role of Self-regulation and Motivation

Self-regulation and motivation usually mediate the correlation between time management and academic success. Zimmerman (2002) postulates that self-practicing learners focus more on and control their learning processes and this includes how they manage the time well. Self-regulation entails goal-setting, time management and motivation to achieve academic objectives. Time management is therefore a subset of self-regulated learning and students that are able to balance these two are likely to get improved academic outcomes.

Wolters (2003) also examined this relationship and determined that the behaviors that affected time management that included planning and scheduling was affected by the level of intrinsic motivation of a student. Academically driven students that perceive value in their education will have a more promising future of practicing time management that fosters academic achievements.

1.8.3. Academic Performance and Procrastination

Procrastination is one of the main challenges to good time management. Lower levels of academic achievement are linked to procrastination because students who procrastinate might lack adequate time to meet homework and exam tasks or to prepare

before exams. Research has revealed procrastination to be a good indicator of low academic achievement (Wolters, 2003). Students who find the time to eliminate procrastination, through following time management plans, report to have a reduced amount of stress and improved academic achievements (Britton and Tesser, 1991).

Good time management also helps students to complete the academic time limits, minimize stress and also maximize study time. An increasing number of studies validate the positive correlation between time management practices and achievement. Students with good time management skills are likely to achieve better GPAs, do assignments in time and have more persistence in school.

Although time management and academic success are well-confirmed to be in a proper relationship, it is also apparent that other aspects like motivation, self-regulation, and the capability of avoiding procrastination are paramount factors. Future studies would dig further to understand the extent to which intervention aimed at enhancing time management skills can lead to academic achievement, especially in various learning environments.

2. Review of Literature

The literature review purpose is to review the previous literature on time management and academic achievement among students. It addresses the needs of the research question and objectives.

Grave (2011) carried out an analysis on time that is taken by the students and how it impacts their grades in undergraduate student. She looked into other means of attaining high academic results. These students scored higher grades with high GPA in high school, attend classes and are students of social sciences or engineering sciences, the study found. After a long time of study and also working as the teacher assistant or tutor, grades are positively influenced among all students. But to work as the teacher assistant and attend all classes requires very high level of motivation attained through the time allocation role. Moreover, the role of time allocation and academic performance of students was also examined by Ogunipe and Falade (2014) who concentrated on the time used by students on self-study and course attendance and attendance at seminars or student work groups. Findings show that academic performance is positively correlated with seminars, attending courses and self-study.

In this study, Miqdadi et al. (2014) explored how time management correlates with academic performance of students and the authors used procrastination, work load pressure, distraction and disorganization as variables of interest. The major sources of data collection were the male students in the Petroleum Institute in Abu Dhabi. The research found the successful students to be time managers.

George et al. (2008) analyze the aspects linked with the academic performance of college students. They discover that time management is the most dominating factor of

academic achievement among these factors and one that is highly correlated with success. The factors that influenced the performance of students were also intimated by Ali et al. (2013). The dependent variable is the grades of students whereas the independent variables are the age, gender, schooling, teacher faculty, tuition trend, hours per day of study, parents socio-economic background, medium of schooling, residential area and accommodation trend. The analysis concluded that; academic performance is strongly related to the daily study hour; socio-economic status.

Khanam et al. (2017) examined the impact of student time management on the academic performance of Odisha medical college students. A cross-sectional study was conducted by analyzing the time attitudes of students, short run planning and long run planning. The research was able to conclude that effective time management helped students to achieve high grades and ineffective time management helped students to get low grades. Only a one-third of the students make their plans and work based on their priorities whereas most of the students do not plan and continuously spend their time unplanned. Nasrullah and Khan (2015) examine the efficiency of the students to have a good allocation of their time in effectively meeting their academic standards data warehousing is done by the students of science and technology in Qurtuba University in Peshawar. According to the Result, there is positive and significant relationship between time management, time planning and success of the students with low but positive relationships between academic achievement and time consumers. The case study found that time mismanaged students are extremely inefficient in academics.

In the case of Zulauf and Gortner (2000), individual time management behavior was measured using a designed questionnaire when time management was surveyed using time diaries during a time survey at Ohio State University. They made a conclusion that GPA is positively related to time management behaviour. Rai (2016) discovered that the proportion of students who are working at their own time and those students achieve very high results compared to those who do not regulate their work by time is very low. The study by Oyuga (2016) compares the association of time management and academic performance between orphaned secondary school students in Kenya. The correlation coefficient value of Pearson between time management and time management displays the value of the correlation as very positive.

Al Khatib (2014) studied the correlation between time management, perceived stress, gender and academic achievement among college students in the United Arab Emirates. The study results revealed that there was negative correlation between time management and perceived stress. The female students will have higher time management as compared to male students. Another research study by Pehlivan (2013) also established the impacts of time management skills on grades of a student. The experiment reveals that the time management level of the students of Karadeniz technical institute is moderate. In

terms of gender variable, females are time planners and they are very good students than the male students. Misra and McKean (2000) examined how time management, academic stress, anxiety and leisure satisfaction are linked to age and gender in undergraduates in universities. Study outcomes revealed that time management was found to be influential more on academic stress than on leisure satisfaction activities. The female students were more effective in time management behavior than their counter mates, the male students and they are also anxious and more academically stressed than the males who enjoyed more than they, leisure activities.

Bratti and Staff Olani (2013) discovered how lecture attendance and self-study affect academic performance of undergraduate students. They came up with a simple theoretical framework of distribution of student time in self-study, leisure, and lecture attendance, and discovered that there was a positive association between self-study time and lecture attendance. Regression analysis of 1998 to 1999 of undergraduate students in Marche Polytechnic indicates that only lecture attendance has a positive significant value to performance of quantitative courses like mathematics and economics and it becomes insignificant in most courses.

The importance of time management as it relates to the academic achievement of higher secondary school in Natham, Dindigul District was studied by Cyril (2014) and a student survey method was used. To him time management was as well associated with academic achievement. Plant et al. (2005) investigated the extent to which time quantity is an important measure of academic performance. This study was carried out in Florida state university through student survey. The research indicates that amount of study time is simply a most powerful predictor of GPA and quality of study time like good time planning and study environment was also put into consideration. Findings suggest that there is a significant relationship between good time planning and academic performance.

2.1. Research and Literature Gap Summary

There have been numerous researches on factors that influence academic performance of students. The time management and performance of students in schools have been studied by many authors. In reference to the past theoretical and empirical studies, the number of the studies, which located the time management and the students' academic performance in the higher institutes, in Pakistan, is very small. Time planning and self-study are the primary determinants in higher grades to most of the authors. Moreover, another aspect that has a positive influence on the academic performance of the students is lectures attendance. The effects of student ability, enjoyment of social life and interest in subject on academic performance were hardly emphasized in studies. In this study, especially, there is a lack of location; the study is carried out within the institutes of higher learning.

3. Methodology

Kothari (2004) defined Methodology as all the methods and techniques in research process in a systematic manner to seek answers to research question. This study has employed quantitative research strategy to explore the research problem taking into consideration the research objectives. Quantitative research, according to Nayak (2015) is the mathematical expression and manipulation of observations with intent to describe and explain the phenomenon. Researcher has employed this methodology since the techniques employed in this study are well-organized and reproducible in the data collection process. Statistical analysis of results has been done.

3.1. Instrument

This measure comprises 44 items with the following dimensions being related to the items:

Table 1 Ratio of items to variable dimensions (Time management skills)

Dimensions	Items
Goal setting	1, 2, 3, 4, 5, 6
Prioritization	7, 8, 9, 10, 11
Planning and scheduling	12, 13, 14, 15, 16
Procrastination avoidance	17, 18, 19, 20, 21, 22

Table 2 Ratio of items to variable dimensions (Academic success of students)

Dimensions	Items
Motivation	23, 24, 25, 26, 27, 28
Self-Regulated Learning	29, 30, 31, 32, 33
Access to Resources	34, 35, 36, 37, 38
Level of Interest	39, 40, 41, 42, 43, 44

The study items will be implemented, with a Likert-type, with the weighting as follows: 1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly Agree.

Target Population: In this research, the target population utilized is a group of students, University of Gujrat.

Sampling: Sample is a subset of population and it will be taken out of the universe or populations to be investigated on what. Sample gives the entire picture of population and hence we extrapolated our result and conclude about the populations based on sample (Singh, 2006). Simple random sampling has been applied in this study in the fieldwork.

Sampling Technique: Simple random sampling is a form of probability sampling to choose a random sample. Simple random sampling means that units have equal probability of them being in the sample (Kothari, 2004). In such a sampling firstly, there is need to pick out all elements in entire population. Secondly there is a need to determine pull out the sample size and then lastly pulling out, a sample, by using computer programs or listing on sheets to choose respondents in such a manner that no respondent has less

opportunity of being the part of the respondent sample. Simple random sampling was adopted in this study to gather the data on university.

Sample Size: This sample was comprised of 150 semester 4years students of university. Nevertheless, it was only 119 questionnaires, which were filled and mailed. Hence, the correct end sample size of this research is 119.

Data collection: To analyze research objective, the researcher has gathered primary data of students on key variables including: time management and academic achievement among other notable influencing variables such as academic motivation, student ability and socio-economic status. The students were administered the data collection instrument in the form of digital data on the tool of Google forms.

Data analysis: Data analysis in projects in the sphere of social sciences and education involved using SPSS IBM Statistics software that identified parameters that characterize descriptive statistics, including: means, modes, averages, deviations, etc. that present a picture of the statistical behavior of the sample. In the case of inferential statistics, the normality in populations, reliability, validity and correlation among variables and their dimensions were discussed.

3.2. Research Methods

It is a research method as claimed by Sarandakos (1993) to establish a right relationship between researcher and respondent and select the methods of which the information of interest will be collected. To this researcher has to learn all those procedures pertaining to the researched topic. All the methods or techniques that are used to gather data and information are termed as research methods. This study is carried out on the basis of a structured questionnaire in order to gather the data.

3.3. Questionnaire

Singh (2006) has written about Questionnaire, which is a research instrument, that has a collection of questions in order to obtain the information of respondents in a standardized manner. It has a list of questions concerning the topic of research and it also has clear instructions on answers. Questionnaire can be unstructured and structured. Structured questions are questions that are concrete, definite and direct in contrast to unstructured questions that carry partially filled questions. In this research, the investigator created a systematic questionnaire and issued to the target participants. Questionnaire was split into the sections. The questionnaire will have the personal information of the respondents in the first part of the questionnaire and in the other parts there will be information about variables time management, socio-economic status, academic motivation and student ability.

4. Theoretical Framework

The theory used to analyze the relationship of productivity is the education production function. The basis in this research is Production Function Approach (PFA).

There is a genesis of economics of PFA. PFA model is the model that is applied to understand maximum quantity of an output that can be produced by using different combinations of inputs (Gordon, 2007). It is predominantly concerned with the changing of the input to the output of goods and services. PFA is employed in estimating the variables that affect academic performance of students. This was also a method used by other researchers in order to examine the academic performance of students. The Production function approach was also applicable in the research of academic performance by Tangaraju et al. (2013) and Nahar and Arshad (2014). The PFA is considered in this study to test effect of time management on academic success of schoolchildren. Time management is considered to be the input and the intermediate or independent variable whereas, student performance in academics is considered to be the output variable and student ability, student socioeconomic background and academic motivation are assumed to be the input. The following production function was employed in this study.

5. Result and Discussion

5.1. Scales and description of the Instrument

The research instrument was created to provide the measurement of the targeted construct with the help of the multi-item Likert-type scale. The completed tool has 44 questions that have a 5-point Likert scale, with higher scores representing an increasing degree of agreement with statements. The scale is developed using pertinent literature and involvement of experts to make its contents relevant and understandable. Once analysis of reliability was done all the items were kept since each item had significant contribution to the total scale.

5.2. Cronbach Analysis of Reliability

Cronbach's Alpha was used to evaluate internal consistency of the instrument since it is a commonly used reliability coefficient within Likert-type scales. Cronbach- Alpha measures the extent to which a set of items relates to each other as a factor where values greater than 0.70 are good, 0.80 are excellent and 0.90 or more is extreme reliability.

Table 3: Scale Description

Scale	Description	Number of Items	Response Format
Developed Research Instrument	Measures the targeted research construct	44	5-point Likert scale

Table 4: Reliability Statistics (Cronbach's Alpha)

Scale	Number of Items	Cronbach's Alpha
Developed Research Instrument	44	0.987

5.3. Cronbach's Alpha Interpretation

The Cronbach Alpha of the 44-item instrument was 0.987 and this is excellent internal consistency. This large coefficient of reliability indicates that the items are well

correlated and always measure the same underlying construct. Also, with item-total statistics, it was also determined that deleting any item did not indicate that the alpha value improved implying that all the items were suitable and needed to be incorporated into the ultimate scale.

5.4. Discussion

The current study was designed to create a valid tool to measure the targeted research construct, and the results of the reliability analysis are a good indicator in favor of the quality of the scale. The last scale had 44 items rated with respect to the 5-point Likert scale and the internal consistency of the scale using Cronbach-Alpha. The results of this analysis gave the Cronbach Alpha of 0.987, which is exceptionally high. This value is above the widely recognized value of 0.70 and is consistent with the methodological imperatives that suggest a value greater than 0.90 to be an indication of high reliability.

The large Cronbach Alpha indicates that the items used in the instrument will have good interrelationship, and always measure the same underlying construct. This conclusion was further supported by item total statistics since the deletion of any item did not result in a significant increase in the alpha coefficient. This means that every item has a positive impact on overall scale reliability and that none of the items were redundant or weak such as to be discarded. Consequently, the rationale to have all 44 items in the final version of the instrument turns out to be empirically reasonable.

Methodologically, the high internal consistency is a good indicator of the confidence of using the instrument to collect data and consequently to analyze the results statistically. A scale that is very reliable minimizes measurement error, enhances accuracy of the results hence making better the credibility of study results. Altogether, the evidence of reliability proves that the formulated instrument is strong and can be used in the similar research settings and it can also become a handy tool in the future to conduct research on the same construct or other, more or less similar ones.

6. Conclusions

As can be observed to a great degree the findings arrived at in the current research are parallel to the findings reported by other researchers; hence they will reinforce decision-making, with regards to the qualification of university students of industrial engineering, as to the impregnation skills that are linked to time management. Having established the key areas of opportunity, and the most significant correlations between the measures of academic time management; It can be concluded that the objective of the study has been resolved because it is possible to derive strategies that will encourage the use of tools that can be used to manage time among students.

Since the self-perception is a catalyst factor to the overall dimensions of time management; The role of the teaching staff in the facilitation of inclusive environments, which through their specific contact with the student engage the student actively in

personalized learning, becomes relevant. Moreover, to implement the strategies successfully, initially, in order to use the time efficiently, the trained and updated teaching staff on the use of self-regulation tools which, to the extent of the methodological need, may involve technological ones.

Such a study is conducive to deepening the study of education, as besides creating new data, based on the implementation of a diagnostic instrument, in the engineering teaching discipline, such as the GTU, it provides a precedent to proceed investigation on the relationships deeper, among the various dimensions involved in time management; other factors being also considered, like cognitive and sociodemographic ones, which is characteristic of the research context in which engineering students gain knowledge and their impact on

6.1. Recommendations

Based on the results determined within the frames of this project, one should suggest the implementation of programs that instill self-regulation measures among the students, as, as Ramírez and Hernández (2019) note, they positively influence academic results.

First, it is suggested to stimulate the strengthening of the perception of control among students; the people possessing better perception of the given dimension usually display a greater degree of goal specificities, define and allocate priorities to the activities that should be implemented to ensure the efficient achievement of the goals.

Secondly, to empower students as far as the use of instruments of time management is concerned, which can lead to a rise in the efficiency of the utilization of the available means, which are practical in terms of tracking and evaluating the activities. Some of which include: Planning, schedule management, watchlists and agendas, paper to digital, including electronic versions accessible on smartphones.

To add another aspect, it is suggested to implement the points listed above into the competencies of impregnation of the academic program; it is suggested that this would leave them with follow-up indicators in the curriculum, and a formal evaluation in comparison with their level of proficiency. The teacher role will play a key role in the enhancement of self-regulation, as through proper training, teachers can produce learning environments, in which cognitive and motivation strategies are formulated that lead to preference and encouragement of the perception of success and the application of time management instruments.

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