INVESTMENT OF TIME AND ITS RELATION TO INCREASING THE LEVEL OF ACADEMIC ACHIEVEMENT OF STUDENTS AT THE COLLEGE OF SCIENCE AND HUMANITIES, DEPARTMENT OF BUSINESS ADMINISTRATION - SHAQRA UNIVERSITY (CSHDBSU-KSA) THADIQ BRANCH, KSA (STATISTICAL STUDY).

Mohamed Hassan Mahmoud Farag and Faiza Mohamed Hassan Khalil.
Faculty of Economics and Political Sciences-Omdurman Islamic University (Sudan) – Shaqra University- KSA.

Abstract

The study aimed at finding out the investment of time and its relevance to the academic achievement of the students at the College of Science and Humanities (Department of Business Administration) - Shaqra University- Thadiq branch in light of some variables related to organization, planning, guidance and control. The research used the descriptive, analytical method. The sample of the study consisted of 110 students selected by stratified random sampling method with equal allocation (55 males and 55 females). A questionnaire was used as a data collection.

Introduction:

Time is one of the rare elements of production that God has given to every human being. Therefore, it is a unique resource of its kind. Each person has the same time amount. Therefore, his investment and organization means rationalizing and enforcing it. With respect to the university student, investing his time means improving his academic achievement and reaching for his goals. The student has many tasks during a daytime and there is not enough time to accomplish all the required work, and in view of the above it is clear that the organization of time and its availability are problems that need to be resolved. This study attempts to identify student's time investment and their relation to academic achievement in the light of some variables that determined in the attached questionnaire.

There may be twenty-six as main variables affect the perfection of the work. The letter "V" was used to stand for the variable that used in the questionnaire, these variables are: V1 = Setting aside time to plan the daily activity, V2 = Setting goals clearly, V3 = Adopt a daily plan for the conduct of study duties, V4 = Identifying and organizing priorities according to their importance, V5 = Seeking compatibility between goals and activities, V6 = Modify the time schedule by emergency, V7 = Using the lecture time to organize knowledge about the course, V8 = Maintain specific sleep hours daily, V9 = Recreation in the leisure time, V10 = Going to lectures based on lecture time, V11 = Time distribution by courses, V12 = Organizing time within the university to raise the academic level, V13 = Use a notebook to remember, V14 = Addressing the problem of loss of time by planning and organization, V15 = Adopt a weekly schedule for review, V16 = Allocating a regular time for study, V17 = Exploitation of the weekend in social activities, V18 = Distribution of time between family and study, V19 = Deliver assignments on time with colleagues, V20 = Follow up results of planning and organization of my time, V21 = Time is calendar for improving study, V22 = Completing the duties without delay, V23 = Commitment to the study plan of the university, V24 =...

Corresponding Author: Mohamed Hassan Mahmoud Farag.
Address: Faculty of Economics and Political Sciences-Omdurman Islamic University (Sudan) – Shaqra University- KSA.
Evaluation of the daily performance of the study, V25 = Avoiding the causes of loss of time and V26 = Investing enough time to review.

**Problem Of The Study:**
Investment of the time and its organization are problems faced students because some of them do not recognize and do not invest their time.

**Objectives Of The Study:**
1. This study aims at identifying the following:
2. The relationship of time investment to academic achievement based on the view of college students.
3. detecting the existence of statistically significant differences between the average grades of students based on the variables of age - gender - hours of revision - the level of study
4. Make proposals to improve the level of academic achievement of the student.

**Significance of The Study:**
1. The importance of the study in the value of time investment and its relationship to increase the level of educational achievement.
2. Study increases the ability of students to increase the efficiency of time investment in general.
3. Study helps students invest their time in academic achievement.
4. The study helps the family to help their children invest their time in self-study.

**Limits Of The Study:**
1. Objective limit and spatial limit: The study is restricted to academic achievement based on the view of students of the Faculty of Science and Humanities (Thadiq branch) - University of Shaqra, KSA.
2. Time limits: January 2019.

**Questions Of The Study:**
1. What is the relationship between the effectiveness of time investment and the academic achievement, according to the perspective of the students of the Faculty of Science and Humanities?
2. Are there statistically significant differences between the means of the student degrees, according to the student's age, gender, educational level and the hours of revision?

**Determination Of The Sample Size:**
Equation used to determine sample size is \( n = \frac{(zpq/d)^2}{d^2} \) Where \( z = 2, p=q=0.5 \) and \( d= 0.047673 \). According to the mentioned above, sample size \( n \) was equal to 110 students selected by stratified random sampling method with equal allocation 55 males and 55 females (because the number of male students was nearly equal the number of female students).

**Methodology:**
The paper depends on descriptive and analytic statistics and related references.

**Previous Studies:**
Abdul-Al, 2009 (m) entitled "The effectiveness of time management for students of the College of Teachers in Hail in the Kingdom of Saudi Arabia and its relation to collection. "The study aimed to identify the time management of students, and the study was applied to a random sample of students from the College of Teachers in Hail in the literary and scientific disciplines totaling (82) students in (2007) There was a correlation between time management and academic achievement. The higher the effectiveness of time management among students, the higher the academic achievement. The students who were included in the study sample at the Teachers College in Hail run some of their time efficiently in some cases. Is dedicated to academic aspects of identifying and distributing curriculum objectives, and directing students to use a daily record to monitor their behavior and daily tasks.

The study of Shawi and Abu Sultanah, 2003 entitled "The skill of time management and achievement in the light of some variables in Yarmouk University students:" This study aimed to identify the availability of the ability to organize time and management of Yarmouk University students and students. The study found the following results:
There was a medium degree of skill in time management among students at Yarmouk University. There was a statistical significance between the skill of time management and achievement. There was a statistically significant correlation between the skill of time and achievement. Donald Donald-1997: The Relationship of Self-Organization, Time Management and Personal Model with Academic Achievement. The study showed that there was a strong correlation between positive and statistical significance between self-control, time management and personality model with academic achievement.

Literature/Theoretical underpinning:-

Time Investment:-
There’s a huge difference between spending time and investing it. The word “spending” means that you’re using something up or exhausting it. When you spend time, you’re not really looking to get anything back. When you invest in something you expend resources, but you do so with an expectation of getting a good return on your investment (ROI). Investing your time means that you engage in activities which are calculated to bring you meaningful rewards.

“Investing” and “ROI” are terms which, up until now, you’ve probably heard only when it comes to money. However, you should start thinking of these terms when it comes to your time, as well.

So, how can you start making better time investments? The first step is to set goals. Until you know what you want and what is most important to you, you won’t be able to decide what the best investment of your time is.

The second step is to make a conscious decision on how you’re going to use your time. Time management is the process of planning and exercising conscious control of time spent on specific activities, especially to increase effectiveness, efficiency, and productivity. It involves a juggling act of various demands upon a person relating to work, social life, family, hobbies, personal interests and commitments with the finiteness of time. Using time effectively gives the person "choice" on spending/managing activities at their own time and expediency, Stella Cottrell (2013).

It is a meta-activity with the goal to maximize the overall benefit of a set of other activities within the boundary condition of a limited amount of time, as time itself cannot be managed because it is fixed. Time management may be aided by a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects, and goals complying with a due date. Initially, time management referred to just business or work activities, but eventually the term broadened to include personal activities as well. A time management system is a designed combination of processes, tools, techniques, and methods. Time management is usually a necessity in any project development as it determines the project completion time and scope. It is also important to recognize that both technical and structural differences in time management exist due to variations in cultural concepts of time.

The major themes arising from the literature on time management include the following:-
1. Creating an environment conducive to effectiveness
2. Setting of priorities
3. Carrying out activity around prioritization.
4. The related process of reduction of time spent on non-priorities
5. Incentives to modify behavior to ensure compliance with time-related deadlines.

Time management is related to different concepts such as:
1. Project management: Time management can be considered to be a project management subset and is more commonly known as project planning and project scheduling. Time management has also been identified as one of the core functions identified in project management. Project Management Institute (2004).
2. Attention management relates to the management of cognitive resources, and in particular the time that humans allocate their mind (and organize the minds of their employees) to conduct some activities.

Organizational time management is the science of identifying, valuing and reducing time cost wastage within organizations. It identifies, reports and financially values sustainable time, wasted time and effective time within an organization and develops the business case to convert wasted time into productive time through the funding of products, services, projects or initiatives at a positive return on investment.
Terminology:
1. Investment: A capital used to produce and provide services.
2. Academic achievement: The student’s cumulative average score
3. Time Investment is the "application of management principles of planning, organization, direction and time control to achieve the best investment of time and achieve the desired results." Huda,
4. Time planning
5. Set up a specific schedule or plan and set a stage for each stage of organization, direction or control to start and end.
6. Time management
7. The organization is the means through which to achieve the goals, to arrange efforts to reach the ends (the least effort Farah, 2008
8. Timing: Timing means how tasks can accomplish goals as planned and in the time available. Rahimi, 2014

Time control:-
Time control means to adjust the work effort, according to the plan in order to achieve the desired goals. Hamouda, 2009.

Stratified Sampling:-
Stratified sampling is a process used in any research that involves dividing the population of interest into smaller groups, called strata. Samples are then pulled from these strata, and analysis is performed to make inferences about the greater population of interest. Stratified sampling is used when:
1. A researcher’s target population of interest is significantly heterogeneous.
2. A researcher wants to highlight specific subgroups within his or her population of interest.
3. A researcher wants to observe the relationship(s) between two or more subgroups; and.
4. A researcher’s goal is to create representative samples from even the smallest, most inaccessible subgroups of the population he or she is interested in.

When using stratified sampling, researchers have a higher statistical precision compared to when they elect to use simple random sampling alone. This is due to the fact that the variability within the subgroups is lower compared to the variations when dealing with the entire population at large.

Thanks to the statistical precision that stratified sampling provides, a smaller sample size is required, which can ultimately save researchers time, money, and effort.

How to Perform Stratified Sampling:-
The process for performing stratified sampling is as follows:-
Step 1:-
Divide the population into smaller subgroups, or strata, based on the members’ shared attributes and characteristics.

Step 2:-
Take a random sample from each stratum in a number that is proportional to the size of the stratum.

Step 3:-
Pool the subsets of the strata together to form a random sample.

Step 4:-
Conduct your analysis.

Sample Size:-
Stratified Random Samples

The precision and cost of a stratified design are influenced by the way that sample elements are allocated to strata. How to Assign Sample to Strata According to "stattrek.com, 2019" One approach is proportionate stratification. With proportionate stratification, the sample size of each stratum is proportionate to the population size of the stratum. Strata sample sizes are determined by the following equation:

\[ n_h = \left( \frac{N_h}{N} \right) * n \]
where \( n_h \) is the sample size for stratum \( h \), \( N_h \) is the population size for stratum \( h \), \( N \) is total population size, and \( n \) is total sample size.

**Results:**

**Findings:**

Analysis of whole data (1\(^{st}\) stage): Table(1) shows that the total Cronbach’s Alpha is 0.885. In table(2) there are 4 variables have Cronbach’s Alpha is greater than 0.885, these variables (Q7, Q10, Q14 and Q24) should be deleted.

| Table 1: Reliability Statistics |
|---------------------------------|
| **Cronbach’s Alpha** | Cronbach’s Alpha Based on Standardized Items | N of Items |
| .885 | .886 | 26 |

| Table 2: Item-Total Statistics |
|---------------------------------|
| **Item** | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach’s Alpha if Item Deleted |
| Q01 | 101.43 | 120.779 | .662 | .884 | .876 |
| Q02 | 101.13 | 124.222 | .543 | .827 | .879 |
| Q03 | 101.25 | 122.517 | .609 | .750 | .877 |
| Q04 | 101.19 | 122.468 | .597 | .853 | .877 |
| Q05 | 101.34 | 126.170 | .348 | .577 | .883 |
| Q06 | 101.14 | 120.211 | .597 | .728 | .877 |
| Q07 | 100.92 | 130.186 | .199 | .756 | .886 |
| Q08 | 101.56 | 123.990 | .472 | .806 | .881 |
| Q09 | 100.76 | 132.843 | .026 | .852 | .889 |
| Q10 | 101.20 | 121.648 | .639 | .754 | .876 |
| Q11 | 101.07 | 124.472 | .442 | .683 | .881 |
| Q12 | 101.02 | 125.706 | .455 | .864 | .881 |
| Q13 | 101.69 | 125.995 | .263 | .702 | .887 |
| Q14 | 101.72 | 124.920 | .360 | .751 | .883 |
| Q15 | 101.73 | 122.806 | .476 | .759 | .880 |
| Q16 | 101.70 | 117.698 | .550 | .859 | .878 |
| Q17 | 101.11 | 122.557 | .465 | .647 | .880 |
| Q18 | 101.04 | 125.687 | .407 | .859 | .882 |
| Q19 | 100.98 | 126.550 | .449 | .803 | .881 |
| Q20 | 101.05 | 127.200 | .361 | .658 | .883 |
| Q21 | 101.16 | 122.083 | .617 | .815 | .877 |
| Q22 | 101.01 | 124.871 | .487 | .641 | .880 |
| Q23 | 101.25 | 129.068 | .208 | .691 | .886 |
| Q24 | 101.37 | 118.401 | .682 | .778 | .874 |
| Q25 | 101.22 | 125.291 | .391 | .493 | .882 |

Analysis of data (2\(^{nd}\) stage): Table(3) shows that the total Cronbach’s Alpha is 0.895. In table(4) there is no variable has Cronbach’s Alpha is greater than 0.895, therefore these variables should be in the analysis (22 variables).

| Table 3: Reliability Statistics |
|---------------------------------|
| **Cronbach’s Alpha** | Cronbach’s Alpha Based on Standardized Items | N of Items |
| .895 | .898 | 22 |

| Table 4: Item-Total Statistics |
|---------------------------------|
| **Item** | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach’s Alpha if Item Deleted |
| Q01 | 101.43 | 120.779 | .662 | .884 | .876 |
| Q02 | 101.13 | 124.222 | .543 | .827 | .879 |
| Q03 | 101.25 | 122.517 | .609 | .750 | .877 |
| Q04 | 101.19 | 122.468 | .597 | .853 | .877 |
| Q05 | 101.34 | 126.170 | .348 | .577 | .883 |
| Q06 | 101.14 | 120.211 | .597 | .728 | .877 |
| Q07 | 100.92 | 130.186 | .199 | .756 | .886 |
| Q08 | 101.56 | 123.990 | .472 | .806 | .881 |
| Q09 | 100.76 | 132.843 | .026 | .852 | .889 |
| Q10 | 101.20 | 121.648 | .639 | .754 | .876 |
| Q11 | 101.07 | 124.472 | .442 | .683 | .881 |
| Q12 | 101.02 | 125.706 | .455 | .864 | .881 |
| Q13 | 101.69 | 125.995 | .263 | .702 | .887 |
| Q14 | 101.72 | 124.920 | .360 | .751 | .883 |
| Q15 | 101.73 | 122.806 | .476 | .759 | .880 |
| Q16 | 101.70 | 117.698 | .550 | .859 | .878 |
| Q17 | 101.11 | 122.557 | .465 | .647 | .880 |
| Q18 | 101.04 | 125.687 | .407 | .859 | .882 |
| Q19 | 100.98 | 126.550 | .449 | .803 | .881 |
| Q20 | 101.05 | 127.200 | .361 | .658 | .883 |
| Q21 | 101.16 | 122.083 | .617 | .815 | .877 |
| Q22 | 101.01 | 124.871 | .487 | .641 | .880 |
| Q23 | 101.25 | 129.068 | .208 | .691 | .886 |
| Q24 | 101.37 | 118.401 | .682 | .778 | .874 |
| Q25 | 101.22 | 125.291 | .391 | .493 | .882 |


| Q01 | 84.92 | 105.140 | .645 | .669 | .887 |
| Q02 | 84.62 | 108.348 | .524 | .691 | .890 |
| Q03 | 84.74 | 106.086 | .635 | .726 | .887 |
| Q04 | 84.68 | 106.035 | .621 | .703 | .888 |
| Q05 | 84.83 | 109.263 | .382 | .508 | .894 |
| Q06 | 84.63 | 104.383 | .593 | .630 | .888 |
| Q08 | 85.05 | 107.300 | .392 | .615 | .894 |
| Q09 | 84.52 | 107.610 | .485 | .621 | .891 |
| Q11 | 84.69 | 106.032 | .616 | .716 | .888 |
| Q12 | 84.56 | 108.468 | .431 | .458 | .892 |
| Q13 | 84.51 | 110.326 | .397 | .537 | .893 |
| Q15 | 85.21 | 108.809 | .354 | .671 | .895 |
| Q16 | 85.22 | 106.539 | .486 | .702 | .891 |
| Q17 | 85.19 | 102.027 | .547 | .764 | .890 |
| Q18 | 84.60 | 106.334 | .473 | .576 | .891 |
| Q19 | 84.53 | 108.875 | .440 | .753 | .892 |
| Q20 | 84.47 | 110.527 | .428 | .590 | .892 |
| Q21 | 84.54 | 110.067 | .412 | .534 | .893 |
| Q22 | 84.65 | 105.898 | .628 | .655 | .887 |
| Q23 | 84.50 | 108.106 | .524 | .595 | .890 |
| Q25 | 84.86 | 102.669 | .680 | .706 | .885 |
| Q26 | 84.71 | 108.630 | .415 | .450 | .893 |

**Table 5:** KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .705 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square | 1267.887 |
| df | 231 |
| Sig. | .000 |

Table 6 shows Communalities that contain initial and extraction of the independent variables. Variable Q17 has maximum initial value equal to 0.764 with extraction equal to 0.643. Variable Q26 has minimum initial value equal to 0.45 with extraction equal to 0.485.

**Table 6:** Communalities

| Q01 | Q02 | Q03 | Q04 | Q05 | Q06 | Q08 | Q09 | Q11 | Q12 | Q13 | Q15 | Q16 | Q17 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| .669| .691| .726| .703| .508| .630| .615| .621| .716| .458| .537| .671| .702| .764|
| .525| .533| .711| .609| .365| .618| .389| .473| .682| .387| .464| .685| .928| .643|

**Appropriate of the sample size and the number of studied variables:**

Table 5 shows that KMO is equal to 0.705 (greater than 0.5), that means the sample size is suitable for analysis and Sig. is equal to 0.000 (less than 0.05), that means the number of the studied variables is suitable for the analysis.
Table 7 shows the total variance explained. There are 6 factors have 56.902% of the total variance.

| Factor | Initial Eigenvalues | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings |
|--------|---------------------|------------------------------------|-----------------------------------|
|        | Total               | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1      | 7.18                | 32.676     | 32.676       | 6.76  | 30.766     | 30.766       | 2.70  | 12.301       | 12.301       |
| 2      | 2.10                | 9.560      | 42.235       | 1.73  | 7.891      | 38.656       | 2.18  | 9.917        | 22.218       |
| 3      | 1.67                | 7.626      | 49.861       | 1.26  | 5.731      | 44.388       | 2.16  | 9.852        | 32.070       |
| 4      | 1.39                | 6.325      | 56.186       | 1.09  | 4.956      | 49.344       | 2.12  | 9.639        | 41.710       |
| 5      | 1.31                | 5.981      | 62.168       | .880  | 4.001      | 53.344       | 1.75  | 7.957        | 49.667       |
| 6      | 1.29                | 5.893      | 68.061       | .783  | 3.557      | 56.902       | 1.59  | 7.235        | 56.902       |
| 7      | .981                | 4.457      | 72.518       |       |            |              |       |              |              |
| 8      | .797                | 3.620      | 76.138       |       |            |              |       |              |              |
| 9      | .749                | 3.404      | 79.543       |       |            |              |       |              |              |
| 10     | .660                | 3.000      | 82.542       |       |            |              |       |              |              |
| 11     | .591                | 2.684      | 85.226       |       |            |              |       |              |              |
| 12     | .547                | 2.486      | 87.713       |       |            |              |       |              |              |
| 13     | .528                | 2.398      | 90.111       |       |            |              |       |              |              |
| 14     | .432                | 1.964      | 92.075       |       |            |              |       |              |              |
| 15     | .423                | 1.924      | 93.999       |       |            |              |       |              |              |
| 16     | .295                | 1.343      | 95.342       |       |            |              |       |              |              |
| 17     | .259                | 1.178      | 96.520       |       |            |              |       |              |              |
| 18     | .213                | .969       | 97.489       |       |            |              |       |              |              |
| 19     | .203                | .924       | 98.413       |       |            |              |       |              |              |
| 20     | .145                | .660       | 99.073       |       |            |              |       |              |              |
| 21     | .124                | .563       | 99.637       |       |            |              |       |              |              |
| 22     | .080                | .363       | 100.000      |       |            |              |       |              |              |

Extraction Method: Principal Categories Factoring.

Table 8: Factor Matrix

|        | 1     | 2     | 3     | 4     | 5     | 6     |
|--------|------|------|------|------|------|------|
| Q25    | .699 |      |      |      |      |      |
| Q03    | .680 |      |      |      |      | -.351|
| Q01    | .679 |      |      |      |      |      |
| Q11    | .675 |      |      |      |      |      |
Table 9 shows that Q19, Q18, Q17, Q12, Q4 and Q1 belong to factor 1 (Orientation & Planning), Q21 and Q23 belong to factor 2 (ignore because consists of less than three variables), Q15, Q3 and Q22 belong to factor 3 (Planning, Orientation & Control), Q11, Q13, Q08, Q02 and Q25 belong to factor 4 (Organization, Planning & Control), Q06, Q05, Q26 and Q20 belong to factor 5 (Planning & Control) and finally Q16 and Q09 belong to factor 6 (ignore because consists of less than three variables).

Table 9: Rotated Factor Matrix.

|       | 1     | 2     | 3     | 4     | 5     | 6     |
|-------|-------|-------|-------|-------|-------|-------|
| Q19   | .806  |       |       |       |       |       |
| Q18   | .644  |       |       |       |       |       |
| Q04   | .582  | .335  |       |       |       |       |
| Q17   | .539  | .476  |       |       |       |       |
| Q01   | .444  | .340  | .378  |       |       |       |
| Q12   | .363  | .341  |       |       |       |       |
| Q21   |       |       | .706  |       |       |       |
| Q23   | .309  | .651  | .731  | .334  |       |       |
| Q15   | .333  | .344  |       | .632  |       |       |
| Q03   | .339  | .382  | .637  |       |       |       |
| Q22   | .327  |       | .494  |       |       |       |
| Q11   | .591  |       |       |       |       |       |
| Q13   | .500  |       |       |       |       |       |
| Q08   | .500  |       |       |       |       |       |
| Q02   | .376  | .478  | .317  |       |       |       |
| Q25   | .343  |       | .405  |       |       |       |
| Q06   | .371  | .573  |       |       |       |       |
| Q05   | .554  |       |       |       |       |       |
| Q26   | .402  | .515  |       |       |       |       |
| Q20   | .447  | .313  | .505  |       |       |       |
| Q16   | .902  |       |       |       |       |       |
| Q09   | .359  | .413  |       |       |       |       |

Extraction Method: Principal Categories Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 13 iterations.

Table 10 shows the component transformation matrix.

**Table 10:** Factor Transformation Matrix

| Factor | 1     | 2     | 3     | 4     | 5     | 6     |
|-------|-------|-------|-------|-------|-------|-------|
| 1     | .490  | .428  | .397  | .455  | .376  | .266  |
| 2     | -.615-| -.397-| .475  | .188  | .264  | .367  |
| 3     | -.414-| .435  | -.650-| .202  | .248  | .337  |
| 4     | -.353-| .265  | .155  | .295  | .208  | -.807-|
| 5     | .284  | -.632-| -.412-| .457  | .342  | -.155-|
| 6     | .076  | -.004-| -.006-| -.649-| .753  | -.079-|

Extraction Method: Principal Categories Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Table 11 shows the correlation among the dependent variables (Q1, Q2, Q3, Q4, Q5 and Q6) and the other 16 questions. There are 31 correlations out of 96 are insignificant (they represent 33%) and 65 are significant (they represent 67%), therefore the majority of the correlations are positive and significant.

**Table 11:** Correlation matrix

|        | Q01 | Q02 | Q03 | Q04 | Q05 | Q06 |
|--------|-----|-----|-----|-----|-----|-----|
| Q08 Correlation Coefficient | .356 | .318 | .409 | .170 | .085 | .168 |
| Sig. (2-tailed) | .000 | .001 | .000 | .076 | .377 | .080 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q09 Correlation Coefficient | .131 | .303 | -.005- | .244 | .106 | .421 |
| Sig. (2-tailed) | .173 | .001 | .955 | .010 | .268 | .000 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q11 Correlation Coefficient | .488 | .469 | .212 | .397 | .236 | .357 |
| Sig. (2-tailed) | .000 | .000 | .026 | .000 | .013 | .000 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q12 Correlation Coefficient | .299 | .264 | .170 | .166 | .120 | .057 |
| Sig. (2-tailed) | .001 | .005 | .076 | .084 | .211 | .556 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q13 Correlation Coefficient | .264 | .456 | .110 | .284 | .140 | .501 |
| Sig. (2-tailed) | .005 | .000 | .254 | .003 | .143 | .000 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q15 Correlation Coefficient | .269 | .362 | .427 | .113 | .050 | .260 |
| Sig. (2-tailed) | .004 | .000 | .000 | .241 | .601 | .006 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q16 Correlation Coefficient | .318 | .137 | .169 | .360 | .125 | .339 |
| Sig. (2-tailed) | .001 | .153 | .078 | .000 | .192 | .000 |
| N       | 110 | 110 | 110 | 110 | 110 | 110 |
| Q17 Correlation | .439 | .233 | .325 | .272 | .187 | .238 |
| Coefficient | Sig. (2-tailed) | N  |
|-------------|----------------|----|
| Q18 Correlation Coefficient | .291 | .139 | .174 | .400 | .257 | .162 |
| Sig. (2-tailed) | .002 | .147 | .069 | .000 | .007 | .090 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q19 Correlation Coefficient | .366 | .100 | .422 | .470 | .007 | .022 |
| Sig. (2-tailed) | .000 | .298 | .000 | .000 | .943 | .820 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q20 Correlation Coefficient | .247 | .474 | .320 | .245 | .258 | .387 |
| Sig. (2-tailed) | .009 | .000 | .001 | .010 | .006 | .000 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q21 Correlation Coefficient | .374 | .487 | .484 | .207 | .114 | .161 |
| Sig. (2-tailed) | .000 | .000 | .000 | .030 | .235 | .093 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q22 Correlation Coefficient | .407 | .318 | .593 | .295 | .106 | .265 |
| Sig. (2-tailed) | .000 | .001 | .000 | .002 | .271 | .005 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q23 Correlation Coefficient | .240 | .338 | .385 | .331 | .157 | .073 |
| Sig. (2-tailed) | .012 | .000 | .000 | .000 | .101 | .449 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q25 Correlation Coefficient | .356 | .329 | .314 | .295 | .230 | .355 |
| Sig. (2-tailed) | .000 | .000 | .001 | .002 | .016 | .000 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |
| Q26 Correlation Coefficient | .009 | .240 | .111 | .069 | .366 | .224 |
| Sig. (2-tailed) | .923 | .012 | .250 | .475 | .000 | .019 |
| N | 110 | 110 | 110 | 110 | 110 | 110 |

**. Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).
Red color means Correlation is insignificant because the sig. is greater than 0.05 level (2-tailed).

Table 12 shows that the majority of Planning, Organization, Orientation and Control oblique to agree and Strongly agree. Table(13) shows that there was significant relationship between the Categories and the Likert levels.

**Table 12**: Likert.Level Categories Crosstabulation

| LEKER T.LEVEL | Strongly disagree | Count | % within LIKERT.LEVEL |
|---------------|------------------|-------|-----------------------|
|               |                  | 4ₐ    | 8ₐ                    | 22ₐ | 7ₐ | 41 |
|               |                  | 9.8%  | 19.5%                 | 53.7% | 17.1% | 100.0% |

| Categories | Plannin g | Organizatio n | Orientatio n | Contro l | Total |
|------------|-----------|----------------|--------------|----------|-------|
| LEKER T.LEVEL | 4ₐ        | 8ₐ             | 22ₐ          | 7ₐ       | 41    |
| Strongly disagree | 9.8%   | 19.5%          | 53.7%        | 17.1%    | 100.0% |

194
|                | % within Categories | % of Total | disagree | % within LIKERT.LEVEL | % within Categories | % of Total | Neutral | % within LIKERT.LEVEL | % within Categories | % of Total | agree | % within LIKERT.LEVEL | % within Categories | % of Total | Strongly agree | % within LIKERT.LEVEL | % within Categories | % of Total | Total | % within LIKERT.LEVEL | % within Categories | % of Total |
|----------------|---------------------|-----------|----------|-----------------------|---------------------|-----------|---------|-----------------------|---------------------|-----------|-------|-----------------------|---------------------|-----------|---------------|-----------------------|---------------------|-----------|-------|-----------------------|---------------------|-----------|
|                | % within Categories | % of Total |          | % within LIKERT.LEVEL | % within Categories | % of Total |          | % within LIKERT.LEVEL | % within Categories | % of Total |       | % within LIKERT.LEVEL | % within Categories | % of Total |               | % within LIKERT.LEVEL | % within Categories | % of Total |       | % within LIKERT.LEVEL | % within Categories | % of Total |
|                | 0.6%                | 0.1%      |          | 21.8%                 | 5.8%                | 1.3%      |          | 24.3%                 | 12.9%               | 3.0%      |       | 25.1%                 | 50.8%               | 11.7%     |               | 20.6%                 | 30.0%               | 6.9%      |       | 23.1%                 | 100.0%              | 23.1%     |
|                | 1.0%                | 0.3%      |          | 17.2%                 | 3.9%                | 1.0%      |          | 23.7%                 | 10.8%               | 2.9%      |       | 24.5%                 | 42.5%               | 11.4%     |               | 33.5%                 | 41.8%               | 11.3%     |       | 26.9%                 | 100.0%              | 26.9%     |
|                | 3.3%                | 0.8%      |          | 41.4%                 | 10.9%               | 2.5%      |          | 31.1%                 | 16.5%               | 3.8%      |       | 21.0%                 | 42.4%               | 9.8%      |               | 18.4%                 | 26.8%               | 6.2%      |       | 23.1%                 | 100.0%              | 23.1%     |
|                | 0.9%                | 0.2%      |          | 19.5%                 | 4.4%                | 1.2%      |          | 20.9%                 | 9.5%                | 2.6%      |       | 29.3%                 | 50.8%               | 13.7%     |               | 27.5%                 | 34.4%               | 9.3%      |       | 26.9%                 | 100.0%              | 26.9%     |
|                | 1.4%                | 1.4%      |          | 100.0%                | 6.1%                | 6.1%      |          | 100.0%                | 12.2%               | 12.2%     |       | 100.0%                | 46.6%               | 46.6%     |               | 100.0%                | 33.6%               | 33.6%     |       | 100.0%                | 100.0%              | 100.0%   |

Each subscript letter denotes a subset of Categories whose column proportions do not differ significantly from each other at the .05 level.

**Table 13:** Chi-Square Tests Likert.Level Categories Crosstabulation

|                      | Value   | df | Asymp. Sig. (2-sided) |
|----------------------|---------|----|-----------------------|
| Pearson Chi-Square   | 111.050*| 12 | .000                  |
| Likelihood Ratio     | 103.255 | 12 | .000                  |
| N of Valid Cases     | 2860    |    |                       |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.46.
Table 14 shows cosstab of grade and gender. Table(15) shows that there was insignificant relationship between the grade and the gender.

**Table 14:** Crosstab Grade and Gender

| Gender | Grade   | Count | Total |
|--------|---------|-------|-------|
|        | FALL    | PASS  | GOOD  | V. GOOD |
| Male   | 2       | 3     | 27    | 23       |
| Female | 2       | 4     | 28    | 21       |
| Total  | 4       | 7     | 55    | 44       |

**Table 15:** Chi-Square Tests Grade and Gender

|                        | Value   | df | Asymp. Sig. (2-sided) |
|------------------------|---------|----|-----------------------|
| Pearson Chi-Square     | .252*   | 3  | .969                  |
| Likelihood Ratio       | .252    | 3  | .969                  |
| Linear-by-Linear Assoc | .150    | 1  | .698                  |
| N of Valid Cases       | 110     |    |                       |

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 2.00.

Table 16 shows cosstab of grade and age. Table(17) shows that there was insignificant relationship between the grade and the age.

**Table 16:** Crosstab Grade and Age

| Age       | Grade   | Count | Total |
|-----------|---------|-------|-------|
|           | FALL    | PASS  | GOOD  | V. GOOD |
| Less than 20 | 2       | 3     | 8     | 12       |
| 20-25     | 2       | 4     | 47    | 32       |
| Total     | 4       | 7     | 55    | 44       |

**Table 17:** Chi-Square Tests Grade and Age

|                        | Value   | df | Asymp. Sig. (2-sided) |
|------------------------|---------|----|-----------------------|
| Pearson Chi-Square     | 5.923*  | 3  | .115                  |
| Likelihood Ratio       | 5.620   | 3  | .132                  |
| Linear-by-Linear Assoc | .241    | 1  | .624                  |
| N of Valid Cases       | 110     |    |                       |

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .91.

**Table 18:** shows the descriptive statistics of grades according to ages, gender and semester

| Age            | Gender | Semester | Mean | Std. Deviation | N  |
|----------------|--------|----------|------|----------------|----|
| Less than 20   | Male   | 2nd      | 1.00 |                | 1  |
|                |        | 3rd      | 4.00 |                | 1  |
|                |        | 4th      | 2.33 | .577           | 3  |
|                |        | 5th      | 3.00 | .000           | 2  |
|                |        | 6th      | 3.50 | .577           | 4  |
|                |        | 7th      | 4.00 | .000           | 3  |
|                |        | Total    | 3.14 | .949           | 14 |
|                | Female | 2nd      | 3.00 | 1.732          | 3  |
|                |        | 3rd      | 4.00 |                | 1  |
|                |        | 4th      | 2.50 | .707           | 2  |
|                |        | 5th      | 3.00 |                | 1  |
|                |        | 6th      | 3.50 | .707           | 2  |
|    | 2nd | 3rd | 4th | 5th | 6th | 7th | Total |
|----|-----|-----|-----|-----|-----|-----|-------|
| Male | 3.67 | 3.00 | 2.50 | 3.36 | 3.56 | 4.00 | 3.20 |
| Female | 3.38 | 3.00 | 2.80 | 3.44 | 3.20 | 3.67 | 3.34 |
| Total | 3.50 | 3.00 | 2.71 | 3.39 | 3.27 | 3.60 | 3.28 |

| 2nd | 3.29 | 3.33 | 2.43 | 3.31 | 3.40 | 3.67 | 3.29 |
| 3rd | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 4th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 5th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 6th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 7th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| Total | 3.28 | 3.29 | 2.43 | 3.31 | 3.40 | 3.67 | 3.29 |

| 2nd | 3.29 | 3.33 | 2.43 | 3.31 | 3.40 | 3.67 | 3.29 |
| 3rd | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 4th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 5th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 6th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| 7th | 3.14 | 3.14 | 2.75 | 3.40 | 3.29 | 3.75 | 3.24 |
| Total | 3.28 | 3.29 | 2.43 | 3.31 | 3.40 | 3.67 | 3.29 |
Table 19: shows Levene's Test of Equality of Error Variances. The p-value (sig) is equal to 0.000, therefore, the variance were homogeneous.

| Dependent Variable: Grade | F    | df1 | df2 | Sig. |
|---------------------------|------|-----|-----|------|
|                           | 3.474| 23  | 86  | .000 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Age + Gender + Semester + Age * Gender + Age * Semester + Gender * Semester + Age * Gender * Semester

Table (20) shows tests of between-subjects effects. The age has p-value (sig) equal to 0.60 and the gender has p-value (sig) equal to 0.272 therefore, there are no significant differences. There is significant differences in grades according to the semesters, because p-value (sig.) is equal to 0.000

Table 20: Tests of Between-Subjects Effects

| Source                  | Type III Sum of Squares | df | MeanSquare | F    | Sig |
|-------------------------|-------------------------|----|------------|------|-----|
| Corrected Model         | 21.754^a                | 23 | .946       | 2.163| .006|
| Intercept               | 627.344                 | 1  | 627.344    | 1434.867| .000|
| Age                     | .121                    | 1  | .121       | .277 | .60 |
| Gender                  | .535                    | 1  | .535       | 1.223| .272|
| Semester                | 14.213                  | 5  | 2.843      | 6.502| .000|
| Age * Gender            | .467                    | 1  | .467       | 1.068| .304|
| Age * Semester          | 8.318                   | 5  | 1.664      | 3.805| .004|
| Gender * Semester       | 1.494                   | 5  | .299       | .684 | .637|
| Age * Gender * Semester | 2.900                   | 5  | .580       | 1.326| .261|
| Error                   | 37.600                  | 86 | .437       |      |     |
| Total                   | 1231.000                | 110|          |      |     |
| Corrected Total         | 59.355                  | 109|          |      |     |

Table 21: shows the Grand Mean and its 95% Confidence Interval

| Dependent Variable: Grade | Mean | Std. Error | 95% Confidence Interval |
|---------------------------|------|------------|------------------------|
|                           | 3.197| .084       | Lower Bound | Upper Bound |
|                           |      |            | 3.029       | 3.365       |

Table 22: shows the multiple comparisons. The minimum significant difference of means was of semester 4. There were no significant difference among the means of the other semesters.

| (I) Semester | (J) Semester | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |
|--------------|--------------|-----------------------|------------|------|------------------------|
|              |              |                       |            |      | Lower Bound | Upper Bound |
| 2nd          | 3rd          | .08                   | .261       | .766 | -.44-        | .60         |
|              | 4th          | .65                   | .217       | .004 | .21          | 1.08        |
|              | 5th          | -.07-                 | .203       | .737 | -.47-        | .33         |
|              | 6th          | -.08-                 | .224       | .738 | -.52-        | .37         |
|              | 7th          | -.42-                 | .215       | .053 | -.85-        | .00         |
| 3rd          | 2nd          | -.08-                 | .261       | .766 | -.60-        | .44         |
|              | 4th          | .57                   | .258       | .030 | .05          | 1.08        |
|              | 5th          | -.15-                 | .246       | .554 | -.64-        | .34         |
|              | 6th          | -.15-                 | .264       | .563 | -.68-        | .37         |
|              | 7th          | -.50-                 | .256       | .054 | -1.01-       | .01         |
| 4th          | 2nd          | -.65-                 | .217       | .004 | -1.08-       | -.21        |
Based on observed means. The error term is Mean Square(Error) = .437.

* The mean difference is significant at the .05 level.

Table 23: shows Box's Test of equality of covariance matrices. Because p-value(sig.) is equal to 0.099, which is greater than 0.001 that means the variance were homogeneous.

| Effect | Pillai's Trace | Wilks' Lambda | Hotelling's Trace | Roy's Largest Root |
|--------|----------------|----------------|-------------------|--------------------|
|        | Value          | F              | Hypothesis df.    | Error df.          |
|        |                |                |                   |                    |
| Grade  |                 |                |                   |                    |
| Intercept | .924         | 422.847£       | 3.000             | 104.0             |
|         | .076           | 422.847£       | 3.000             | 104.0             |
|         | 12.198         | 422.847£       | 3.000             | 104.0             |
|         | 12.198         | 422.847£       | 3.000             | 104.0             |
|         | .126           | 1.546          | 9.000             | 318.0             |
|         | .877           | 1.564          | 9.000             | 253.26            |
|         | .138           | 1.574          | 9.000             | 308.0             |

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.
a. Design: Intercept + Grade

Table 24: shows Levene's test of equality of the error variances, which was insignificant at 0.001, that means there was equality of the error variances.

| Effect | F | df1 | df2 | Sig. |
|--------|---|-----|-----|------|
| Gender | .360 | 3   | 106 | .782 |
| Age    | 5.719 | 3   | 106 | .001 |
| Semester | 4.812 | 3   | 106 | .004 |

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Design: Intercept + Grade

Table 25: shows that, Pillai's Trace measure was highly significance(Sig.=.000), this explains that there was effect of the independent variables on the dependent variable (Grade).

| Effect       | Value   | F     | Hypothesis df. | Error df. | Sig. |
|--------------|---------|-------|----------------|-----------|------|
| Intercept    | Pillai's Trace | .924  | 422.847£       | 3.000     | 104.0| .000 |
|              | Wilks' Lambda | .076  | 422.847£       | 3.000     | 104.0| .000 |
|              | Hotelling's Trace | 12.198 | 422.847£      | 3.000     | 104.0| .000 |
|              | Roy's Largest Root | 12.198 | 422.847£      | 3.000     | 104.0| .000 |
| Grade        | Pillai's Trace | .126  | 1.546          | 9.000     | 318.0| .131 |
|              | Wilks' Lambda | .877  | 1.564          | 9.000     | 253.26| .126 |
|              | Hotelling's Trace | .138  | 1.574          | 9.000     | 308.0| .122 |
Table 26: shows descriptive statistics of gender age and semesters.

| Gender  | Grade | Mean | Std. Deviation | N  |
|---------|-------|------|----------------|----|
| FALL    | 1.50  | .577 | 4              |
| PASS    | 1.57  | .535 | 7              |
| GOOD    | 1.51  | .505 | 55             |
| V. GOOD | 1.48  | .505 | 44             |
| Total   | 1.50  | .502 | 110            |

| Age     | Grade | Mean | Std. Deviation | N  |
|---------|-------|------|----------------|----|
| FALL    | 1.50  | .577 | 4              |
| PASS    | 1.57  | .535 | 7              |
| GOOD    | 1.85  | .356 | 55             |
| V. GOOD | 1.73  | .451 | 44             |
| Total   | 1.77  | .421 | 110            |

| Semester| Grade | Mean | Std. Deviation | N  |
|---------|-------|------|----------------|----|
| FALL    | 3.00  | 1.155| 4              |
| PASS    | 3.71  | .488 | 7              |
| GOOD    | 4.71  | 1.487| 55             |
| V. GOOD | 4.93  | 1.934| 44             |
| Total   | 4.67  | 1.676| 110            |

Conclusion:--
1. There were four factors affect the level of academic achievement of students of CSHDBSU. These factors are: factor 1 which combined of (Orientation of time & Planning of time), factor 2 which combined of (Planning, Orientation & Control of time), factor 3 which combined of (Organization, Planning & Control of time), and factor 4 combined of (Planning of time & Control of time). There were interactions between the factors.
2. There was no significant difference between the degrees of the male students and the degrees of the female students.
3. There was no significant difference between the degrees of the students according to the students' age.
4. The least mean of grades of students was at semester 4.
5. The majority of Planning, Organization, Orientation and Control oblique to agree and Strongly agree.
6. No significant difference among the importance of Planning, Organization, Orientation and Control.

Study Recommendations:--
1. Planning, Organization, Orientation and Control of the time are very important in increasing the level of academic achievement of the student.
2. The University administration should play a better role in order to increase the effectiveness of students' time management through academic and training programs.
3. The importance of enlightening students with the skills of academic achievement through a precise time plan.
4. To increase the skill of time investment among students in the department.

References:--
1. Abdel-Al Antar Mohamed Ahmed (2009) the effectiveness of time management students at Teachers College in Hail. WWW.ULUM.NL in Saudi Arabia and its relation to collection, Journal of Human Sciences- Year 6: Issue 40: Winter 2009 Faculty of Education, Sohag University, Egypt.
2. Al-Deeb, Ibrahim Ramadan, Foundations and Skills of Self-Management, Umm Al-Qura Foundation for Translation and Publishing, 2006.
3. Al-Khouli, Mohammed, Study Skills, Dar Al-Falah Publishing and Distribution, Amman Jordan, 2000
4. Al-Rahimi, Salem and Al-Mardini, Tawfiq, The Effect of Time in the Academic Achievement of Students at Irbid University, Journal of the University of Economic Sciences, 2014.
5. Donald W.D Thirteen timely Tips for more Effective personal time Management, new York, Harper Role, 1997.
6. Hamouda, Abdel Nasser, The Arab Guide to Time Management, League of Arab States, Arab Organization for Administrative Development, Cairo, 2009.
7. https://www.surveygizmo.com/resources/blog/what-is-stratified-sampling-when-is-it-used/
8. Issa, Mansour, Time Management Skills, Egyptian Academy of Sciences. First Edition, Cairo, 2012
9. Macan, C. and Fogarty, J, and Roberts, Strategies for success in education time Management in more Important for part, 2012.
10. Stella Cottrell (2013). The Study Skills Handbook. Palgrave Macmillan. pp. 123+. ISBN 978-1-137-28926-1.
11. Project Management Institute (2004). A Guide to the Project Management Body of Knowledge (PMBOK Guide). ISBN 1-930699-45-X. Archived from the original on 2008-11-04.