

**Students Time Allocation at Business English Programme- Faculty of Languages,
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Abstract: *Time is invaluable and irreversible for every aspect of human productivity. This study tries to investigate how students at the Faculty of Languages- University of Aden allocate their time in the various activities and its effect on their academic performance. The informants have to report in a diary what they do over a week. They are volunteers from the third year students at the Business English Programme at the Faculty of Languages. The results reveal that self-directed study has positive and significant correlation with the students' academic achievement. Classroom attendance, entertainment, work, household work and other daily practices do not correlate with the students' academic achievement.*

Key Words: *academic achievement, self-directed learning, sleep, working hours, entertainment, household work*

Introduction

University students should be able to manage their time in a way that meets their various needs and practices. Because of the enormous and speed developments in life and technology, students face much temptation for entertainment and wasting their time. However, because time is invaluable and irreversible classroom study and self-directed study should come at the students' priorities.

The students' ability to manage time will give them the opportunity to improve their academic performance, to entertain, to work and to participate in social life.

If students want to enhance their academic performance, they should spend enormous and quality time in learning and learning related activities.

Statement of the Problem

Being a lecturer and then an assistant professor at the Faculty of Languages for more than 20 years, the researcher has observed that students' achievements has regressed and the number of failures is increasing. Students are unwilling to do tasks and when they do, most of them do not do it properly.

Many factors might affect students' performance, such as the social, economic and the security challenges our country is facing. The students' motivation is another important factor. But this study is focusing on how students use their time and the correlation between students time allocation and their academic performance.

Significance of the Study

In Yemen, many studies have focused on teaching methodology and assessment but they have ignored the students' part in the learning process. Since students are the target of the whole learning process, it is very useful to shed light on the factors that affect or correlate with their performance. Among which, time management is very essential. To my knowledge, no other study at the University of Aden has been conducted on this topic.

It is hoped that this study will raise the students' awareness to the importance of time management. Encouraging them to keep a record of how they spend their time will let them aware of the positive and negative activities they spend time on. This finally may lead to students' improvement in their academic performance.

Limitation of the Study

The study aims at exploring how students use their time. It was conducted on a group of students at the Faculty of Languages, University of Aden. All the informants were at the third year Business English Programme. Data were obtained from 48 full-time students consisting of 12 males and 36 females. 2 females and 1 male were married. They were all between 22 to 24 years of age. Data were collected in the middle of the second semester. That time students were having mid semester tests.

Research Hypotheses

- Students' academic achievement correlates positively with their total learning hours.
- Students' academic achievement correlates positively with their classroom learning hours.
- Students' academic achievement correlates positively with their self-directed learning hours.
- Students' academic achievement correlates negatively with the time they spend on entertainment.
- Students' academic achievement correlates negatively with the time they spend on household work.
- Students' academic achievement correlates negatively with the time they spend on work (jobs).
- Students' academic achievement correlates positively with enough sleep time.
- Students' academic achievement correlates negatively with the time they spend on the other activities (personal care, transportation, eating, day dreaming, relaxation...etc).

Aim of the Study

Identifying the possible hindrance behind students' academic regression in relation to time use.

Review of the Literature

Grave (2011, p.5) claims that the time spent on attending courses correlates positively with grades for females, high-ability students, and students of Social Sciences and Sciences/Engineering.

Many other scholars have also stressed the influence of classroom attendance on students' performance. They argue that attendance positively affects academic performance. (Allen and Webber 2006, Devadoss and Foltz 1996, Stanca 2006).

Jacobs and Hyman (2010, p. 48) state that attending classes is one of the most time-efficient things a student can do. They argue that students who miss class need three times as long to learn on their own what they have missed as it would have taken to attend the class. And they never really learn it as well. Jacobs and Hyman (2010, p. 59) indicate that a student can produce one page of notes in fifteen minutes of a typical lecture.

Regarding home study, spending time on self-directed study, other study-related activities, or on working as a student assistant or tutor is positively correlated with grades for almost all students (Grave, 2011, p.5).

Doumen, Broeckmans and Masui (2014) examined the causal effect of time used for self-study on academic performance for first year students. For Macro-Economics, they found that self-study time predicted students' achievement above and beyond relevant student characteristics and the degree of class room attendance. For Financial Accounting, students only benefited from more self-study time when they made few exercises.

Comparing the effect of time spent on lectures with self-study and time for work, Dolton, Marcenaro, and Navarro (2003 cited in Grave 2011 p. 7) conducted a study on first and final year students at University of Malaga. They found that time spent on lectures is more effective than time spent on self-study, and time used for employment has no effect.

Bratti and Staffolani (2002) and (cited in Grave 2011 p. 7) studied the influence of students' different time use using data on first-year economic students at the University of Ancona (Italy). They found that attendance seems to be more effective for achievement especially in quantitative disciplines such as Mathematics and Economics, whereas self-study seems to be more effective for nonquantitative disciplines such as Law and Economic History.

Looking at the influence of work on students' performance, Devlin, James and Grigg (2008) argue that 43.1 per cent of employed university students reported that their work has negative influence on their study. They conclude that working affects negatively the quality of the students' education, which may affect the country good on the long term. This result contracts what De Zoysa and Rudkin (2007) found. They argue that there was a positive correlation between paid jobs and domestic students' performance. However, for overseas students, a negative correlation was observed.

Snyder, de Brey, and Dillow (2016) found that students working 1-15 hours a week score a significantly higher GPA than those working 16 or more hours and those who do not work at all.

Sleeping deeply and enough is essential for every human being. Different suggestions have been provided on how much time students can sleep. Horne (1985 cited in Horne 2000 p. 23) suggests that 6 hours a night is sufficient for the majority of people. Bartel, Richardson, and Gradisar (2018 p. 2) advise 7-9 hours for young adults (18-25 years old). Jacobs and Hyman (2010, p. 49) suggest that 7 or 8 hours of sleep is sufficient.

In a study by Curcio, Ferrara, & De Gennaro (2006), it was found that sleep quality and quantity are closely related to students learning capacity and learning performance. Similarly, Dewald, Meijer, Oort, Kerhof, and Bogles (2010) have stressed the importance of sleep duration on study achievement.

Leisure time activities have also been investigated in their relation and effect on the students' academic performance. Scholars have not specified a particular amount of time for entertainment (Horne 2000 p. 23). However, it can be claimed that such activities should not come in the priority of the students practices. Kendrick and Kendrick (1998 cited in Horne 2000 p. 23) recommend six hours per week for exercising.

Socializing is part of human life. Dougan and Dougan (1998 cited in Horne 2000 p.24) regard socializing as to be best done at the left over times. Again, no specific time was recommended by scholars for social life.

Although Kendrick and Kendrick (1998 cited in Horne 2000 p. 24) estimate 3 hours a night for watching television or relaxing, they have warned that such activities might lead to postpone more important practices.

For household work, shopping, eating and personal care and other unavoidable activities no specific time was identified.

Research Methodology

The students were asked to voluntarily participate in this correlational study. They were introduced to the purpose of the study and to the concepts used such as college study, self-directed study, household work, job, entertainment (leisure activities, watching TV, socializing, physical exercising, using social media, visiting friends, going on picnics...etc.), personal care, transportation, day dreaming...etc. A paper of instructions was distributed to the participants. The students were asked to fill in a diary the time they spend on each of the previously mentioned practices. Data were collected in the middle of the second semester. That time students were having mid semester tests.

Participants

The study was conducted on a group of students at the Faculty of Languages, University of Aden. All the informants were at the third year Business English Programme. Data were obtained from 48 full-time students consisting of 12 males and 36 females. 2 females and 1 male were married. They were all between 22 to 24 years of age.

Data Analysis and Results

The data collected were analyzed using the Statistical Package for Social Sciences (SPSS) programme. The means, standard deviation, T- value and its significance were obtained as well as Pearson's correlation coefficient between the students' GPA at the end of the second semester on the one hand and each of the other variables on the other hand.

Table (1): The difference in means for students' time use according to gender

Gender	Means (average)	Std. Deviation	T-value	Sig.
Total learning hours				
Male (m)	1261	280.59	0.457	0.650
Female (F)	1332	487.89		
Classroom learning hours				
Male (m)	551	77.84	1.049	0.300
Female (F)	512	116.90		
Self-directed learning hours				
Male (m)	710	294.82	0.749	0.458
Female (F)	820	458.58		
Working				
Male (m)	527	922.21	1.556	0.127
Female (F)	187	510.67		
Household work				
Male (m)	527	369.88	5.265	0.000
Female (F)	1440	532.77		
Entertainment				
Male (m)	2701	1137.68	2.138	0.038
Female (F)	2066	749.59		
Sleeping time				
Male (m)	3356	311.19	0.745	0.460
Female (F)	3471	479.53		
Other activities (personal care, eating, transportation...etc.)				
Male (m)	1649	1161.47	0.437	0.665
Female (F)	1542	499.38		

Note: In the table above, hours were converted into minutes

Before embarking on the main focus of this study, a comparison was made between male and female students in means, standard deviation and T-value. Table (1) above shows the followings:

1. The difference between the means of total learning time for male and female students is small and insignificant. The average time use in total learning among male students is 21.02 hours a week, while it is 22.20 hours a week for female students. The means for total learning for all students (males and females) is 21.90 hours a week.

The statistical T-value (0.457) and its significance level (0.650) show that there is no significant difference between the means for total learning time between male and female students.

2. The difference between the average classroom learning hours for male and female students is small and insignificant. The average hours of classroom learning among male students is 9.18 hours, whereas, it is 8.53 hours for female students. The means for classroom learning hours for all students (males and females) is 8.69 hours a week.

The statistical T-value (1.049) and its significance level (0.300) indicate that there is no significant difference between the average classroom learning hours male and between female students.

3. The difference in the average hours of self-directed learning for male and female students is small and insignificant. The average hours of males self-directed learning is 11.83 hours a week, while the average hours of female self-directed learning is 13.67 hours a week. The means for self-directed learning for all students (males and females) is 13.20 hours a week.

The statistical T-value (0.749) and its significance level (0.458) show that there is no significant difference between the average hours of self-directed learning between males and females.

4. The difference between the average working hours for the male and female students is small and insignificant. The average working hours among male students is 8.78 hours a week, while it is 3.11 hours a week for female students. The total means for work for all students (males and females) is 4.53 hours a week.

Note that the T-value is (1.556) and its significance level is (0.127) show that there is no significant difference between the average working hours of males and females.

5. The difference between the average hours of household work for males and females is large and significant. The males average hours of household work is 8.78 hours a week, whereas, it is 24 hours a week for females. The means for household work for all students (males and females) is 20.19 hours a week.

The statistical T-value (5.265) and its significance level (0.000) show that there is a significant difference between the average household working hours for male and female students.

6. The difference between the average hours of entertainment for male and female students is large and significant. The average hours of entertainment among male students is (45.01) hours a week, while the average hours of entertainment for female students is 34.43 hours a week. The means for entertainment for all students (males and females) is 37.07 hours a week.

The T-value, (2.138), and its significance level (0.038) show the significant difference between the average hours of entertainment for male and female students.

7. The difference between the average sleeping hours for male and female students is small and insignificant. The average sleeping hours among male students is 55.93 hours a week, while it is 57.85 hours a week for female students. The means for sleeping for all students (males and females) is 57.37 hours a week.

The statistical T-value (0.745) and its significance level (0.460) show that there is no significant difference between the average hours of male and female students sleeping hours.

8. The difference between the average hours of the other activities (personal care, eating, transportation, day dreaming, relaxing, reading the holy Quran, praying ...etc.) for male and female students is small and insignificant. The average hours of such activities of male students is 27.48 hours a week, whereas, it is 25.70 hours a week for female students. The means for these activities for all students (males and females) is 26.15 hours a week.

The statistical T-value is (0.437) and its significance level is (0.665) show that there is no significant difference between the average hours of such activities between male and female students.

Table (2): The difference in means of students' GPA according to gender

Gender	Means (average)	Std. Deviation	T-value	Sig.
Achievement				
Male (m)	69.00	25.53	0.259	0.797
Female (F)	66.70	25.61		

It can be seen from the table above that the difference between the average academic achievement (GPA) of male and female students is small and insignificant. The average GPA of male students is 69.00, whereas, it is 66.70 for females students. The statistical T-value (0.259) and its significance level (0.797) show that there is no significant difference between the average GPA of male and female students.

Research Hypotheses:

Starting with the first hypothesis in the study:

- Students' academic achievement correlates positively with their total learning hours.

Table (3): Pearson's correlation coefficient between students' GPA and the total learning hours

		Achievement	Learning hours
Pearson Correlation	Achievement	-	0.563**
	Learning hours	0.563**	-

** Correlation is significant at the 0.01 level (1-tailed).

Table (3) shows that Pearson's Correlation coefficient (R) is (0.563), which is of high and significant value. Accordingly, it can be said that there is a positive correlation between the students' GPA and the total learning hours spent on classroom learning as well as self-directed learning. This confirms the validity of the hypothesis: Students' academic achievement correlates positively with their total learning hours.

The second hypothesis states:

- Students' academic achievement correlates positively with their classroom learning hours.

Table (4): Pearson's correlation coefficient between students' GPA and classroom learning hours

		Achievement	Classroom learning hours
Pearson Correlation	Achievement	-	-0.037
	Classroom learning hours	-0.037	-

Table (4) shows that Pearson's Correlation coefficient (-0.037) is at a very small negative value. This means that the correlation between the students' GPA and classroom learning hours is insignificant. This finding rejects the validity of the hypothesis that claims: Students' academic achievement correlates positively with their classroom learning hours.

The third hypothesis states:

- Students' academic achievement correlates positively with their self-directed learning hours.

Table (5): Pearson's correlation coefficient between students' GPA and self-directed learning hours

		Achievement	Self-directed hours
Pearson Correlation	Achievement	-	0.613**
	Self-directed hours	0.613**	-

** Correlation is significant at the 0.01 level (1-tailed).

Table (5) shows that Pearson Correlation coefficient (0.613) is high and significant. This indicates that the correlation between the students' GPA and self-directed learning hours is positive. This result confirms the validity of the hypothesis: Students' academic achievement correlates positively with their self-directed learning hours.

The fourth hypothesis:

- Students' academic achievement correlates negatively with the time they spend on entertainment.

Table (6): Pearson's correlation coefficient between students' GPA and entertainment hours

		Achievement	Entertainment
Pearson Correlation	Achievement	-	0.006
	Entertainment	0.006	-

From the table above, it can be seen that Pearson's Correlation coefficient (0.006) is very small and insignificant. This means that the correlation between students' GPA and the hours they spend on entertainment and leisure activities is insignificant. Therefore, this result indicates that the hypothesis "Students' academic achievement correlates negatively with the time they spend on entertainment" is incorrect.

The fifth hypothesis states:

- Students' academic achievement correlates negatively with the time they spend on household work.

Table (7): Pearson's correlation coefficient between students' GPA and household work hours

		Achievement	Household work
Pearson Correlation	Achievement	-	-0.150
	Household work	-0.150	-

Table (7) above shows that the correlation coefficient between the students' GPA and the hours they spend on household work is small negative correlation and insignificant. This indicates that the hypothesis "Students' academic achievement correlates negatively with the time they spend on household work" is incorrect.

The sixth hypothesis:

- Students' academic achievement correlates negatively with the time they spend on work.

Table (8): Pearson's correlation coefficient between students' GPA and working hours

		Achievement	Working
Pearson Correlation	Achievement	-	-0.199
	Working	-0.199	-

Table (8) shows that Pearson's Correlation coefficient (-0.199) is small negative and insignificant. This means that the correlation between the students' GPA and the students' working hours is insignificant. This disapproves the validity of the hypothesis

Students' academic achievement correlates negatively with the time they spend on working.

The seventh hypothesis:

- Students' achievement correlates positively with enough sleep time.

Table (9): Pearson' Correlation coefficient between students' GPA and sleeping hours

		Achievement	Sleep time
Pearson Correlation	Achievement	-	-0.180
	Sleep time	-0.180	-

It is clear from the table above that Pearson's Correlation coefficient (-0.180) is small negative and insignificant. This indicates that the correlation between the students' GPA and their sleeping hours is insignificant. As a result, the hypothesis "Students' academic achievement correlates positively with enough sleep time" is rejected.

The eight hypothesis:

- Students' academic achievement correlates negatively with the time they spend on the other activities (personal care, transportation, eating, day dreaming, relaxation...etc.

Table (10): Pearson's correlation coefficient between students' GPA and other activity hours (personal care, eating, transportation, day dreaming, relaxation...etc.)

		Achievement	Other activities
Pearson Correlation	Achievement	-	0.039
	Other activities	0.039	-

Table (10) above shows that the correlation between the students' GPA and the time spent on personal care, eating, transportation, day dreaming, relaxation...etc. is very small positive and insignificant. This indicates that the hypothesis "Students' academic achievement correlates negatively with the time they spend on the other activities (personal care, transportation, eating, day dreaming, relaxation...etc." is incorrect.

Discussion

The aim of this study is to find out the correlation between the students' academic achievement on the one hand and each of the followings; the total learning hours, classroom learning hours, self-directed learning hours, work, household work, entertainment, sleeping and some other activities including personal care, eating, transportation, day dreaming ...etc.

The results of the study reveal that the significant differences between male and female students are restricted on entertainment and household work. Whereas male students tend to spend more time on entertainment, female students spend more time on household work. This can be attributed to the customs of our society where household work is left as part of the female daily life. In addition, females feel more responsibility towards their families. On the other hand, males have more time to spend on entertainment.

The study also reveals that there is no significant correlation between classroom learning and students' academic performance. This can be explained by considering the university rules. Attending classes is compulsory at the University of Aden. Students who are absent for 25% of the total number of lectures will be suspended and not allowed to sit for the final examination. But they are allowed to sit for the re-examination in which they get only 50% of the scores regardless how high scores they achieve. Such rules have minimized the significance of classroom attendance on students' achievement since all students (Excellent, good and poor students) have to attend classes.

It is worth noting to mention that students have also to get at least 15/30 scores in order to be able to sit for the first examination. And many instructors allocate 5 scores for attendance which might be a good gift for poor learners to enhance their chance to sit for the first examination.

Another factor that might play a role in the result is the impact of the instructors' qualification and to what extent the lectures are useful. Of course, this factor has not been investigated but it is recommended to be handled in future studies.

Accordingly, it can be assumed that classroom attendance has no significant role in the correlation with academic achievement since attendance is compulsory for students and scores are allocated for it. This factor does not reveal the individual differences among the students. This result is incongruent with what Grave (2011), Devadoss and Foltz (1996), Allen and Webber (2006), Stanca (2006) and Jacobs and Hyman (2010) have claimed about the role of classroom attendance in students' achievement. However, it should be noted here that the major of informants of this study is of social sciences.

Examining the relationship between students' academic performance and self-directed study, a positive and significant correlation between these two variables was found. Then, self-study was found to play more important role than attending lectures in academic achievement. The more time students spend on self-directed study the better performance they can achieve. Self-directed study is the factor that decide individual differences among university students at the Faculty of Languages. This result is incompatible with what Dolton, Marcenaro, and Navarro (2003 cited in Grave 2011) have found. But it is compatible with what Bratti and Staffolani (2002) have found since Business English Programme is a nonquantitative discipline.

The typical classes at the Faculty of Languages is 12 hours a week. For Hoehn and Sayer (1989 cited in Horne 2000 p.22), each hour of class time should be met with two hours of study time which means 36 hours for the students at the Faculty of Languages, University of Aden. Other researchers such as Dougan and Dougan (1998 cited in Horne 2000 p.22) suggest three hours of study for each hour of class time which produces 48 hours of study work in a week. But the difference (14-26 hours a week) is great between what should be done and what the students concerned in this study do (22 hours a week).

Although attending lectures shows no relation to students' achievement when it is measured separately, it shows a significant correlation with students' performance when it is added to the time spent on self-directed learning.

Work shows insignificant correlation with students' academic performance. As it can be seen in Table (1) male students average working hours is 1.25 a day and 0.44 a day for females. It is 6.35 hours a week for all students.

Household chores, entertainment, personal care, transportation, relaxation, day dreaming...etc. show insignificant correlation with students' achievement. Accordingly, they have no effect on the students' academic performance.

It was also found that the students have enough and normal sleeping time duration. However, this result does not reflect any correlation with their performance.

Within the 168 hours a week students have, they spend most of their time on sleeping (57.30 hours a week) which is within the normal and necessary range. Then comes entertainment (40.12 hours a week). Although previous studies have not emphasized or assigned particular time for entertainment, it is clear that students spend much and invaluable time on entertainment at the cost of study. In the third place comes the other activities (personal care, day dreaming, relaxation, transportation...etc. (27 hours a week). The fourth place is for household work (16.40

hours a week). The fifth place is for self-directed study (13.15 hours a week) which shows a very serious problem concerning the students' ability and/ or willingness to manage their time. In the sixth place comes the classroom learning hours (9.26 hours a week) while they should attend 12 hours a week. In the last place comes work (6.35 hours a week).

Conclusion and Recommendations

It can be concluded from what is mentioned above that despite the importance of self-directed study and its crucial effect on the students' academic performance it is still not in the students' priorities. It takes the fifth place among their various practices. Students should give their academic education the priority. They should spend more time in self-study. Other activities should come next to self-study as well as classroom learning.

Accordingly, the followings are suggested to enhance appropriate time use by university students:

- Raising the students' awareness to the importance of time allocation and its effect on their academic performance.
- Time management is a skill university students need to learn.
- Students should give learning the priority after sleeping time, eating and personal care.
- Students should set a regular time for studying. This will protect them from any unexpected events (Dembo 2004 P. 145).

References

Allen, D. O., & Webber, D. J., 2006, *Attendance and Exam Performance at University*, Discussion Papers 0612, University of the West of England, Department of Economics. Retrieved June 1, 2018 from: <http://eprints.uwe.ac.uk/15904/9/Download.pdf>

Bartel, K, Richardson, C & Gradisar M 2018, *Sleep and mental wellbeing: exploring the links*, Victorian Health Promotion Foundation, Melbourne Retrieved August 15 2018 from https://www.sleephealthfoundation.org.au/files/Sleep_and_Mental_Well_being/Sleep_and_mental_wellbeing_exploring_the_links_full_report.pdf

Bratti, M., and S. Staffolani (2002): *Student time allocation and educational production functions*, Quaderns di Ricerca. Retrieved June 1, 2018 from https://www.researchgate.net/publication/259309417_Student_Time_Allocation_and_Educational_Production_Functions

Curcio, G., Ferrara, M., & De Gennaro, L. (2006). Sleep loss, learning capacity and academic performance. *Sleep Medicine Reviews*, 10 (5), 323-337. Retrieved May 27, 2018 from doi: 10.1016/j.smr.2005.11.001

Dembo, M. H., (2004) *Motivation and Learning Strategies for college success*. 2nd ed. New Jersey, Lawrence Erlbaum Associates Publishers

Devadoss, S., and Foltz, J. (1996), Evaluation of factors influencing student class attendance and performance. *American Journal of Agricultural Economics*, 78 (3), 499-507.

Devlin, M., James, R., & Grigg, G. (2008). Studying and Working: A national study of student finances and student engagement. *Tertiary Education and Management*, 14 (2), 111-122. Retrieved May 17, 2018 from doi: 10.1080/13583880802053044

Dewald, J. F., Meijer, A. M., Oort, F. J., Kerhof, G., A., & Bogles, S. M., (2010). The influence of sleep quality, sleep duration and sleepiness on school performance in children and adolescents: A meta-analytic review (2009). *SleepMedicine Reviews* 14 (3), 179-189 Retrieved July 18, 2018 from doi: <https://doi.org/10.1016/j.smr.2009.10.004>

De Zoysa, A., and Rudkin, K. M., (2007). *The Effects of Employment on Academic Performance of Australian Accounting Students*. 7th Global Conference on Business & Economics (pp. 1-29). Lynchburg, VA: Association of Business and Economics Research. Retrieved on July 18 2018 from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=2167&context=commpapers>

Doumen, S., Broeckmans, J., and Masui, C., (2014). The role of self-study time in freshmen's achievement. *Educational Psychology*, Abstract 34 (3), 385-402, Retrieved on July, 10, 2018 DOI: [10.1080/01443410.2013.785063](https://doi.org/10.1080/01443410.2013.785063)

Grave, B. S. (2011). The effect of student time allocation on academic achievement. *Education Economics*, 19 (3), 291-310. Retrieved on May 17, 2018 from doi: 10.1080/09645292.2011.585794

Horne, W. R., (2000). How students spend their time. *Learning Assistance*, 5 (2) 22-33 Fall 2000. Publisher Eric. Retrieved on May 25 2018 from https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/5_2_2.pdf

Jacobs, L. F., & Hyman, J. (2010). *The secrets of college success*. San Francisco, CA. Jossey-Bass: A Wiley Imprint. Retrieved July 20, 2018 from <http://b-ok.xyz/book/968182/2fbb2d>

Snyder, T.D., de Brey, C., and Dillow, S.A. (2016). Digest of Education Statistics 2014 (NCES 2016-006). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved on May 17, 2018 from <https://nces.ed.gov/pubs2016/2016006.pdf>

Stanca, L., (2006). The Effects of Attendance on Academic Performance: Panel Data Evidence for Introductory Microeconomics. *Journal of Economic Education*, 37(3), 251-266.