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Time Spent and Academic Study Behavior of the Students of Agrotechnology Discipline of Khulna University of Bangladesh

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ABSTRACT

The main purpose of the study was to determine the time spent and academic study behavior of the students of Agrotechnology Discipline of Khulna University, Khulna-9208, Bangladesh. A number of activities were considered to measure the time spent by the students. Data were collected from randomly selected fifty students of five batches (2010-2014) of Agrotechnology Discipline, Khulna University. Data were also collected on selected eight characteristics of the students through personal interview using an interview schedule during October-November, 2014. The respondent students spent their time in eleven activities such as religious activities, academic learning, personal learning, games/sports, personal activities (sleeping, bathing, taking meal), chatting/gossiping with friends, private tuition, interaction with senior and/or junior, watching TV, internet browsing and mobile talking to different extent. Among the eleven activities, the respondent students preferred to spent highest time (7.827 hours) in personal activities followed by academic study (7.705 hours) which includes residential hall room, classroom, library and group studies. The respondents also preferred to spend least time in interaction with senior and/or junior (0.385 hours). Out of twenty four hours, the respondents were not able to indicate/specify the activities where they have spent the rest 1.465 hours. Most (86%) of the respondents showed medium to high academic study behavior. Among the selected eight characteristics of the respondent students, only participation in extracurricular activities showed a negative significant relationship with the academic study behavior/time spent in academic study of the students.

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INTRODUCTION

Time is money. Time is the enemy. Time is on your side. But still we would have to know the time we spend on our activities to verify this famous saying (Anonymous, 2012).

Time is a measure in which events can be ordered from the past through the present into the future, and also the measure of durations of events and the intervals between them. Time is an observed phenomenon, by means of which human beings sense and record changes in the environment and in the universe. Time has been called an illusion, a dimension, a smooth-flowing continuum, and an expression of separation among events that occur in the same physical location. Time is the ongoing sequence of events taking place. We measure time using seconds, minutes, hours, days, weeks, months and years. Clocks measure time. Time Spent is the indispensable tool for measuring, analyzing, and comparing the time spent on different activities. We talk a lot about time, but the one thing we definitely know about time is there's never enough.

Time is finite and in terms of amount of time that exists in a person's life, there is not much time in equality in comparison to other endowments such as money. In addition, the choice on how to spend time affects a lot of other aspects of life as well as a person's happiness but it would be useful to see how the students value time since it would shed light on a population where income is relatively homogenous. There is a proverb that time and tide waits for none. So, every student should be aware about their time. Strauss (2013) surveyed in the Midwest and one in the East America that the students can spend sixty to more than one hundred ten hours per year in test preparation in high-stakes testing grades. Educational institution is a platform to meet new people, experience new things and work at gaining independence. But it is also about classes, exams, studying, working with professors and hopefully gaining a wealth of useful knowledge and new ways of thinking. In order for students to succeed, they need to put in time.

No subject is more polarizing in education than testing (Mark *et al.* 2014). Although there is correlation evidence showing that students who read more have higher achievement, the National Reading Panel stated there was no experimental study showing practice effects of how time spent reading affects achievement (Wu and Samuels, 2010). Taylor *et al.* (1990) found high correlations between the amount of independent reading time and student's reading achievement scores. Cardinal (1989) found that student's time-on-task and academic achievement were positively correlated. The cumulative time used to communicate with parents and the general public had been tested by Mark *et al.* (2014).

Participation in extracurricular activities can help students develop better attitudes toward school and long-term educational and occupational success. Participation in activities has also been associated with avoiding negative outcomes like dropping out of school or using drugs. Similarly, participation is positively related to standardized test scores, grades and educational aspiration (Anonymous, 2012).

The American high school students have many demands on their time, and how they choose to spend that time on any given day depends on a variety of factors such as the age and the sex of the students (Allard, 2008). Data from American Time Use Survey (ATUS) show how much time per day, on average, high school students devote to leisure activities, household activities, work and homework. ATUS data also reveal differences in students' use of time between weekdays and weekends (Allard, 2008).

The students study in different institutions needs to use their valuable time to enrich their knowledge. Because they will be employed at different level of agricultural organizations to act as the mediator for transfer of technologies and their experience. By spending their time in accurate way they can play an effective role in transferring knowledge to the farmers and also the general people. Many research have been conducted regarding time spent of high school student in America, time spent in internet using, time spent in shopping behavior, time spent outside the classroom but no studies have been conducted regarding the time spent by the university students.

Considering the above facts, the researcher felt a thrust to conduct a study with the hope to identify the student's behavior that how the time is spent by the students of Agrotechnology Discipline of Khulna University per day.

Objectives of the Study

i. To analyze the selected characteristics of the students of Agrotechnology Discipline of Khulna University.
ii. To identify time spent by the students in different activities within twenty-four hours with emphasis to academic study behavior.
iii. To identify the nature or type of the activities as preferred by the students.
iv. To explore the relationships between the selected characteristics of the students and their academic study behavior.

METHODOLOGY

Locale of the Study: Agrotechnology Discipline of Khulna University, Khulna-9208, Bangladesh was purposively selected as the locale of the study.

Population and Sampling Procedure: All the undergraduate students of five batches (2010-2014) of B.Sc.Ag (Honours) program of Agrotechnology Discipline of Khulna University of Bangladesh were selected as the population of the study. A list of the existing undergraduate students of the program was prepared with the help of the Head of the Discipline. Irrespective of the size of the students at different term/year, 10 students were selected at random from each of the term of the respective year. Thus, actual sample size of the study was 50. Distribution of the sampled respondents has been shown in Table 1.

Method, Instrument and Time of Data Collection: Data were collected through face to face interview using a pre-tested interview schedule during October to November, 2014.

Variables of the Study: In the present study, the following selected characteristics such as age, educational qualifications, academic excellence, family size, annual family income, participation in extracurricular activities related organizations, participation in extracurricular activities, and participation in agricultural activities were treated as independent variables. The focus issue includes academic study behavior of the students within twenty four hours.

Time Spent by the Respondent Students within Twenty Four Hours: The time spent by the students means how much time s/he spent in 11selected activities in a day. The time was expressed in hour. Based on mean time spent, the activities were ranked for identifying the priority/preferred area of activities.

Academic Study Behavior: Academic study behavior of the students was determined based on the time s/he spent especially for academic study. A score of one was assigned for one hour and so on. For example, if a student spent 8 hours for academic study out of 24 hours his/her score was 8. On the other hand, a student spent 8hr 30min for academic study; his/her score was 8.5. Based on academic study behavior score, the respondents were grouped into three categories as shown below:

Categories	Score (Hours)
Low academic study behavior	Up to 5
Medium academic study behavior	5-8
High academic study behavior	>8

Statistical Analysis: After collection, data were analyzed, coded and tabulated for interpretation. The SPSS 16.0 was used to analyze the data. Statistical treatments such as number, percent, mean, standard deviation and rank order were used to interpret the data. Correlation co-efficient (r) was employed to test relationship between any two variables.

RESULTS AND DISCUSSION

Facts on the Selected Characteristics of the Students

Majority (64%) of the respondents were very young aged compared to teen (32%) and less young (4%) aged categories. Two-fifth (40%) of the respondents have both of the medium and higher educational qualifications compared to 20 percent have lower educational qualification, respectively.

About half (46%) of the respondents had high TGPA (3.5-3.74) whereas two-fifth respondents obtained excellent TGPA. Ten and four percent of the respondents had medium and low TGPA, respectively. Majority (64%) of the respondents had medium sized family compared to small sized (32%) and large sized (4%) family, respectively. The findings also indicate that the average family size of the students is smaller than that of national average of 4.06 (HIES, 2016). It means that the family heads of the respondents are conscious about population growth and family size. Half of the respondents belonged to medium income category compared to high income (38%) and low income (12%) categories. Highest proportion (42%) of the respondents had no precipitation compared to 40, 12 and 6 percent had low, medium and high participation in extracurricular activities related organizations, respectively. The reason behind no participation or low participation in extracurricular activities related organizations as mentioned by the respondents were too much busy to study, political attitude

Table 1. Distribution of population and sample

Year and Term (Batch)	Population(No. of students)	Sampled respondents
4th year 2nd term ('10 Batch)	29	10
3rd year 2nd term ('11 Batch)	33	10
2nd year 2nd term ('12 Batch)	27	10
1st year 2nd term ('13 Batch)	42	10
1st year 1st term ('14 Batch)	36	10
Total	167	50

Table 2. Distribution of the respondent students according to their selected characteristics

Selected Characteristics	Categories	Score	Respondents		Observed Range	Mean	Standard Deviation
			No	%			
Age	Teen aged	Up to 19	16	32			
	Very Young aged	20-22	32	64	19-24	21.46	1.83
	Less young aged	>22	2	4			
Educational Qualifications	Lower educational qualification	Up to 12	10	20			
	Medium educational qualification	12.1-14	20	40	12-15.50	13.6	1.29
	Higher educational qualification	>14	20	40			
Academic Excellence	Low TGPA	Up to 3	2	4			
	Medium TGPA	3.1-3.49	5	10	2.24-4	3.69	0.29
	High TGPA	3.5-3.74	23	46			
	Excellent TGPA	>3.75	20	40			
Family Size	Small sized family	Up to 3	16	32			
	Medium sized family	4-5	32	64	2-6	3.96	0.90
	Large sized family	>5	2	4			
Annual Family Income	Low income family	35-150	6	12			
	Medium income family	151-300	25	50	36-1,011	53.42	1.44
	High income family	>300	19	38			
Participation in Extracurricular Activities Related Organizations	No participation	0	21	42			
	Low participation	Up to 1	20	40	0-4	0.92	1.10
	Medium participation	2-3	6	12			
	High participation	>3	3	6			
Participation in Extracurricular Activities	No participation	0	7	14			
	Low participation	Up to 4	6	12	0.00-23	8.14	5.53
	Medium participation	5-8	15	30			
	High participation	>8	22	44			
Participation in Agricultural Activities	No participation	0	4	8			
	Low participation	Up to 3	10	20	0.00-23	6.5	4.34
	Medium participation	4-9	27	54			
	High participation	>9	9	18			

of the organizers and less eager to participate in the organization. Highest proportion (44%) of the respondents had high participation while 30% had medium participation and 12% had low participation but 14% had no participation in extracurricular activities. This situation indicates that they have high interest to participate in extracurricular activities but no or less interest to participate in extracurricular activities related organization. Majority (54%) of the respondents had medium participation compared to about one-fifth (20%) had small participation whereas 18% had high and only 8% had no participation in agricultural activities like homestead gardening, flower gardening, poultry rearing etc. Due to pressure of study about three-forth (74%) had low to medium participation in agricultural activities (Table 2).

Time spent by the respondents within twenty-four hours including study behavior

The distribution of time spend of the respondents are given in Table 3. About half (48%) of the respondents spent high amount of time as compared to medium (36%) and low (16%) amount of time for religious activities like salat (prayer), telawat, puja and so on (Table 3). The findings also indicate that most of the students have affinity to spent time in religious activities. None of the students are aloof from the religious

activities. About two-fifth (44%) of the respondents spent medium amount of time in academic study as compared to high (42%) and low (14%) amount of time (Table 3). The academic study/learning included the class room learning, study in their room and library. None of the students spent very high amount of time (>11 hours) for academic study. Majority (52%) of the respondents spent medium amount of time in their personal leanings as compared to low (36%) and high (12%) amount of time (Table 3). The findings also indicate that most (88%) of respondents spent low to medium amount of time in their personal learning or study such as reading general knowledge, story books, novel and so on. About two-fifth (42%) of the respondents spent low amount of time in games or sports as compared to medium (16%) and high (4%) amount of time (Table 3). The findings also indicate that most (80%) of the respondents did not spend or spend less time in games due to over pressure of study. More than two-third (70%) of the respondents spent medium amount of time in their personal activities such as sleeping, taking meal and bathing as compared to high (18%) and low (12%) amount of time (Table 3). About half (48%) of the respondents spent medium amount of time in gossiping or chatting with their friends as compared to low (32%) and high (20%) amount of time (Time). The findings also indicate that most (80%) of the students like to spend low to medium amount of their time in gossiping with their friends. Half (50%) of the respondents did not spent time in private

Table 3. Distribution of the respondents according to their time spent in the selected activities

Selected Activities	Categories	Score (hours)	Respondents		Range	Mean	Rank Order	Standard Deviation
			No.	%				
Religious activities	Low time spent	Upto 0.25	8	16				
	Medium time spent	0.25-0.75	18	36	0.25-1.50	0.77	7th=	0.33
	High time spent	>0.75	24	48				
Academic Study/ learning	Low time spent/academic study behavior	Upto 5	7	14				
	Medium time spent/academic study behavior	5-8	22	44	4.5-11	7.71	2nd	1.88
	High time spent	8-11	21	42				
Personal learning	Low time spent	Upto 1	18	36				
	Medium time spent/ acaemicstudy behavior	1-3	26	52	4.5-10.75	7.83	6th	1.41
	High time spent	>3	6	12				
Games/ sports	No time spent	0	19	38				
	Low time spent	Upto 1	21	42	0.00-4.00	0.77	7th=	0.91
	Medium time spent	1.5-2	8	16				
	High time spent	>2	2	4				
Personal activities	Low time spent	Upto 6	6	12				
	Medium time spent	7-9	35	70	4.5-10.75	7.83	1st	1.41
	High time spent	>9	9	18				
Gossiping with friends	Low time spent	Upto 0.5	16	32				
	Medium time spent	0.5-1	24	48	0.00-2.00	0.98	4th	0.55
	High time spent	>1	10	20				
Private tuition	No time spent	0	25	50				
	Low time spent	Upto 1	8	16	0.00-4.00	0.93	5th	1.10
	Medium time spent	1-2	12	24				
	High time spent	>2	5	10				
Senior-junior interaction	No time spent	0	22	44				
	Low time spent	Upto 0.25	3	6	0.00-2.00	0.39	10th	0.44
	Medium time spent	0.25-0.50	16	32				
	High time spent	>0.50	9	18				
Watching TV	No time spent	0	17	34				
	Low time spent	Upto 0.5	14	28	0.00-3.00	0.65	9th	0.69
	Medium time spent	0.5-2	18	36				
	High time spent	>2	1	2				
Internet browsing	No time spent	0	9	18				
	Low time spent	Upto 0.5	12	24	0.00-4.50	1.00	3rd	0.90
	Medium time spent	0.5-2	25	50				
	High time spent	>2	4	8				
Mobile talking	Low time spent	Upto 0.5	28	56				
	Medium time spent	0.5-1	18	36	0.00-2.00	0.73	8th	0.44
	High time spent	>1	4	8				

tuition as compared to medium (24%), low (16%) and high (10%) amount of time for private tuition. It means that rest half of the respondents are engaged in private tuition. More than two-fifth (44%) of the respondents did not spend their time with their senior and/or junior as compared to medium (32%), high (18%) and low (6%) amount of time (Table 3). The findings also indicate that due to high pressure of study, the respondents had least scope to spend much time with their senior and/or junior. Highest proportion (36%) of the respondents spent medium amount of time in watching TV as compared to low (28%) and high (2%) amount of time (Table 3). The findings also indicate that majority (66%) of the students have affinity in watching TV. But a significant amount of respondents (34%) had no time to watch TV. Half (50%) of the respondents spent medium amount of time in internet as compared to low (20%) and high (8%) amount of time (Table 3). However, good percentages (18%) of the students were not exposed to internet browsing. Majority (56%) of the respondents spent low (56%) amount of time in mobile talking as compared to medium (36%) and high (8%) amount of time (Table 3). The findings also indicate that a lower portion of respondents do not spend so much time in mobile talking.

Nature/Type of Activities as Preferred by the Students

The students spent their time in eleven types of activities as described earlier. But the preference of the respondents related to the activities performed in 24 hours of a day was determined based on mean time spent by them in the respective activities (Table 3).

The findings indicate that the respondent students preferred to spend more time (7.827 hours) in personal activities which includes sleeping, bathing and taking meal while they spent least time in interaction with seniors and/or juniors. The 2nd preferred activity based on time spent was academic learning/study.

Relationships between the Selected Characteristics of the Respondents and their Academic Study Behavior

Among the eight selected characteristics of the respondents only participation in extracurricular activities showed a negative but significant relationship with their time spent in academic study/academic study behavior within twenty-four hours. It means that the students who are more involved in extracurricular activities they spent low time in academic learning/study.

CONCLUSION

The respondent students spent most of the time (22.535 hours) out of the 24 hours in eleven activities such as religious activities, academic study, personal study, games/study, personal activities, chatting/gossiping with friends, private tuition, senior and/or junior interaction, watching TV, internet browsing, and mobile talking. It means that the students spent their time in a planned manner. They preferred to spend highest time (7.827 hours) in personal activities like sleeping, bathing, and taking meal while they spent least amount of time (0.385 hours) in interaction with seniors and/or juniors. The second preferred activity was academic study where the students spent 7.705 hours of time. Most (86%) of the respondents showed medium to high academic study behavior as compared to low (14%) academic study behavior. Among eight selected characteristics of the respondent students only participation in extracurricular activities showed a negative but highly significant relationship with their time spent in academic study/academic study behavior within twenty-four hours.

Table 4. Co-efficient of correlation between selected characteristics of the respondents and academic study behavior

Sl. No.	Selected characteristics of the respondents	Focus variable	Observed "r" values
01.	Age		-0.133^{NS}
02.	Educational qualification		-0.113^{NS}
03.	Academic excellence		-0.085^{NS}
04.	Family size	Academic study	0.143^{NS}
05.	Annual family income	behavior	0.037^{NS}
06.	Participation in extracurricular activities related organizations		-0.102^{NS}
07.	Participation in extracurricular activities		-0.457**
08.	Participation in agricultural Activities		-0.193^{NS}

NS= Non-significant, **correlation highly significant at the 1 percent level of significance

REFERENCES

Allard, M.D. 2008. How High School Students Use Time: A Visual Essay. Monthly Labor Review. 11: 51-61.

Anonymous. 2012. Time Spent Outside The Classroom. Digest of Gifted Research. (www.tip.duke.edu/node/1331).

Cardinal, M. 1989. Perfectionism, Performance, and State Positive Affect and Negative Affect after Classroom Test. Canadian Journal of School Psychology. 1(4): 239-245.

HIES. 2016. Household Income and Expenditure Survey. Statistical Year Book of Bangladesh. Bangladesh Bureau of Statistics, Ministry of planning, Government of the People's Republic of Bangladesh.

Mark, T., Coggins, C., Guan, C. and Hiler, T. 2014. The students and stopwatch: How much time do American students spend on testing?(www.teachplus.org/sites/default/files/publications/pdf/the_students_and_the_stopwatch.pdf).

Strauss, V. 2013. How Much Time Do School Districts Spend on Standardized Testing? The Washington Post, 25 July, 2013. (www.washingtonpost.com).

Tylor, B.M., Frye, B.J., and Maruyama, G.M. 1990. Time Spent Reading and Reading Growth. Research Journal. 27(2): 351-362.

Wu, Y.C. and Samuels, S.J. 2010. How the Amount of Time Spent on Independent Reading Affects Reading Achievement: A Response to the National Reading Panel. A Research Report. Department of Educational Psychology, University of Minnesota. 25p. (www.tc.umn.edu/samue001/webpdf/manuscript277.04.pdf).