DETERMINANTS OF ACADEMIC PERFORMANCE OF UNDERGRADUATES OF THE FACULTY OF MANAGEMENT STUDIES AND COMMERCE OF THE UNIVERSITY OF SRI JAYEWARDENEPURA IN SRI LANKA

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Abstract

The main purpose of this study is to identify the most significant factors influencing the academic performance of the undergraduates of the Faculty. A systematic random sample of two hundred students representing the second, third and the fourth year of student population of the Faculty in the year 2010 were selected. The data was obtained through a structured questionnaire. Descriptive statistics, factor analysis, reliability analysis, correlation analysis and stepwise multiple regression were used for data analysis. It was found that self-determination; time management, English knowledge and students' attendance on lectures are positively and significantly (at P < 0.001) affecting the academic performance. Among them, self-determination was the most influential factor, which alone explains 46.4 percent of variance in academic performance of the undergraduates. Also the library usage and self-motivation have shown significant (at p < .01) and positive association with academic performance. Further, active learning has also shown significant (at p< 0.05) and positive association with the academic performance. Those variables altogether were found to explain 69 percent of variance in academic performance of the undergraduates. The implication of this study for improving students' academic performance of the undergraduates of this Faculty is also outlined.

Keywords

Academic Performance, Undergraduates, University Education

1. Introduction

Education is the most powerful path in acquiring knowledge, skills and nurturing positive attitudes. Proper educational level enhances productivity of any country. University education enhances the human capital of the country. The selection of students to state universities of Sri Lanka is highly competitive. Only a limited number of students are selected based on merit and a quota system. Students with a higher Z-score at the Advance Level of the General Certificate Examination (G.C.E A/L) are qualified for a placement at a state university. According to the University Grant Commission in Sri Lanka, The Faculty of Management Studies and Commerce (thereafter FMSC) in the University of Sri Jayewardenepura has been received a high reputation for the management education among the National University System in Sri Lanka, the majority of students, who are qualified to the university education from the G.C.E. (A/L) Examination under the Commerce Stream, select this Faculty as their first preference. However, due to this high demand, only the students with the highest Z-core get a placement to the FMSC. Despite this situation, it has been evident that a considerable number of students were unable to complete their degree programmes within the scheduled time period. For instance, it is reported that for the year 2009, nearly 22 per cent of the student population of the faculty was unable to complete the degree programmes at their first attempt (Examination Unit of the FMSC, 2009).

2. Importance of the Study

The students of universities are one of the vital sources of the manpower in the development process of any country. If students drop out from the universities, they face difficulties in finding suitable jobs from the labour market. This leads to other social problems such as youth frustration, stress and anti-governmental activities. On the other hand, this situation hinders the development of the labour market and ultimately it affects badly to the economic development of that country. Therefore, students' performance in universities should be the main consideration not only to the academics, educators, and administrators of Higher Educational Institutions as an institutional issue, but also to the policy makers and development practitioners as a national issue. Thus identification of the reasons for students' academic success will help to reduce the above problems. Two points could be highlighted in respect to the significance of this study;

- No comprehensive and systematic empirical study has been done in relation to the students' academic performance of the University of Sri Jayewardenepura, particularly in relation to the FMSC. This research would be the first attempt in this regard.

- This study would be the initial and comprehensive evaluation in examining the effectiveness of the academic programmers after restructuring (in 2002) the FMSC particularly from the students' perspective.

3. Benefits of the study

The main beneficiaries are the undergraduates of the faculty. Identification of the reasons for students' academic success would directly help to improve their academic performance. Secondly, these research findings would also help for the academics and administrators of the Faculty and the University for improving the efficiency and effectiveness of the academic programmes of the FMSC and the university. Thirdly, policy makers and development practitioners would also benefit from these research findings as they would be able to ensure that the limited public resources were utilized effectively and efficiently. Finally, this research study would contribute to the knowledge of academic performance of Higher Educational Institutions and also practice for designing and managing higher educational programmes.

4. Objectives

4.1 General Objectives

This study examines the factors influencing the academic performance of the undergraduates of FMSC in the University of Sri Jayewardenepura in Sri Lanka.

4.2. Specific Objectives:

- Examine the determinants of the undergraduates' academic performance of the FMSC,

- Examine the relative importance of these determinants of the academic performance of the undergraduates of FMSC and

- Propose recommendations to improve the academic performance of the undergraduates of the FMSC of the University of Sri Jayewardenepura.

5. University Education in Sri Lanka

Sri Lanka has inherited two major traditions of higher education; one is going back to the institutions developed by the Buddhist Sangha and the other is higher Educational Institutions derived from the British tradition. The University Education in Sri Lanka was exclusive in English with obvious limitations on those who educated in Sinhala and Tamil. The University System of Sri Lanka began formally in 1921 with the establishment of Ceylon University College established in Colombo as an affiliated institution of the University of London. The First Autonomous Degree Awarding University in Sri Lanka (University of Ceylon) was established in July 1942 (Tilakarathna, 1997). The Government raised the Vidyodaya and Vidyalankara Pirivena to the status of the universities in 1959. In 1960, the first batch of the students of Sinhala/Tamil medium was admitted and in 1961, the intake of Arts students was doubled (Tilakarathna, 1997). In 1967, the Colombo Campus of the University of Ceylon was converted into a separate university as the University of Colombo and also a college of Advance Technology was set up at Katubadda in Moratuwa, which became the nucleus of a Technological University, which was concentrated on Engineering Studies (Tilakarathna, 1997). During the period of 1970-77, the University System in Sri Lanka was expanded further and another new campus; namely "Jaffna Campus" was established in 1974. After the formulation of the University Act No. 16 of 1978, six independent universities were established at Colombo, Peradeniya, Sri Jayewardenepura, Kelaniya, Moratuwa, and Jaffna. The Vidyodaya and the Vidyalankara campuses were renamed as the University of Sri Jayewardenepura and the University of Kelaniya. As the University Act No. 16 of 1978 empowered the Minister in charge of the subject of Higher Education to establish Higher Educational Institutions, several universities were established under the University Act namely; the University of Ruhuna in 1979, the Open University of Sri Lanka (OUSL) in 1980, the Eastern University in 1986, the South Eastern University, Rajarata University and the Sabaragamuwa University in 1995. Later on several other universities named as Wayamba University, Uva Wellassa University and the University of the Visual & Performing Arts were established.

5.1 The University Admission Policy

The National Council of Higher Education (NCHE) co-ordinated admission to the three universities through the Common Entrance Examination. In 1965, performance at the University Entrance Examination was replaced by performance of the G.C.E. Advanced Level Examination conducted by the Departments of Examinations as the determinants of the University Admission

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and the selection was only on merit (Kottahachchi, 1997). In 1974 the Government introduced a "District Quota System" where the number of places was available for the university was decided on the basis of the population of each district. In 1976, the Government decided to admit students both on combination of Merit (70% was allocated on the basis of all Island merits) and District Basis (30% was allocated among Districts according to the population) (Kottahachchi, 1997). In 1977, the United National Party came into the ruling power and changed the University Admission Policy by introducing Raw Marks System based entirely on Merit. However, the Government appointed a committee to formulate a new Admission Policy in 1978 to be adopted in 1979. This policy recommended that 30% of the admission is on merit basis, 55% on District basis and 15% for Underprivileged Districts. Thirteen Districts (Amparai, Anuradhapura, Badulla, Batticaloe, Hambantota, Mannar, Moneragala, Mullative, Nuwareaeliya, Pollonnaruwa, Trincomalee, Vaunia and Puttala) were recognized as "Underprivileged" Districts (Kottahachchi, 1997). In 1984, the existing University Admission Policy was revised as to reduce the under privileged districts up to five (Amparai, Badulla, Hambantota, Mannar and Mullativu), to increase the district quota to 65%, to reduce the underprivileged Quota to 05 %, and to maintain the Merit Quota to 30%. The Admission Policy was revised again for the admission to the academic year on 1990/1991 and the merit quota was increased up to 40% and the number of under privileged districts was increased from five to twelve. However, the admission to the Arts faculties was made on merit from 1990/91 (Kottahachchi, 2000). Thus, the Admission to the Universities in Sri Lanka is being done by the basis of an Admission Policy laid down from time to time by the University Grant Commission. After the year 2000, the selection of the students is made on the basis of the highest Z-core based on the GCE Advanced Level Examination.

5.2 Faculty of Management Studies of the University of Sri Jayewardenepura

The University of Sri Jayewardenepura (USJ) is one of the major National Universities in Sri Lanka. The University originated as a college of oriental learning, traditionally known as Vidyodaya Pirivena in 1873; primarily to meet the needs of the Buddhist monks. In 1959 the University status was bestowed on the Vidyodaya Pirivena by the Vidoydaya and Vidalankara Universities under the Act No. 45. Its status changed to that of a campus in 1972 when the single University of Sri Lanka was established under the Universities Act No. 1 of 1972. With the implementation of the Universities Act No. 16 of 1978, Vidyodaya campus became an

autonomous university, which was renamed as the University of Sri Jayewardenepura. By 2012, the University of Sri Jayewardenepura consists of five main Faculties, namely Faculty of Humanities and Social Sciences, Faculty of Applied Sciences, Faculty of Management Studies and Commerce, Faculty of Medical Sciences and Faculty of Graduate Studies with an internal undergraduate student population of about 10,000. The Faculty of Management Studies and Commerce (FMSC) was established in   1972 and it is known as the Centre of Excellence in Management Education in Sri Lanka. Currently, there are about 5000 undergraduate students studying for twelve Degree programs offered by twelve   departments, namely: Department of Accounting, Department of Business Administration, Department of Marketing, Department of Public Administration, Department of Estate Management and Valuation, Department of Commerce, Department of Finance, Department of Human Resource Management, Department of Information Technology, Department of Decision Sciences, and Department of Business Economics and Department of Entrepreneurship. The students who performed at their highest level at the GCE A/ L Examination in the Commerce Stream are qualified for entering to the FMSC of the University of Sri Jayewardenepura.

6. Academic Performance of University Undergraduates

Considerable researches are available in relation to the academic performance of the students at schools and other Higher Educational Institutions. These studies help educational institutions to improve the quality of their educational programs. Students' success is generally judged on examination performance.

6.1 Measuring Academic Performances

Academic Performance refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers (Banquil et al., 2009). An undergraduate is a college or a university student who has not yet received a bachelor's or similar degree (The Free Dictionary by Farlex, 2016). University is an institution for higher learning with teaching and research facilities, constituting a graduate school and professional schools that award master's degrees and doctorates and an undergraduate division that awards bachelor's degrees (Your Dictionary, 2016). Success on examination is a crucial indicator that a student has to benefit from a course of study (Wiseman, 1961 cited by Boa, 2014). Meaning the examination should cover the students' academic ability and skills in applying practical abilities (Bourne,

2007 cited by Goni & Bello, 2016). The Academic performance is used to label the observable manifestation of knowledge, skills, concepts and understanding ideas (Tuckman, 1975). Many researchers try to identify the determinants of undergraduates' success on examination using as a measure: the Grade Point Average (GPA).

6.2 Related Research on Academic Performance

Numerous studies have identified and analyzed the factors influencing the academic performance. By using the Grade Point Average (GPA) as a measure for the academic performance, Bett & Morell (1999) identified several variables namely; gender, ethnicity and family income as well as the Socio-economic Environment at School have an important role in explaining why the students obtain different GPA. Similarly, Stricker & Rock (1995) have analyzed the impact of the examinees' initial characteristics (gender, ethnicity, parental education, geographical regions, and age), college related characteristics, and college related performance variables in the performance on the Graduate Record Examinations (GRE) General Test and found that the students' initial characteristics have a modest impact on the GRE and among them parental education is the most significant. Alfan & Othman (2005) conducted a research to understand students' performance in relation to the University of Malaysia and found that knowledge prior to entering the University such as Economics, Mathematics, and Accounting is crucial in assessing students in understanding courses in both Business and Accounting programs. The results also found that the female students perform better than the male students. However, the GPA was found to be positively and strongly related to the students who perform well in other courses, tend to perform well in the Introductory Marketing Course. Many researchers found the relationship between the improved class attendance and improved Grade Point Average (Collett et al., 2007; Stanca 2006; Chow 2003, Rodgers, 2011; Durden & Ellis, 1995 (cited in Ali, Jusoff, Ali, Mokhtar, & Salamat, 2009). Moore (2006) indicated that class attendance enhances learning; on average, students who came to the most classes made the highest grades, despite the fact that they received no points for coming to class. Another study done by Haralambos & Holborn (1996) found that material factors such as family income play a part in determining the levels of attainment. Lower Social Classes may lack the money to provide their children with the same educational opportunities as the Middle and the Upper Class parents. Greater resources may allow parents to provide a greater range of books, a superior diet, and more space in the home to do homework, greater opportunities for travel, private tuition and

access to private fee-paying schools. In all these ways, more affluent parents can provide their children with advantages before they attend schools and during their school careers.

Ali et al. (2009) indicated that the students from families of higher income levels perform better in their academic assessment as compared to those who come from families of lower income brackets. The same relationship was confirmed by Hijazi & Naqvi (2006). Similarly, Checci (2000 cited in Ali et al., 2009) also concluded that the family income provides incentives for better   student performance as richer parents internalize this affect by investing more resources in the education of their children. On the other hand Raza and Naqvi (2006 cited in Ali et al., 2009) found that there is a negative relationship between student performance and students' family income. Ali et al. (2009) examine the factors that affect students' performance of the University of Technology. University of Technology MARA Kedah, Malaysia have found that several variables; namely demography, active learning, students' attendance, and involvement in extracurricular activities are positively related to students' performance (Ali et al., 2009). Akessa and Dhufera (2015) found that there is a significant relationship between the academic achievement and their parent's education level as well as economic status of families. Raychaudhuri et al (2010) found the association between students' performance and students' attendance in the class, family income, mother's and father's education level, teacher-student ratio, distance from home to learning place and sex of the student in Bangladesh. Hijazi & Naqvi (2006) examined the relationship between several factors and students' academic performance and found that students' attitude towards attendance in classes, time allocation for studies, parents' level of income, mother's education are positively associated with students' academic performance, and mother's age is negatively associated with the dependent variable because the aged mothers have less control over their children that affects the student's performance. Further, Osaikhiuwa (2014) noted   institutional variable like an unfavorable leaning environment, inadequate water supply, and insufficient library facilities did not show significant relationship with student performance. Ch (2006) examined the effects on guidance services on student's study attitude; study habits and academic achievement revealed that the guidance services have significant effect on the student's study attitude, study habits, and academic achievement. According to the above study, as the academic integration variables, practical applications of course work outside of college, talking with a professor about a course, using the library for quiet studying and positive experience with the educational equity program were positively associated

with higher GPA. As social integration variables of this study, friendships with students of different economic or social backgrounds, advice from friends about academic problems, participating in campus life, scanning notices of campus events, attendance at athletic events, attendance at fine arts, events on campus, and positive experience with the educational equity program were positively associated with higher GPA. According to a study done by Harb & El-Shaarawi (2006) students' competence in English was the most important factor that affects students' performance of United Arab Emirates Universities. Another important factor in this regard is the students' participation in class discussions. However, this study found that the most are missing too many lectures and living in crowded households, which are negatively affected on students' performance.

Similarly, hard work and discipline, previous schooling, parents' education, family income and self-motivation as factors that explain differences in students' academic performances (cited by Harb & El-Shaarawi, 2006). Hedjazi & Omidi (2008) discovered there was a positive significant correlation observed between academic success and high school GPA, study hours, planning for study, motivation, and emotional atmosphere of educational environment, families' attitudes towards studies and years of experience of teaching and also female students were found to be more successful than the male students.

7. Main Hypothesis of the study

Based on the literature review and also considering the context of the Faculty of Management Studies and Commerce, following hypothesis was drawn;

The academic performance of the Undergraduates of the Faculty of Management Studies and Commerce of the University of Sri Jayewardenepura are positively associated with the following variables;

1. Time management,
2. Students' attendance on lectures,
3. Peer Influence,
4. English knowledge of students,
5. Involvement in co-curricular activities,
6. Students' active learning,
7. Their learning strategies,

8. The use of library,

9. Influence on lectures,

10. Students' Family Background

11. Students' Self-motivation and

12. Students' Self-determination.

8. Methodology of the Study

This study was mainly based on Quantitative Research Approach with the Survey Method. The Unit of Analysis of the Study was "Individual Undergraduates". The population of the study was the 2nd, 3rd and the 4th years of the students of the year 2010 (about 3320 students). The First year students were not included for the sample, as their results were not released at the time of data collection. The sample size was 203, nearly 7% of the population. Selection of the Sample was the Systematic Random Sampling Method (representing 12 Departments of the Faculty) a structured questionnaire was administered by two research assistants. Also officials' files of the Examination Branch of the Faculty were also used. For the data analysis, both descriptive statistics and inferential statistics were used. Statistical tools such as frequency analysis, reliability analysis, factor analysis, and correlation analysis; stepwise multiple regressions were used for analyzing the data. Frequency analysis was used to describe the number of occurrence of each response chosen by the respondents. Reliability analysis used to ensure the scale of reliability. Factor analysis was used to ensure construct validity of the measures. Correlation analysis used to describe the relationship among the variables. Stepwise regressions used to determine the strength of the causal relationship among the variable.

9. Measures of the Study

The dependent variable of the study is the Academic Performance of the Undergraduates of the FMSC of the University. The respondents were directly asked their overall GPA (Grade Point Average) at the time of data collection. All independent variables were derived from the literature and measured by using five point liker scale and asked them to answer each item to get the respondents' preference from mostly agreed to mostly disagreed.

10. Validity and Reliability

10.1 Validity

For a theoretical and observational meaningfulness, all the measures of the study were developed by well-grounded theory. The dependent variable of the academic performance of the undergraduate was measured by the Grade Point Average, which is a well-accepted measure in the literature. All other independent variables were also based on strong literature to support the theoretical validity of the study. By employing the principal component analysis, the underlined variables of the factor and the structure of the concept were identified. Other form of validity is discriminant Validity. The Discriminant validity shows that a measure is distinct and is empirically different from other measures (Barringer and Bluedorn, 1999). Thus, exploratory factor analysis was employed to assess discriminant validity of the variables of the study. By conducting a principle component analysis with Varimax rotation, separate factors of the concepts have been clearly identified.

10.2 Factor Analysis

This study hypothesized that academic performance of the undergraduates is determined by twelve major factors, which are; (1) Time management, (2) Students' attendance on lectures, (3) Peer Influence, (4) English knowledge of students, (5) Involvement in co-curricular activities, (6) active learning, (7) learning strategies of undergraduates, (8) use of library, (9) Influence on lectures, (10) students' family background, (11) Self-motivation of undergraduates and (12) Self-determination of undergraduates. Factor Analysis was used to screen all the variables. The Factor analysis is widely used to examine the underlying patterns or relationships for a large number of variables and to determine whether or not the information can be summarized in a smaller set of factors or components (Hair, et al., 1995). Thus, the original set of variables can be reduced to a smaller set which accounts for reliable variance of the initial variable set. The new, smaller set of variables can be used to form operational representatives of the construct. Hence, this research involved an examination of several variables which are required the factor analysis to identify the underlined variables that explain the pattern of correlation within a set of observed variables. Table 2 shows how those variables were constructed. As shown in table 1, Factor Analysis was used in order to ensure the validity of factors, it was considered factors which consists of higher factor load (the factor load is greater than .05 is considered as significant). Under the first variable Time Management was taken four items for further analysis namely plan day to day work in advance, prioritize tasks have to do, able to meet deadlines of assignments, can manage time for studies and other activities due to the higher alpha value respectively .779,

.882, .538, .604 which is more than .50. Furthermore these four items explain 48.451 total variance of the concept Time Management and its alpha coefficient is .628. Students' Attendance on Lectures was taken two items for further analysis namely, never miss lectures, and believe attending lectures help to obtain higher grades, due to the higher alpha value which is more than .50. These two items alpha values are respectively .843 and .843 and explain 71.02 total variance of the concept Students' Attendance on Lectures. Its alpha coefficient is .587. Peer influence was also taken three items for further analysis namely, prefer to study with friends, highly concern my friends' suggestions, Discussions with my friends help for my studies. These three items consist higher alpha value respectively .840, .824, .848 which is more than .50. Furthermore these three items explain 70.104 total variance of the concept Peer influence and its alpha coefficient is .786. English knowledge was selected five items for further analysis namely, can well understand lectures conducted in English, can read lecture Materials and recommended readings in English, understand Lecture Materials and recommended readings in English, confident to speak in English, always write exams in English. Those items alpha values are respectively .868, .856, .884, .733, and .710 which is more than .50. These five items explain 66.194 total variance of the concept English Knowledge and its alpha value is .863.

The variable of Involvement in Extra-curricular activities consists only one item and it was taken for further analysis.

Active Learning was also taken three items for further analysis. Those items are namely, often involve in class room discussions and presentations, often answer questions asked by lecturers, often ask questions from lectures and there alpha values are respectively .783, .858, 802 which is more than .50. These three items explain 66.406 total variance of the concept Active Learning and its alpha value is .747.Variable Learning strategies was taken three items for further analysis namely, often prepare my notes and review them, plan well in advance to prepare exams, use short notes, mind maps, and other techniques to memorize due to the higher alpha value respectively .800, .844, .811 which is more than .50. These three items explain 67.028 total variance of the concept Learning Strategies and its alpha value is .752.Usage of Library was taken two items for further analysis namely, often use library for extra readings, Often use the internet to gather knowledge and there alpha values respectively .840, .840 which is more than .50. Moreover these two items explain 70.611 total variance of the concept Usage of Library and its alpha value is .578.

Influence on Lectures was taken four items for further analysis namely teaching styles of lecturers who taught are good, I am happy with the lecturers who taught me, Lectures who taught me often help to overcome my learning difficulties, Lecturers' feedback is helpful to improve my performance. These items alpha values are respectively .675, 810, .860, and .727 which is more than .50. These four items explain 59.499 total variance of the concept Influence on Lectures and its alpha value is .766. Family Background was taken two items for further analysis namely my parents can afford my educational expenses, my parents are well educated due to the higher alpha value respectively .824, .824 which is more than .50. Furthermore these two items explain 67.889 total variance of the concept Family Background and its alpha value is .527.Self-motivation consists of selected four items for further analysis namely I can cope with the exam tension, Can manage the work load of my studies, I am enjoying lectures in my degree, I feel interested most of the courses that I am following. There alpha values are higher respectively .718, .763, .767, .768 which is more than .50. These four items explain 56.883 total variance of the concept Self-motivation and its alpha value is .747. Self-determination was also taken three items for further analysis. Those are namely I have a strong determination to get good results, my first priority is to complete the degree with a class, I take most efforts to complete my studies and there alpha values are respectively .883, .882, and .800 which is more than .50. Furthermore these three items explain 73.256 total variance of the concept Self-determination and its alpha value is .811.

Table 1: *Results of Factor Analysis of Independent Variables*

Items®	Absolute loading[+]
Time Management (alpha= 0.628)	
Plan day to day work in advance	.779
Prioritize tasks I have to do	.882
Able to meet deadlines of assignments	.538
Can manage time for studies and other activities	.604
Total Variance Explained 48.451	
Students' Attendance on Lectures (alpha= 0.587)	
Never miss lectures	.843

Believe attending lectures help to obtain higher grades	.843
Total Variance Explained 71.020	
Peer Influence (alpha.786)	
Prefer to study with friends	.840
Highly concern my friends' suggestions	.824
Discussions with my friends help for my studies	.848
Total Variance Explained 70.104	
English knowledge (alpha.863)	
Can well understand lectures conducted in English	.868
Can read lecture Materials and recommended readings in English	.856

®*Items followed a 5 point scale (1= strongly agree vs 5= strongly disagree)*
⁺*Absolute loading of .50 or higher were significant*

Table 1: *Results of Factor Analysis of Independent Variables cont.…*

Items®	Absolute loading⁺
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Understand Lecture Materials and recommended readings in English	.884
I am confident to speak in English	.733
Always write exams in English	.710
Total Variance Explained 66.194	
Involvement in Extra-curricular activities …… (Only one item)	
Active learning (alpha.747)	
Often involve in class room discussions and presentations	.783
Often answer questions asked by lecturers	.858
Often ask questions from lectures	.802
Total Variance Explained 66.406	
Learning strategies (alpha.752)	
Often prepare my notes and review them	.800
Plan well in advance to prepare exams	.844
Use short notes, mind maps, and other techniques to memorize	.811
Total Variance Explained 67.028	
Usage of library (alpha.578)	

Often use library for extra readings	.840
Often use the internet to gather knowledge	.840
Total Variance Explained 70.611	
Influence on lectures (alpha.766)	
Teaching styles of lecturers who taught are good	.675
I am happy with the lecturers who taught me	.810
Lectures who taught me often help to overcome my learning difficulties	.860
Lecturers' feedback is helpful to improve my performance	.727
Total Variance Explained 59.499	

®*Items followed a 5 point scale (1= strongly agree vs 5= strongly disagree)*
⁺*Absolute loading of .50 or higher were significant*

Table 1: *Results of Factor Analysis of Independent Variables cont…*

Items®	Absolute loading⁺

Family Background (alpha.527)	
My parents can afford my educational expenses	.824
My parents are well educated	.824
Total Variance Explained 67.889	
Self-motivation (alpha.747)	
I can cope with the exam tension	.718
Can manage the work load of my studies	.763
I am enjoying lectures in my degree	.767
I feel interested most of the courses that I am following	.768
Total Variance Explained 56.883	
Self-determination (alpha.811)	
I have a strong determination to get good results	.883
My first priority is to complete the degree with a class	.882
I take most efforts to complete my studies	.800
Total Variance Explained 73.256	

®*Items followed a 5 point scale (1= strongly agree vs 5= strongly disagree)*
†*Absolute loading   of .50 or higher were significant*

11. Reliability of the Measures

Babbie (1990) mentioned that in order to ensure reliability of measures, questionnaire must be designed by giving attention to the several considerations such as questions should be relevant to the respondents, otherwise, they will produce unreliable answers. The respondents should know those answers of the questions. Also clear and easy questions should be asked. When designing the questionnaire for getting more reliable data, close attention has been paid to those criteria mentioned by Babbie. Hence, before the final distribution of the questionnaire, it was distributed to several undergraduates to ensure the clarity of the questionnaire, and make sure that no ambiguous questions were included. For ensuring the reliability of the variables; Cronbach's coefficient alpha was calculated. As the alpha values are greater than .50, they can be considered as acceptably reliable in general; thus, those coefficients seem satisfactory enough to be included in further analysis of the study. Cronbach's Coefficient Alpha level of all measures of this study were nearly 0.60 or above 0.60.

12. Analysis of Data

By employing the frequency analysis, first part of this section presents the demographic characteristics of the sample. Next section presents and analyses the correlation among variables. Final section of this part, presents the test results followed by the stepwise multiple regression analysis.

12.1 Demographic Characteristics of the Sample

The first part of the questionnaire was designed to obtain background information concerning the year of the students, gender, and age, and ethnicity, field of study, residence, family background, and department of the study, whether they are employed, and their GPA. According to the field data, about nearly 49 percent are from 4th year and 26 percent are from 2nd year and the rest is from the 3rd year. About 56 of the sample are female. About 95 percent are Sinhalese and none of them are there Muslims. About 39 percent of the sample is living in boarding houses and about 37 percent are in hostels. About 37 percent of the samples' parents' monthly income level is Rs. 10000 to 25000 and nearly 26 of the sample is coming from the less than Rs 10000 monthly income level. Nearly 27 percent of the sample is working. About 26

percent of the sample is from the Department of Business Administration and others are from the rest of the Departments. About 16 percent of the sample's GPA is below 2 which denote the "Failed" category.

Table 2: *Demographic Characteristics of the Sample (N = 203)*

Variables	Count	Percentage
Year of the Students		
Second Year	52	25.6
Third Year	50	24.6
Fourth Year	99	48.8
Gender		
Male	90	44.3
Female	113	55.7
Ethnicity		
Sinhala	193	95.1
Tamil	10	4.9
Muslim	….	…..
Residence		
Home	41	20.2
Hostel	74	36.5
Boarding	79	38.9
Other	04	2.0
Family Background		
Below 10,000	54	26.6
10,001-25,000	74	36.5
25,001 -40000	41	20.2
Above 40000	31	15.3
Working		
Yes	55	27.1

No	148	72.9

Table 2: *Demographic Characteristics of the Sample (N = 203) cont...*

Variables	Count	Percentage
Department		
Business Administration	53	26.1
Finance	37	18.2
Accountancy	25	12.3
Public Administration	22	10.8
Marketing Management	21	10.3
Commerce	15	07.4
Department *cont...*		
Human Resources Management	11	05.4
Estate Management and Valuation	08	03.9
Information Technology	06	03
Business Economics	03	1.5
Decision Sciences	01	0.5
Entrepreneurship	01	0.5
Overall GPA		
Above 2 (Pass)	168	82.8
Below 2 (Fail)	32	15.8

Source: *Field Data*

12.2 Correlation of the Research Variables

Before analyzing the regression model, it was necessary to ensure that there was no multicollinearity problem among independent variables. Inspection of correlation coefficients will help to determine that there is no multicollinearity problem among them. Pearson product–moment correlation matrix of the research variables included in the study is shown in Table 3.

Accordingly, there is no multicollinerarity problem as the correlation coefficient value of the measures ranged from .094 to .585. As the correlation matrix indicates, the inter correlations among the variables were low, thereby minimize the problem of multicollinearity. A high level of multicollinearity can result in unstable regression coefficients in linear regression models (Pedhazur, 1982, cited in Barringer and Bluedorn, 1999). Pearson product moment correlation matrix has shown the significant positive correlations in the expected direction between Academic Performance and all other variables.

Table 3: *Person Product Moment Correlation Matrix for the Research Variables*

Variable	GPA	TM	SAL	PI	AL	LS	EK	IECA	UL	IL	FB	SM	SD
GAP	1.00												
TM	.571**	1.00											
SAL	.503**	.338**	1.00										
PI	.268 **	.358**	.257 **	1.00									
AL	.530**	.268**	.253**	.139 *	1.00								
LS	.507**	.489**	.389**	.177 *	.417 **	1.00							
EK	.552**	.374**	197 **	.230 **	.415 **	.355 **	1.00						
IECA	.141*	.108	.105	.130	.262 **	.037	.096	1.00					
UL	.351**	.260**	.148*	.144 *	.392 **	.345 **	.130	.229 **	1.00				
IL	.487**	.391**	.305**	.189 **	.341 **	.368 **	.453 **	.170 *	.186 **	1.00			
FB	.295**	.195 **	.173*	.127	.226 **	.170 *	. 243 **	.099	.177 *	.296 **	1.00		
SM	.554**	.383**	.303**	.198 **	362 **	.356 **	.378 **	.251 **	.169 *	.594 **	315 **	1.00	
SD	.585**	.449**	. 421**	.316 **	.316 **	.587 **	.408 **	.094	.195 **	.431 **	.258 **	.548 **	1.00

**. Correlation is significant at the 0.01 level (2-tailed), *. Correlation is significant at the 0.05 level (2-tailed).

GPA= Grade Point Average, TM = Time Management, SAL= Students' Attendance on Lectures, PI = Peer Influence, AL= Active Learning, LS= Learning Strategies, EK=English Knowledge, IECA= Involvement in Extra –Curricular Activities, UL=Use of Library, IL=Influence on Lectures, FB= Family Background, SM= Self-Motivation, SD= Self Determination.

12.3 Stepwise Regression Test Results

The test results indicate that the hypothesized variables of self-determination, time management, English knowledge of the undergraduates and students' attendance on lectures are positively and significantly related (at P < 0.001) with academic performance. Among them, self-determination was the most determinants factor, which alone explains 46.4 percent of variance in academic performance of the undergraduates. Also the library usage and self-motivation have shown significant and positive relationship (at p < .01) with academic performance. Further,

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active learning has shown significant and positive relationship (at $p< 0.05$) with the academic performance. Those variables altogether were found to explain 69 percent of variance in academic performance of the undergraduates. Peer Influence, Learning Strategies, Involvement in Extra-curricular activities, Influence on lectures, Family Background, were not significantly related with the Academic performance of the undergraduates.

Table 4: *Stepwise Regression Test Results*

Variables	1	2	3	4	5	6	7
Self Determination	.282***						
Time Management		.195***					
English Knowledge			.214***				
Student Attendance on Lectures				.180***			
Library Usage					.135**		
Self-Motivation						.132**	
Active Learning							.118*
F –ratio	172.153***	124.083***	103.714***	89.404***	81.019***	71.800***	63.854***
R	.683	.747	.784	.805	.823	.832	.837
R²	.466	.559	.615	.648	.677	.692	.701
Adjusted R²	. 464	.554	.609	.641	.669	.682	.690
R Square Change	.466	.092	.056	.034	.029	.014	.009

*p<0.05, **p<0.01, ***p<0.001

Regression coefficients shown are standardized coefficients

13. Discussion

As the study found that Students' attendance on lectures is another factor affecting the academic performance there are other researchers also found the relationship between the improved class attendance and improved Grade Point Average (Collett et al., 2007; Stanca 2006; Chow 2003, Rodgers, 2011; Durden and Ellis, 1995 (cited in Ali et al.; 2009). Furthermore Moore (2006) indicated that class attendance enhances learning; on average, students who came to the most classes made the highest grades, despite the fact that they received no points for

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coming to class. Ali et al (2009) examined the factors that affect students' performances of the University of Technology MARA Kedah, Malaysia have found that students' attendance positively related to students' performance. Another research carried out by Hijazi & Naqvi (2006) examined the relationship between several factors and students' academic performance. This study found that students' attitude towards attendance in classes is a factor that influence their academic performances. According to a study done by Harb & El-Shaarawi (2006) found that the most students who are missing too many lectures are negatively affected on their performance. The usage of library is another factor affecting the academic performance. Saenz et al. (1999) revealed using the library for quiet studying is positively associated with higher GPA. Self-motivation is also a determinant of the academic performance. According to Saenz et al. (1999) Positive experience with the educational equity program was positively associated with higher GPA. Another finding reveals that self-motivation as a factor that positive relate with academic success (Hedjazi & Omidi, 2008 cited by Harb & El-Shaarawi, 2006).

According to the study active learning is also a determinant of the academic performance and there are previous similar findings such as Ali et al. (2009) found that student's active learning, positively related to students' performance. Saenz et al. (1999) examined the relationship between the college experience and academic performance among minority students in institutions in American Higher Education and found that practical applications of course work outside of college, talking with a professor about a course associated with higher GPA. According to a study done by Harb & El-Shaarawi (2006) students' participation in class discussions is an important factor that affects students' performance of United Arab Emirates Universities.

14. Conclusion and Policy Implications

The regression results indicate that a significant and positive relationship between the Academic Performance and Self Determination, Time Management, English Knowledge, Student Attendance on Lectures, Library Usage, Self-Motivation, Active Learning. Among variables, self-determination is the most significant factor influencing the academic performance of the undergraduates explaining 46.6 variance of the dependent variable. Those variables explain 69% of variance in Academic Performance of the undergraduates of the FMSC. Other hypothesized variables namely; Peer Influence, Learning Strategies, Involvement in co-curricular

activities, Influence on lectures, Family Background, were not significantly associated with the dependent variable. As it was revealed that self-determination is the most significant factor in this study. In this regard, if the students have a strong determination to obtain better results, give their highest priority to complete the degree with a class and also take strong efforts to complete their study that would lead to improve their academic performance.

Time management is another determinant of the academic performance. When managing time, it would be more effective, if students plan day to day work in advance, prioritize tasks of what they have to do, meet deadlines of assignments and manage time for studies with other activities. English language competency is another important factor leading to academic performance. They should have the ability to understand lectures conducted in English, read lecture materials   and recommended readings in English without difficulties should have confident to speak in English and should always write exams in English. Students' attendance on lectures is another factor affecting the academic performance. In this regard, students should attend the most classes and believe that those lectures would help to obtain higher grades. The usage of library is another factor affecting the academic performance. In this regards, they should often use the library for extra readings and also the Internet to gather knowledge. Self-motivation is also a determinant of the academic performance. In this regard, the undergraduates should have the ability to cope with the exam tension, manage the workload of studies and enjoy and feel interested with their studies. Active learning is also a determinant of the academic performance. In this regard, students should often involve in classroom discussions and presentations by actively involving (asking questions from lecturers) in the classrooms.

The findings of this study would be useful for students, lecturers, and administrators   to improve the academic performance of the undergraduates of the FMSC of the University of Sri Jayewardenepura in Sri Lanka. As this study was revealed that self-determination is the most significant factor in this study. Saenz et al (1999) also examined the relationship between the college experience and academic performance among minority students and revealed self-understanding is associated with students' higher GPA and also hard work and discipline also affect students' academic success (cited by Harb & El-Shaarawi, 2006), Hedjazi & Omidi (2008). Time management is another determinant of the academic performance confirmed by Hijazi & Naqvi (2006). Hedjazi and Omidi 2008, cited by Harb & El-Shaarawi (2006) also found that there was a positive significant correlation observed between academic success and students'

study hours, planning for English language competency. Also Harb & El-Shaarawi (2006) confirmed that students' competence in English was the most important factor of students' academic performance of United Arab Emirates Universities.

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