Advance Physics Letter

Study Habits in Physics Among Students and Effects on Academic Performance

[1]Nur' Ain Hamdan, [2]NurulIzzati Makhtar, [3]Amin Aadenan

[1]Center of Foundation Studies, Universiti Teknologi MARA (Selangor), Campus of Dengkil, 43800 Dengkil, Selangor, Malaysia

[2,3]Faculty of Applied Science, Universiti Teknologi MARA (Negeri Sembilan), 72000 Kuala Pilah, Negeri Sembilan, Malaysia

Abstract : The demands of the students study in the universities are very high and competed nowadays. The challenge of students who were enrolling their studies at university was very tough and difficult due to different of background education previously. The university is experiencing the high number of student failures and low quality of students' academic performance. The study aimed to assess study habits in Physics among students and the effects on their academic performance. The study was conducted among first semester students of Diploma in Textile Technology at Universiti Teknologi Mara, Campus of Negeri Sembilan, Malaysia. The students required Physics as a core subject as guided in their study programme. A questionnaire survey was used for the data collection. Out of 25 students who were taking this course completed answering the questionnaire. The data collection was analyzed by using the Statistical Package for Social Science (SPSS). Figures and tables were showed to present the result. The study affirmed that study habits among students potential to influence on academic performance. Students should be encouraged to plan flexibility on their own study habits in order to engage successfully with teaching methods and academic curriculum. A variety of study habits develop student creativity skills and experience them to become a long-lives learner in response to the Malaysia Education Blueprint 2015-2025.

Keywords: study habit, students, academic performance, background education, academic curriculum

I. INTRODUCTION

Study habit is a well planned and the pattern of study purposely to understand academic subjects and pass examination. Study also describes about a planned program of subject matter at institutions as an academic curriculum. Furthermore, the chief purposes of study are to acquire knowledge and habits, which will be useful in meeting new situations, interpreting ideas, making judgments creating new ideas, and to perfect skills (Crow and Crow, 2007). Sawar et al. (2009) in their research revealed that high achievers had better study orientation, study attitude than the low achievers. Therefore, successful achievement in any form of academic activity is based upon study, interpretation and application (Evans & Julius, 2015). They continued saying that in the educational parlance, performance manifests through academic achievement, which is the manifestation of a student's habit of study and they in turn are formed and strengthened through education. Performance can be defined as how good or bad something is worked as required by the system. Nowadays, the demands of the students to study in the universities are very high and competed. The teacher as a main person in university needs to give the best service in education to the students. In Physics, the students need to practice a lot of exercises from any tutorials, text books, past year exams questions, online questions or others reference books to pass with flying color. The students' performance (academic achievement) plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development (Norhidayah et.al, 2009). Academic achievement means how much knowledge the individual has acquired from the school (Bashir & Mattoo, 2012). The main concern of all educational efforts is to observe the learner achieves. The past background in education is importance as benchmarks to the students. The challenges of students who enroll their studies at university are very tough and difficult due to different of background education previously is a main problem statement of this study. Unfortunately, these potential students did not perform well in their study. Therefore, it will affect the academic students' performance in the university. As the result, the second problem statement of this study is the university is experiencing the high number of student failures and low quality of students' academic performance. The purposes of this study are to assess study habits in Physics among Diploma of Textile Technology students and determine the effects on their academic performance. The factors that influence students' academic performance needs to be identified and improved by university management, faculty and students in order to deliver superior academic

performance (Womble, 2003). There are many factors contribute to the students' academic performance have been studied. According to Amitava Raychaudhuri, et. al., (2010), found that numerous studies have been done to identify those factors which are affecting student's academic performance. The students' academic performance depends on a number of socio-economic factors like students' attendance in the class, family income, mother's and father's education, teacher-student ratio, presence of trained teacher in school, sex of the student, and distance of schools. Besides that, Paula and Camille (2004) stated that teachers motivated to pursue their careers by the influence of others significantly affected students' use of resource management strategies on a learning development course but played no role in students' use of motivation or cognitive and metacognitive learning strategies. Kaushar (2013) found that time management plays a vital role in students' academic performance. According to Sansgiry et al. (2004), one such technique of time management is forming study groups. According to Yilmaz (2014), a positive self-concept is one of the most vital elements for student success, and because self-concept is both a personal and a motivational variable, its overall contribution to the variance of academic achievement should be high; individuals therefore seem to be more confident and motivated to perform in a manner consistent with their self-concept contends that. In a study on second year university students, Sikhwari (2014) shows a significant correlation between achievement and the self-concept of students, as well as a significant correlation between achievement and motivation scores of the students. The Grade Point Average (GPA) system, as an indicator of the students' academic performance, is used in many countries around the world (James & Chilvers, 2001). In Malaysia, the students also were exposed by GPA system to indicate the students' achievement in academic. Students who have good self-concept of themselves is performing well to please themselves, their parents and to get admission into higher institutions of their choice (Raju, 2013). The student should perform well if they are properly guided by the parents and also by their teacher. If the student should know well about their abilities and their competences then he performs well (Irfan & Shabana, 2012).

II. METHODOLOGY

The study was conducted at Universiti Teknologi Mara, Campus of Negeri Sembilan in Malaysia. Survey method was distributed to first semester students of Diploma in Textile Technology at this campus, which contain the total numbers of respondents 27 students. They required Physics as one of the core subject as required in their diploma studies. They had answered 16 questions in the questionnaire form related to their study habits in Physics subjects and effects in academic performance. The sample size of study is small but supports with this statement. They opinioned that it could be argued that studies using small sizes are not meant to quantify general performances within a population but merely to document the existence of an effect and so the number of subjects is less important (Andrew & Algis, 2001). From that total number of students, 94.0 % respondents filled up completely the questionnaire and returned the copies and the rest of 6.0 % incompletely returned it. The survey contains 16 numbers of questionnaires that was used as data collection. The population of study was performed in the Table 1 below.

Table 1: Population of study

Category	Description	Total Number
Gender	Male	2
	Female	23
Main stream	Science	8
	Economics	4
	Art	9
	Others	4
Background Level	SPM	24
	STPM	1
	Matriculation	0
	Foundation	0
Total		**25**

III. RESULTS DAN DISCUSSION

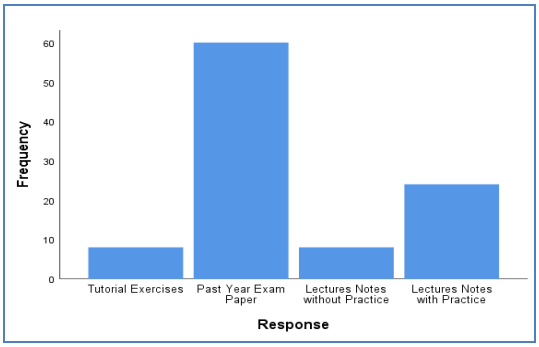

Figure 1 : Material of Studies Physics

As shown in Figure 1, 8.0 % of the respondents indicated they practiced Physics from tutorials given in the class, meanwhile 60.0 % indicated they practiced Physics from past year exam papers per semester. Out of 8.0 % respondents also indicated they practiced Physics from lectures notes only without redo it and the rest of 24.0 % respondents indicated they practiced Physics from lectures notes by repeating it after the class end. The findings showed most of students took short skills study by depending on past year exam only hence they were poor skills in reading. A central problem was that many of these students had not learned how to take effective notes (Mutsotso & Abenga, 2010).

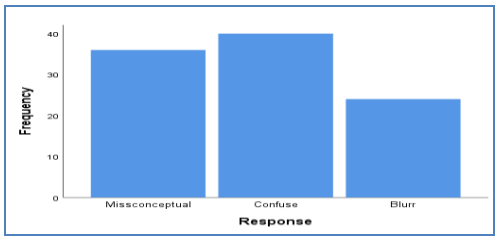

Figure 2 : Problems of Studies Physics

From Figure 2, out of the total respondents of 25, 36.0 % opinioned they faced a problem in missing conceptual to understand Physics, 40.0 % respondents opinioned they confused in using correct equation of certain theories in Physics and 24.0 % respondents opinioned they had blurred in Physics due to zero knowledge about Physics and experienced their past background not in Science. Early education in Science at primary and secondary school is important for students because they could learn easier and did not feel awkward when they were at universities. Therefore, all the reason of problems study among them will approach to their perception in this subject for the next figure.

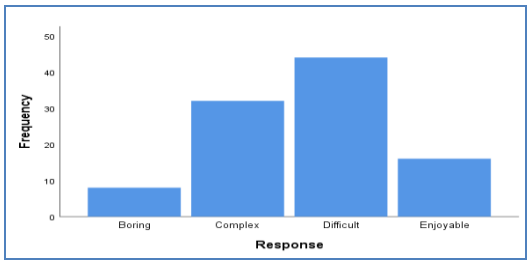

Figure 3: Perception of Physics

According to the perception of Physics among students, 8.0 % of respondents opinioned it was a boring subjects, 32.0 % of the respondents opinioned Physics was a complex subject to be learned, other 44.0 % opinioned it was difficult to be carried and 16.0 % opinioned it was an enjoyable subject to be taken part. The findings confirmed that less background in Science at previous school concludes this subject was difficult. This factor could play a strong relationship with academic performance among students. A good perception will produce a success achievement in academic.

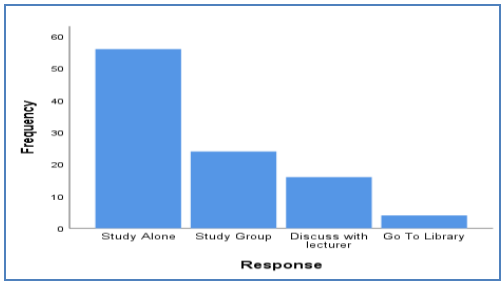

Figure 4: Study habits among students

Based on Figure 4, out of the total respondent of 25, 56.0% indicated they studied alone at room, 24.0 % were of the view they preferred study in group with their friends, 16.0 % were of the belief they studied by discussing with lecturer on free time while 4.0 % indicated they go to library as their study habits. The result implies that probably most students in the course were coming from day school, which they tend to study in privacy rather than other people.

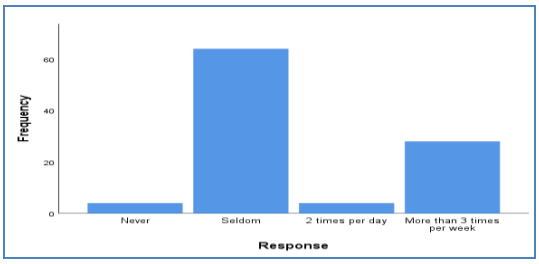

Figure 5: Time management of study

From Figure 5, 4.0 % of the respondents agreed that they never spend their time to practice exercises in Physics, while 64.0 % of the respondents agreed that they seldom studied unless when they had tests or quizzes or exam in the class only. About 4.0 % of the respondents agreed that they spent two times per day practicing exercise in Physics and 28.0 % of the respondents agreed they studied more than three times per week in Physics. The findings revealed that lack of time spending in studies encourages students studied past year exams and it showed the students were inactive learner in the class. A study by Nagaraju (2004) found that students usually do not devote sufficient time to their studies and seldom have proper study habits. Among the study variables, the issue of time management has been found highly significant and positively related to students' academic performance (Abdul Rahman et al., 2014).

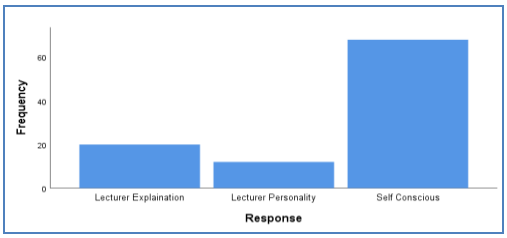

Figure 6: Motivation on the study

By referring the Figure 6, out of 25 students, 20.0 % of the respondents indicated a good explanation from lecturer motivates themselves to keep studied in Physics, 12.0 % of the respondents indicated a lecturer personality helped them to motivate in Physics and 68.0 % of the respondents indicated their self- conscious motivated them to achieve goals in life. Motivation is an important factor leads academic performance among students. When students believe they can success if they keep consistently study, they can give best performance in their academic. Motivation not only promotes learning, but also is an intermediate to learning; while students have motivation during the learning process, everything will be paved well, relationships will run smoothly, stress will decrease and creativity and learning will be more open (Wlodkowski, 2008).

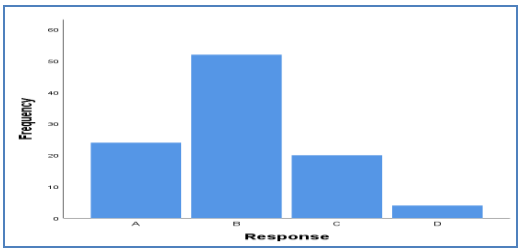

Figure 7: Target Achievement in Physics

Figure 7 presented a target achievement in Physics among students for their current academic semester. 24.0 % of the respondents aim A in Physics, 52.0 % of respondents aim B in Physics, 20.0 % of the respondents aim C in Physics while 4.0 % of the respondents only aims D. The findings revealed that majority of students were lack of self-confidents and courage to dreams high in this subject. The target was a bit lower between them hence it proved that the finding from Figure 5 corresponds to this target of students in Physics. The student should perform well if they are properly guided by the parents and also by their teacher. If the student should know well about their abilities and their competences then he performs well (Irfan & Shabana, 2012).

IV. CONCLUSION

The study believes that an academic performance is success when all elements involving students, lecturers, academic curriculum and university play their role in a good manner. The relationship between students' habits in studies and academic performance are linearly direct to each other. If students' habits can have a variety of skills study hence spontaneously it will contribute a good academic performance in the university. The study revealed that majority of respondents opinioned habit of study have effect on academic performance. Moreover, the study found that basic knowledge in Physics at early education is important to perform well in academic. According to the findings of the study, a few recommendations can be taken for future action to improve student habits. Students should be encouraged to plan flexibility on their own study habits in order to engage successfully with teaching methods and academic curriculum. A variety of study habits develop student creativity skills and experience them to become a long-lives learner in response to the Malaysia Education Blueprint 2015-2025. The study encourages student friendly user to massive open online course (MOOC), which this is open free course online available currently. From the MOOC application, students will easier access to gain extra study material and knowledge about the course. Hence, a multiple skill of study can be promoted among students in order to develop graduate employability in future. Furthermore, the study recommends administration should engage students more on assignments and presentations task as a major point of the assessment process of students. Currently, students were assessed 70 % on examination and 30 % on assignment. When the trend changes reversely, student will acquire more skills in searching information and improve communication skills in speaking. In addition, university plays a role in revising a requirement of academic qualification to offer the study course in order to enable university sustains good academic performance. Finally, the study suggests that lecturer role as a main factor in gaining motivation among students and cultivates the habits skills of study. A good lecturer can assist student by giving moral support to them and make available to help when they need. The connection can be either face to face or via social media network liked facebook, twitter or watsapp applications because students always make themselves close to social media all the time.

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