

SIMILAR CHANCES TO HAVE GOOD SELF-REGULATION, COLLABORATIVE LEARNING AND ACADEMIC-ACHIEVEMENT AMONG STUDENTS WITH VARIOUS ADMISSION SELECTION: A PRELIMINARY STUDY

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Abstrak. *Kualitas input dan proses sangat berpengaruh terhadap kualitas lulusan. Kualitas input ditentukan oleh kualitas seleksi masuk, sedangkan kualitas proses terutama ditentukan oleh kualitas kurikulum. Proses seleksi yang baik dan kurikulum berbasis kompetensi (KBK) yang diterapkan di seluruh institusi pendidikan kedokteran di Indonesia diharapkan mampu memicu mahasiswa untuk dapat belajar mandiri dan kolaborasi sehingga diharapkan mampu mencapai indeks prestasi yang baik. Penelitian ini bertujuan untuk mengetahui hubungan antara self regulasi dan belajar kolaborasi mahasiswa yang berlatar belakang berbagai seleksi masuk dengan pencapaian prestasi akademiknya. Penelitian dilakukan secara case-control selama 3 bulan (Januari sampai Maret 2009) melalui pengisian kuesioner oleh seluruh mahasiswa FK Unmul yang menjalani KBK dan yang memenuhi kriteria inklusi. Kuesioner yang memuat tentang cara seleksi masuk, pola regulasi diri dan kolaborasi serta nilai IPK diisi oleh responden dihadapan peneliti. Data dianalisis dengan regresi COX dengan menggunakan STATA versi 9. Seluruh 53 (100%) mahasiswa angkatan 2007 berpartisipasi dalam penelitian ini. Hasil analisis data memperlihatkan 43 (94,3%) mahasiswa memiliki IPK yang tinggi dan masing-masing sekitar 79,1% dan 83,7% diantaranya memiliki regulasi diri dan kolaborasi yang baik. Mahasiswa yang memiliki IPK tinggi serta regulasi dan kolaborasi yang baik ini ternyata tidak dipengaruhi oleh faktor cara seleksi masuk. Perbedaan seleksi masuk mahasiswa FK Unmul ternyata tidak mempengaruhi mahasiswa untuk memiliki tingkat regulasi diri dan belajar kolaborasi yang baik serta IPK yang tinggi. Kemungkinan kualitas seleksi masuk, proses pendidikan dan kualitas penilaian IPK mempengaruhinya. Hal ini memerlukan penelitian lebih lanjut.*

Kata kunci: *cara seleksi masuk, regulasi diri, kolaborasi, IPK*

INTRODUCTION

Self-regulation and collaborative learning are important in PBL process. Their ability to perform self-regulation will determine the success of their study in PBL. This high academic ability should be reflected in the Grade Point Average (GPA).⁽¹⁾

Self regulation is an adjustment strategy in learning that students use when they have difficulties in study. In problem-based learning (PBL) process, strong self-regulation is needed because students are expected to develop the learning objectives by their own efforts and need much time to search information sources. The input process, such as the quality of students

who enter the school, is one of the key factors influencing students to succeed in their study.⁽²⁾

However, Amin and Eng⁽²⁾ pointed out some learning problems in several medical schools in Asia, such as poor participation and difficulty for students to be involved in discussions, less confidence to seek information independently, and feel that searching for other information is time consuming. This may be related to some communities' perspective that end grade is more important than learning process. Students who get a high score in the test will be known as clever students. Unfortunately, assessments in almost higher schools in Indonesia can not distinguish students with higher cognitive skills.⁽¹⁾

It is therefore important to investigate the association between students' self regulation and collaborative learning with various admission selections on students' academic achievement.

METHODS

This research was a cross sectional design conducted from February to March 2009 by distributing questionnaire adopted from the Learning Style Inventory by Vermunt.⁽³⁾ The questionnaire was distributed directly by the researcher to all students who meet the inclusion criteria (experiencing CBC and having GPA) and collected directly just after students completed the whole questionnaire. The questionnaire was consisted of 2 groups of questions: (1) students' admission selection background (the local test, district area representatives selection and the national test), and GPA; (2) student perception about their self regulation and collaborative learning. After that, the collected data was separated based on the data

categorization. The GPA was grouped into high and low. The GPA was high if the GPA score was more than 2.75 (maximum GPA was 4.00), and low if the GPA score less than 2.75. These groups were made based on the minimum-standard for government employee recruitment. Student's admission selection backgrounds were categorized into 3 groups, the local test, district area representatives, and the national test. The students' self regulation and collaborative learning were categorized into low and good.

The data was tabulated and analyzed by using STATA 9.0 software. The admission selection variable considered to influence self regulation and collaborative learning for students who have high GPA were analyzed with COX regression. Variables with p value ≤ 0.05 were considered to have strong relationships in influencing student achievement score (GPA).⁽⁴⁾

RESULTS

Respondents in this study were all students of FMUM year 2007 who have experiences in CBC and had GPA. Total numbers of students who participated in this study were 53 who had been registered as a student since the first year without any exclusion (response rate was 100%), while the students of year 2008 were excluded because they had not yet been receiving GPA.

In Table 1, it can be seen that all students who enter FMUM through national selection had high GPA, whereas those who enter through local test and district area representatives selection respectively 30 (93.8%) and 13 (92.9%) have a high GPA. About 40 (97.6%) of students with high self-regulation also had high GPA, while approximately 10

(83.3%) of students with low self-regulation also had high GPA. On the other hand, those 43 (94.3%) respondents who

had good collaborative learning had high GPA, while all students who had low collaborative learning also had high GPA.

Table 1. Distribution of Grade Point Average on Students' Admission Selection and Self Regulation

	GPA Score			
	Low		High	
	n=3	%	n=50	%
Admission Selection background				
District representative selection	1	7.1	13	92.9
Local test	2	6.2	30	93.8
National test	0	0.0	7	100.0
Self Regulation status				
Low	2	16.7	10	83.3
Good	1	2.4	40	97.6
Collaborative learning status				
Low	0	0.0	7	100.0
Good	3	5.7	43	94.3

Table 2 Distribution of Self Regulation on Admission Selection Background of Students Who had High Grade Point Average

Admission selection background	Self regulation				Crude RR	95% Confidence Interval	P
	Low (n=10)		Good (n=40)				
	n	%	n	%			
District representative selection	2	15.4	11	84.6	1.00	Reference	
Local test	6	20.0	24	80.0	0.94	0.46 – 0.93	0.878
National test	2	28.6	5	71.4	0.84	0.29 – 2.43	0.753

Table 3. Distribution of Collaborative Learning on Admission Selection Background of Students who had High Grade Point Average

Admission selection background	Collaborative learning				Crude RR	95% Confidence Interval	P
	Low (n=7)		Good (n=43)				
	n	%	n	%			
District representative selection	1	7.7	12	92.3	1.00	Reference	
Lokal test	5	16.7	25	83.3	0.73	0.13 – 4.19	0.722
National test	1	14.3	6	85.7	0.45	0.05 – 4.21	0.488

Table 2 shows that from all students with high GPA, respondents who had low and good self regulation were similarly distributed with respect to admission selection background.

Similar to the data in Table 2, Table 3 also reveals that from all students with high GPA, respondents who had low and good collaborative learning were similarly

distributed with respect to admission selection background.

DISCUSSION

This study has some limitations, such as the number of samples and validation of the questionnaires. When this study was conducted, CBC in FMUM had been running for 2 years. That is why the subjects who met the inclusion criteria are the students of year 2007. Limited number of the samples would affect data interpretation. The other limitation was the validation of questionnaires. Before being distributed, the questionnaire was translated into Indonesia language without validation from English expertise. The questionnaire was translated by the researcher and several students of FMUM. However, the researcher decreased this limitation by supervising the students when they answered the questions. Students who did not understand the questions were given explanation.

This study is a basic research that attempts to know students' perception on their self-regulation and collaborative learning within various students' admission-selection background. And then, these data were connected with their GPA which is a parameter of their success in learning processes.

Quality of input and process are important in determining quality of graduates. Quality of admission selection and curriculum mainly influence the input and process. Good quality of student's selection and curriculum based competences (CBC) implemented in all medical schools in Indonesia are expected to lead the students' ability to learn independently and collaboratively and graduate with good academic achievements.

Inventory of students' self-regulation and collaborative learning are very important since CBC was first implemented in FMUM in 2007. CBC with PBL as one of the learning strategies emphasises on the independent learning and collaboration. Students' ability to perform self-regulation and collaboration perhaps will determine their success in doing their study.

The data shows that most students already have a good self regulation and collaboration. Self regulation and collaborative learning are needed in the process of higher education. Student as an adult learner is expected to go through a self-learning process and to be able to work together to solve problems they found in learning processes.⁽⁵⁾ Doing self regulation and good collaboration will result in effective learning.⁽⁶⁾

The learning strategy of students with good self-evaluation was not only to master the topics given by their teacher but also to develop these topics until they realized they have mastered them. They will set the pattern of their learning internally, either in selecting, relating, organizing, and criticizing of a lecture topic. Students will always try to communicate the problems they find in their learning process and try to find the solutions to those problems by themselves. These students will always attempt to identify any problems in topics given to them, not only on the literature provided by the lecturers but also other literatures related to that topic so that students are more likely to gain a better understanding to the topics. If the student will get a topic that is difficult to understand, they always try to ask why they do not understand the topic and try to find a solution by increasing their prior knowledge or

reviewing the topics they have learnt previously.⁽⁷⁾

The student ability to perform self-regulation and collaboration needs process. Many factors influence that process, including student characteristics, previous students' education, culture and student's family and community practice. Indeed, it is difficult for Indonesian students in particular to have a habit to regulate their study by themselves and learn collaboratively, because Indonesian students are used to learn passively, the big influence of parents and teachers in their decision making (= dominant), and the inconfidence of students to express their opinions and knowledge, as well as the reluctance of students to look for other course literatures.^(1, 2) Ajisukmo & Vermunt⁽¹⁾ explained further about the pattern of Indonesian students' learning habits, teacher oriented. This happens because our culture sees teacher as one who knows everything and student as one who do not know anything. This situation creates a condition in which the students should hear what the teacher teach without an argumentation and critical opinions. It is a taboo for students to counter what the teacher has given. Students assume that arguing and criticizing their teachers' opinion are not polite. They also are afraid of teacher's punishment when they give an argument or even a rejection toward the teacher opinion. In other words, there is a tendency for students to have lack of confidence to argue their teacher's opinion.

From the data obtained, almost all of students have good self regulation and collaboration without differences on the admission selection background. There are several possible factors causing this. The first factor is that the subjects have been experiencing the CBC for four semesters when the questionnaires were distributed.

Students have been exposed to the CBC for 1.5 years, which means they may have been familiar with the process of self directed learning and group tutorials. Through the PBL learning method, students are encouraged to express their opinions in a small group discussion and to respond to critical opinions from their fellow students. They also should try to formulate their own learning objectives by the end of the tutorial. Furthermore, they are also given a chance to search literatures and to integrate them in order to answer the questions they do not understand and the learning objectives that they stated previously.⁸ The second factor influencing students' good self regulation and collaboration is the possibility of students to experience learning process during their study in their high school.⁽⁹⁾

Indeed, self regulation and collaborative learning capabilities should guide the students to study effectively because these capabilities bring students to learn deeply, widely, and critically against any existing problems of learning and try to find solutions to those problems. High academic ability should be reflected in their GPA. In addition, there should be differences in academic achievement between students with good self-regulation and collaboration and those without them. However, in this study, the students with low self regulation and collaborative learning had the same chance to get a high GPA with those who had good self regulation and collaborative learning. The assessments that perhaps can distinguish both of groups did not work effectively.

The assessment and educational system are assumed as the main factors in influencing these problems. The educational system in Indonesia still tends to be teacher centered and instructional practiced. Although the PBL method have

been running, the learning processes still focus on transforming knowledge from teachers and other fellow students. The teachers still expect students to master the topics by receiving, memorizing, or retaining the information in order to reproduce it. It causes the students just learn the topic without digesting, criticizing, analyzing, or evaluating. ^(1, 2) Teachers are still the most powerful and the responsible factor of the learning process. They still focus on how much information can be remembered and what scores will be achieved at the end by students. In the tests, students are expected to reproduce the information and knowledge transmitted in the classroom. It influences students to study merely on teachers' hand outs without exploring the subjects to other references or sources. ⁽¹⁾ Students still are not expected to answer questions in the tests with high cognitive abilities, such as relating, structuring, and critical judgments. Most likely the questions in the tests are "recall" that can only be answered by students who have learned by just memorizing teacher's handout. ⁽¹⁾

In Conclusion, Students with various admission selections have similar chances to have good self-regulation, collaborative learning and high academic achievement. Quality of input, learning process, quality of assessment could be likely influence this condition. It needs further study

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