

Student Perceptions of the Undergraduate Learning Process

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Introduction

The learning process should be able to determine and achieve learning goals through learning strategies, utilized learning resources, support for students, and identifying obstacles during the learning process. When students can successfully reach their goals, it will lead to satisfaction with the learning process. At the end of each learning process, evaluation is necessary to assess student satisfaction and measure the success level of the learning system (Julianto, 2020).

Evaluation of learning is a process of collecting, analyzing, and interpreting information to determine the level of achievement of learning objectives by students. Without evaluation, a program or institution will not know its level of success, underlying issues, or the factors that support it. Thus, evaluation serves as information and feedback related to the objectives of the activities carried out by an institution. Evaluation of medical students' learning processes can be done using the Student Evaluation of Learning Experience and Examination Questionnaire (SELEQ). SELEQ is a questionnaire used to evaluate students' perception of the learning process and is utilized to measure the quality of learning and student satisfaction during the learning process (Kusmiati *et al.*, 2023).

The evaluation conducted by the Faculty of Medicine at Jazan University, Kingdom of Saudi Arabia (KSA) in 2017 revealed that in the aspect of support and services, there was a

good level of satisfaction. However, in the aspect of learning resources and facilities, there was a decline, which correlated with the increase in the educational level (Dighriri *et al.*, 2017).

Learning satisfaction is related to the quality of the learning process. When the learning process is good, with professional instructors, engaging teaching abilities, effective communication, a comfortable learning environment, supportive classroom settings, and supportive learning services, it will demonstrate the quality of the learning process and the satisfaction of the students (Firdaus & Baisa, 2023).

Methodology

This research employs a quantitative observational analytical approach using descriptive data analysis. The study population consists of students from the cohorts of 2020, 2021, and 2022. The inclusion criteria for this research were students registered in the academic department of the Faculty of Medicine, Muhammadiyah University of Semarang, cohorts 2020, 2021, and 2022. Additionally, participants were also required to express their willingness to become respondents. The exclusion criteria included students from the 2019 cohort who dropped out, students on academic leave, and students who have already participated as respondents in the validity and reliability testing. The sample size that met the specified inclusion and exclusion criteria was 405 students.

The instrument used to evaluate students' perceptions was adapted from the called the Student Evaluation of Learning Experience and

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Examination Questionnaire (SELEQ) (Kusmiati, n.d.). This questionnaire consists of 33 statement items divided into 7 aspects, namely learning material and body knowledge, learning experiences, faculty competence and ability, exam effectiveness, suitability of learning material with the test, difficulty level of exam, and learning system blocks. The assessment for each answer in this questionnaire is divided into "TS= Not Agree", "KS= Less Agree", "RR= Undecided", "S=Agree", and "SS=Strongly Agree".

This questionnaire has been adapted according to the study location and context, and validity and reliability tests have been conducted. The validity test results, analyzed using Pearson correlation, showed that the calculated r-value was greater than the critical r-value or the significance value was less than 0.05, indicating that the questionnaire was valid. Meanwhile, the reliability test results, using Cronbach's alpha formula for this instrument, yielded a value of 0.925, indicating that the instrument is suitable for use. The categorization of this questionnaire was done by summing up the scores from each aspect. The total score was then divided into 5 categories based on the minimum and maximum values, and categorized as TS (Not

Agree), KS (Less Agree), RR (Undecided), S (Agree), and SS (Strongly Agree).

Results

Respondents consisted of 132 students from the 2020 cohort (32.6%), 134 from the 2021 cohort (33.1%), and 139 from the 2022 cohort (34.3%). The majority were female (n=276, 68.1%). Based on the age of the respondents, 123 students were 21 years old (30.4%) (Table 1).

Students' perception of the learning process regarding learning material and body of knowledge (Table 2) shows that the majority (213 students, 52.6%) fall into the agree category. In terms of learning experiences, the majority fall into the agree category, with 187 students (46.2%). Regarding the faculty's skills and competencies, the majority fall into the agree category, with 218 students (53.8%). For exam effectiveness, the majority strongly agree, with 180 students (44.4%). Regarding the suitability of learning material with the test, the majority agree, with 182 students (44.9%). In terms of the difficulty level of exams, the majority agree, with 195 students (48.1%), and for the aspect of the learning system block, the majority agree, with 213 students (52.6%).

Table 1: Characteristics of Respondents (N=405)

No	Characteristics of Respondents	Category	Frequency (N)	Percent (%)
1.	Gender	Male	129	31.9
		Female	276	68.1
2.	Age	18	22	5.4
		19	105	25.9
		20	105	25.9
		21	123	30.4
		22	44	10.9
		23	6	1.5
3.	Cohort	2020	132	32.6
		2021	134	33.1
		2022	139	34.3

Table 2: Students' Perception of the Learning Process (N=405)

No	Aspect	TS		KS		RR		S		SS	
		N	%	N	%	N	%	N	%	N	%
1.	Learning Material & Body of Knowledge	3	0.7	2	0.5	56	13.8	213	52.6	131	32.3
2.	Learning Experiences	2	0.5	2	0.5	52	12.8	187	46.2	162	40
3.	Faculty's Skills and Competencies	2	0.5	1	0.2	57	14.1	218	53.8	127	31.4
4.	Exam Effectiveness	3	0.7	4	1	41	10.1	177	43.7	180	44.4
5.	Suitability of Learning Material with The Test	2	0.5	5	1.2	78	19.3	182	44.9	138	34.1
6.	Difficulty Level of Exam	5	1.2	17	4.2	84	20.7	195	48.1	104	25.7
7.	Learning System Block	3	0.7	2	0.5	56	13.8	213	52.6	131	32.3

Discussion

Learning Material & Body of Knowledge

Teaching materials refer to carefully and systematically developed resources or content in accordance with the learning principles employed by instructors and students during the learning process. The sequence of teaching plays a crucial role in determining the order of learning or instruction (Qodriyah, 2019).

Engaging learning media has a significant positive impact on students' academic achievement. Unappealing presentation of lecture materials can be linked to instructor tendency to rely solely on conventional methods, lack of innovative approaches utilizing technology to enhance the attractiveness and interactivity of content, and self-satisfaction in teaching practices, which may hinder personal growth and improvement. The age of instructors also influences their ability to create more engaging materials due to a lack of knowledge and skills in digitalization. The older the instructors, the less their digitalization skills in material creation. Additionally, students' personal factors can also influence exam scores, such as being unprepared to grasp and master extensive materials, facing difficulty in understanding content, not having found effective self-learning methods, and struggling with self-management and time management (Sagita *et al.*, 2023).

Learning Experiences

In Indonesia, medical undergraduate education consists of two consecutive stages: the preclinical stage and the clinical stage. In the preclinical stage, students will study various medical sciences. In the clinical stage, students must demonstrate the ability to effectively apply the knowledge acquired in the preclinical stage to real patients (Tjahjadinata *et al.*, 2020).

The preclinical phase is considered the most effective preparation for students in this study. In the preclinical stage, students receive training in patient interaction, albeit with standardized patients. This aligns with the Problem-Based Learning philosophy, specifically the concept of giving students an early opportunity to engage in clinical experiences. However, students can only interact with actual patients during the clinical phase. As a result, all theoretical knowledge acquired during the preclinical phase will be directly applied in practice with patients during the clinical phase (Ginting & Yulfi, 2021).

Faculty's Skills and Competencies

In addition to course materials, lecturers play a crucial role in shaping students' positive perspectives towards the learning process. Lecturers who possess a profound understanding of the course material and skilfully communicate it effectively, using

appropriate teaching techniques and media, will be able to manage the class effectively and foster students' learning motivation. In addition to considering the type of learning material, it is also important to take into account the principles of relevance, consistency, and adequacy in determining the scope of the material. This includes assessing the breadth and depth of the content. Lecturers often face challenges related to providing instructional materials that are either too lengthy or insufficient, overly detailed or superficial, presented in the wrong sequence, or not aligned with the desired competencies (Qodriyah, 2019).

Exam Effectiveness

Analytical thinking skills of students, especially in medical education, are crucial. Analytical thinking is integrated into the Clinical Skill Lab (CSL) learning process to assist students understand how to perform procedures, make diagnoses, and solve problems. These skills are continuously honed throughout medical education. In the preclinical phase, students are taught these in skill labs and their proficiency is assessed through clinical skills exams or Objective Structured Clinical Examinations (OSCE). OSCE is a method of evaluating various components of competency, including history taking, physical examination, procedural skills, communication skills, interpretation of results, clinical laboratory skills, management, and therapy (Adista et al., 2023).

Suitability of Learning Material with the Test

Before delving into the content, lecturers communicate the learning objectives. Each lecture session serves a specific function, and it is crucial for students to understand the content they will acquire. In each session, lecturers communicate the intended objectives of the lecture material. Presenting learning objectives at the beginning of the lecture can assist students understand how to achieve their learning goals, identify necessary learning materials applicable to the strategies and methodologies used, and monitor their learning progress (Dewi & Asikin, 2019). Indeed, student learning outcomes serve as a benchmark for

the effectiveness or ineffectiveness of the learning process. Therefore, higher student learning outcomes correlate directly with the improvement of achieving learning objectives, and vice versa (Turdjai, 2016).

Difficulty Level of the Exam

The level of difficulty of a question is determined by the ratio of participants who answered the question correctly to the total number of participants in the test. The difficulty index of a question increases when more participants answer it correctly, indicating that the question is relatively easier. The difficulty level of questions from students' perspectives can be attributed to academic challenges, which manifest as disturbances in one or more physical and psychological factors, resulting in imperfect abilities in listening, thinking, writing, and comprehension. This is also influenced by emotional factors, challenges faced, economic conditions, cultural factors, or unfavourable environments. Medical students experiencing academic difficulties may have issues related to inadequate analytical skills, lack of basic knowledge, misidentification of questions in exams, and insufficient preparation. Additionally, the experience of online learning can also impact students' academic difficulties. In this study, there are two cohorts that experience online learning, which can influence the learning process, leading to students struggling to understand the material and affecting their ability to answer questions, resulting in the perception that the questions are difficult (Fairus et al., 2023).

Learning System Block

All academic activities are organized in an integrated manner within blocks. A block is the smallest unit of each competency-based learning. Each block encompasses the competencies that students are required to achieve. Medical science is divided into two major groups: basic or pre-clinical medicine and clinical medicine. Both branches of medical science are interrelated. Basic medical science is still necessary to answer exam questions, as mentioned in previous research, it is noted that basic medical science is still used to address

exam questions in the system block. Teaching basic medical science for 4 semesters has benefits in clinical blocks. Students can still remember and understand basic medical science and apply it in clinical blocks (Yudaristy *et al.*, 2014).

Conclusion and Recommendations

Our research findings indicate that students had positive perceptions in various aspects. Specifically, in terms of learning materials and knowledge, 213 students (52.6%) expressed positive perceptions. Regarding the learning experience, 187 students (46.2%) had positive perceptions. For the competence and skills of lecturers, 218 students (53.8%) perceived them positively. The appropriateness of teaching materials with the exam content was acknowledged by 182 students (44.9%). The difficulty level of the exams was perceived as appropriate by 195 students (48.1%), and the learning system block received positive perceptions from 213 students (52.6%). Notably, 180 students (44.4%) had a highly positive perception of the effectiveness of the exams.

Hence, it can be concluded that students have a positive perception of the learning process at the undergraduate level in the Faculty of Medicine, Universitas Muhammadiyah Semarang. We recommend Future researchers conduct similar studies that are linked to the academic achievement of respondents and to select respondents with similar learning characteristics.

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