

## **KUALITAS PELAYANAN DAN PENGEMBANGAN LABORATORIUM JURUSAN**

### **QUALITY OF SERVICE AND DEVELOPMENT OF THE DEPARTMENT'S LABORATORY**

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### **ABSTRAK**

Laboratorium Jurusan pada perguruan tinggi berperan sebagai penunjang akademik yang membantu mahasiswa dalam proses belajar dalam meningkatkan kompetensinya. Tujuan penelitian adalah untuk mengetahui tingkat kepuasan pengguna laboratorium dan untuk mengetahui kebutuhan pengembangan laboratorium Jurusan Pendidikan Jasmani Kesehatan dan Rekreasi (Penjaskesrek) Fakultas Keguruan dan Ilmu Pendidikan (FKIP) Universitas Islam Riau (UIR). Penelitian ini menggunakan pendekatan kuantitatif dengan jenis metode survei. Subyek penelitian ini adalah seluruh pengguna laboratorium dengan teknik pengambilan sampel *total sampling*. Sampel penelitian ini adalah 85 siswa. Instrumen pengumpulan data menggunakan kuesioner dan teknik analisis data yang digunakan dalam penelitian ini adalah deskriptif kuantitatif. Hasil penelitian tingkat kepuasan pengguna terhadap laboratorium jurusan Penjaskesrek tahun 2023 termasuk dalam kategori baik dengan perolehan rata-rata 3,41 dan hasil analisis kebutuhan menunjukkan 68% dari 85 responden yang menilai bahwa sumber daya manusia (SDM), pelayanan dan ketersediaan sarana dan prasarana serta program lain di laboratorium sebagai komponen kebutuhan pengembangan laboratorium jurusan Penjaskesrek sudah baik atau cukup.

**Kata Kunci:** pelayanan; laboratorium; jurusan

### **ABSTRACT**

*Departmental laboratories at tertiary institutions act as academic supports that assist students in the learning process to improve their competence. The research objectives were to determine the level of satisfaction of laboratory users and to determine the need for laboratory development for the Department of Physical Education, Health and Recreation (Penjaskesrek), Teaching and Education Faculty (FKIP), Universitas Islam Riau (UIR). This study uses a quantitative approach to the type of survey method. The subjects of this study were all laboratory users using the total sampling technique. The sample of this research is 85 students. The data collection instrument used a questionnaire and the data analysis technique used in this study was quantitative descriptive. The results of the research on the level of user satisfaction with the Penjaskesrek majors laboratory in 2023 are included in the good category with an average acquisition of 3.41 and the results of the needs analysis show 68% of 85*

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*respondents who considered that human resources (HR), services and availability of facilities and infrastructure as well as other programs in the laboratory as a component of the needs for the development of the Penjaskesrek majors laboratory are good or sufficient.*

**Keywords:** *service; laboratory; department*

## **Introduction**

The existence of educational laboratories in tertiary institutions is an important component as a supporting unit for the academic process. Apart from providing academic facilities and infrastructure, the lab is also a place of learning and can also be a source of learning for students in improving their competence. The role of laboratories in tertiary institutions states that Educational Laboratories, hereinafter referred to as laboratories, are academic support units in educational institutions, in the form of closed or open rooms, permanent or mobile in nature, managed systematically for testing, calibration and/or production activities on a limited scale, using equipment and materials based on certain scientific methods, in the context of implementing education, research, and community service (Peraturam Menteri PAN dan RB, 2010).

The role and function of a laboratory is as a source of student learning, educational methods and as a means of supporting research. The more complete functions of the laboratory for students are as follows, namely providing complete learning between theory and practice, as scientific work skills, fostering the courage to seek the essence of scientific truth, skills in using tools and media to seek and find the truth, fostering curiosity as a scientific attitude capital, fostering and fostering self-confidence as a result of skills from discoveries obtained from laboratory work activities (Emda, 2017). The existence of a laboratory is one of the supporting factors for students in the learning process, the results of research from Hermawan (2022) state that the incomplete facilities on campus cause the lecture process to be less effective so that the knowledge gained is less than optimal.

With its very strategic function, it is hoped that educational laboratories in higher education today are not only to meet the demand for practical lectures, or as complementary facilities for accreditation. But the function of its existence as a center for the development of science. The laboratory is the priority. Therefore laboratory management needs to be planned along with academic planning, the role of the laboratory is very large in determining the quality of education because it is the laboratory that produces scientific work that can be proud of, which cannot be produced by other institutions. If an agency already has an educational laboratory, the existence of the lab must be put to good use.

The Penjaskesrek Study Program FKIP Islamic University of Riau has a Sport Science Laboratory as a facility to support the activities of lecturers and students in the process of conducting education, research and community service. The existence of this department's laboratory is already running with systematic and structured management. The management of this lab is chaired by the Penjaskesrek lecturer who is appointed directly by the Dean of FKIP UIR and has laboratory staff or institutions who help serve the needs of lecturers and students.

As for laboratory laboratory staff, the Department of Physical Education and Recreation already has certificates related to laboratory management, this aims to create professional management and excellent service in lab management. The management of the facilities and infrastructure of the Sport Science lab is carried out by arranging tools in the practice room and storage room. Equipment is grouped based on its type, so that it is easy to check and retrieve the tool requirements to be used. three principles of storing laboratory tools and materials, namely, safe, easy to find and easy to retrieve (Tawil & Liliasari, 2016).

The problems faced by the laboratory for the Department of Physical Education, Health and Recreation (Penjaskesrek), Teaching and Education Faculty (FKIP), Universitas Islam Riau (UIR) apart from the availability of the required equipment are also related to the management system and service system. Measuring user satisfaction is a way to find out the effectiveness of existing governance systems and service systems, besides that analysis needs for lab development are also needed through the results of the responses from the lab users themselves. Needs are conditions or things that must be met, in contrast to desires whose conditions do not always have to be met. Needs are defined as gaps between what is expected and actual conditions, while desires are future expectations or ideals related to solving a problem (Morrison et al., 2001). Need is the gap between the current state and what it should be. It can be interpreted that the need for learning is a very important condition that must be fulfilled in learning (Suparman, 2004). the need for an education lab in an institution certainly has a need so that the function of the lab can still function optimally.

User satisfaction is the level of user feelings as a result of comparing user expectations with the actual results obtained by users related to a product or service (Kotler, 2002). The results of research from (Nikolic et al., 2015) reveal that student satisfaction is influenced by lecturers and the quality of equipment. Another study was conducted by Lukum & Paramata (2015) student satisfaction is also determined by the friendliness and dexterity of the laboratory staff at work. To determine the level of user satisfaction with services is influenced by service facilities and infrastructure, service response, service worker expertise and completeness of the services provided (Santoso, 2011), plus services that can satisfy customers or users more are polite behavior, how to convey information to customers, exact delivery times and friendliness (Moenir, 1998). To support user satisfaction factors, awareness and the active role of officials and staff who work directly in the laboratory service department are needed. Regulatory factors become a reference for service reference, organizational factors which are systems and mechanisms of service mechanisms, professional attitude factors in carrying out tasks and supporting factors from facilities in carrying out tasks.

Apart from that, it is also necessary to do an analysis of the needs for the development of more Penjaskesrek majors. This is done to analyze gaps, identify and define solutions. states that this needs analysis activity is a tool for identifying problems in order to determine appropriate actions (Morrison et al., 2001). The complete analysis activities of a person identify opportunities, find and describe problems, state questions, build hypotheses, reduce possibilities,

describe relationships between existing parts and elements, separate facts and fiction and provide judgments and recommendations (Allison, 1992).

In order to continue to be able to provide good service and the need for the development of the Penjaskesrek majoring laboratory in the future, it is necessary to carry out research related to laboratory users and also to analyze the needs for the development of these laboratories. The results of the study stated that there was very little information and research conducted on assessing the quality of laboratory services in university environments (Cerna & Tereda, 2016). This can later provide important information for laboratory management in improving existing systems and also as a need for the development of the Physical Education and Health Research Laboratory in the future.

## Method

This study used a quantitative approach with survey methods, the population of this study consisted of all people who had used the Sport Science Laboratory of the Penjaskesrek Study Program both internally and externally, totaling 85 people, sampling was carried out by total sampling technique. The instrument used in this study used open and closed questionnaires. This questionnaire will reveal the level of satisfaction of major lab users which includes tangible aspects (5 questions), reliability (4 questions), responsiveness (5 questions), assurance (5 questions), empathy (4 questions). And reveal the needs analysis for the development of the KTP Department Lab. This questionnaire has been tested for validation and reliability using Cronbach's Alpha with a significance of 5%. The final results of validity and reliability testing showed that all 23 items of the questionnaire were declared valid for use. The scale used is the Likert scale which is a psychometric scale commonly used in questionnaires and is the most widely used scale in survey research. a Likert scale to determine the level of user satisfaction in the Physical Education Department of Physical Education and Research consists of options (optional) and the score is.

Criteria	Score
Very good	5
Good	4
Sufficient	3
Less	2
very less	1

Where then determine the use of the average level of satisfaction according to the Likert method in (Nazir, 2014) using the formula:

$$\text{Satisfaction average} = \frac{\text{total score answers}}{\text{total questionnaire}}$$

As for determining the average satisfaction using the Likert scale guidelines as follows:

Table 2. Average user satisfaction

Score Intervals	Criteria
$\bar{x} > 4,2$	Very good
$3,4 < \bar{x} \leq 4,2$	Good
$2,6 < \bar{x} \leq 3,4$	Sufficient
$1,8 < \bar{x} \leq 2,6$	Less
$\bar{x} \leq 1,8$	Very less

## Results

The service user satisfaction survey was carried out using a qualitative research method approach, using a Likert scale measurement consisting of tangible, responsiveness, assurance, empathy, reliability aspects. The questionnaire consisted of 23 questions which were distributed to students who had used the services available at the Physical Education Department laboratory with a total sample of 85 people. Answers from respondents are presented in the following table:

Table 3. Quality Of Penjaskesrek Laboratory Services For Each Indicator

No	Indicator	Average	Criteria
1	Tangibles	3,27	sufficient
2	Responsiveness	3,40	Good
3	Emphaty	3,29	sufficient
4	Assurance	3,51	Good
5	Realibility	3,59	Good
	Average	3,41	Good

After obtaining the average of each user satisfaction indicator, it is then matched with the satisfaction interval category in table 2. So that overall Based on the results of table 3 above, the level of papality of users of the Penjaskesrek Laboratroy Study Program FKIP UIR obtains the average value of the entire an indicator of 3.41 is included in the good category.

For the results of the data needed for laboratory development obtained based on research data and input provided by students from the work. Factors that need to be improved in developing the quality of the laboratory for the Penjaskesrek FKIP UIR department are as follows, in terms of facilities and infrastructure in terms of Completeness of learning and research equipment owned by the laboratory as respondents answered that it is still lacking, there is a need for additional test and measurement tools for research and completeness such as fitness equipment that still needs to be added. Because as many as 48% of respondents stated the need to complete the equipment. With regard to additional supporting equipment such as waiting rooms, fire extinguishers, toilets, first aid and air conditioning as many as 71% of respondents gave adequate responses. In terms of the availability of practice space on the LB, as many as 81% of respondents gave adequate responses. Regarding the ease of access to obtain information about

the availability of tools on the LB, as many as 43% of respondents answered that it was quite difficult to obtain the information. This certainly needs attention from the leb manager.

## **Discussion**

The results of the study showed that the satisfaction level of the users of the UIR Physical Education, Health and Recreation Lab, was in the good category with an average score of 3.41. Obtain from this value based on the average value of the indicators of the aspects of tangible, responsiveness, assurance, empathy, reliability. The elaboration and discussion of each indicator needs to be done to further explain the results of this study.

The tangible aspect as a whole obtains an average value of 3.27 which is in the sufficient category, this component contains several questions, including, 1) regarding the ease of reaching more for users to obtain a score of 3.52 in the good category. Which this illustrates that it is easier to reach by its users. 2) The next component relates to the service system implemented by leb obtaining a score of 3.3 which is included in the sufficient criteria, this certainly needs to be improved. Because the results of similar studies state that student perceptions of academic administration services have a significant and positive effect on student satisfaction, meaning that the more academic administration services received, the higher student satisfaction will be (Hanifa et al., 2019). 3) Completeness of learning and research equipment owned by the lab obtained a score of 2.9 included in the sufficient criteria. This is of course a concern for LB managers and stakeholders to add and complete LB tools as a learning support process in study programs. Because all the facilities and infrastructure considered by students are still not sufficient enough to be followed up further, so that student expectations can be comparable to the services provided (Prihatin & Dewi, 2019). 4) the completeness of supporting equipment (electricity, toilets, fire extinguishers and air conditioning) gets a score of 3.5 or a good category. this needs to be maintained, such as toilets that are always clean, air conditioning that works well. Electricity and extinguishers are always available. 5) The complaint system that is in the leb gets a score of 2.9 or the sufficient category, this illustrates that the existing complaint system still needs to be maximized, so that in the future students can easily submit complaints related to more.

The second aspect, namely Reliability, obtained a score of 3.59 or a good category. This component contains several questions, 1) about the quality of the equipment, when it is used, it gets a score of 3.6 or a good category. 2) clarity of information to users gets a score of 3.5 or a good category. 3) regarding the fee rates in the LB score of 3.5 or the good category. 4) regarding the suitability of costs with the services provided obtaining a score of 3.6 or in the good category. of all the components on the Reliability aspect, the Penjaskesrek Department has received good satisfaction from its users. Because customer satisfaction is the main thing in sales and satisfied customers will be loyal longer, less sensitive to price and give good comments about the company (Rohaeni & Marwa, 2018). Customer satisfaction is the meaning of comparison between what consumers expect and what consumers feel when using a product or service (Gultom et al., 2020) and several studies reveal that overall the quality of service

received by customers, especially reliability, is in accordance with what is expected to have an impact significantly and increase customer satisfaction (Kim & Kim, 2016;Siddiqi, 2011). Other research also states that service quality can also increase an athlete's motivation and performance (Diana et al., 2022).

The third aspect, namely Responsiveness as a whole, obtained a score of 3.40 or a good category. the components in this spec contain related questions, 1) the ability of the LB officer to obtain a score of 3.1 or the sufficient category. 2) The attitude of the officers towards the user gets a score of 3.4 or a good category, 3) the attitude of the officer in accepting suggestions and complaints gets a score of 3.4. From the results obtained in this aspect, LB officers already have a responsive attitude towards users properly, this needs to be maintained and improved. One indicator of service quality is also supported by professional employees who provide good service to consumers. One important factor for obtaining customer satisfaction is through a good relationship between employees and customers (Levesque and McDougall in Siddiqi, 2011).

The fourth aspect, namely Assurance as a whole, gets a score of 3.51 or a good category. The components of the questions in this aspect include, 1) guarantees about the timeliness of the services provided get a score of 3.7 or a good category, 2) security guarantees for user documents get a score of 3.3 or a good category, 3) guarantees that they are always consistent in providing equipment the good gets a score of 3.5 or good category. the results obtained from this aspect state that leb has succeeded in providing good guarantees to leb users. Setiawan & Mujiati (2016) states that service quality can increase customer satisfaction. Good service quality is characterized by good state of facilities.

The last aspect is Emphaty as a whole, obtaining a score of 3.29 or the sufficient category. The components of the questions in this aspect include, 1) the level of access or ease of obtaining information related to the procedure for using/borrowing more equipment gets a score of 3.5 or a good category. 2) the level of access or ease of obtaining information on the availability of existing equipment on LB gets a score of 2.86 or the sufficient category, 3) Personal attention to users LB gets a score of 3.4 or good, 4) the effort of the manager to not delay work or services to leb users get a value of 3.5 or a good category. from the results of this aspect that needs to be considered is the ease of users accessing information related to the availability of existing equipment in leb. The leb manager needs to make a sort of list of available tools that can be accessed using a drive link, barcode or the web to make it easier for users to find out about the availability of the tools on the leb. Lovelock & Wright (2012) explain the provider's relationship with customers through communication, attention and understanding of customer needs will form customer satisfaction.

## **Conclusion**

Based on the results of the research and discussion it can be concluded) The level of student satisfaction as users of the Penjaskesrek FKIP UIR Lab Study Program is included in the good category with an average score of 3.41 and the results of the needs analysis show that overall it is good or adequate. This was proven by 68% of the 85 respondents who considered

that Leb's human resources, services and availability of infrastructure and other programs in leb as a component of the need for the development of the Laboratory for the Department of Physical Education, FKIP UIR were adequate. Some things that need to be considered to improve the quality of services for lebs include the need to add existing leb tools related to learning and research, such as measurement tools, fitness tools and other tools. Providing a place for complaints, which can be in the form of providing a box for complaints or directly providing the cellphone contact number where the complaints are made, the latter relates to ease of access and obtaining information related to the availability of additional tools that can be used for learning and research. Of course, it is necessary to make some kind of list of available tools that can be accessed using the drive link, barcode or web to make it easier for users to find out about the availability of the tools that are available on the web.

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