

Development of Application-Based Self-Assessment for Basic Gymnastics Evaluation of Students of State Elementary School



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ABSTRACT: Basic gymnastics skills are needed in PJOK lessons. The purpose of the study is to develop an application-based self-assessment instrument to improve the ability to roll forward, roll backward, wax attitude, and kayang. The type of research is research and development (Research and Development) The population of this study includes all students of SD Negeri 2 Tanjung Gadang class VI as many as 25 students, and SD 15 Teratak Baru class VI as many as 30 students with a total of 55 students. The samples in the study were all students of SD Negeri 2 Tanjung Gadang class VI as many as 25 students, and SD 15 Teratak Baru class VI as many as 30 students. The sampling technique is total sampling. Analysis of research data is carried out after data collection is completed to find out the assessment of the products that have been developed. There are three steps in conducting data analysis, namely: (1) Preparation, (2) Tabulation, and (3) Application of data by the research approach. The instrument used to collect data in testing the development of this product is to use non-test instruments. The instrument is made in the form of a structured questionnaire. The results of research on the development of application-based self-assessment for basic gymnastics evaluation are basic gymnastics self-assessment application media with a validation rate according to experts an average of 83.8% so the media can be said to be feasible. Then the reliability rate was up to 0.982 in small group trials and 0.974 in large group trials, so the tool is said to be reliable in evaluating basic gymnastics based on self-assessment applications. The conclusion is that the name of the basic gymnastics self-assessment application media is said to be reliable in evaluating basic gymnastics based on self-assessment applications.

KEYWORDS: Development of Self Assessment, Application-Based, Basic Gymnastics

I. INTRODUCTION

The implementation of continuous education is a process of human development that lasts a lifetime. Education includes a wide range of subject matter. One of them is Physical Education, Sports, and Health. Sports Physical Education and Health are very important subjects, as they provide opportunities for learners to engage directly in various learning experiences through physical activity, play, and sports that are carried out systematically. The provision of learning experiences is directed to foster, as well as form a healthy and active lifestyle throughout life. There have been many educational theories about learning and learners and finding strategies and methods that facilitate and organize teaching processes that align learners' abilities (Hussein et al., 2022).

The government has included sports as one of the physical education curricula in formal schools as a learning means to educate the nation's life and improve the quality of Indonesian people in realizing a just and prosperous society, as well as allowing its citizens to develop themselves and all aspects, both physical and spiritual. Law of the Republic of Indonesia No. 3 Article 1 of 2005 states that "Educational sports are physical sports that are carried out as part of an orderly and continuous educational process to obtain knowledge, personality, skills, health, and physical fitness". Gymnastics classes are an important lesson in sports education colleges because they have a great impact on students' mental preparation, physical, and Dynamic (Hasan et al., 2022). It is important to facilitate students in learning well-packaged and interesting gymnastic movements, especially those who use science and technology (Kurniawan, 2018). Adequate levels of physical activity and the development of basic motor skills since they are the basics of a healthy and active future lifestyle (Šalaj et al., 2019).

Gymnastics is considered a sport with a complex technique (Sukamti & Pranatahadi, 2019). Gymnastics is more related to biomechanics than any other sport, this science contributes to the analysis, illustration, understanding, and improvement of sports techniques (Hassan et al., 2015). One form of sport in schools is the sport of dexterity gymnastics. Agility gymnastics is a

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sport that requires flexibility and good coordination between limbs. Movement in dexterity gymnastics requires courage, the flexibility of the body as well as correct technique. Dexterity gymnastics is often said to be with match gymnastics or artistic gymnastics because the forms of movement must be by the rules that apply in the match both regarding the attitude at the time of going to do beauty, and the accuracy and balance in the final attitude. Dexterity gymnastics can be done without tools and with tools. Agility gymnastics without tools is called floor exercises, while dexterity gymnastics using tools is called tool gymnastics. Practicing Gymnastics skills will create a background of motor exercises in situations of rotation, body investment, and body sustainability, using all segments of the body (Ávalos-Ramos & Vega-Ramírez, 2020).

One of the forms of movement of floor gymnastics is the front roll. The forward roll movement begins with a squat attitude, the hands are raised straight up so that the body is straight from the hips to the fingertips of the hands. Raise your hips and move the weight forward, put both hands on the mat, touch your chin to your chest, and put your shoulders on the mat while rolling. Keep the body bent with both knees fixed on the chest and end with a squatting stance with both hands straight up. In-person front-roll gymnastics learning is difficult for elementary school students (Septiana et al., 2022). presents the basic approach adopted to develop young gymnasts' physical fitness (Mkaouer et al., 2018). Knowledge training affects performance and provides appropriate criteria for better identification of talents (Douda et al., 2008). International success in gymnastics requires hours of special practice (Pion et al., 2015).

PJOK learning for specific activities of floor gymnastics has various problems that must be faced (Nurseto & Saryono, 2020). Students, especially at the elementary level as equals, certainly have difficulty doing so, physical education teachers are required to be able to use appropriate methods in teaching exercise skills roll forward, roll backward, candle, and kayang attitudes such as using various teaching methods, so that in the learning process of physical education, especially in delivering the material of floor exercises roll forward, roll backward, candle and kayang attitudes can achieve the ultimate goal of learning, namely students can roll forward, roll backward, candle and kayaking attitudes well. Floor gymnastics is a gymnastics whose movements are performed on mats, the elements of which include jumping, rolling, jumping, and spinning in the air and support with hands and feet (Hidasari & Bafadal, 2020). Balance is also an important human ability that is used in our daily activities such as walking and standing as well as in most games and sports and dancing (Das & Sarkar, 2020). It is widely accepted that the evolution of the back-arc basin is closely correlated with the roll- of the back (Tao et al., 2020). The importance of gymnastics lessons, which is one important lesson in the faculty of physical education due to their great impact on preparing students mentally, physically, and kinesthetically through learning many basic skills in different devices (Hussein, Ghazi HasanLafta Hussein & Al-Jadaan, 2022).

Most educators in primary schools are less creative in providing learning models. Most physical educators only emphasize the result without paying attention to the learning process. This will have a bad impact on students because of the lack of knowledge provided and will indirectly affect the performance of educators physical education goals will not be achieved, and it will damage the image of the physical education teacher in the eyes of students. Elementary school children are at the age when children like and love playing (Andriadi & Saputra, 2021).

Teaching methods must be adjusted to the abilities of students, facilities and infrastructure, and the environment and conditions or circumstances. Self-assessment-based learning is considered suitable for this data condition, where the world is being hit by the Covid-19 pandemic, which makes the teaching and learning process experience obstacles in its implementation. Self-assessment is a character education-oriented assessment system that is associated with how well a person judges himself. Kemendikbud, (2013) states that: "Self-assessment is an assessment technique by asking learners to express their strengths and weaknesses in the context of achieving competencies". Thus, students in addition to being able to be actively involved in learning activities can also be active in assessing learning outcomes. Digital media is permeating the daily lives of children and adolescents. Various Technologies can change, but their general interpretation follows the same pattern with many positive attributes including educational innovation or even revolution (Jastrow et al., 2022).

Self-assessment is a new vision in learning evaluation for the advancement of student studies. This assessment model requires learners to assess their work, based on clear evidence and criteria, to improve future performance (McMillan & Hearn, 2015). Rolheiser & Ross, (2015) Self-assessment is a way to look within oneself. Through self-assessment, students can see their advantages and disadvantages, henceforth these shortcomings become improvement goals. Thus, learners are more responsible for the process and achievement of their learning goals. The classic method for describing virtual processes is the Feynman diagramming method (Petukhov et al., 2022).

Suerta & Dkk, (2015) The results of these descriptive statistics, in general, the ability of students to design databases conceptually and logically through the Authentic Self-Assessment Model is quite good. As many as 71.3% of students have abilities in the high and very high categories, while the remaining 28.7% have abilities in the low to medium categories. (Linda,

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2016) The results of the study stated that students' mastery of science literacy through self-assessment was in the high category with an average of 83.25%. Science as the torso of knowledge reaches 81%, science as a way to investigate reaches 85%, science as a way of thinking reaches 86% and the interaction between science, technology, and society reaches 81%.

Wahyuningsih, (2017) Self-assessment results in 61.9% of students having a scientific attitude with a good category, and 28.10% of students are very good, some students feel good about being tolerant and lacking in honesty and confidence. Wilujeng & Tunggal, (2016) Shows that there is a significant positive correlation between the self-assessment value and the value given by the lecturer to the student. So it can be concluded that in a limited scope, this method can be applied to writing courses as well as to other courses. Based on the results of observations and observations on students of SD Negeri 2 Tanjung Gadang from February 03, 2022 to February 11, 2022, it shows that there is no self-assessment instrument to help students assess themselves as learning evaluations.

In learning agility gymnastics on the front roll material, roll back, candle, and kayang attitude have been running, but have not shown maximum results. Of the 87 learners, only 37 learners were able to do the front roll, the rollback, the candle, and the kayaking attitude correctly. One of the dominant factors that cause the lack of optimal learning is that students feel afraid to do teaching materials. The fear of students is more important because they feel that they will not be able to perform the front roll movement, roll backward, candle, and kayaking attitudes that require flexibility, strength, and courage are quite large. When students get the task of doing teaching materials, they always show an attitude of asking their other friends to do it first. The low ability of students shows weaknesses as well as difficulty in teaching and learning front roll, roll backward, candle attitude, and kayang.

Departing from this, efforts are needed from teachers to be able to improve the ability of front roll, roll backward, candle, and kayang attitudes for students of SD Negeri 2 Tanjung Gadang. This rationale is the reason for learning with self-assessment to improve the ability to learn front roll, roll backward, candle and kayang attitudes for students of SD Negeri 2 Tanjung Gadang, with the hope that students can assess and evaluate themselves based on their observations and abilities. The purpose of the study is to develop an application-based self-assessment instrument to improve the ability to roll forward, roll backward, wax attitude, and kayang.

II. MATERIAL AND METHODS

This research method is research and development (Research and Development). Research and Development research methods are methods used to produce a particular product and test the effectiveness of the product. There are several models in research and development including the ADDIE model which develops model models with stages of Analysis, Design, Development, Implementation, and Evaluation. Product trials are carried out through 2 stages, namely small-scale trials and large-scale trials. Collecting data is an important job in researching. To collect the necessary data, researchers use several methods, namely: (1) Observation, (2) Interviews, and (3) Questionnaires. The observations made are participatory observations, where researchers make direct observations and are involved in what data sources do. The instrument used to collect data in testing the development of this product is to use non-test instruments. The instrument is made in the form of a structured questionnaire.

Analysis of research data is carried out after data collection is completed to find out the assessment of the products that have been developed. Research data was obtained from questionnaires that had been filled out by media experts, students, and students. The development of instrument items is a parameter for explaining the results of measuring or scaling from the questionnaire, the data obtained from the questionnaire will be analyzed with percentage analysis techniques, while the data obtained from the likers-scale questionnaire will be analyzed using average analysis techniques.

Arikunto, (2013) There are three steps in conducting data analysis, namely: (1) Preparation, (2) Tabulation, and (3) Application of data by the research approach. The activities carried out in the preparation step include checking the name and identity of the filler, checking the completeness of the data, and also checking the types of data fields. At the tabulation stage, data analysis activities can be in the form of scoring items that need to be scored. In this development research, the instruments used were arranged on a Likert scale with intervals of 1 to 5.

III. RESULTS AND DISCUSSION

Expert Review Results

1. Expert Validity Test

a. Sports Evaluation and Measurement Test Expert

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The expert in the evaluation and sports measurement tests who are validators in the research on the development of basic gymnastics test instruments based on self-assessment applications is Dr. Damrah, M.Pd. He is one of the lecturers of Evaluation and measurement at the Faculty of Sports Science, Padang State University. This validation is carried out on November 14, 2022, by practicing in the field, describing the tools and how they work in the field accompanied by assessment instruments in the form of questionnaires.

1) Assessment from Evaluation Expert and Measurement Test Dr. Damrah, M.Pd

Based on the assessment from Dr. Damrah, M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

Table 1. Media Self-assessment Validation Questionnaire Score By Sports Evaluation and Measurement Test Expert

No	Aspects	Score	F. Relatif
1	Ease	7	9,3
2	Material suitability	13	17,3
3	Practicality	38	100,7
Value		58	77,33333333
Sum		75	100,0

In the input and advice box that has been provided by the evaluation and measurement test expert, Dr. Damrah, M.Pd does not provide input and suggestions.

Table 2. Percentage of Media Self-assessment Results By Sports Evaluation and Measurement Experts

No	Expert	<i>f</i>	<i>N</i>	<i>P</i> (%)	Eligibility Categories
1	Evaluation and Measurement Tests	58	75	77,4%	Excellent/Decent

Based on the table above, experts in the evaluation and test of sports measurements argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will already be able to operate properly and decently, the results of the validity test of evaluation experts and sports measurement tests obtained a percentage of 77.4%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Feasible".

2) Assessment from Evaluation Expert and Measurement Test Dr. Sazeli Rifki, S.Si., M.Pd

Based on the assessment from Dr. Sazeli Rifki, S.Si., M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

Table 3. Media Self-assessment Validation Questionnaire Score By Sports Evaluation and Measurement Test Expert

No	Aspects	Score	F. Relatif
1	Ease	9	12,0
2	Material suitability	15	20,0
3	Practicality	41	54,7
Value		65	86,66666667
Sum		75	100,0

In the input box and suggestions that have been provided by evaluation experts and measurement tests, Dr. Sazeli Rifki, S.Si., M.Pd gave the input "Adjust the writing of symbols on the Likert scale and adjust the numbers on the questionnaire grid".

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Table 4. Percentage of Media Self-assessment Results By Sports Evaluation and Measurement Experts

No	Expert	<i>f</i>	N	<i>p</i> (%)	Eligibility Categories
1	Evaluation and Measurement Tests	65	75	86,6%	Excellent/Decent

Based on the table above, experts in the evaluation and test of sports measurement argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will be able to operate properly and properly, the results of the validity test of the evaluation expert and the sports measurement test obtained a percentage of 86.6%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Decent".

3) Assessment from Evaluation Expert and Measurement Test Sepriadi, S.Si., M.Pd

Based on the assessment from Sepriadi, S.Si., M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

Table 5. Media Self-assessment Validation Questionnaire Score By Sports Evaluation and Measurement Test Expert

No	Aspects	Score	F. Relatif
1	Ease	9	12,0
2	Material suitability	14	18,7
3	Practicality	39	52,0
Value		62	82,66666667
Sum		75	100,0

In the input box and suggestions that have been provided by evaluation experts and measurement tests, Sepriadi, S.Si., M.Pd gave input "For videos, it is better to make a video slowly with the implementation step because this is to be easily understood by elementary school students".

Table 6. Percentage of Media Self-assessment Results By Sports Evaluation and Measurement Experts

No	Expert	<i>f</i>	N	<i>P</i> (%)	Eligibility Categories
1	Evaluation and Measurement Tests	62	75	82,6%	Excellent/Decent

Based on the table above, experts in the evaluation and test of sports measurement argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will be able to operate properly and properly, the results of the validity test of evaluation experts and sports measurement tests obtained a percentage of 82.6%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Feasible".

b. Media experts

The media expert who became a validator in the research on the development of basic gymnastics test instruments based on self-assessment applications was Dr. Anton Komaini, S.Si, M.Pd. He is one of the futsal lecturers at the Faculty of Sports Science, Padang State University. This validation was carried out on March 26, 2021, by practicing in the field, describing the tools and how they work in the field accompanied by assessment instruments in the form of questionnaires.

1) Assessment from media expert Dr. Anton Komaini, S.Si, M.Pd

Based on the assessment from Dr. Anton Komaini, S.Si, M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

Table 7. Media Validation Questionnaire Score self-assessment By Media experts

No	Aspects	Score	F. Relatif
1	Technical Quality	36	36,0

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2	Ease of Use and Navigation	21	21,0
3	Beauty	29	29,0
Value		86	86
Sum		100	100,0

In the input box and suggestions that have been provided by media experts, Dr. Anton Komaini, S.Si, M.Pd gave the input "Check the letters in the word again in the application and make them more colorful and interesting, for example, filled with spirit-enhancing music".

Table 8. Percentage of Assessment Results By Media Experts

No	Expert	<i>f</i>	<i>N</i>	<i>P</i> (%)	Eligibility Categories
1	Media	86	100	86%	Excellent/Decent

Based on the table above, media experts argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will be able to operate properly and feasible but has several revisions in components, the results of the futsal expert validity test obtained a percentage of 86%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Decent".

2) Assessment from media expert Dr. Aldo Naza Putra, S.Pd., M.Pd

Based on the assessment from Dr. Aldo Naza Putra, S.Pd., M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

Table 9. Media Validation Questionnaire Score self-assessment By Media experts

No	Aspects	Score	F. Relatif
1	Technical Quality	35	35,0
2	Ease of Use and Navigation	23	23,0
3	Beauty	29	29,0
Value		87	87
Sum		100	100,0

In the input box and suggestions that have been provided by media experts, Dr. Aldo Naza Putra, S.Pd., M.Pd gave input "There should be a place to upload student video files".

Table 10. Percentage of Assessment Results By Media Experts

No	Expert	<i>f</i>	<i>N</i>	<i>P</i> (%)	Eligibility Categories
1	Media	87	100	87%	Excellent/Decent

Based on the table above, media experts argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will be able to operate well and be feasible but has several revisions in components, the results of the futsal expert validity test obtained a percentage of 87%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Decent".

3) Assessment from media expert Ardo Okilanda, M.Pd

Based on the assessment from Ardo Okilanda, M.Pd using the assessment questionnaire, the assessment results can be represented in the table below.

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Table 11. Media Validation Questionnaire Score self-assessment By Media experts

No	Aspects	Score	F. Relatif
1	Technical Quality	33	33,0
2	Ease of Use and Navigation	22	22,0
3	Beauty	28	28,0
Value		83	83
Sum		100	100,0

In the input box and suggestions that have been provided by media experts, Ardo Okilanda, M.Pd gave input "At the end of the application there is no score of value".

Table 12. Percentage of Assessment Results By Media Experts

No	Expert	<i>f</i>	<i>N</i>	<i>p</i> (%)	Eligibility Categories
1	Media	83	100	83%	Excellent/Decent

Based on the table above, media experts argue that the product of developing a basic gymnastics test instrument based on a self-assessment application developed by this researcher will be able to operate well and be feasible but has several reviews in the components, the results of the futsal expert validity test obtained a percentage of 83%, so it can be interpreted that the basic gymnastics test instrument based on the self-assessment application has the category "Decent"

2. Reliability test

The following are the results of calculating the reliability of small group and large group data which were carried out twice and the data calculated the correlation between the two data.

Table 13. Degree of Reliability

Correlation Coefficient Intervals	Reliability
0,00-0,199	Very Weak
0,20-0,399	Weak
0,40-0,599	Keep
0,60-0,799	Strong
0,75-1,00	Very Strong

The following are the results of calculating the reliability of small group data which was carried out twice and the data was calculated the correlation between the two data.

$$r = \frac{\sum XY}{\sqrt{\{\sum X^2\}\{\sum Y^2\}}}$$

$$r = \frac{24069}{\sqrt{\{16951\}\{35371\}}}$$

$$r = \frac{24069}{24486.19}$$

$$r = \mathbf{0,982}$$

From the result of r 0.982, it can be said that it is very strong and significantly correlated. The reliability test data on this tool can be seen in the appendix. The reliability test data on this instrument can be seen in the appendix and reliability of this instrument is used to see the level of reliability of the instrument using the Small Group Test method and statistical calculations of the product moment, the following results are obtained:

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Table. 14. Small Group Frequencies Distribution

No	class Interval	F. Absolut	F. Relatif	Information
1	>65,41	3	9%	Very High
2	58,29 - 65,4	4	12%	Tall
3	51,17 -58,28	15	45%	Keep
4	44,05 - 51,16	10	30%	Low
5	<44,04	1	3%	Very Low
Sum		33	100%	

Based on the table above, the basic gymnastics test data of elementary school students from 33 respondents, 3 people (9%) are in the very high classification, then as many as 4 people (12%) are in the high classification, as many as 15 people (45%) are in the medium classification, as many as 10 people (30%) are in the very low classification, and as many as 1 people (3%) are in the very low classification.

Then for more details on the results of the basic gymnastics test data of elementary school students in small groups can be seen on the histogram as follows:

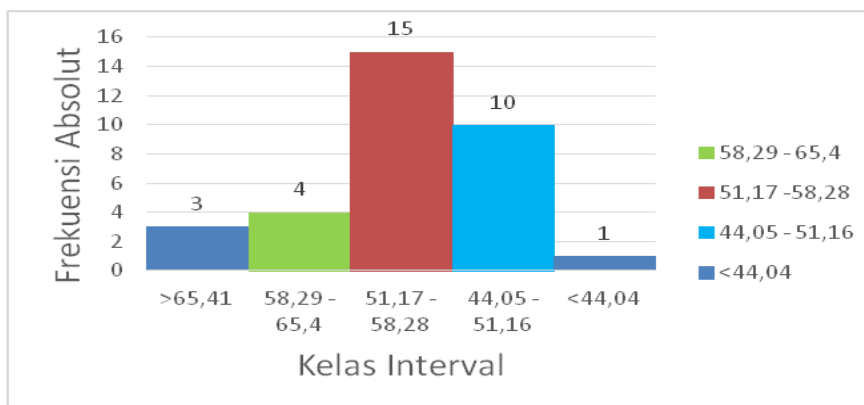


Figure 1. Histogram Data on the frequency distribution of basic gymnastics tests of small group elementary school learners

Next is the result of calculating the reliability of large group data which was carried out twice and the data was calculated correlation between the two data.

$$r = \frac{\sum XY}{\sqrt{\{\sum X^2\}\{\sum Y^2\}}}$$

$$r = \frac{34028}{\sqrt{\{21704\}\{56198\}}}$$

$$r = \frac{34028}{34924.5}$$

$$r = \mathbf{0,974}$$

From the result of r 0.974, it can be said that it is very strong and significantly correlated. The reliability test data on this tool can be seen in the appendix.

The reliability test data on this instrument can be seen in the appendix and reliability of this instrument is used to see the level of reliability of the instrument using the large Group Test method and statistical calculations of product moments, the following results are obtained:

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Table. 15. Frequency Distribution Large groups

No	class Interval	F. Absolut	F. Relatif	Information
1	58,17>	9	18%	Very High
2	55,12 - 58,16	7	14%	Tall
3	52,08 - 55,11	12	24%	Keep
4	49,03 - 52,07	11	22%	Low
5	<49,02	11	22%	Very Low
Sum		50	100%	

Based on the table above, the basic gymnastics test data of elementary school students from 50 respondents, 9 people (18%) are in the very high classification, then as many as 7 people (14%) are in the high classification, as many as 12 people (24%) are in the medium classification, as many as 11 people (22%) are in the low classification, and as many as 11 people (22%) are in the very low classification.

Then for more details on the results of the basic gymnastics test data of elementary school students in large groups can be seen on the histogram as follows:

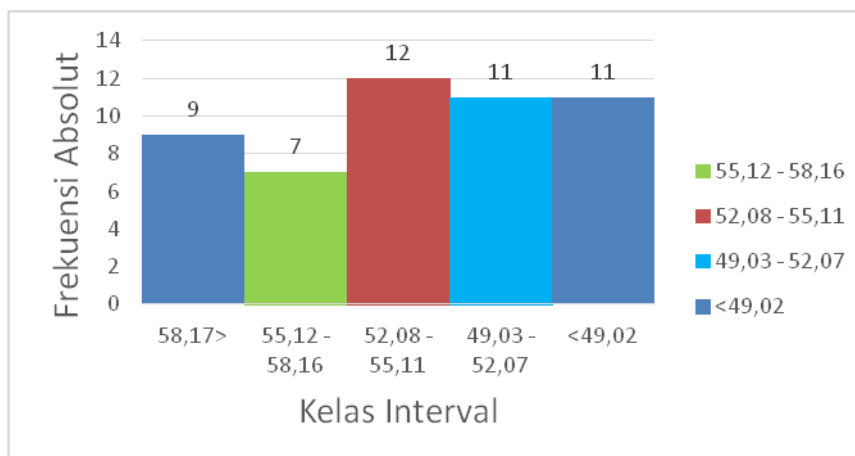


Figure 2. Histogram Data on the frequency distribution of basic gymnastics tests of elementary school learners Large groups Discussion

1. Empirical Validity of the First Stage of Expert Validity

Table 16. Percentage and degree of eligibility from experts

No	Expert	Percentage	Eligibility level
1	Evaluation and measurement tests of sports	77,4%	Excellent/Decent
2		86,6%	Excellent/Decent
3		82,6%	Excellent/Decent
4	Expert	86%	Excellent/Decent
5		87%	Excellent/Decent
6		83%	Excellent/Decent

From the validation results by these experts, if averaged, a percentage of 83.8% was obtained and it can be concluded that self-assessment media can be used in application-based basic gymnastics evaluations. Some suggestions and criticisms on the media created are as material for further development when going to mass production so that the media can be of economic value and can be used periodically.

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2. Reliability Test

Table 17. Category Correlation Coefficient of Reliability of Small Groups

N	Koofesien korelasi	Realibilitas
33	0.982	Very Strong

Table 18. Large Group Reliability Correlation Coefficient Category

N	Koofesien korelasi	Realibilitas
50	0.974	Very Strong

From the results of the table, the media developed as a self-assessment media can be used in application-based basic gymnastics evaluations said to be real and consistent in application-based basic gymnastics evaluations.

3. Practicality

According to the Big Indonesian Dictionary (KBBI), practicality is easy and happy to use (running and so on), in this case, practicality is the convenience possessed by the media in the evaluation of basic gymnastics based on self-assessment applications. In the assessment questionnaire conducted by experts, the practicality value of the tool was obtained as follows:

Table 19. Percentage of Practicality from Expert Assessment

Expert	F	N	Percentage	Eligibility level
Evaluation and measurement tests of sports	38	45	84,4%	Excellent/Decent
	41	45	91,1%	Excellent/Decent
	39	45	86,7%	Excellent/Decent
Expert	21	25	84,0%	Excellent/Decent
	23	25	92,0%	Excellent/Decent
	22	25	88,0%	Excellent/Decent

From the validation results by the three experts, if the average practicality value is obtained, a percentage of 87.7% is obtained and it can be concluded that the tool for the development of basic gymnastics test instruments based on self-assessment applications has a level of practicality "Very Good / Feasible".

4. Effectiveness

According to the Big Indonesian Dictionary (KBBI), effectiveness is the usefulness, activeness, and there is conformity in activity between a person who carries out a task to be achieved, in this study the meaning of effectiveness is the effectiveness of the media in the evaluation of basic gymnastics based on the application of self-assessment, then the effectiveness value is obtained as follows:

Table 20. Percentage of Effectiveness of Expert Assessment

No	Expert	F	N	Percentage	Eligibility level
1	Evaluation and measurement tests of sports	13	20	65,0%	Good/Decent
2		15	20	75,0%	Good/Decent
3		14	20	70,0%	Good/Decent
4	Expert	36	40	90,0%	Excellent/Decent
5		35	40	87,5%	Excellent/Decent
6		33	40	82,5%	Excellent/Decent

From the validation results by the three experts, if the effectiveness value is averaged, a percentage of 78.3% is obtained and it can be concluded that the media from the development of the basic gymnastics self-assessment application has a "Good / Decent" effectiveness.

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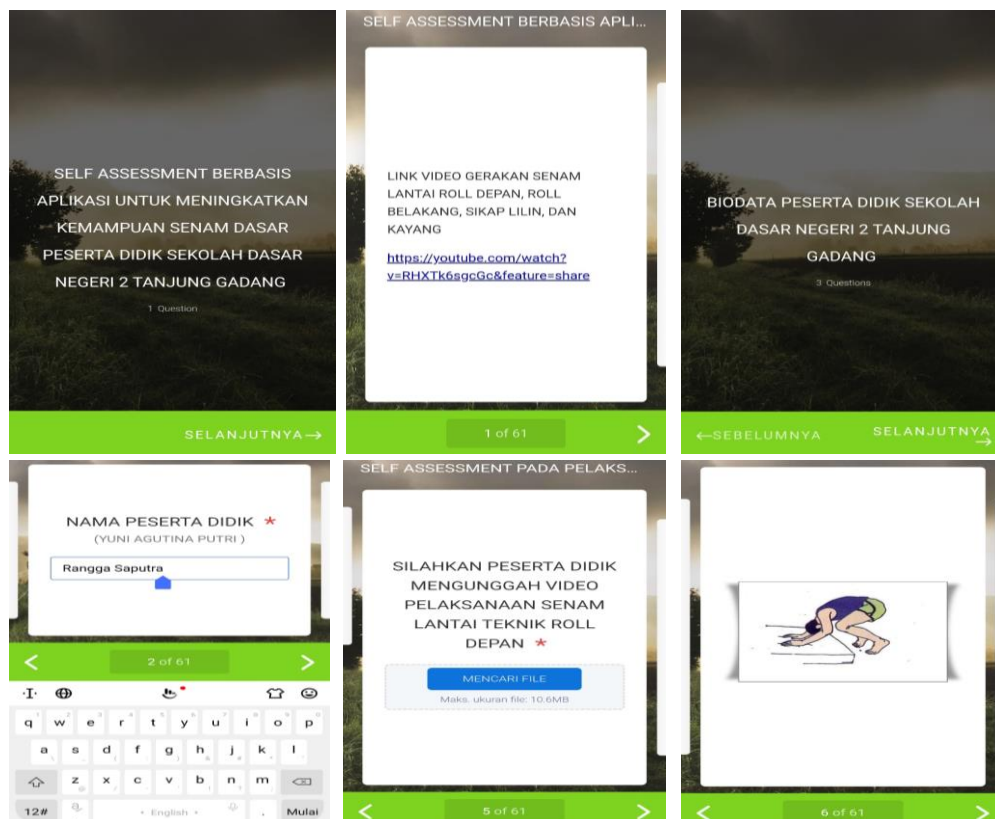
RESULTING INSTRUMENTS

The resulting media is a form of application based on the analysis of theories and the need to evaluate the basic gymnastics of elementary school students that is more contemporary and renewable. The media named "basic gymnastics self-assessment application" is used as a medium for evaluating and learning basic gymnastics for students where the results of the evaluation of basic gymnastics movements carried out by students are directly recorded in the application and can be displayed from android. The data that has been displayed in the android application can be saved directly to Google. The display form of the resulting instrument is as follows:

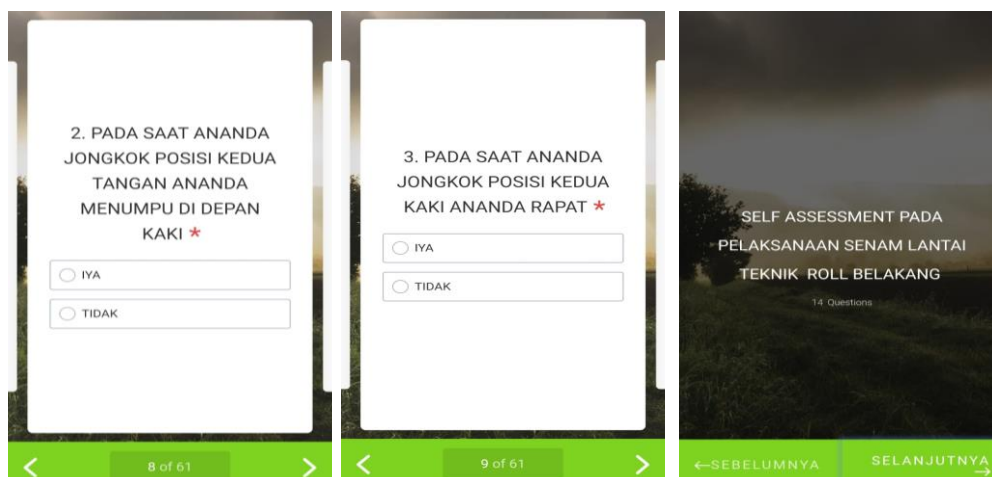


Gambar 21. Tampilan Halaman Depan Aplikasi

OPERASIONAL APLIKASI



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APP USAGE GUIDELINES

- 1) Turn on Android.
- 2) Open the Internet (Google Chrome, Firefox, or Internet Explorer).
- 3) Press search to enter a web address.
- 4) Type "https://form.jotform.com/223034259005042" in the search.
- 5) Press "Start".
- 6) Fill in the student's full name
- 7) The application is ready to use, fill in the statement by selecting one of the answers "YES" or "NO".

MEDIA EXCELLENCE

The advantages of basic gymnastics media based on self-assessment applications include:

- 1) This media is a basic gymnastics evaluation media based on a self-assessment application that can be used for students to analyze their ability to do basic gymnastics.
- 2) Media can be used for students to evaluate their ability to do basic gymnastics.
- 3) Media has proven to be more effective to use because the use of applications can be carried out at home so it is more effective and efficient for learning at home.
- 4) Media has proven to be efficient in obtaining basic gymnastics data for students.
- 5) The media can facilitate the work of teachers and related parties in carrying out basic gymnastics studies.
- 6) The form of media attracts attention to motivate learners to learn independently.
- 7) The media used is very modern and renewable by using applications on android.
- 8) The output data is directly displayed in the form of an android application.

TOOL FLAWS

- 1) Media must be operated by using android.
- 2) Media must be operated using the Internet so it requires quota.
- 3) If the use of media is not supervised by adults then the use of android can be abused like playing games.

RESEARCH LIMITATIONS

This research resulted in a basic gymnastics self-assessment application that can find out the results of basic gymnastics skills of elementary school students, but in the implementation and results of the study, namely "validity testing is only limited to used validity tests".

IV. CONCLUSION

Based on the results of data processing and analysis of the data from the research that has been carried out, regarding the development of application-based self-assessment for basic gymnastics evaluation, it was concluded that the name of the basic gymnastics self-assessment application media that functions as a medium for evaluating basic gymnastics in elementary school students with a validation level according to experts on average 83.8% so that the media can be said to be feasible. Then the reliability rate was up to 0.982 in small group trials and 0.974 in large group trials, so the tool is said to be reliable in evaluating

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basic gymnastics based on self-assessment applications. Media has several advantages, especially used for students to evaluate their ability to do basic gymnastics, as well as application-based media that can be used on Android.

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