Development of Authentic Appraisal Instruments Basic Skills for Playing Football of Junior High School Students

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Physical Education Sport and Health as one of the sports subjects has a sub-material practice of sports skills. Assessment of sports skills as performance assessment should also follow the assessment rules by BSNP. The objective of the study is to develop an authentic assessment instrument of the basic skills of playing football of junior high school students who qualify as valid, reliable and practical. The type of research is research and development following the Borg & Gall model. Technique of collecting data with documentation study, interview and observation. The result of the research is the assessment instrument product with lattice, observation sheet, rubric, and appraisal instrument. The result of instrument validity test with expert judgment show very valid that is 87,96%. Reliability test results with Cronbach's Alpha obtained coefficient of 0.931, and with Intraclass Correlation Coeficient (ICC) of 0.871 so that the developed instrument has a high degree of reliability. Practicality test results obtained 82% percentage so that the instrument has a high level of practicality.© 2018UniversitasNegeri Semarang.

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INTRODUCTION

Education as a means of destroying the nation has specific standards for every aspect of education. Education standardization is intended to ensure that existing education can uniformly have national qualifications. The government has made efforts to standardize national education, such as the enactment of Law no. 20 of 2003 on National Education System. The National Education System Act provides an explanation of national education standard in Chapter IX paragraph (1); "National education standards comprise the content standards, processes, competencies of graduates, education personnel, facilities and infrastructure, management, financing, and educational assessments that should be improved on a planned and periodic basis."

Permendikbud No. 66 of 2013 (2013: 3-4) also contains an explanation of the scope of assessment of learners' learning outcomes, including; competence attitudes, knowledge, and skills are done in a balanced way so that it can determine the relative positions of learners against predetermined standards. Skill competency assessment is conducted through performance appraisal. Performance appraisal requires learners to be able to demonstrate a certain competence with practice tests, projects, and portfolio assessments. The instrument used can be a check list or rating scale with a rubric. Performance appraisal by practice tests requires a series of responses in the form of skills performing activities or behaviors in accordance with competence demands.

Permendikbud No. 104 years 2014 (2014: 2) explains that the assessment of learning outcomes by educators is the process of gathering information / evidence of learning achievement of learners in the competence of spiritual attitudes and social attitudes, knowledge competencies, and skill competencies conducted in a planned and systematic, during and after learning process. Permendikbud wants assessment of students' learning outcomes done

with authentic assessment. Authentic assessment is a form of assessment that requires learners to display attitudes, using knowledge and skills gained from learning in performing tasks and activities in everyday life. Authentic assessment is expected to provide information on learning outcomes based on the real ability of learners.

Gulikers, Bastiaens & Kirschiner (2004: 5) define authentic judgments as judgments that require learners to demonstrate a common competence, or combine science knowledge, skills, and attitudes, which they must apply in real-life situations. Moman (2003: 163) mentions that authentic assessment requires learners to apply some of the skills acquired in the classroom and use them as a basic capital for further learning, whereas Wiggins (1990: 1) provides learners with useful intellectual tasks.

Physical Education Sport and Health as one of the sports education subjects has a sub-material practice of sports skills. Assessment of sports skill practice as performance assessment must also follow the assessment rule by BSNP. Frey, Schmitt, & Allen (2012: 14) explains that performance assessment is an assessment involving full learner activity, so performance assessment is an authentic assessment. Newmann & Archbald in Herrington & Herrington (2006: 147) adds that one of the authentic task and assessment criteria is that tasks and judgments relate to real-life tasks, and according to Palm (2008: 1) authentic assessment must effectively help learning.

In the eyes of physical education of sports and health, football is one of the favored sports by junior high school students. According to Muhajir (2003: 1) football is a game that is done by kepak-kari is fought over by the players with the aim to enter the ball kegawang opponent and defend his own goal so as not to enter the ball, in this game, basic techniques or skills to play football is very influential on the quality of one's game, because it is one of the main capital in playing football. Football a game that is done by punting, played two squads each team consists of 11 players who are commonly called teams.

Each team or squad attempts to insert the ball as much as possible against the opponent's goal and defend his own net so as not to enter and use the prescribed rules (Sucipto et al, 2000: 7). According Husaini, et al (2002: 1), football games require skills related to the freshness of the body, namely strength, or muscle explosive power, speed, and agility.

The basic technique is all the underlying activities so that with the capital in such a way it can already play football (A. Sarumpaet et al, 1992: 17). The technique of playing football is all the movements with the ball needed to play football (Soekatamsi, 1989: 33). The basic ability to play football consists of Passing, Throw-In, Dribbling, Shooting, and Heading. Knowledge of basic soccer techniques is important given to students to have basic knowledge about football, able to develop talents in playing football, understand the importance of learning the basic ability to play football, understand the values contained therein, and shaping the character and nature of a person when the game lasts.

Football is one of the big ball games included in teaching material at school and football is one of the most popular games, and is often played by the students during sports activities either at school or at home. The assessment of soccer practice in schools is also an authentic assessment. Authentic assessment will produce good information if the instrument used has a good level of validity and reliability. Oluwatayo (2012: 399) asserted that the validity and reliability of the instrument will be achieved if the compiler of the instrument pay attention to the validity and reliability.

The results of interviews with teachers as primary data and the results of interviews with students as secondary data. Agus Juhartanta, a teacher of sport and health education at SMP N 1 Welahan Jepara (Agus, interview, April 23, 2015) stated that the basic skills assessment of playing football in schools is implemented without good instruments, so that the final value of the teacher assessment, without details of every aspect and stages in the assessment of

basic skills of playing football. Furthermore, the result of interview with physical education teacher of sport and health of SMP N 2 Welahan Jepara, (Novy Agung Wibowo, interview on October 13, 2015), shows that assessment without good guidance can make assessment not reliable even element of subjectivity. Another problem in the field is that teachers do not have the opportunity in school to conduct research on developing authentic assessment instruments for basic soccer playing skills, limited time for teachers to assess basic skills of playing soccer, lack of support facilities. Students 'learning achievement assessment problems will have an impact on the validity of learners' learning outcomes. The emerging problems are deviations from the assessment principles as referred to in the BSNP Appraisal Standards and the theory of authentic assessment. Therefore, an authentic instrument suitable for junior high school children and easy to use by physical education teachers sports and health.

The empirical facts show that the assessment of basic soccer skills in SMP N 1 Welahan is implemented without good instruments, so that the final score of the teacher's judgment, regardless of every aspect and stage of learning. Assessment done in the absence of good guidance to make the assessment results are not reliable even element of subjectivity.

The problem of the implementation of the basic skills assessment of playing football as a result of observations in general the unavailability of basic skills of playing football instruments for junior high school students and children in accordance with the condition of facilities and infrastructure in SMP N 1 Welahan, from the analysis of observation data obtained conclusion that what is needed is instrument assessment of basic skills of playing football, then specifically the researcher will focus on the problem of the implementation of the basic skills assessment of playing football in terms of assessment instruments, given the

researcher's focus on the field of educational evaluation.

In accordance with the background that has been described, it is necessary to formulate an authentic assessment instrument of the basic skills of playing the valid, reliable and practical junior high school students of Junior High School (SMP) as the endeavor to realize valid, objective, fair, integrated, open , comprehensive and sustainable, systematic, criteria, and accountable

METHODS

Research conducted is a type of research and development (research and development) so that research design follows research and development design. The research phase includes qualitative and quantitative research. Qualitative research is conducted at the stage of initial information gathering in the field with interviews and documentation studies, instruments and practicability assessment. Quantitative research is conducted at the validity test stage and reliability test of the authentic assessment instrument of the basic skills of playing football of junior high school students.

The development procedure of this research consists of several development steps from Borg and Gall (2007: 507), the development steps are as follows:

Table 1. Development Steps

Step development	Description of Development Steps
Preliminary studies	➢ Analysis of the problem of authentic assessment of the basic skills of playing football of the first high school students ➢ Need analysis of the authentic assessment of the basic skills of playing football of the first high school students ➢ Seeking an authentic instrument model for authentic assessment of the basic skills of playing football of the first high school students
Planning	➢ Determine aspects of authentic assessment of the basic skills of playing football of the first high school students ➢ Determine the subject of authentic assessment instrument test the basic skills of playing football of the first high school students
Development of hypothetical model	➢ Develop a prototype of an authentic assessment instrument of the basic skills of playing football of the first high school students ➢ Prepare an authentic assessment instrument rubric of the basic skills of playing football of the first high school students
Review of hypothetical models (*expert judgment*)	➢ Review prototypes of basic skills assessment instruments of counseling. The review relates to the content or material of the instrument whether it is in accordance with the aspects to be assessed in the basic skills practice of playing football. The review is done by giving the prototype of the instrument to the expert, then the researcher holds a discussion with the experts together to analyze the contents of the instrument. Experts are given validation sheets as the basis for determining content validity.
Revision I	➢ At this stage of revision I performed an instrument improvement from the results of expert validation analysis.

Step development	Description of Development Steps
	The result of this revision becomes Draft II
Trial is limited	➢ Draft Test II
	➢ Analyze the results of the Draft II group trial
Revision II	➢ At the revision stage the results of the trial are limited to revision of errors in the scoring sheet, assessment rubric and assessment norms. The result of this revision becomes Draft III
Extensive trials	➢ Draft Test III
	➢ Analyze the results of the Draft III trials
Revised final model	➢ Improvement on the product of the development result
Dissemination	➢ Distribution through scientific journals

Research data includes three aspects. Data and sources of data and instruments used in this study can be seen in the following table:

Table 2. Data and Research Data Sources

No	Aspect	Source	Instrument
1	Needs of instrument development according to teacher's perception of physical education of sport and health.	Master subjects physical education sport and health SMP N 1 Welahan	➢ Interview guide ➢ Documentation
2	Validation of instruments of authentic assessment of basic skills of playing the first middle school students football	Three lecturers are experts in the field of measurement and football	➢ Observation sheet
3	Test the practicality of the instrument	Two subject teachers of physical education of sport and health	➢ Instrument ➢ Practicality sheet

RESULTS AND DISCUSSION

Introduction Study

From the analysis conducted in the field by way of interviewing the physical education teacher of sports and health, found the principal problem that is in the method of assessment and the use of assessment instruments. The results of the interviews were then described that at the stage of authentic assessment of the basic skills of playing football, the first school learners use only the open records and self-assessed appraisal by the assessor teacher. And it can be ascertained that the assessment instrument used has not met the criteria of validity, reliability, and fulfill the element kepraktisan.Padahal success of achieving competence is determined by the instrument used.

Developed Appraisal Instruments

Research and development is a research method used to produce a particular product. The product resulting from this research is an

authentic assessment guide to the basic skills of playing soccer in a format containing grids, assessment observation sheets, assessment rubrics, appraisal norms, and basic skills application apps to play android based football. The assessment observation sheet was used by a rater or an assessor outside the researcher. The rater involved in the study was physical exercise and health education teachers.

The development of an authentic assessment instrument product of the basic skills of playing football in this study consisted of two observational skills namely kicking, stopping the ball and dribbling. The grid of an authentic assessment instrument of the basic skills of playing football can be seen in Table 3.

Table 3. Grid of the Authentic Assessment Instrument Basic Skills of Playing Football

Variable	Sub Variable	Indicator	No. Item
Kick and stop the ball	Eyes sight	Looking towards the ball position and towards the target ball will be kicked	1
	Foot pedestal	the knee on the foot of the pivot slightly bent and at the kick kick straightened	1
	Legs Swing	lifting the legs swing backwards and then swung forward until the legs are used to kick in right about the ball part being kicked	1
	Ball Enters	kick and stop the ball using the inner and outer legs and stop the ball with the sole of the foot	1
	Posture	the foot position is right beside the ball, the body is just above the ball, and the posture is slightly inclined forward	1
	Implementation of Results	kick and stop the ball for 30 seconds 20 times	1
Dribble	Early Attitude	standing facing the direction of movement, foresight, both arms slightly outstretched	1
	Movement	pushing the ball forward with the position of the foot slightly opened forward with the foot pivot followed, moving the ball not far from the foot	1
	End of Movement	weight is on legs that are not used for dribbling, eye gaze toward the ball, the position of the ball rolling not far from the foot	1
	Ball Enters	dribble using both feet with inner and outer legs alternately	1
	Agility	dribble past 5-6 cones	1
	Implementation of Results	dribble with less than 19 seconds	1

Validity, Reliability and Practicality

- **Validity**
  Content validity test with Aiken's Value analysis got coefficient value *Aiken's V.*

Table 4. Analysis Results *Aiken's V*

Rater	Item 1		Item 2		Item 3		Item 4		Item 5		Item 6		Item 7		Item 8		Item 9	
	Score	s	Score	S	Score	s	Score	S	Score	s	Score	S	Score	s	Score	s	Score	s
I	4	3	3	2	3	2	3	2	4	3	4	3	3	2	4	3	4	3
II	4	3	3	2	3	2	3	2	4	3	4	3	3	2	3	2	4	3
III	4	3	4	3	4	3	4	3	3	2	3	2	4	3	4	3	3	2
∑s	9		7		7		7		8		8		7		8		8	
V	1		0,778		0,778		0,778		0,889		0,889		0,778		0,889		0,889	

The Aiken's V coefficient ranges from 0-1. Aiken's V coefficient for content validity test items is 1 (item 1), 0.778 (item 2), 0.778 (item 3), 0.778 (item 4), 0.889 (item 5), 0.889 (item 6), 0.778 (item 7), 0.889 (item 8), and 0.889 (item 9) so that it can be said that the instrument used has high validity.

Qualitative data obtained from the results of the discussion with experts and the results of improvement notes in the form of suggestions on assessment instruments.Recititulation of qualitative data of expert validation results are presented in Table 5.Selanjutnya data serve as a reference instrument improvement.

Table 5. Qualitative Data Recapitulation Expert Validation

No	Validator	suggestion
1	I	(1) Improve grammar (2) Indicator football accuracy check again, with accurate indicator on what ball hold is not? (3) Is there a minimum number of kicks etc? (4) Determination of the number of tents 20 times or 30 times shall have a basis
2	II	(1) Add parallel class settings (2) Make the calculation of value automatically
3	III	(1) Describe the kicking indicator and stop the ball along with dribble (2) Sub-variables should be adjusted to the principles of kicking the ball and dribbling

Reliability

The authentication test of the authentic assessment instrument of the basic skills of playing android based football is done by calculating the coefficient of Alpha Cronbach and Intraclass Correlation Coefficients (ICC) with SPSS (Statisical Package for the Social Sciences) 20. Reliability test result with SPSS 20. can be seen in Figure 1 and Figure 2.

Table 7. Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.871[a]	.795	.920	14.519	61	61	.000
Average Measures	.931[c]	.886	.958	14.519	61	61	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

Output of instrument reliability test results showed that the value of Alpha Cronbach coefficient of 0.931. Alpha reliability test results obtained coefficient value of 0.931 indicates that the authentic assessment instrument basic skills of playing football android based has a high level of reliability.

Intraclass Correlation Coefficient (ICC) calculates the value of reliability coefficients between rater. Output Reliability Test Results Instrument shows Intraclass Correlation Coefficient (ICC) of 0.871, so it can be understood that with Intraclass Correlation Coefficient (ICC) of 0.871 indicates the authentic assessment instrument basic skills play football has a high degree of reliability.

Practicality

The practicality test is used to assess the practicality of an authentic assessment instrument of basic skills of android-based football play. Practical test is done by giving practicality assessment sheet to subject teacher of Physical Education of Sport and health at SMP N 1 Welahan. The practicality test measures the authentic assessment instrument of basic android football based skills from the ease of administering, the time spent to evaluate, ease of scoring, and the ease of interpretation and use of the instrument.

Table 8. Recapitulation of Data on the Assessment of Practicality Results

No	Aspect	statement	Master's Score I	Master's Score II
1	Easy to administer	The instructions for using the instrument can be understood easily.	5	4
		Instruments can easily be set according to assessment needs.	4	4
		Sub aspects of the assessment can easily be observed and assessed.	4	4
2	Time spent on evaluation	Assessment instruments can make efficient use of time in assessment.	4	4
3	Ease of scoring	Scoring instructions can easily be understood.	5	4
		The scoring criteria and criteria are presented clearly and easily understood.	4	4
		The instrument displays the scoring criteria and scoring columns clearly.	4	4
		Scans with apps, making it easy to scroll.	4	4
4	Ease of interpretation and application usage	Recapitulation of values can be done quickly and easily.	4	5
		The interpretation instructions are clearly presented.	4	4
		Interpretation of value can be done easily.	4	4
		Applications of the instrument can be run easily.	4	4
Total score			50	49
Percentage			$\frac{50}{60}$ x 100% = 83%	$\frac{49}{60}$ x 100% = 81%
Average Percentage			82%	

CONCLUSION AND SUGGESTION

Based on the results of the research, the developed product is an authentic assessment instrument of the basic skills of playing soccer with an assessment format that contains: lattice, assessment observation sheet, assessment rubric and assessment norm. From the result of validity test of instrument of appraisal using aiken'v formula and it is stated that instrument of assessment is valid by content with high category. Reliability test is done from expert test result, limited test and wide test it is stated that sig value of all test no significant difference from result of assessment from second rater. And based on tables of alpha cronbach coefficient criteria from george & mallery (2003) concluded that the average reliability criteria of both rater is very high. As for the practicality of the instrument obtained the average percentage value of the three assessors is 82%, and categorized high. In conclusion that the authentic assessment instrument product of the basic skills of playing football developed proved to be valid, reliable and practical.

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