

Affective Assessment Of Buddha Religious Education Learning

Hariyanto

{buddha_wng@yahoo.com} Raden Wijaya Wonogiri State Buddhist High School, Central Java

ABSTRACT

The results of observations in the School of Assessment of Buddhist Religious Education Subjects, the cognitive domain assessment was carried out by means of tests. Affective domain assessment is done by giving assignments and observations. Based on these conditions an appropriate and quality assessment instrument is needed. This type of research is Research and Development. The feasibility and quality test of the instrument is based on the results of the validation of the expert team and the implementation of trials to students. Data analysis using t test, validity and, reliability test. The initial draft of 60 statement items was developed using a Likert scale. The average result of lecturer validation was 76% and the teacher's statement was 82% in accordance with the aspects studied with the appropriate criteria. Analysis of the results of small group trials, namely 51 (85%) statement items have good distinction, 38 (63%) valid statement items and instrument reliability $r_{11} = 0.614 > r_{table} = 0.576$. Based on the analysis of small group trials, the instrument was improved and rearranged into draft II. Draft II was tested on respondents in a field test. The results of the field test analysis showed that 52 (87%) statement items had good distinctive power. The results of the validity test are 52 (87%) valid statement items and the reliability calculation results are $r_{11} = 1.00 > r_{table} = 0.244$, so that the instrument is reliable. Based on the results of this field test analysis, the final product of the affective domain assessment instrument was prepared.

Keywords

Instruments, Affective Assessment

Introduction

One indicator of the success of curriculum implementation is marked by the ability of good graduates at a certain level of education. The ability of graduates that contains three domains of learning objectives, namely: cognitive domain, affective domain, and psychomotor or often called the ability to think, behavior and, skills to do a job [1], [2], [3], [4]. The subject of Buddhist Religious Education should in its aim be to achieve these three domains. Learning the subject of Buddhism Education is essentially to create humans who believe and fear God Almighty and have noble character [5], [6], [7].

The success of students in learning can be identified by carrying out an evaluation. In addition, evaluation as a benchmark for students in achieving learning goals, evaluation is also used to measure the success rate of teaching programs [8], [9], [10]. Implementation of evaluation is one of the important tasks that must be done by the teacher. Evaluations that are done properly and correctly can improve the quality and learning outcomes because these evaluation activities help teachers to improve learning methods and help students improve their learning methods [11], [12], [13]. The implementation of evaluation needs to be supported by instruments that are in accordance with the characteristics of the objectives (including competency standards and basic competencies), as well as carried out regularly and continuously [14], [15], [16], [17], [18].

Literature Review

Students are not only able to master the cognitive aspects, but also be able to develop the affective aspects as well as the psychomotor aspects as a whole. However, in the Buddhist Religious Education Subject in, particular, the aspects assessed were only limited to cognitive and affective aspects [19], [20]. While the psychomotor aspect is prioritized for subjects that have many practices such as

Physics, Chemistry, Biology, Languages and Information Technology and, Computers [21], [22]. Affective domain determines a person's learning success. People who do not have good affective abilities find it difficult to achieve optimal learning success. Cognitive and psychomotor learning outcomes will be optimal if affective is high. Therefore, education must be organized by giving better attention to this affective domain. In addition, the development of the affective domain in schools will have a very positive influence in the next child's life, either at home or in the environment [23], (S. Lakshmi and G. M. K. Nawas, 2016). Teachers of Buddhist Religion Education are well aware that affective problems are felt to be important, but in reality, teachers do not assess the affective domain by using relevant instruments. So it is necessary to design and develop an affective domain assessment instrument specifically concerning the Affective Domain Assessment Instrument for Buddhist Religious Education Subjects Sila Material.

Appraisal is a process of gathering information and making decisions based on that information. Information that is relevant to what will be assessed can make it easier to make an assessment in learning activities [24], [25], [26], [27]. Assessment is a systematic and continuous activity to gather information about student learning processes and outcomes in order to make decisions based on certain criteria and considerations [28], [29].

Students' affective conditions relate to attitudes, interests, and/or values. This condition cannot be detected by tests but can be obtained through a systematic and continuous questionnaire, inventory, or observation. Affective abilities are part of learning outcomes that have a very important role [30]. Success in the cognitive and psychomotor domains is largely determined by the affective condition of students. Students who have an interest in learning and a positive attitude towards lessons will feel happy learning certain

subjects so that they can achieve optimal learning outcomes [31]. The five levels of the affective domain are: receiving (attending), responding, valuing, organizing, and characterization [32]. At the receiving or attending level, students have the desire to pay attention to specific phenomena or stimuli. The teacher's task is to direct students' attention to phenomena that are the object of affective learning [33], [34]. Responding is the active participation of students, namely as part of their behavior. At this stage, students not only pay attention to specific phenomena but also react [35]. Valuing means giving value or giving appreciation to an activity or object so that if the activity is not carried out, it is felt that it will bring harm [36]. Organization, values are linked to one another, conflict between values is resolved, and begins to build a consistent internal value system. Learning outcomes at this level are in the form of value conceptualization or value system organization [37]. Characterization is the highest level of affective domain. At this level, students have a value system that controls behavior until a certain time to form a lifestyle. Learning outcomes at this level are personal, emotional, and social [38].

Student behavior that is controlled by the presence of values will affect morale. Moral is teaching or principle about good and bad values for actions and behavior in human life in the environment of personal life, family, community, nation and, state [39], [40], [41]. Moral is the capacity to: 1) distinguish between right and wrong; 2) different actions and 3) experience pride in acts of kindness and guilt exists when acting outside the standard norm [42]. Matters (scope) of morality are reasoning (considerations) based on rules, principles, idealizations which state actions as right, wrong, good, bad which have an influence on feelings, interests, idealization of other people or, certain experiences [43]. Morality in Buddhism is based on *Sīla* which is practiced in everyday life. Morality and ethics are the basis for developing other virtues such as mental cultivation through meditation [44], [45], [46].

Method

This research is a type of R & D research, this research develops an affective domain assessment instrument which is one of the learning tools. The subjects in this study were Buddhist high school and vocational high school students. All these students have obtained the Buddhist Religious Education Subject at the Competency Standard of morality. So that the research subject can be used as a source of data in research. Data collection methods in this study include: The Documentation Method is used to obtain data about schools, students, learning plans, and assessment models carried out by teachers, the Questionnaire Method is used to collect data about student responses as The subject of research on the Subject of Buddhist Religion Education subject matter of morality using the affective domain assessment instrument developed by the researcher [47]. The stages of the research implementation of the affective domain assessment instrument development, are as follows: observation of potentials and problems, determining the

objectives of the assessment, developing an Assessment Instrument (Development of an Initial Draft); instrument validation (review of instruments by experts); small group trials, revising draft I; and field testing.

The affective domain assessment instrument developed in this study uses a non-test technique with a Likert scale as a measurement tool. Before arranging the instrument, a grid is made. The arrangement of indicators in the grid has been adjusted to operational verbs in the affective domain, the statement sentences are made in the form of favorite and unfavoreable statements which have also been adjusted to the characteristics of each measurement.

Results

Potential and Problems (Research)

The learning device includes the character values that must be achieved for each main material being taught. The learning method used is cooperative using interactive lecturing and discussion methods. However, the evaluation is still limited to the evaluation of the cognitive domain with tests for the affective domain and the assessment has not been done optimally. Affective assessment is still carried out, namely by observation and assignments. Observations are made when learning takes place in the classroom, while assignments are given as homework, namely by summarizing material or searching for additional material from the internet. This affective assessment is given every mid-semester, if the submitted assignments are complete, the student will be given a B (Good) grade.

The teacher has attended the socialization, received training in making evaluation tools for the assessment of the cognitive domain, namely by means of multiple choice tests and descriptions. Meanwhile, to assess the affective domain can be done in several ways, including observation, giving a questionnaire or inventory. However, in its implementation, to assess the affective domain of the teacher only observes student assignments. Affective assessment is also only limited to attitude characteristics, four other characteristics that are also important in affective assessment, namely interests, self-concept, values and, morals have not been implemented [48].

The affective assessment that is carried out is not in accordance with the quality affective domain assessment instrument, because it has not been developed using the right instrument, no assessment indicators are made according to the affective domain operational verb and cannot function to measure all the characteristics of the affective domain assessment. In making the grid, the researcher uses the affective domain level of Operational Verbs (KKO) in Bloom's taxonomy which includes accept (A1), respond (A2), assess (A3), manage (A4), live (A5).

Development of Affective Domain Assessment Instrument Product Design (Development)

The instrument developed as an assessment model for the affective domain in this study is the affective domain assessment instrument using the Likert scale. This affective domain assessment instrument is said to be of quality because the assessment covers all the criteria for affective

assessment, namely attitudes, interests, self-concept, values and, morals.

The initial draft of the research instrument developed 60 statement items consisting of 12 attitude statement items, 12 interest statement items, 12 self-concept statement items, 12 value statement items and, 12 moral statement items. To produce a quality affective domain assessment instrument, this instrument goes through several trial stages both theoretically and empirically. Theoretically, the instrument is validated by a team of experts using the instrument review sheet format that has been made according to the affective instrument writing guide. After being tested theoretically, an empirical trial was carried out by involving students as test subjects. The empirical test is stated to be ended by the researcher if there are 50 valid statement items, provided

that 10 statement items measure attitudes, 10 statement items measure interest, 10 statement items measure self-concept, 10 statement items measure value and 10 statement items measure morale. This result is the final product of the affective domain assessment instrument. The explanation of the description above is as follows:

Expert Validation

At the instrument validation stage, it produced several inputs from the expert team, so it was necessary to fix the deficiencies contained in this instrument both in terms of content, construction and, language. The results of the validation from the expert team are explained as follows:

Expert Team Validation

Table 1. Percentage of Expert Review Results on Affective Domain Assessment Instruments

No	Reviewers	Statement of Compliance (%)	Statement No. Corresponding (%)	Criteria
1	TA-1	63	37	fit
2	TA-2	78	22	Very worthy
3	TA-3	87	13	Very worthy
	Total	228	72	fit
	Average %	76	24	fit

Information:

TA-1 = Evaluation Expert Team

TA-2 = Material Expert Team

TA-3 = Curriculum Expert Team

The percentage of the analysis results shows that most of the statements are in accordance with the aspects studied, with the average criteria being feasible. These appropriate statements are rearranged, while those that are not suitable

are corrected according to the input of the reviewer. Inputs from reviewers that are used as guidelines for correcting inappropriate statements can be seen in Table 2.

Table 2. Input from the Expert Team on the Affective Domain Assessment Instrument

No	Reviewers	Input
1	TA-1	<ol style="list-style-type: none"> Some statements are not yet contextual, need to be reviewed or reconstructed (number 2, 3, 4, 5, 10, 14, 15, 16, 17, 19, 25, 28, 29, 39, 40, 41, 43, 45, 47, 58, 54, 57, 59). There is a statement in measuring attitudes that should be included in measuring interest (number 4). Affective assessments need to appear in the syllabus and lesson plans
2	TA-2	<ol style="list-style-type: none"> Some unfavorable statements are not in accordance with the subject matter of the study (numbers 6, 7, 10, 20). The statement items are good enough less than 20 words but some are too long so they are difficult to understand (number 14, etc.). Indicators in expressions of interest still need to be improved. Several indicators in moral measurement are necessary perfected. Need to be careful in developing character values, see the guidelines issued by Balitbang or the Ministry of National Education.
3	TA-3	<ol style="list-style-type: none"> The editorial statement is made more operational. The language is improved again (it still seems like every day social language). The writing system (letters and words) is checked again, there are still many wrong writing or letters in the sentence. Improvements in numbers 6, 9, 17, 40, 45, 54, 55, 58.

Table 3. Inputs and improvements to be made

No	Input	Revision
1	Some statements are not yet contextual, need to be reviewed or reconstructed..	Reviewing each statement and correcting the construction of sentences that are not yet appropriate so that the sentence is more contextual (statements number 2, 3, 4, 5, 10, 14, 15, 16, 17, 19, 25, 28, 29, 39, 40, 41, 43, 45, 47, 48, 54, 57, 59).
2	There is a statement in measuring attitudes that should be included in measuring interest.	Review statements in measuring attitudes, and remove statements that should be included in measures of interest (statement number 4).
3	Some unfavoreable statements are not in accordance with the subject matter of the study.	Refined content and constructs for unfavoreable statements (statements number 4, 10, 20, 40).
4	The statement items are good enough less than 20 words but there are still some that are too long so that it is difficult to understand.	Review each statement and correct sentences that are unclear to make them easier to understand (numbers 14, 40, 59).
5	Indicators in the expression of interest and morals still need to be improved and refined	Improve indicators in measuring interest and morale, by paying attention to KKO in the affective domain to measure interest and morale.
6	It is necessary to be careful in developing character values, see the guidelines issued by Balitbang or Depdiknas.	Improve the development of character values by referring to the Balitbang and Depdiknas guidelines.
7	Editorial statements are made more operational.	Operate the editorial of each statement (corrections in numbers 6, 9, 17, 40, 45, 54, 55, 58)
8	Language has been improved again (still impressed with everyday social language).	Language is made better, but still easy to understand.
9	The writing system (letters and words) is checked again, there are still many wrong words or letters in the sentence.	Review the writing procedures of each statement, and complete incomplete or incorrect words and sentences.
10	There are several operational verbs (KKO) used in the indicators that are not quite right	Adjust the KKO with the type of measurement and indicators.
11	There are character values that are not in accordance with the material developed.	Customize the character developed with the material.

In accordance with the expert team's input, a review of the statement items were not in accordance with the aspects being studied. Furthermore, improvements were made to the item numbers mentioned by the reviewer in accordance with the input given, namely item numbers 2, 3, 4, 5, 6, 9, 10, 14, 15, 16, 17, 19, 20, 25, 28, 29, 39, 40, 41, 43, 45, 47, 58, 54, 55, 57, 58, 59.

Based on some input provided by the expert team on the affective domain assessment instrument, the researcher made revisions to correct errors and add deficiencies in the instrument..

Small Group Trial

The small group trial involved 12 students, namely 4 students who had high achievement, 4 students who had medium achievement and 4 students who had low

achievement. The determination of these criteria is based on the average score of the students' daily tests. This small group trial was carried out in order to determine the difference in power of the instrument and its level of reliability. The analysis of the instruments for small group trials is as follows following:

Instrument Difference Analysis

The analysis of the instrument's difference in power was calculated using the one-end t test formula. This is done because what is differentiated is the two groups whose status has been defined, namely the upper group and the lower group. The small group trial consisted of 12 students, divided into 6 upper group students and 6 lower group students based on the scores they obtained.

Table 4. Results of the Analysis of the Difference of the Small Group Trial Instruments.

No	Criteria	No item	Total	Percentage
----	----------	---------	-------	------------

1	Bad	7, 20, 34, 36, 39, 44, 45, 50, 60.	9	15
2	Good	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 37, 38, 40, 41, 42, 43, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59.	51	85

The results of the analysis show that 9 (15%) statement items have poor differentiation power because the results of the calculation of the difference in power are <0.300 . Meanwhile, 51 (85%) other statement items are classified as having good difference because the results of the calculation of the difference are >0.300 .

Validity Analysis

In the small group trial, the results of the validity test of the affective domain assessment instrument with a Likert scale used r table of 0.576. After the trial, there were 22 (37%) invalid statement items because r count <0.576 , while 38 (63%) other statement items were valid with r count >0.576 . Invalid statements include item numbers 3, 6, 7, 11, 20, 22, 24, 34, 35, 37, 39, 42, 43, 44, 46, 47, 48, 50, 53, 55, 56, 60.

Instrument Reliability Analysis

The instrument reliability index is good, seen from the results of the reliability analysis, the value of $r_{11} = 0.614$ while r table = 0.576. Because $r_{11} > r$ table, it can be concluded that the research instrument is reliable.

Based on the results of the analysis of the difference power, the validity and, reliability of the instrument, it can be concluded that the first draft of the affective domain assessment instrument 51 (85%) items have good distinction power, 38 (63%) items are valid statements and the reliability index is classified as good. In the small group trial the invalid statement items also still exceeded 25%. Therefore, to produce a better affective domain assessment instrument, a revision was made to draft I of the instrument, namely for statement items that were invalid and had little difference in power.

Revision of the Affective Domain Appraisal Instrument

The revision of the instrument is based on the results of the small group trial. The results of the small group trial analysis showed that there were still 9 statement items that had little difference, namely questions number 7, 20, 34, 36, 39, 44, 45, 50, 60. While the results of the validity test showed that there were 22 invalid statement items, including statements number 3, 6, 7, 11, 20, 22, 23, 33, 34, 36, 39, 42, 43, 44, 45, 47, 48, 50, 53, 55, 56, 60. repairs are needed for questions that have little difference and are invalid.

Improvements are made by reviewing each invalid statement item, then referring to the initial input from the reviewer, namely reviewing the statement indicators, Operational Verbs used, relevance to material, sentence construction, composing favorite and unfavoreable statements and, grammar. Statements 3, 6 and, 7 are favorite statements to measure student attitudes. It is necessary to make improvements to the three sentences because they have little difference, namely by changing the sentence structure to make it more operational and become an un factual

sentence. With this change, the respondents' answers are more varied.

Statements number 20, 22, 24 are statements that measure student interest. Statement number 20 has a very small difference score of -2.089 and the validity is -0.025, the sentence can still be interpreted as fact. So that the respondent's answer is also less varied, so that the sentence is changed to a sentence that is not factual. Meanwhile, statements number 22 and 24 have validity respectively 0.567 and 0.309, with a relatively good difference. This statement is good enough, because the validity is almost close to the t table. However, the sentence structure needs to be improved so that the respondents' answers are more varied and the statement items become valid.

Statements number 33, 34, 36 are statements to measure students' self-concept. Statement number 33 is actually quite good, with a difference of 0.679 and validity of 0.340. However, the sentence structure and language still need to be improved so that the statement becomes easier to understand. So that the respondents' answers are more varied. For statements number 34 and 36, the difference is very small, namely -0.336 and -0.490 with a validity of 0.324 and 0.017. Because the variety of answers is very small and the validity is also small, it is necessary to improve the statement items so that the statements are not confusing and more operational.

Statements numbers 36, 39, 42, 43, 44, 45, 47, 48 are statements to measure values that function to express students' beliefs about a problem. Many of the statements in the measurement of this value are invalid, due to their small difference, construct, and poor grammar. So it needs improvement so that the statement does not direct students to one or two answer criteria, for example, only 'SS' or 'S'. While statements number 50, 53, 55, 56, 60 as a measure of morality, already have quite good validity and distinctive power. It just needs to be improved on the grammar and sentence arrangement. The results of this revision are rearranged in the form of an affective domain assessment instrument and used in the implementation of measurements in the field.

Field Test (Development of Draft II Affective Domain Assessment Instruments)

The field measurement implementation involves all Buddhist students. Based on the results of the main field test affective assessment, the analysis of the difference power, the validity and reliability of the instrument was calculated.

Instrument Difference Analysis

Before analyzing the different power of the instrument, respondents were divided into three groups based on their scores, namely the upper group, the middle group and the lower group, each of which consisted of 18 (27%) upper

groups, 29 (46%) middle groups and 18 (27%) the lower

group based on the total score it gets.

Table 5. Results of the Analysis of the Discrepancy of Field Test Instruments

No	Criteria	No item	Total	Percentage
1	Bad	7, 11, 33, 34, 46, 47, 50, 55	8	13
2	Good	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 48, 49, 51,	52	87

The results of the analysis of the difference in power based on the table above shows that 8 (13%) statement items have poor differentiation power because the results of the calculation of the difference in power are <0.300 , while 52 (87%) of the statement items are classified as good because the results of the calculation of the difference in power are >0.300 . From the data from the analysis of the instrument's difference in power, it means that each item statement in the instrument has a large variety of answers, so that the

affective domain assessment instrument can be said to be good.

Validity Analysis

The results of the validity test of the affective domain assessment instrument with r_{table} of 0.244, after being analyzed with the Microsoft Office Excel program, the valid items were 52 (87%) and 8 (13%) invalid items, namely items number 7, 11, 33, 34, 46, 47, 50 and 55.

Table 6. Results of the Validity Analysis

No	Criteria	No item	Total	Percentage
1	Bad	7, 11, 33, 34, 46, 47, 50 dan 55	8	13
2	Good	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 49, 51, 52, 53, 54, 56, 57, 58, 59, 60.	52	87

Based on the results of the analysis in the table above, there are results for each measurement criterion where invalid statement items are in the attitude measurement 2 invalid statements and 10 valid statements, on interest measurement 12 valid statements, on self-concept measurement 2 invalid statements and 10 statements valid, on the measurement of the value 2 statements are invalid and 10 statements are valid, while in moral statements 2 statements are invalid and 10 statements are valid. Invalid statements are caused because the construction is still bad, so that it only leads students to answer in the 'SS' or 'S' category only.

Reliabilitas Instrumen

The results of the reliability analysis showed the value of $r_{11} = 1.00$. Because $r_{11} > r_{table}$ of 0.244, it can be concluded that the research instrument is reliable. Because the affective domain assessment instrument is >0.700 , it can also be concluded that the reliability of the instrument is good.

Based on the results of the field test analysis, in general, the instrument is functioning properly. However, there are still some invalid statements, namely item numbers 7, 11, 33, 34, 46, 47, 50 and 55. Because the researcher does not make further research, then invalid statements will not be included in the product. final affective domain assessment instrument. By removing the invalid instrument, it will not affect the achievement of the assessment indicators, because valid

statement items can already represent all the assessment indicators to be achieved.

Discussions

Assessment is an important part of learning activities. Assessment is not only done using tests, because tests can only be used to measure cognitive aspects. Meanwhile, the assessment also needs to measure the affective and psychomotor aspects. The teacher's assessment includes cognitive and affective aspects, cognitive assessment is carried out using tests, while affective assessments are carried out by observation or through assignments. The method of assessing the affective domain using observations or assigning tasks is not wrong, but it is less relevant for assessing the affective domain. Affective assessment using non-test evaluation tools is more relevant because it is based on student responses or student responses during learning [49], [50] [51].

The affective domain assessment instrument developed in this study consisted of 60 statement items divided into five categories, namely 12 statement items to measure attitudes, 12 statement items to measure interest, 12 statement items to measure self-concept, 12 statement items to measure value and 12 item statements to measure morale. The development of the instrument was adjusted to the Competency Standards for Buddhist Education Subjects, namely analyzing the precepts. Because this affective domain assessment

instrument functions to assess student affective, which is part of the learning process, this affective domain assessment instrument is prepared by taking into account the affective domain assessment level which consists of five levels, namely accept (A1), respond (A2), assess (A3), manage (A4) and live (A5). The affective domain assessment instrument was made using a Likert scale using four answer choices, namely Strongly Agree (SS), Agree (S), Disagree (TS), Strongly Disagree (STS). The arrangement of each statement item is based on the character that must be achieved by students after studying the learning material [52] [53], .

The first trial in a small group involving 12 respondents with the criteria of 4 high-ability students, 4 medium-ability students and 4 low-ability students, seen from the average daily scores of students on the subject matter of the precepts. The reason the researchers took 12 respondents in a small group test was so that the answers were more varied. Variations in this answer seem even more obvious if the value of the difference in power of the instrument is small and the reliability or reliability index is good. The variability of the instrument and the reliability index or reliability index are important indicators in analyzing the instrument. The results of the analysis of the difference power and the reliability or reliability index are used as a reference for improving the instrument after the implementation of the trial.

Instrument Difference

The analysis that has been carried out in a small group with 12 students as respondents, of the 60 statements, there are 9 (15%) items that the difference is <0.300 and 51 (85%) the difference is >0.300 . Whereas in the main field test with 65 students, the results obtained 8 (13%) items statement of difference power <0.300 and 52 (87%) items statement of difference power >0.300 .

Instrument Validity

Analysis of the level of validity that has been carried out in a small group with a number of respondents 12 students, obtained results 22 (35%) invalid statement items because $r_{count} < r_{table}$ is 0.576, while 38 (63%) other statement items are valid. The results of the identification of the items are invalid, due to poor construction, grammar and sentence structure. Especially the statements used to measure students' values or beliefs. Therefore, there is a correction for invalid statement items. After that the instrument was rearranged and used for field testing. The results of the field test with 65 students showed that 8 (13%) statement items were invalid because $r_{count} < r_{table}$ and 52 (87%) statements were valid. The data from the analysis shows that the affective domain assessment instrument is good. However, because there are still items that are not valid, the instrument needs to be rearranged and invalid statement items removed from the instrument to produce a new affective domain assessment instrument product.

Reliability or Reliability Index

The results of the reliability analysis carried out in the small group resulted in a reliability index of $r_{11} = 0.614$. This reliability index is greater than $r_{table} = 0.576$, so that the affective domain assessment instrument is reliable. Whereas

in the field test the reliability index increased by $r_{11} = 1.00$ compared to $r_{table} = 0.244$ at the 5% significance level, so this instrument is reliable, because $r_{11} > r_{table}$. In addition, because the reliability index is greater than 0.700, the affective domain assessment instrument is classified as good. Judging from the results of the reliability analysis of the instrument from small group trials to reliable field tests so that there is no doubt about it and able to describe the true affective value of the respondents.

Based on the results of empirical calculations, a final draft of the affective domain assessment instrument is compiled which can be mass produced and used by teachers for assessment. In accordance with the initial plan, the final product of this affective domain assessment instrument consists of 50 statement items consisting of 10 attitude statements, 10 statements of interest, 10 self-concept statements, 10 value statements and 10 moral statements. The indicators of the 50 statements consist of A1 (16%), A2 (24%), A3 (26%), A4 (8%) and A5 (26%).

Conclusion

The affective domain assessment instrument is feasible with an average percentage of 76% and 82%. Development of draft I of the instrument, through small group trials. The results of the analysis of the difference in the power of the instrument in the small group trial, the results were 9 (15%) items of small differentiation power and 51 (85%) items of good differences. Analysis of the validity of the affective domain assessment instrument in small group trials, the results were 22 (35%) and 38 (63%) other statement items were valid. While the reliability analysis of the instrument was reliable with $r_{11} = 0.614$. Development of draft II instruments, implementation of field tests. The results of the analysis of the difference in the power of the main field test instrument were 8 (13%) items that stated the difference was small and 52 (87%) items stated that the difference was good. While the validity analysis with a significance level of 5%, the results obtained 8 (13%) invalid statement items and 52 (87%) valid statement items because $r_{count} > r_{table}$. The reliability index shows the consistency of the results, namely $r_{11} = 1.00$. Because the score > 0.700 , the affective domain assessment instrument is classified as good.

References

- [1] D. R. Krathwohl, B. S. Bloom, dan B. B. Macia, "Taxonomy of Educational Goals. Handbook II: Affective Domain.," hal. 254–255, 1964.
- [2] S. J. Snider, "Cognitive and affective learning outcomes resulting from the use of behavioral objectives in teaching poetry," *J. Educ. Res.*, vol. 68, no. 9, hal. 333–338, 1975, doi: 10.1080/00220671.1975.10884791.
- [3] A. R. M. Zaghoul, "Assessment of lab work: A three-domain model; Cognitive, affective, and psychomotor," *ASEE Annu. Conf. Proc.*, hal. 2279–2285, 2001, doi: 10.18260/1-2--8931.
- [4] N. A. M. Noor, N. M. Saim, R. Alias, dan S. H. Rosli, "Students' performance on cognitive,

- psychomotor and affective domain in the course outcome for embedded course,” *Univers. J. Educ. Res.*, vol. 8, no. 8, hal. 3469–3474, 2020, doi: 10.13189/ujer.2020.080821.
- [5] P. Morgan, “The place of Buddhism in the religious education curriculum,” *Br. J. Relig. Educ.*, vol. 9, no. 1, hal. 17–21, 1986, doi: 10.1080/0141620860090103.
- [6] J. Morgan, “Buddhism and Autonomy-Facilitating,” 2013.
- [7] D. W. Robinson-Morris, “Radical Love, (R)evolutionary Becoming: Creating an Ethic of Love in the Realm of Education Through Buddhism and Ubuntu,” *Urban Rev.*, vol. 51, no. 1, hal. 26–45, 2019, doi: 10.1007/s11256-018-0479-4.
- [8] L. G. Criscione-Schreiber, M. B. Bolster, B. L. Jonas, dan K. S. O’Rourke, “Competency-based goals, objectives, and linked evaluations for rheumatology training programs: A standardized template of learning activities from the carolinas fellows collaborative,” *Arthritis Care Res.*, vol. 65, no. 6, hal. 846–853, 2013, doi: 10.1002/acr.21933.
- [9] D. C. Briggs, R. Chattergoon, dan A. Burkhardt, “Examining the Dual Purpose Use of Student Learning Objectives for Classroom Assessment and Teacher Evaluation,” *J. Educ. Meas.*, vol. 56, no. 4, hal. 686–714, 2019, doi: 10.1111/jedm.12233.
- [10] S. Lin *et al.*, “Data-based student learning objectives for teacher evaluation,” *Cogent Educ.*, vol. 7, no. 1, 2020, doi: 10.1080/2331186X.2020.1713427.
- [11] P. Ramsden, “Student learning and perceptions of the academic environment,” *High. Educ.*, vol. 8, no. 4, hal. 411–427, 1979, doi: 10.1007/BF01680529.
- [12] D. M. Kagan, “Ways of Evaluating Teacher Cognition: Inferences Concerning the Goldilocks Principle,” *Rev. Educ. Res.*, vol. 60, no. 3, hal. 419–469, 1990, doi: 10.3102/00346543060003419.
- [13] D. J. Boyd, P. L. Grossman, H. Lankford, S. Loeb, dan J. Wyckoff, “Teacher preparation and student achievement,” *Educ. Eval. Policy Anal.*, vol. 31, no. 4, hal. 416–440, 2009, doi: 10.3102/0162373709353129.
- [14] C. S. Logan dan C. D. Ellett, “The development, validity, and reliability of a faculty evaluation instrument to measure generic teaching skills and perceived enhancement of student learning,” *J. Pers. Eval. Educ.*, vol. 2, no. 1, hal. 65–82, 1988, doi: 10.1007/BF00124968.
- [15] M. G. Fete, R. C. Haight, P. Clapp, dan M. McCollum, “Peer evaluation instrument development, administration, and assessment in a team-based learning curriculum,” *Am. J. Pharm. Educ.*, vol. 81, no. 4, 2017, doi: 10.5688/ajpe81468.
- [16] F. Böttcher-Oschmann, J. Groß Ophoff, dan F. Thiel, “Validation of a questionnaire to assess university students’ research competences via self-evaluation – An instrument for evaluating research-oriented teaching and learning arrangements,” *Unterrichtswissenschaft*, vol. 47, no. 4, hal. 495–521, 2019, doi: 10.1007/s42010-019-00053-8.
- [17] J. Membrillo-Hernandez dan R. Garcia-Garcia, “Challenge-Based Learning (CBL) in engineering: Which evaluation instruments are best suited to evaluate CBL experiences?,” *IEEE Glob. Eng. Educ. Conf. EDUCON*, vol. 2020-April, hal. 885–893, 2020, doi: 10.1109/EDUCON45650.2020.9125364.
- [18] M. Kokoç dan M. Kara, “A Multiple Study Investigation of the Evaluation Framework for Learning Analytics,” *Educ. Technol. Soc.*, vol. 24, no. 1, hal. 16–28, 2021, [Daring]. Tersedia pada: <https://www.jstor.org/stable/26977854>.
- [19] T. J. Ten Cate dan J. C. J. M. De Haes, “Summative assessment of medical students in the affective domain,” *Med. Teach.*, vol. 22, no. 1, hal. 40–43, 2000, doi: 10.1080/01421590078805.
- [20] M. Droege dan M. T. Assa-Eley, “Pharmacists as care providers: Personal attributes of recent pharmacy graduates,” *Am. J. Pharm. Educ.*, vol. 69, no. 3, hal. 290–295, 2005, doi: 10.5688/aj690344.
- [21] A. Bin Azman, A. B. M. Shaharoun, dan M. B. Abdullah, “Review current practical skills assessment in machining course based on psychomotor domain,” *Proc. - 2014 Int. Conf. Teach. Learn. Comput. Eng. LATICE 2014*, hal. 171–175, 2014, doi: 10.1109/LaTiCE.2014.40.
- [22] S. Baharom, M. A. Khoiry, R. Hamid, A. A. Mutalib, dan N. Hamzah, “Assessment of psychomotor domain in a problem-based concrete labrotary,” *J. Eng. Sci. Technol.*, vol. 10, no. Spec. Issue 1 on UKM Teaching and Learning Congress 2013, June 2015, hal. 1–10, 2015.
- [23] M. Savic dan M. Kashef, “Learning outcomes in affective domain within contemporary architectural curricula,” *Int. J. Technol. Des. Educ.*, vol. 23, no. 4, hal. 987–1004, 2013, doi: 10.1007/s10798-013-9238-8.
- [24] R. Dann, “Assessment as learning: Blurring the boundaries of assessment and learning for theory, policy and practice,” *Assess. Educ. Princ. Policy Pract.*, vol. 21, no. 2, hal. 149–166, 2014, doi: 10.1080/0969594X.2014.898128.
- [25] Á. Fidalgo-Blanco, M. L. Sein-Echaluce, F. J. García-Peñalvo, dan M. Á. Conde, “Using Learning Analytics to improve teamwork assessment,” *Comput. Human Behav.*, vol. 47, hal. 149–156, 2015, doi: 10.1016/j.chb.2014.11.050.
- [26] M. Heritage dan C. Wylie, “Reaping the benefits of assessment for learning: achievement, identity, and equity,” *ZDM - Math. Educ.*, vol. 50, no. 4, hal. 729–741, 2018, doi: 10.1007/s11858-018-0943-3.
- [27] C. J. Watling dan S. Ginsburg, “Assessment, feedback and the alchemy of learning,” *Med. Educ.*, vol. 53, no. 1, hal. 76–85, 2019, doi: 10.1111/medu.13645.
- [28] J. D. Gaudreau, P. Gagnon, F. Harel, A. Tremblay, dan M. A. Roy, “Fast, systematic, and continuous delirium assessment in hospitalized patients: The

- nursing delirium screening scale,” *J. Pain Symptom Manage.*, vol. 29, no. 4, hal. 368–375, 2005, doi: 10.1016/j.jpainsymman.2004.07.009.
- [29] J. LeClair dan L. F. Shih, “Implementation of a systematic outcomes assessment plan to ensure accountability and continuous improvement in a non-traditional Electronics Engineering Technology Program,” *ASEE Annu. Conf. Expo. Conf. Proc.*, 2010, doi: 10.18260/1-2--16963.
- [30] E. Jen, “Affective Interventions for High-Ability Students From 1984-2015: A Review of Published Studies,” *J. Adv. Acad.*, vol. 28, no. 3, hal. 225–247, 2017, doi: 10.1177/1932202X17715305.
- [31] J. Slaby, “Affective self-construal and the sense of ability,” *Emot. Rev.*, vol. 4, no. 2, hal. 151–156, 2012, doi: 10.1177/1754073911430136.
- [32] D. R. Krathwohl, B. S. Bloom, dan B. B. Masia, “Taxonomy of educational objectives: The classification of educational goals; Handbook,” vol. XXV, no. 3, hal. 895–897, 1969.
- [33] D. Shin, “Preservice Mathematics Teachers’ Selective Attention and Professional Knowledge–Based Reasoning About Students’ Statistical Thinking,” *Int. J. Sci. Math. Educ.*, 2020, doi: 10.1007/s10763-020-10101-w.
- [34] K. Karst dan M. Bonefeld, “Judgment accuracy of preservice teachers regarding student performance: The influence of attention allocation,” *Teach. Teach. Educ.*, vol. 94, hal. 103099, 2020, doi: 10.1016/j.tate.2020.103099.
- [35] L. A. Didion, J. R. Toste, dan J. H. Wehby, “Response Cards to Increase Engagement and Active Participation of Middle School Students With EBD,” *Remedial Spec. Educ.*, vol. 41, no. 2, hal. 111–123, 2020, doi: 10.1177/0741932518800807.
- [36] H. C. Çelik, “The effects of activity based learning on sixth grade students’ achievement and attitudes towards mathematics activities,” *Eurasia J. Math. Sci. Technol. Educ.*, vol. 14, no. 5, hal. 1963–1977, 2018, doi: 10.29333/ejmste/85807.
- [37] K. Komalasari dan J. Sapriya, “Living values education in teaching materials to develop students’ civic disposition,” *New Educ. Rev.*, vol. 44, no. 2, hal. 107–121, 2016, doi: 10.15804/tner.2016.44.2.09.
- [38] S. Schwartz, “Value Priorities and Behavior: Applying a Theory of Integrated Value Systems Shalom Schwartz,” *Psychol. Values Ontario Symp.*, vol. 8, no. May, hal. 1–24, 2013, [Daring]. Tersedia pada: <https://dspace.palermo.edu/ojs/index.php/psicodebat/article/view/514>.
- [39] W. Hofmann, D. C. Wisneski, M. J. Brandt, dan L. J. Skitka, “Morality in everyday life,” *Science (80-.)*, vol. 345, no. 6202, hal. 1340–1343, 2014, doi: 10.1126/science.1251560.
- [40] C. Schein dan K. Gray, “The Theory of Dyadic Morality: Reinventing Moral Judgment by Redefining Harm,” *Personal. Soc. Psychol. Rev.*, vol. 22, no. 1, hal. 32–70, 2018, doi: 10.1177/1088868317698288.
- [41] P. S. Churchland, “Braintrust: What neuroscience tells us about morality,” *Braintrust What Neurosci. Tells Us about Moral.*, no. 2012, hal. 1–273, 2018, doi: 10.5964/ejop.v14i2.1589.
- [42] R. A. Quinn, A. C. Houts, dan A. C. Graesser, “Naturalistic Conceptions of Morality: A Question- Answering Approach,” *J. Pers.*, vol. 62, no. 2, hal. 239–262, 1994, doi: 10.1111/j.1467-6494.1994.tb00293.x.
- [43] M. Harris, “History and Significance of the EMIC/ETIC Distinction,” *Annu. Rev. Anthropol.*, vol. 5, no. 1, hal. 329–350, 1976, doi: 10.1146/annurev.an.05.100176.001553.
- [44] W. Edelglass, “Buddhist Ethics and Western Moral Philosophy,” *A Companion to Buddh. Philos.*, no. April, hal. 476–490, 2013, doi: 10.1002/9781118324004.ch31.
- [45] Saeeda Lubaba dan AKM Shahed, “Morality and Its Universal Approach From the Perspectives of Four Key Religions: Hinduism, Buddhism Christianity and Islam,” *Soc. Chang.*, no. XI, hal. 50–63, 2017.
- [46] K. Romesh, “Moral Elements in the Ethical Code of Buddhism,” *Filoz. Publiczna i Eduk. Demokr.*, vol. 3, no. 2, hal. 18–35, 2018, doi: 10.14746/fped.2014.3.2.14.
- [47] A. Syamsudin, B. Budiyo, dan S. Sutrisno, “Model of affective assessment of primary school students,” *Res. Eval. Educ.*, vol. 2, no. 1, hal. 25, 2016, doi: 10.21831/reid.v2i1.8307.
- [48] M. Kahveci dan M. K. Orgill, “Affective dimensions in chemistry education,” *Affect. Dimens. Chem. Educ.*, hal. 1–318, 2015, doi: 10.1007/978-3-662-45085-7.
- [49] T. Oakland, “Affective assessment,” *Psicol. Esc. e Educ.*, vol. 1, no. 2–3, hal. 11–21, 1997, doi: 10.1590/s1413-85571997000100002.
- [50] E. Kitchen, S. Reeve, J. D. Bell, R. R. Sudweeks, dan W. S. Bradshaw, “The development and application of affective assessment in an upper-level cell biology course,” *J. Res. Sci. Teach.*, vol. 44, no. 8, hal. 1057–1087, 2007, doi: 10.1002/tea.20188.
- [51] M. Ismail dan L. Syaiful, “Affective assessment in learning using fuzzy logic,” *2015 IEEE Conf. e-Learning, e-Management e-Services, IC3e 2015*, no. July, hal. 98–102, 2016, doi: 10.1109/IC3e.2015.7403494.
- [52] S. Jagger, “Affective learning and the classroom debate,” *Innov. Educ. Teach. Int.*, vol. 50, no. 1, hal. 38–50, 2013, doi: 10.1080/14703297.2012.746515.
- [53] S. L. Wong, “Affective characteristics for 21st century learning environments: Do they matter?,” *Int. J. Interact. Mob. Technol.*, vol. 14, no. 12, hal. 186–194, 2020, doi: 10.3991/IJIM.V14I12.15567.