Validity and Reliability of State Attitudes and Historical Insights of High School Students

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Abstract—This study aims to measure the value of the validity and reliability of state defense attitudes and insight into the history of high school students by not giving treatment to the subject to be studied. This research is an ex post facto type. This study uses a quantitative approach, because the information obtained is presented in the form of numbers and analyzed using statistical analysis. This research was carried out in all Yogyakarta State Senior High Schools. The results of this study indicate that: (1) assessment instruments to measure state defense and historical insight have validity coefficients of 1.00 and 1.00, which means that all instrument items developed are in a very useful category to use. (2) based on the results of empirical trials of state defense attitudes and historical insights, the INFIT values of MNSQ and INFIT t can be seen, the value of INFIT MNSQ defends the state by 1.00 with a standard deviation of 0.09, while the historical insight is 1.00 with standard deviation 0.10. The value of INFIT t defends the state of -0.22 with the standard deviation of 2.17 while the historical insight is -0.09 with standard deviation 1.86. (3) The reliability value obtained for the state defense attitude is 0.83 and 0.97 while the historical insight has a reliability of 0.83 and 0.97.

Keywords—State Defense, Historical Insights

I. INTRODUCTION

Indonesia is an archipelagic country that is very broad and has various ethnicities and cultures. Diverse ethnic groups can be united in one container, namely the Unitary Republic of Indonesia (NKRI). States that every Indonesian citizen must have the attitude and behavior as an Indonesian citizen who is able to maintain and maintain the sovereignty of the Indonesian state during the lives of other nations in the world [18]. These attitudes and behaviors must be instilled in the child from an early age, so that the child when he or she has entered adulthood has an attitude of patriotism to maintain and maintain the Indonesian Republic.

The problem of defending the country has been formulated in Chapter XII Article 30 of the 1945 Constitution. In Chapter XII of National Defense and Article 30 paragraph 1 and paragraph 2 of the 1945 Constitution states that each citizen has the right and obligation to participate in the defense of the state. Growing awareness of defending the country for every citizen can be pursued through education. The current conditions that occur in students are very worrying, many students are imitating without selecting the outside culture that comes in, one example with the existence of modernization raises the easy-going nature. Therefore, through education, students are expected to be able to understand the ins and outs of defending the country through the concept/understanding of defending the country, the legal basis for defending the country, etc. and can select the outside culture that enters.

In modern times today, many cultures of the nation have been eroded because of globalization. Teenagers love the culture of other nations more than their own national culture. They are not reluctant to learn about the culture, language, fashion and history of other nations. But they knew little about the history and culture of their own people. Research conducted by Widarta at High School 2 Wonosari, stated that the activities of students always use the internet and even the influence of globalization, especially in the field of science and technology, so that it is strongly suspected of influencing the degradation of nationalism [20]. Love the homeland with one of the ways is to commemorate national holidays. States that the most important and effective growth of state defense for Indonesia today is none other than through education [19].

For students who live in the current development period, instilling and understanding the values of the 1945 struggle feels more difficult than the previous generation. This is due to the lack of historical insight possessed by students which results in the difficulty of students to understand the values of the encounter in the past. Therefore, the effort to pass on to the initial step is to provide material related to the values of the Indonesian struggle to achieve independence. In addition, it also held activities on the commemoration of national historic days and conducted study tours to historical heritage sites.

With the competency of knowledge given by the teacher to students, it is hoped that it can add insight to students. Insights into the history of the nation are expected to help students to select foreign cultures. Judging from the facts written by the yet through his article, many students love foreign cultures more positively and negatively. The positive impact that can be felt by students is the advancement of science and technology owned by foreigners. With the entry and development of science and technology in
Indonesia, students can learn more about the knowledge and technology possessed by foreigners so that they are not left behind. The negative impact felt by students is by imitating the dress style of foreigners who are impolite to how to get along with foreigners who are very free.

Thus, in the cultivation of insights to students, teachers are expected to be able to attract attention and be able to encourage students not to be influenced by the negative culture of foreigners. So that it can have an impact on the learning achievement of students in school. History lessons not only learn the meaningless past. With the history of students will be able to know national identity. History will lead students to the gate of nationalism.

Based on the description above, this study seeks to see the value of validity and reliability of state defense attitudes and insight into the history of high school students. Realizing the value of validity and reliability is very important to determine the questions to be tested for research.

II. STATE DEFENSE AND HISTORICAL INSIGHTS

A. State Defense Attitude

Attitude is something related to the individual personality of each human being itself. Attitudes can be interpreted as an action that relates to the actions that will be carried out by the individual. Attitude is defined as a reaction or response that arises from an individual to an object which then raises individual behavior towards the object in certain ways [2]. Defines attitude as a reaction to the views or feelings of an individual towards an object [5]. Stated Every individual has attitude but, being a psychological phenomenon, each attitude is invisible [7]. Therefore, attitude are subjective and personal attributes and difficult to measure. From some of the opinions above, it can be concluded that the attitude is the reaction or individual response to an object that he wants to know in a certain way.

Love for the homeland will create an awareness of the country and be willing to sacrifice to the country. Therefore, a person or student must instill a sense of love for the homeland by performing a ceremony every Monday at school, even though we see that ceremonial activities every day are commonplace, but by doing the little things little by little a sense of love for the country will emerge.

A sense of love for the motherland is a form of love for his people, a good citizen must have a strong sense of nationalism. States that every Indonesian citizen must know or understand the forms of defense efforts of the country [18]. In an era of globalization, threats to state sovereignty and the integrity of the Republic of Indonesia can come from anywhere and in any form. In accordance with Law No. 3 of 2002 article 9 paragraph 2

B. Historical Insights

Historical insight is a way of looking at someone who has been known, without the historical insight of a person will not understand the history of his people. According to the Big Indonesian Dictionary, insight is a view, a review, and a conception of perspective. Thus, historical insight is a review, view, and conception of the perspective of a historical meaning. Suggests that historical insight has a character that is closely related to history. Historical knowledge recognizes three-dimensional views, and all three have the main characteristics of historical insight, 1) History is a continuity of the past, present, and future, which means that history is inseparable from time, even to design the future, history is very meaningful to become a guide in the future. 2) History is the unity of man, time and place, history is inseparable from human beings (historical actors), the time and place of history itself. 3) History is science, art, and philosophy, history is a discipline that covers culture, politics, geography and so on [1].

A person who learns or studies history or historical events, will eventually have a historical insight. With historical insight, one can develop a historical perspective that is useful for designing the future for the nation and for itself. History is often said to have educational, recreational and inspirational functions. With these three functions, in a history study it is very important to add a historical insight to students. Explains that History as a scientific discipline clearly has its own perspective which is not the same as other disciplines. Historical insights, views, or perspectives are intended as a framework of reference in explaining the study object and giving a firm picture of the developing phenomenon. In reviewing the views and perspectives of historical insights must refer to a historical fact. The historical facts referred to here are events or events that happened and must have valid and verifiable data [8].

History has an important meaning for people who study a historical event. History has two important aspects, namely history in a subjective sense as a construction or building compiled by historians as a description or story, history in an objective sense that
refers to the event or event itself, as a process in its actuality [10]. That way, someone gets historical insight in accordance with the point of view and the point of view of the person himself, because historical events have been compiled by historians and get valid results and point to the event itself and can be applied in daily life. Explained that History is a reconstruction of the reconstructed past, history is everything that is thought, said, done, felt, and experienced by humans [9]. By thinking about what has happened, it will open a new insight that will then be told to the surrounding community. All events that have been experienced by a person can be said as a person's life experience and will open a new insight that has happened to yourself.

Past events that are important and can be found in historical facts can be made into historical knowledge. History as a past event that can still be traced to the truth and evidence. Historical study is not a past study in the real sense, but rather a study of traces of the present from past events [15]. Then events that have no trace can be considered nonexistent (never happened). Past events related to the present but have valid and reliable evidence or data are called historical events. With the existence of valid data and evidence, the traces of the past can be traced to the truth through direct interviews. History as follows “The concept of history plays a fundamental role in human thought. It involves nations of human agency, change, the role of material circumstances in human affairs, and the putative meaning of historical event. It raises the possibility of “learning from history”. The concept of history plays a fundamental role in human thought. This concept calls on countries from human agents to change the material conditions in human affairs and the putative meaning of historical events. This gives rise to the possibility of learning from history.

III. MATERIAL AND METHODOLOGY

This research is an ex post facto type. This study aims to measure the value of validation and reliability of state defense attitudes and historical insights by not giving treatment to the subjects to be studied. This study uses a quantitative approach, because the information obtained is presented in the form of numbers and analyzed using statistical analysis.

This research was carried out in all Yogyakarta State Senior High Schools, as for later researchers took several high schools to be used as a research sample for High School 1 Bantul, High School 1 Kasihan, Colombo High School, High School 10 Yogyakarta, and High School 11 Yogyakarta. This study includes three stages, namely preparation, implementation and completion.

The population is the whole research subject that has the same characteristics. The population in this study were students of class XI IPS High School 1 Bantul, High School 1 Kasihan, High School 10 Yogyakarta, and High School 11 Yogyakarta. The sample is a portion of the population whose number is smaller than the number of populations that is considered representative of the population. Sampling using probability sampling technique is by sample random sampling, taking students from all 1 High School, Kasihan High School 1, Yogyakarta 10 High School, Yogyakarta 11 High School, and Colombo High School with 283 respondent variables of state defense and historical insight.

A valid instrument has high validity. Instruments that are less valid means having low validity. To find out the validity of the instrument, use the validity coefficient of Aiken; s content V, Formulates the Aiken’s V statistic as follows [14]:

\[ V = \sum s / \left| \sum (c-1) \right| \]

Information:
- S = r - lo
- Io = The lowest validity assessment number (in this case = 1)
- c = The highest validity score (in this case = 5)
- r = Number given by an appraiser

Content validation testing in this study using a grid to assess the appropriateness of the instrument to expert judgment or expert which includes the indicators to be measured, after getting the value from expert judgment then calculated using the formula above. The results of the coefficient are then interpreted whether the instrument's validity is useless, depending on the circumstances, can be useful or very useful. Explains if the Aiken's validity coefficient is less than 0.11, the validity is said to be useless, if between 0.11-0.20 it is said to depend on the situation, and if between 0.21-0.35 it can be said to be useful, and if it is more than 0.35 it is said to be very useful [14]. An instrument is said to be valid if the validity coefficient is included in the "can be useful" or "very useful" category [6].

Reliability refers to an understanding that an instrument can be trusted enough to be used as a data collection tool because the instrument is good. In this study reliability testing using the Alpha-Cronbach formula as follows:

\[ \alpha = \frac{n}{n-1} \left(1 - \frac{\sum \text{variances}}{\text{total variance}}\right) \]

Information:
- \( \sum \text{variances} \) = Variance 1, 2, and 3 hemisphere scores
- \( \text{total variance} \) = Variance of test score

To interpret the constraints of the instrument, guidelines are used according to Arikunto as follows [17]:

\[ \text{validity} = \frac{\text{number of items}}{\text{total items}} \times 100 \]

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The instrument is said to be reliable if it has a reliability or reliability coefficient of 0.6 or more. If alpha is less than 0.6 then it is declared unreliable and vice versa if it is equal to or greater than 0.6 then reliable.

IV. RESULT AND DISCUSSION

The product developed is an assessment instrument based on the state’s defense attitude and historical insight. Purpose develops assessment instruments to measure students’ abilities regarding state defense attitudes and historical insights. The instrument developed consisted of 40 multiple choice questions.

Instrument state defense and historical insights each consist of 20 multiple choice questions. The instrument developed adapted the theoretical study. The state defense attitude instrument was developed by referring to 4 problem solving indicators, each indicator consists of 5 multiple choice questions.

Instruments of state defense and historical insight were validated by one instrument expert and one practitioner. There are three aspects of assessment, namely material, construct, and language. These three aspects are translated into 10 questions. The results of instrument validation by the expert were analyzed with the validity equation Aiken [14]. Based on the results of the analysis obtained Aiken validity coefficient of 1.00, which means > 0.35 and included in the category very useful [14]. Based on the results of the instrument analysis, state defense and historical insights are declared to be valid in content and can be used to measure state defense and historical insights.

After the expert review, then the instrument is repaired according to suggestions and input. The results of this improvement can be used for empirical trials. trials were conducted in five schools, namely High School 1 Bantul, High School 1 Kasihan, High School 11 Yogyakarta, High School 10 Yogyakarta, and High School Colombo with the number of students 283 class XI IPS. The purpose of this trial is to determine the suitability of the assessment with the RM scoring model, the degree of difficulty of the item, and the reliability of the instrument.

Based on the results of empirical trials of state defense defense, the average value of Infit Mean Square (INFIT MNSQ) and INFIT t can be seen in table 2. The information obtained from table 2 is the average value of MNSQ INFIT for each item worth 1.00 with a standard deviation of 0.09. The average value of MNSQ INFIT has an acceptance limit of ≥ 0.77 to ≤ 1.30 [3]. The distribution of INFIT MNSQ values for each assessment item can be seen in Figure 1.

![Fig. 1. Distribution of MNSQ Infinite Values for Each Item of State Defense Attitude](image)

Based on the results of the analysis it can be concluded that the assessment instruments developed match the RM model. Table 2 also presents the average value of INFIT t that is equal to -0.22 with a standard deviation of 2.17. Based on this information it can be concluded that the items developed were declared to be passed and can be used. These conclusions are taken based on the criteria of passing whether the items that are passing have INFIT t < -2.0 or > 2.0 [3]. Based on the results of the analysis, it can be stated that all items from the state defense instrument can be declared valid and can be used to measure state defense.

The reliability of the state defense instrument can be analyzed classically. Based on the results of the classical analysis, the instrument reliability coefficient that has been empirically tested is 0.83. Table 2 presents the results of classical instrument reliability.) The reliability coefficient of state defense instruments belongs to the very strong category [17].

Table 3 presents the results of classical instrument reliability.) The reliability coefficient of state defense instruments belongs to the very strong category [17].

<table>
<thead>
<tr>
<th>Analytical aspect</th>
<th>Analysis Results</th>
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<tr>
<td>Infit MNSQ</td>
<td>Mean = 1.00, SD = 0.10</td>
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<tr>
<td>Infit t</td>
<td>Mean = -0.22, SD = 2.17</td>
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<tr>
<td>Alpha Cronbach</td>
<td>0.83</td>
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Based on the results of empirical trials of historical insights, the average value of Infit Mean Square (MNSQ) and INFIT t for each item is worth 1.00 with a standard deviation of 0.09. The average value of MNSQ INFIT has an acceptance limit of ≥ 0.77 to ≤ 1.30 [3]. The distribution of INFIT MNSQ values for each assessment item can be seen in Figure 1.
Square (INFIT MNSQ) and INFIT t can be seen in Table 3. The information obtained from Table 3 is the average value of MNSQ INFIT for each item valued at 1.00 with a standard deviation of 0.10. The average value of MNSQ INFIT has an acceptance limit that is \( \geq 0.77 \) to \( \leq 1.30 \) [3]. The distribution of INFIT MNSQ values for each assessment item can be seen in Figure 2.

Based on the results of the analysis it can be concluded that the assessment instruments developed match the RM model. Table 3 also presents the average value of INFIT t which is equal to -0.09 with a standard deviation of 1.86. Based on this information it can be concluded that the items developed were declared to be passed and can be used. These conclusions are taken based on the criteria of passing whether the items that are lolol have INFIT t < -2.0 or > 2.0 [3]. Based on the results of the analysis, it can be stated that all items of historical insight instruments can be declared valid and can be used to measure historical insights.

The reliability of historical insight instruments can be analyzed classically. Based on the classical analysis, the reliability coefficient of the instrument that has been empirically tested is 0.97. Table 3 presents the results of classical instrument reliability. Reliability coefficient of the instrument of historical insight is included in the very strong category [17].

V. CONCLUSION

The conclusions of this study are as follows: (1) the development of assessment instruments for state defense and historical insights follow the stages of research and development, (2) the development of assessment instruments to measure state defense and historical insights have validity coefficients of 1.00 and 1.00, which means that all instrument items developed are in very useful categories for use. Assessment developed by the instrument is stated in the material, constructs and aspects of language. (3) based on the results of empirical trials of state defense attitudes and historical insight, the INFIT value of MNSQ and INFIT t can be seen, the value of INFIT MNSQ is state defense of 1.00 with a standard deviation of 0.09, while the historical insight is 1.00 with standard deviation 0.10. The value of INFIT t defends the state of -0.22 with the standard deviation of 2.17 while the historical insight is -0.09 with standard decision 1.86. The reliability value of state defense is 0.83 and historical insight is 0.97.

REFERENCES