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Conference Paper

Development of Self-Control Instruments for Aggressive Behaviorin the Class Xi Vocational School of Diponegoro Majenang

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Abstract

Verbal aggressive behavior is exhibited in individuals due to low self-control. This study aimed to develop instruments for aggressive behavior in students, to help improve the students' self-control. The instrument development method was used. The data were collected through a questionnaire tested on 30 students of class XI SMK Diponegoro Majenang, chosen by random sampling. The Aiken formula with valid conditions > 0.73 was used for evaluating the validity. The KMO test results of 0.728 > 0.50 meant that the instrument could be considered valid as a measuring instrument. The reliability test was carried out with the Alpha Cronbach formula and a result of 0.853 > 0.60 was obtained. This meant that the self-control scale could be considered reliable to measure the level of control in students exhibiting aggressive behavior.

Keywords: development; instrument; self-control; aggressive behavior

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1. Introduction

Self-control of the aggressive behavior of adolescents, especially students, is currently a very concerning problem. As in the case of students who fought teachers in one of Manado High Schools, North Sulawesi [1]. The problem in this case is the deviation of verbal aggressive behavior shown by students to the teacher by saying disrespectful, obscene, and rude words. This disrespectful behavior occurs because students refuse and do not accept when the teacher is reprimanded. Worse, several times they often opposed the teacher's opinion and cursed when given assignments. This phenonema is also reinforced by the fact of field data from several schools. Based on interviews and observations with guidance and counseling teacher in SMK Diponegoro Majenang, SMK Bima Pemalang, it was found that several students had been caught and reported violating verbal and non-verbal ethics to older people or their peers.

The problem in the previous paragraph is not in line with the functions and objectives of national education in Law number 20 of 2003 concerning the National Education System whose main essence is to function to develop and shape the character and

civilization of a nation with dignity in order to educate the nation's life, as well as to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic citizens.

Indeed, the adolescent phase is a phase in which emotions are volatile. High school / vocational school-age adolescents are students who are entering their middle adolescence (madya). Hurlock [2] argues that early adolescence lasts from 13 years to 16 years or 17 years, and late adolescence runs from 16 years or 17 years to 18 years, that is, the legal age of maturity. Adolescence during the vocational school period is a teenager experiencing a transition period from early adolescence to late adolescence. Hurlock [2] also adds that late adolescence is a time of emotional turmoil; adolescents want him to always be at the forefront, to be seen and recognized. Meanwhile, according to Sidaguna [3], aggressive behavior is a form of harsh words such as insults, ridicule, screams, insults, criticism that have a negative connotation. Hanurawan [4] also reinforces that aggressive behavior is a behavior or action intended to dominate or behave destructively through verbal or physical strength directed at the target object of aggressive behavior.

However, from the context of the previous problems, the purpose of this study is a study that seeks to provide the need for instruments on self-control of aggressive behavior for students of SMK Diponegoro Majenang. Do not just stop there, with the results of the development of this instrument, guidance and counselling teachers can effectively find out how the condition of students' aggressive behavior self-control behavior. Of course, so that guidance and counselling teachers can provide targeted guidance and counselling programs appropriately.

2. Literature Review

Self-control is an individual skill in reading the sensitivity of the situation themselves and their environment. Borba [5] states that self-control is the ability of the body and mind to do what it should be done. Borba's argument [5] is a reference that with self-control, the ability of an individual's body and mind will be more focused in doing what should be done.

Self-control also plays a role in managing behavioral factors that are by the situation and conditions in the individual's environment, as in line with the opinion of Marsela and Supriatna [6] that with self-control, individuals will be more sensitive to situations. It was concluded that individuals who have better self-control will make decisions

and take effective action steps to produce something they want and avoid unwanted consequences. As for the aspect of self-control, Averill [7] argues that there are three aspects of self-control, namely: 1). Behavior Control, 2). Cognitive Control, 3). Decisional Control. Meanwhile, Ghufron & Risnawati [9] stated that there are five kinds of aspects of self-control, namely: (1) the ability to control behavior, (2) the ability to control the stimulus, (3) the ability to anticipate an event or incident, (4) the ability to interpret events or incidents., (5) ability to make decisions. This study will take theoretical arguments from Ghufron & Risnawati [8] as the basis for developing self-control instruments.

Aggressive behavior is behavior that harms many people. Aggressive behavior will lead to actions that are detrimental to many parties. Corti, et al. [9] argued that aggressiveness is the need to attack, rape, or injure others, belittle, harm, disturb, harm, damage, abuse, ridicule, or accuse maliciously, severely punish, or commit other sadistic acts. Buss in Dayakinsi & Hudainah [10] suggests there are several types, namely aggressive behavior: (1) Direct Active Verbal Aggressive Behavior, (2) Direct Active Verbal Aggressive Behavior, (3) Direct Active Verbal Aggressive Behavior, (4) Passive Verbal Aggressive Behavior Indirect.

Based on the explanation that has been described, the researcher will use it as a guideline to develop a self-control instrument for aggressive behavior, which is used to measure the effect of self-control on aggressive verbal behavior in class XI students of SMK Diponegoro Majenang. Self-control behavior needs to be done because previous observations by researchers show that self-control in the Diponegoro Vocational High School is still low and requires special guidance and direction.

3. Material & Methodology

This research method is non-experimental, the researcher specifically collects data without direct intervention [11] (Barker, Pistrang, Elliott, 2002). Data collection conducted in this study aims to test whether the aggressive behavior self-control measurement instrument developed is a measurement instrument that has good psychometric properties. This research design model is based on the development of affective instruments [12]) (Mardapi, 2012: 149) The design of the model consists of eight steps in its application, as for the steps as follows: (1) compiling specifications for the instrument, (2) examining the instrument; (3) conducting trials; (4) analyzing instruments; (5) improving instruments; (6) conducting the next stage of the trial; (7) interpret the results of the instrument; (8) final instruments. An instrument is a tool used by a researcher to collect data as needed. This study uses a questionnaire-type instrument. The questionnaire in this study was a

closed questionnaire with a psychological measurement scale, namely the Likert scale. The questionnaire used in this study consisted of validation sheets for expert judgment and self-assessment sheets by students.

The subjects in this study were students of class XI SMK Diponegoro Majenang who were taken by 30 students randomly or Random Sampling. The criteria for students who become participants are class XI students of SMK Diponegoro without using special criteria. Then after the retrieval process, the data obtained will be analyzed using quantitative data analysis.

The data to be disclosed in this research is the development of verbal aggressive behavior self-control instruments for students of SMK Diponegoro Majenang. The research data were collected using a self-control questionnaire instrument of verbal aggressive behavior for high school students whose validity had previously been tested through expert judgment, calculated using the Aiken formula and reliability tests using the Cronbach Alpha formula. The questionnaire contains 14 statements with four alternative answers consisting of strongly agree (SS), Agree (S), disagree (TS), and strongly disagree (STS). The questionnaire instrument was given to high school students who were the samples to measure self-control in verbal aggressive behavior. Data were analyzed using quantitative data analysis. Statistical calculations pursue quantitative data analysis techniques through four stages: calculating the subject's answers, making data tabulations, calculating total answers, grouping research data, and ending with displaying the results of the research. All data were processed to obtain the highest value, lowest value, mean, and standard deviation.

Instrument validation used content and construct validity. Content validity by eight Expert Judgment with undergraduate level (strata 1). Aiken's formula [13] (Azwar, 2014; 134). The construct validity was analyzed using Exploratory Factor Analysis (EFA) which was analyzed based on a sample with a KMO coefficient of> 0.5 and a data feasibility test with an MSA coefficient of> 0.5. The next stage is factor analysis to see the number of factors generated by the SPSS 25 output, construct validity by looking at the loading factor> 0.3 then the construct validity is fulfilled (valid instrument items). Then the results of the instrument were analyzed using the Aiken formula and obtained 14 valid items. The reliability of the instrument uses One Way Anova to calculate the level of agreement between the three (3) Expert Jugments and uses the Cronbach's Alpha formula to calculate the reliability of student self-assessments. Estimation of the reliability of the character assessment instrument using an internal consistency approach with the instrument reliability criteria according to [14] (Sugiyono, 2011: 184) and

[15] (Suharsimi A, 2008: 75) an instrument is declared reliable if the reliability coefficient is at least 0.6.

4. Results and Discussion

4.1. Result

The data in this study were analyzed using quantitative data analysis. Quantitative data analysis techniques are pursued by statistical calculations through several stages which include calculating the subject's answers, making data tabulations as well as calculating the total answers. All data were processed to obtain the highest value, lowest value, mean, and standard deviation. The results of the research on the development of verbal aggressive behavior self-control instruments in the form of a closed questionnaire consisting of three indicators with a total number of statements of 25 items. Based on table 1. Analysis of the results of content validation by experts analyzed with the Aiken's V formula shows that the overall coefficient of each item is greater than the valid criteria of 0.70 and based on this result if the validity coefficient ≥ 0.70 means the item can be said to be valid [13] (Azwar, 2014: 143). Based on table 1. Analysis of the results of content validation by experts analyzed with the Aiken's V formula shows that the overall coefficient of each item is greater than the valid criteria of 0.70 and based on this result if the validity coefficient ≥ 0.70 means the item can be said to be valid [13] (Azwar, 2014: 143).

TABLE 1: Analysis of the results

Aiken's V	
Number of items	17
Average V index	0.728

The self-control instrument item test was then carried out on 30 students of class XI SMK, based on table 2, the results of the data feasibility test will be seen with a KMO coefficient> 0.5. Obtained KMO of 0.772, which means greater than 0.5. Meanwhile, the significance generated from Bartlett's Test of Sphericity is 0,000. (Santoso, 2006: 22). [16]

With the above results, it can be said that the variables and samples used allow for further analysis. Furthermore, to see the correlation between the independent variables, the Anti-Image Matrices table can be considered. The value that is considered is the MSA (Measure of Sampling Adequacy). MSA values range from 0 to 1, with the following conditions: (Santoso, 2006: 20) [16]

TABLE 2: The results of the data feasibility tes

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.772
Bartlett's Test of Sphericity	Approx. Chi-Square	224.409
	Df	91
	Sig.	.000

MSA = 1, the variable can be predicted without error by other variables.

MSA> 0.5, the variable can still be predicted and can be analyzed further.

MSA <0.5, the variable cannot be predicted and cannot be further analyzed, or excluded from other variables.

TABLE 3: Anti Image Correlation

VAR 1	.693a
VAR 2	.672a
VAR 3	.866a
VAR 4	.542a
VAR 5	.796a
VAR 6	.694a
VAR 7	.613a
VAR 8	.673a
VAR 9	.579a
VAR 10	.818a
VAR 11	.704a
VAR 12	.825a
VAR 13	.451a
VAR 14	.523a
VAR 15	.646a
VAR 16	.183a
VQR 17	.244a

Based on the results of the MSA above, all independent variables can be further analyzed because each value is> 0.5. However, on var 13, 16, 17 there were items that were dropped because <0.5. The number of valid items is 14 items. The following are 14 valid statement items after analysis using statistics. Described in the following table:

4.2. Statement of Result

The instrument developed in this study was verbal aggressive behavior self-control. The development of this instrument has a good level of validity and reliability. The development of this instrument is based on the development of assessments and measurements

TABLE 4: Self-Control Statement Questionnaire

No.	Statement	Alternative Answers			
		SS	S	TS	STS
1.	I get angry and scold when my words are abused				
2.	When I speak politely, my words must be heard and respected				
3.	I speak the harsh language that comes to mind directly and without thinking				
4.	I mock friends when friends make mistakes				
5.	I pitted other people against each other because I felt displeasure with them				
6.	I like to talk about the ugliness of my friends				
7.	I don't make fun of friends when they make mistakes				
8.	I was influenced by my friends because they mocked other people				
9.	I find it difficult to control myself not to talk about the badness of other people				
10.	I make fun of others for making me feel good				
11.	When given a difficult assignment from the teacher I chose not to do the assignment				
12.	I refuse to talk to friends I don't like				
13.	When I talk to a friend I don't like, my voice is high				
14.	When my teacher scolded me, I felt resentful				

that have been tested using statistical methods. This is reinforced by the statement [17] Friendenberg (1995) which explains that a good measurement is an instrument that has good items statistically. According to the instrument development procedure described by [18] Purwanto (2007) is a variable identification activity, a description of the theory, and materials, development of trial specifications, and complications.

Verbal aggressive self-control behavior becomes an important structure for individuals to live a life that leads to a positive direction for self-actualization, society and all elements that contribute to it. Because in essence humans must help and help each other and must have good self-control over others because self-control has a considerable influence on the sustainability of relationships between individuals.

The instrument developed in this study aims to determine how high, medium and low self-control the verbal aggressive behavior of vocational high school students is. This study also has good psychometric properties because it meets the value requirements in statistical tests. The results of the development of this instrument will be in the form of a standard instrument. The instrument used was a closed questionnaire type using a Likert scale.

4.3. Discussion

This study refers to the development of students' self-control instruments based on indicators of verbal aggressive behavior self-control which have been tested on 30 students of class XI SMK Diponegoro Majenang. Self-control of verbal aggressive behavior in students can be seen based on the three indicators used, namely the ability to control behavior on aggressive behavior, the ability to anticipate events on verbal aggressive behavior and the ability to make decisions on verbal aggressive behavior.

Of the three indicators, 25 items of appropriate statements were made, and then expert testing was carried out and resulted in 17 items that got a score above 0.70 according to the aiken validity formula. After obtaining 17 items that have been valid, then the trial is conducted again to 30 students of class XI SMK Diponegoro and obtained 14 valid items because there are 3 items that have failed because the value is below 0.5 based on the results of MSA (Measure of Sampling Adequacy), then 14 variables independent can be further analyzed because each value> 0.5.

Based on the results obtained, a self-control instrument will be developed which will consist of 14 statement items that are adjusted to 3 indicators of verbal aggressive self-control behavior. The questionnaire that was tested on 30 students resulted in 4 assessment categories, namely; very high, high, low and very low. The frequency of students in the closed questionnaire trial resulted in 6 students in the very high category, 4 students in the high category, 17 students in the low category and 3 students in the very low category.

The results obtained were in the low and very low categories as many as 20 students out of 30 students with a percentage of 67%. Therefore, it is necessary to develop a self-control instrument for class XI students of SMK Diponegoro Majenang. In relation to the world of education, students who have the ability to self-control verbal aggressive behavior are expected to be able to understand, adapt and control themselves to the events they experience. When the school environment or outside the school, so that students can focus on the learning process and in socializing with students who are far from social deviations.

Verbal ability is one of the determinants of student success in achievement, especially the ability to understand and provide information; here the role of school counsellors is very important in the process of developing students in a positive and optimal direction. Programs that are in accordance with the problems faced by students as well as attractive service media can support the effectiveness of the teaching and learning process in the school environment.

5. Conclusion

The results of the validity and reliability tests on the development of this instrument generally show that the category is high and feasible for use. The development of this instrument has gone through a trial process with exploratory factor analysis and alpha Cronbach's reliability.This study refers to how the process of making self-control instruments for verbal aggressive behavior, where the results of filling out a questionnaire were distributed to 30 respondents of class XI SMK Diponegoro Majenang by random sampling, which resulted in a 57% percentage which means that it means that class XI students of SMK Diponegoro Majenang need service because it produces a low percentage.

The service will refer to three indicators of aggressive behavior self-control, namely: 1) Ability to Control Behavior Against Aggressive Behavior; 2) Ability To Anticipate An Event Against Verbal Aggressive Behavior; 3) Ability to Make Decisions Against Verbal Aggressive Behavior. Of the 3 indicators of self-control, the first trial was carried out on 30 students by random sampling and produced 17 statement items that had been adjusted to the results of the reliability test and MSA (Measure of Sampling Adequacy. The second trial stage was carried out and retested to produce 14 statement items. This research will continue to develop and will be tested again to more respondents to produce more maximum service. Item statements in the questionnaire will be multiplied and adjusted to variables so that student needs can be met according to their development tasks.

Acknowledgement

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