

Identification of Character Values On Adiwiyata School

Ari Setiawan*¹, Dian Sri Suhesti²

*Corresponding author: ari.setiawan@ustjogja.ac.id

¹Universitas Sarjanawiyata Tamansiswa, ²SMAN 1 Banguntapan

Abstract

This study aims to produce character value instruments that exist in schools that implement the program adiwiyata. The approach used in this study is quantitative. The subjects of this study were 110 students of SMAN 1 Banguntapan Bantul in Yogyakarta province. The sample technique used was purposive sampling. Data analysis is divided into 2, validity using EFA technique and reliability using alpha cronbach approach. Data analysis using SPSS 20.0 program. The results showed that the KMO value was 0.587, which means that the instrument test sample had fulfilled. The instrument used was summative rating scale. The construct validity of the instrument with the EFA approach obtained 19 valid results by forming 7 factors (components) based on eigen value. The reliability value is 0.650 in the medium category, which means that the instrument is reliable. These results indicate that the instrument to identify the value of the character of students in the school can be used.

Keywords: *character, students, adiwiyata*

Background

The existence of environment will influence between living things and the growth of its habitat, including human. Human attitude toward its environment, its effect will be back to themselves (Hamzah, 2011: 3). Various of environment problem and natural disaster happened especially in keeping from damage and pollution.

In 1996, Education Department and Environment Ministry which renewed in 2005 and 2010 started to develop Education Environment Program at school from elementary to high school through an adiwiyata program. This program aims to support and make school which care and have culture of environment that is able to participant and do the conservation and sustainable development for this era and the next generation. By implementing this program, school's citizen especially students are expected to have character of caring and culturing, and also to support and form human resources who have national character toward the development of economy, social and their environment to achieve the sustainable development in that area.

Adiwiyata school according to Environment Minister (2011:3) is defined as a proper and ideal place to achieve all science knowledge and norm also ethics used for the base of human on prosperity life and sustainable development. Adiwiyata school in Indonesia is develop to form character of nation toward norm and ethic. The important value being developed is care, especially environment care. Nevertheless other characters may not be shown by this program.

According to Environment Ministry Law No.5, in 2013 adiwiyata school is done based on educative, participative and sustainable principle. This program is integrated in every subject, including chemistry. Chemistry is mainly divided into, organic and inorganic chemistry. Society judges that chemical which is used in daily life is dangerous to human. This chemical is inorganic chemistry. While chemistry is not inorganic. The chemicals in the world can not be separated from chemistry because it is the branch of science that deals with the composition and structure of matter and the changes that matter undergoes. Matter is anything that has mass and occupies spaces, which means just about anything you consider (Myers, R : 2003). Our body, the air our breathe are all examples of matter. Matter is simply the stuff that makes up our universe. By studying chemistry, student are expected to know the composition and the structure of matter in the surroundings so they will do and use it wisely.

Adiwiyata program has a close relationship to chemistry. Chemistry that the students acquire in the class is hoped to be used and support adiwiyata program. So that chemistry not just be theory but can be implemented in the reality.

Adiwiyata program will be succeeding if every civilian of school, such as teachers, student's dan staffs involved in this program. School program also support every component of Adiwiyata School. Every component of adiwiyata program has a role condition of school environment in habiting the value of care especially care of school environment. This program is done by elementary to senior high school even college or university. The sustainable of this program by education institution can grow the care character as a habit. So that the goal of adiwiyata will be reached.

From the above discussion, adiwiyata can increase the competence of school output. The output competence of education consists of cognitive, affective and psychomotor of knowledge of logical, affective is relating to attitude and behavior, while psychomotor is relating to skill. Attitude and behavior of someone is based on character inside him (Mardapi and Setiawan, 2018). The competence of output is not only for the graduate but also for the society. So a graduate must have good character that his competence can be useful for the society.

Through these years the government tries to build character in education but school emphasis more on cognitive. This is because cognitive based competence is easier to do than affective. Cognitive competence involves knowledge, understanding, application and other intellectual skills. While affective involves attitude, value, moral, emotion, etcetera (Mardhapi and Setiawan, 2018). Psychomotor competence relates to motion skill. Cognitive competence is needed all people in understanding the nature and life phenomenon smartly. Having cognitive competence, men are able to know and solve the problem rationally, logically, consider and decide a decision or even men can reach higher logic, able to conclude, decide and judge. Affective competence which is character to the

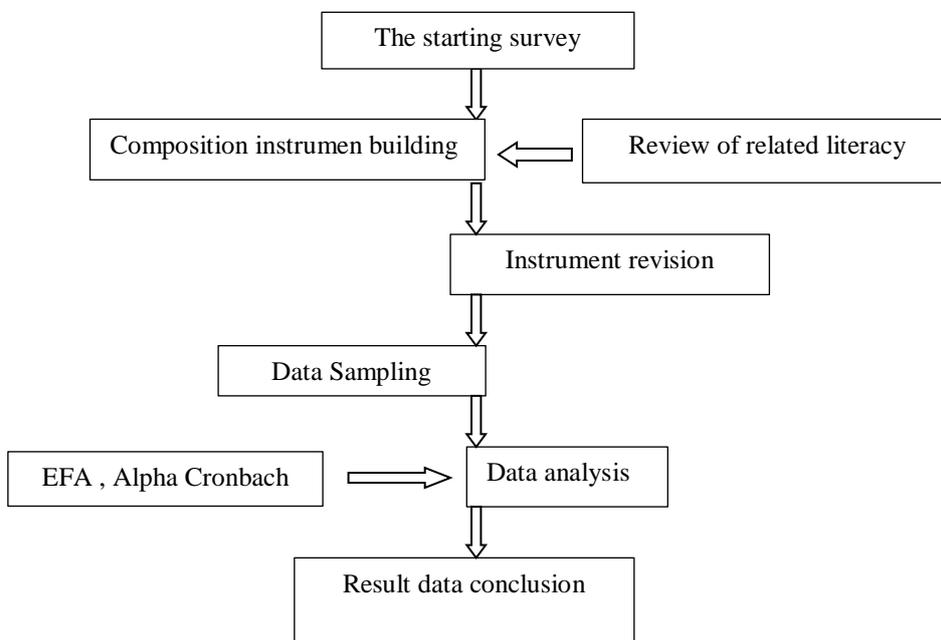
aspect that founder the attitude and behavior of someone. So that education always tries to find strategic to do character education well so that the output can be success in the society.

Learning process in the schools hasn't come to the level of making students enjoy studying and grow talent to learn deeply on an object. This is because students most learn many lessons with full material in limited time. As a result many students do not like studying. This is a challenge on education institution to improve strategy so that studying is a need for student.

The implementation of adiwiyata program school is expected to be a variation in learning process in order to grow student's character. This is the based of research. It is needed to identity character value to improved instrument assessment of student's character in Adiwiyata School.

Methodology

This research aims to identify character shown in Senior High School which implement adiwiyata. This research uses quantitative approach by exploratory method to get component from the character value. A clear research procedure can be seen in the flow chart in picture 1.



Picture 1. Procedure of Developing Character Value Instrument

(Setiawan & Fadil, 2017)

The research is begun by doing the starting study in SMA N 1 Banguntapan Bantul. This survey is used to get the reflection of adiwiyata program relating to the experience of student's character development. Then the researcher does the review of related literature

comprehensively to be able to improve characteristic concept definition of student character.

The next step is composing the character instrument using summative rating scale modified by Likert scale. Summative rating scale is used to identify the appearance of character in thematic learning. The option used are always, often, sometime, rarely, never by 5-4-3-2-1 score for favorable statement. While the unfavorable score is vice versa (Setiawan and Mardapi, 2017).

The constructive instrument is used to data sampling in Senior High School involving 110 students. The acquirement data response on Senior High School's character is analyzed. The analysis is involving point validity by EFA. EFA is used by SPSS 20,0. This is meant to know the number of formed component and the valid point (variable). While to count the reliability of instrument using cronbach alpha (Mardapi and Setiawan, 2017).

Findings and Discussion

The survey of the research composes the instrument used to identify student's character value. Instrument is composed based on review of related literature, survey and expert consultation. This first phase forms 20 points of instrument. Next, the instrument are tried out to 110 students.

The result of the try out then is analyzed by constructive validity using EFA by SPSS program. The first step is tested by KMO Barlets to know the sufficiency of sample. The result is 0,587 means that the samples are from the same variation so it can continue to the next analysis. Then to see the point of validity, can be known by seeing the value on anti-image correlations which finds 0,5-0,9 of score. This shows that one of the variable is invalid and 19 variable are valid to be used.

A valid measurement does not only show the right data but also gives the exact discription of the data. Exact means the measurement is able to describe about the smallest differences between the subjects (Danang Sunyoto, 2012:5). On the other side the definition of validity is the exact measurement aspect (Saifuddin Azwar, 2014). The exactness becomes important in a measurement. The exactness of measurement will give accurate data. From the definition it can be concluded that , in simple way, validity is rightness and exactnees as far as the instruments are able to measure what will be measured or how an instrument is sufficiency its measurement function.

The next step is seeing the *eigen value* to determine the formed factor or component. Based on the analyss the result is shown in table 1.

Table. 1 . The Result of Eigen Value of The Instrument

No	Component/Factor	Eigen Value
1	Component 1	3,042
2	Component 2	2,208
3	Component 3	1,634

4	Component 4	1,495
5	Component 5	1,395
6	Component 6	1,372
7	Component 7	1,208

Based on table 1, it can be seen that the instrument being analyzed has 7 components. These components are called indicator of forming character value of Senior High School with adiwiyata program.

After estimated validity it is continued to see the reliability value. The result of estimation using Cronbach Alpha is 0,650. This shows that the instrument is reliable. The definition of reliability measurement tool and reliability measurement result is considered the same. Though each use of them is needed to notice. Reliability concept in the reliability measurement tool relates closely to error of measurement. Error measurement shows the inconsistency of the result of measurement, it can happened if the measurement is remeasure in the same subject. One of the caused of fault measurement is the variety response of the respondent (Viswanathan, 20: 135), for example is extreme response which is a variable is responded massively by respondent. The high reliability means having the low mistake of measurement and vice versa (Coaley, 2010:100). Relating to the mistake of measurement we need to pay more attention in order to get the high reliability instrument. The last phase of the research is forming the valid point (variable) becoming a unity reliable instrument. Next the instrument which has 7 component can be used to identify the valve of Senior High School student's character with adiwiyata program.

Conclusion

Based on the discussion, we come to the conclusion that the instrument used to identify Senior High School student's character value had the validity and reliability requirement. Constructive validity using EFA gives 19 point of instruments that have score (> 0,5) while the reliability using alpha gives 0,650 score. The formed character value to identity has 7 component, seen by Eigen value.

References

- Bahrudin, M.D.F. (2017). Pelaksanaan Program Adiwiyata dalam Mendukung Pembentukan Karakter Peduli Lingkungan Di SMA Negeri 4 Pandeglang. *Jurnal Pendidikan Geografi*. Vol 17, No. 1, (pp. 25-37)
- Coaley, K. (2010). *An introduction to pshycological assessment and pshycometric*. London: Sage Publications.
- Danang Sunyoto. (2012). *Validitas dan reliabilitas*. Jogjakarta : Nuha Medika.
- Hamzah, Sukri. (2013). *Pendidikan Lingkungan Sekelumit Wawasan Pengantar*. Bandung : PT Refika Aditama

- Mardapi, D & Setiawan, A. (2018), *Penilaian Afektif*, Yogyakarta: ParamaPublishing
- Mardapi, D (2017), *Pengukuran, Penilaian, dan Evaluasi Pendidikan*, Yogyakarta: Parama Publishing
- Menteri Lingkungan Hidup Republik Indonesia. (2013). *Peraturan Menteri Lingkungan Hidup Republik Indonesia No. 05 Tahun 2013 tentang Pedoman Pelaksanaan Program Adiwiyata*. <http://blh.jogjaprov.go.id/po-content/uploads/Permen-LH-No-05-th-2013-Tentang-Pedoman-Adiwiyata.pdf> (diakses 28 Juli 2018)
- Myers, Richard. (2003). *The Basic of Chemistry*. London : Greenwood Press
- Saifudin Azwar. (2014). *Validitas dan reliabilitas*. Yogyakarta : Pustaka Pelajar.
- Setiawan, A, & Fadil, Identifikasi Nilai-Nilai Sikap Sosial Pada Pembelajaran Tematik Sekolah Dasar, Prosiding Kongres HEPI 2017, Kalimantan Selatan: Banjarmasin
- Setiawan, A, & Mardapi, D, The Development Of Instrument For Assessing Students' Affective Domain Using Self- And Peer-Assessment Models, Prosiding Kongres HEPI 2017, Kalimantan Selatan: Banjarmasin
- Setiawan, A, & Mardapi, D, The Development Of Instrument For Assessing Students' Affective Domain Using Self- And Peer-Assessment Models, Prosiding Seminar Internasional UST 2017, Yongyakarta
- Tim Adiwiyata Nasional. (2011). *Panduan Adiwiyata Sekolah Peduli dan Berbudaya Lingkungan*. Jakarta: Kementerian Lingkungan Hidup
- Viswanathan M. (2005). *Measurement error and research design*. London; Sage Publication.