**Humaniora**, 11(3), November 2020, 227-233
**DOI:** 10.21512/humaniora.v11i3.6693

P-ISSN: 2087-1236
E-ISSN: 2476-9061

# VALIDITY AND RELIABILITY OF RESILIENCE SCALE FOR ISLAMIC BOARDING SCHOOL STUDENTS

**Destiana Rizki Hayatini[1]*; Dimyati[2]**

[1,2] Postgraduate of Psychology, Universitas Negeri Yogyakarta
Jl. Colombo Yogyakarta No. 1, Sleman, Daerah Istimewa Yogyakarta 55281, Indonesia
[1]destianarizki90@gmail.com; [2]dimyati@uny.ac.id

**Received:** 08th September 2020/ **Revised:** 28th September 2020/ **Accepted:** 26th October 2020

**How to Cite:** Hayatini, D. R., & Dimyati. (2020). Validity and reliability of resilience scale for Islamic Boarding School students. *Humaniora, 11*(3), 227-233. https://doi.org/10.21512/humaniora.v11i3.6693

## ABSTRACT

*The research aimed to examine the content validity and resilience scale reliability that was developed based on the theory of Reivich and Shatte. The measuring instrument consisted of 32 items which resulted from a modification of the instruments made by Reivich and Shatte. The instrument had seven aspects of resilience, namely emotion regulation, impulse control, optimism, causal analysis, empathy, self-efficacy, and reaching out. The research sample amounted to 150 respondents consisting of Islamic Boarding School students in Purworejo, Central Java, boys and girls aged 11-18 years. The items in the measuring instruments were analyzed using the Gregory formula with the help of Ms. Excel program; then, the Cronbach Alpha formula was analyzed using the SPSS program. Based on the analysis of content validity with two experts' judgments and the validity index of 1, it means that the instrument's validity is very high. As for the reliability test results, the value of Cronbach's Alpha item resilience scale is 0,753. This shows that the resilience scale item has good reliability. Based on these data, resilience instruments can be said to be valid and reliable to measure the resilience of Islamic Boarding School students.*

***Keywords:*** *content validity, content reliability, resilience scale, school students*

## INTRODUCTION

The term resilience is first put forward by block under the name ego resilience, which is defined as a general ability that involves a high and flexible self-adjustment ability when faced with internal and external pressures (Farkas & Orosz, 2015). Resilience, according to Luthar (in Sinnott, 2013), is a dynamic process that includes positive adaptation in the context of significant difficulties. Resilience refers to separate personal attributes. According to Reivich and Shatte (2002), resilience describes an individual's ability to respond to the trauma faced in healthy and productive ways (Supriyanto & Hendiani, 2018a; 2018b). Bahryni, Bermas, & Tashvighi (2016) have said, on the one hand, resilience is defined as a human adaptation in confrontation with disasters or extraordinary pressures, overcoming and even reinforced by those experiences. It can be said that resilience is an individual's ability to create a bio-psychological balance in dangerous situations.

In general, resilience is characterized by several characteristics, namely the ability to face difficulties, toughness in dealing with stress, or rising from trauma experienced (Masten and Coatsworth in Hendriani, 2018). According to Luthar (2003), resilience is a dynamic process that includes positive adaptation in the context of difficult situations that contain significant dangers and obstacles, which can change over time and place (Sinnott, 2013). Given the positive relationship affects both the resilience dimension and the perception of self-success in life skills, future predictions can better understand the functioning of the protective factors that are actively involved in dealing with the transition from childhood to adolescence (Sagone & Indiana, 2017).

Particularly, in adolescence, humans face different levels of risk factors and protective factors. It arises from factors related to broad societal factors to factors that exist at the individual level, such as

*Corresponding Author

genetics and personality. Between these two sources, some factors arise from their local communities, families, schools, and their peer groups (Harvey & Delfabbro, 2004). From this context, the thing that attracts the researchers to conduct the research on adolescents is the resilience of adolescent students, which is often referred to as resilience, for those who live in the Islamic boarding school environment. These adolescents are very interested in studying because, at this time, a person experiences many changes in his/her life. Santrock (2012) has stated that adolescence is a transitional period in the span of human life, which bridges childhood to adulthood. During childhood, adolescents spend thousands of hours interacting with parents, friends, and teachers, but now is the time for them to experience dramatic biological changes, new experiences, and new developmental tasks. Adolescence thinking becomes more abstract and idealistic.

Sholichatun (2008) has found that in the context of Islamic boarding school youth resilience, adolescents who live in the Islamic boarding school community have a different social space from youth in general. The typical characteristics of Islamic boarding school life place the problematic behavior of young students as a phenomenon that has its own uniqueness. They are in a community with a certain value base that is different from society's values in general. The activities and values in the Islamic boarding school community can be said to have a distinctive style. The challenges for adolescent students are different from those for non-students, even though they are in the same range of development. There are many risk factors for students in addition to the risk factors that arise in adolescence, plus the risk factors that arise because they are far from parents. They are exposed to routine Islamic boarding school activities, demands to be able to mingle with many adolescents of the same age who live in the same environment for 24 hours, as well as demands to be able to adapt to the existing regulations in the Islamic boarding school.

From the preliminary study results (a researcher interview with one of the boards of Islamic boarding schools in Purworejo), the foundation has a fairly tight schedule for adolescents. They must be able to divide their time well between school activities and activities in Islamic boarding schools (chanting, memorizing, and so on). Activities at the Islamic boarding school start from 03.30 am to 10.00 pm. From morning to afternoon, they study at school, then intersperse with several extracurricular activities. Based on previous research, researchers have not found specific resilience instruments for adolescents living in Islamic boarding schools. Therefore, the researchers develop a measuring tool by modifying the resilience scale developed by Reivich and Shatte in Hendriani (2018). It is adapted to the context of adolescent students and the cultural environment of this research.

Reivich and Shatte in Hendriani (2018) suggest that there are seven aspects that are the main domain of resilience. First is emotion regulation. It is the ability to remain calm under stressful conditions. Individuals who are less able to regulate emotions will have difficulty building and maintaining relationships with other people. Conversely, an excellent ability to regulate will contribute to the ease in managing responses when interacting with other people and various environmental conditions. The second is impulse control, which is the individual's ability to control the desires, urges, likes, and pressures from within. Individuals with low impulse control abilities will quickly experience emotional changes when faced with various stimuli from the environment. The third is optimism that is a person's belief that he/she has the ability to overcome adversities that may occur in the future. This also reflects the self-efficacy they have, namely the belief that they can solve existing problems and control their lives. Fourth is the causal analysis that is the individual's ability to accurately identify the causes of the problem at hand. Individuals who cannot identify the cause of the problem correctly will continue to make the same mistakes. Fifth is empathy that is closely related to an individual's ability to read signs of other people's emotional and psychological conditions. Someone who has the ability to empathize tends to have positive social relationships. Sixth is self-efficacy that represents a belief that individuals are able to solve problems experienced and achieve success. Self-efficacy is one of the cognitive factors that determine a person's attitude and behavior in a problem. Seventh is reaching out that is the individual's ability to achieve positive aspects of life after adversity. Many individuals are unable to do this because of the tendency since childhood to learn to avoid failures and embarrassing situations more than practice to face them.

From these aspects, a resilience scale made by Reivich and Shatte (2002) has amounted to 56 items. In this research, researchers make modifications to existing items by adjusted to the context of the subject and research location. There has never been a special resilience instrument for Islamic boarding school students from previous studies, so it is hoped that this instrument can be used for Islamic boarding school students with an age range of 11-18 years.

A research instrument is a tool used to collect data or measure the object of a research variable. To obtain correct data for conclusions in accordance with the actual situation, it is necessary to have an instrument that is valid and consistent, and appropriate in providing research data (reliable). The validity and reliability of an instrument are not necessarily determined by the instrument itself. Although an instrument has been standardized and reliable, it does not immediately make it can be used anywhere, anytime, to any subject. The instrument needs to be retried every time it is used (Tavakol & Dennick, 2011). Validity is the extent to which a measuring instrument is appropriate in measuring data; in other words, whether the measuring instrument used measures something to be measured. For example, if a researcher wants to measure a gold necklace, then he/

she uses a gold scale. A variable or question is said to be valid if the variable score or question is significantly correlated with the total score (Janti, 2014).

The validity of the instrument can be proven, among others, in terms of content, otherwise known as content validity or content validity; in construct terms, known as construct validity; and by criteria, otherwise known as criterion validity. The content validity or content validity provides evidence on the elements existing in the measuring instrument and is processed by rational analysis. The validity of the content is judged by experts. When the measuring instrument is described in detail, the assessment will be easier to do. After testing the content validity to the expert, the instrument is revised according to the advice or input from the expert. Fraenkel, Wallen, and Hyun (2012) have said that if the expert still asks for improvement after the revision, then the revision still needs to be done until the expert receives the instrument without any further improvements.

The validity of the criteria compares the instruments that have been developed with other instruments that are considered comparable to what the instruments that have been developed will assess. These other instruments are referred to as criteria. Fraenkel, Wallen, and Hyun (2012) have said that there are two types of criterion validity, namely the validity of the predictive criteria and the validity of the concurrent criteria. In this research, the researchers examine the content validity of the modified measuring instrument. Content validity is developed to find out how the factual attributes measured in the test match the performance developed on the items in the test. This validity requires a rational analysis from an expert in the field that the measuring instrument is developing or professional judgment (Setiawati, 2014).

Content validity analysis is carried out qualitatively and quantitatively. Visually, it can be seen from the various scribbles, input, and sentences that are not yet right. Meanwhile, quantitatively, it can be done by analyzing the Content Validity Ratio or CVR (Shultz, Whitney, & Zickar, 2005). There are several kinds of formulas used in content validity analysis, namely Aiken, Gregori, and Lawshe (CVR) formulas. The instrument tested in this research is a non-test instrument; therefore, the researchers chose to use the Gregory formula in testing the validity of its contents. Non-test instruments are usually carried out without 'testing' the object of research but are carried out in a certain way, especially to obtain information relating to the condition of the object of research. In mathematics education research, non-test instruments often used are observation guidelines, interview guidelines, and questionnaires (Hidayati, 2012).

In addition, the research also tests the reliability of the instrument. Azwar (2019) has said that reliability is interpreted by how high the correlation between scores appears on two parallel tests. Alternatively, it can be said that reliability is a measure that shows the extent to which the measurement results remain consistent when measured several times with the same measuring instrument. Research requires data that is truly valid and reliable. Externally, testing can be done with test-retest (stability), equivalent, and a combination of both. Internally, the reliability of the instrument can be tested by analyzing the consistency of the items on the instrument with certain techniques. In the test-retest approach, the test kits are given to a group of subjects twice, at certain intervals. The reliability coefficient is measured from the correlation score on the first test and the second test. There are various formulas used in calculating reliability. One way to calculate the reliability coefficient is done by analyzing the variance of scores using the Cronbach Alpha formula. Setiawati, Mardapi, and Azwar (2013) have said that reliability calculations using alpha coefficients are more widely used than calculations with other techniques. This technique has the advantage of being able to get a score and how to analyze it.

Reliability testing with test-retest is done by testing one type of instrument several times on the same subject (respondent). The reliability of the instrument is measured by the correlation coefficient between the first experiment and the next experiment. The instrument is declared reliable if the correlation coefficient is positive and significant. The correlation between the first test results and the test results is then tested with Product Moment correlation to find the correlation coefficient. Reliability testing with the equivalent test is done by testing different but equivalent instruments (comparable/equivalent). The experiment is carried out only once on the same respondent. Instrument reliability is measured by the correlation coefficient between one instrument experiment and another. The instrument is declared reliable if the correlation coefficient is positive and significant. Reliability testing with internal consistency test is done by testing the instrument just once on the research subject. This test can be done with the split-half technique of Spearman-Brown, KR 20, KR 21, or the Cronbach Alpha technique.

Reliability testing using the Cronbach Alpha test is carried out for instruments that have more than one correct answer (Adamson & Prion, 2013). These instruments are, for example, instruments in the form of essays or questionnaires. If the Cronbach's alpha reliability coefficient is less than 0,70 (ri<0,70), Tavakol and Dennick (2011) have suggested revising or eliminating items that have low correlation. An easy way to determine the item of the question is with the help of a program on the computer. If the Cronbach's alpha reliability coefficient is more than 0,90 (ri> 0,90), they also have a suggestion. They suggest reducing the number of questions with the same question criteria even though they are in different sentences.

Several studies have tested the validity and reliability of the resilience scale. It includes the reliability and validity of the Japanese version of the resilience scale for students (Nishi et al., 2010), the validity and reliability of the Connor Davidson Resilience Scale (Cd-RISC) on sports competitions in

America (Gonzalez et al., 2016), a resilience scale for adolescents by testing construct validity on a sample of French-speaking Belgian adolescents (Hjemdal et al., 2011), reliability and the validity of the Korean version of the Connor Davidson resilience scale (Baek et al., 2010), and the reliability and validity of the resilience scale for the Turkish version of adolescents (Basim & Cetin, 2011). Based on this background, this research aims to test the validity of the contents of the resilience scale developed based on the theory of Reivich and Shatte (2002), then to test its reliability using the Cronbach Alpha formula.

## METHODS

The instrument in the research consists of 32 items in the form of a questionnaire that is given directly. The research respondents are 150 junior high school students (male and female) in a private foundation in Purworejo, Central Java, with an age range of 11-18 years (mean = 13,66, SD = 1,469). The questionnaire is given to the subjects in January 2020. The scaling method used is a Likert scale with four alternative answers, namely very suitable (SS), appropriate (S), unsuitable (TS), and very inappropriate (STS). Setiawati, Mardapi, and Azwar (2013) have said that the subject's response is given at the level of approval or disagreement in various variations on a Likert scale. In the subject-centered scaling method, the compilers of the test put the subjects or individuals to be faced at different points continuously.

The validity of the contents of the instrument uses expert judgment (two raters) with the Gregory formula. The calculation uses Ms. Excel program assistance.

$$Vi: D / (A + B + C + D) \quad (1)$$

Information:

Vi : Content validity

A : Both experts rate items with a value between 1 or 2.

B : The first expert assesses items with a value of between 3 or 4 and the second expert scores items with a value between 1 or 2.

C : The first expert assesses items with a value of between 1 or 2 and the second expert scores items with a value between 3 or 4.

D : Both experts assess items with a score of 3 or 4.

Then the reliability is calculated using the Cronbach Alpha formula with the help of the SPSS program. The steps are after entering the raw data from the subject's response, click 'Analyze', then 'Scale', 'Reliability Analysis', then enter all items into the 'Item', click 'Statistics', under 'Descriptives for', click on 'Item', and 'Scale if item is deleted', click 'Continue', then 'OK'.

## RESULTS AND DISCUSSIONS

From the results of the content validity test using the Gregory formula with two experts who have competence in the field to be studied, the criteria for content validation are as follows: 0,8-1 (very high), 0,6-0,79 (high), 0,4-0,59 (moderate), 0,2-0,39 (low), and 0,00-0,19 (very low). Out of the 32 items, the expert gives an assessment with a value range of 3 and 4. The result of the calculation of the validation of the contents of the instrument is 1, so the resilience instrument had a very high validity.

Table 1 Calculation of the Gregory Formula

| Item | Expert A | Expert B | Category |
|---|---|---|---|
| 1 | 3 | 4 | D |
| 2 | 3 | 4 | D |
| 3 | 4 | 4 | D |
| 4 | 4 | 4 | D |
| 5 | 4 | 3 | D |
| 6 | 3 | 4 | D |
| 7 | 3 | 4 | D |
| 8 | 4 | 4 | D |
| 9 | 3 | 4 | D |
| 10 | 3 | 4 | D |
| 11 | 4 | 4 | D |
| 12 | 4 | 4 | D |
| 13 | 3 | 4 | D |
| 14 | 4 | 3 | D |
| 15 | 4 | 4 | D |
| 16 | 3 | 4 | D |
| 17 | 4 | 4 | D |
| 18 | 3 | 3 | D |
| 19 | 4 | 4 | D |
| 20 | 4 | 4 | D |
| 21 | 4 | 4 | D |
| 22 | 3 | 4 | D |
| 23 | 4 | 4 | D |
| 24 | 4 | 4 | D |
| 25 | 4 | 4 | D |
| 26 | 3 | 4 | D |
| 27 | 3 | 4 | D |
| 28 | 4 | 3 | D |
| 29 | 3 | 4 | D |
| 30 | 4 | 4 | D |
| 31 | 3 | 3 | D |
| 32 | 3 | 4 | D |

Furthermore, the reliability test with the Cronbach Alpha formula obtained, as can be seen in Table 2.

Table 2 Case Processing Summary

| | | N | % |
|---|---|---|---|
| Cases | Valid | 150 | 100,0 |
| | Excluded[a] | 0 | 0,0 |
| | Total | 150 | 100,0 |

[a]: Listwise deletion based on all variables in the procedure.

Table 3 Reliability Statistics

| Cronbach's Alpha | N of Items |
|---|---|
| 0,753 | 32 |

Based on the results of the reliability test using alpha from Cronbach in Table 3, it is known that the Cronbach's Alpha value of the resilience scale item is 0,753. By looking at the r-value distribution table, with a significance of 5%, if the number of subjects is 150, the significance is 0,159.

Widhiarso (2009) has stated that the recommended value of the construct reliability coefficient is above 0,70. Researchers who get a reliability coefficient value below 0,70 are expected to modify the measurement model/instrument that they are developing. From the results of the instrument reliability test, it can be said that the instrument in this research has good reliability with a Cronbach Alpha value of 0,753.

Table 4 shows the total item statistical results from the 32 item resilience scale. From these results, it can be seen that there are 18 items whose total correlation is above 0,3, so there are 14 items that need to be corrected (the highlighted one). It is possible that the questions are irrelevant (not according to the indicators), the language is not clear, or it is difficult for the research subjects to understand.

Table 4 Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| RE1 | 95,4600 | 63,794 | 0,172 | 0,751 |
| RE2 | 95,6600 | 64,159 | 0,108 | 0,755 |
| RE3 | 95,8200 | 62,914 | 0,172 | 0,752 |
| RE4 | 95,8267 | 65,030 | 0,041 | 0,758 |
| PI1 | 95,2067 | 61,400 | 0,321 | 0,743 |
| PI2 | 94,8800 | 61,771 | 0,318 | 0,743 |
| PI3 | 95,4800 | 62,318 | 0,247 | 0,747 |
| PI4 | 95,1133 | 61,605 | 0,325 | 0,743 |
| OP1 | 95,0733 | 63,666 | 0,223 | 0,748 |
| OP2 | 95,9467 | 64,695 | 0,074 | 0,756 |
| OP3 | 94,9267 | 62,605 | 0,350 | 0,743 |
| OP4 | 95,8400 | 60,833 | 0,352 | 0,741 |
| AK1 | 95,7533 | 66,268 | -0,065 | 0,767 |
| AK2 | 95,0867 | 61,154 | 0,388 | 0,740 |
| AK3 | 95,7533 | 64,939 | 0,051 | 0,757 |
| AK4 | 95,4667 | 60,989 | 0,336 | 0,742 |
| AK5 | 95,2000 | 64,094 | 0,105 | 0,755 |
| AK6 | 95,6000 | 59,597 | 0,453 | 0,735 |
| EM1 | 95,0333 | 62,462 | 0,326 | 0,744 |
| EM2 | 95,3400 | 61,676 | 0,370 | 0,741 |
| EM3 | 95,3533 | 64,633 | 0,066 | 0,757 |
| EM4 | 95,1133 | 61,457 | 0,383 | 0,740 |
| EM5 | 95,1533 | 62,453 | 0,320 | 0,744 |
| EM6 | 94,9067 | 61,293 | 0,457 | 0,738 |
| ED1 | 94,7867 | 62,370 | 0,423 | 0,741 |
| ED2 | 95,7867 | 61,310 | 0,272 | 0,746 |

Table 4 Item-Total Statistics (Continued)

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| ED3 | 95,1133 | 61,766 | 0,388 | 0,741 |
| ED4 | 95,7867 | 62,317 | 0,203 | 0,751 |
| RO1 | 95,1667 | 61,442 | 0,474 | 0,738 |
| RO2 | 95,8200 | 62,766 | 0,201 | 0,750 |
| RO3 | 94,8133 | 62,126 | 0,424 | 0,741 |
| RO4 | 94,9600 | 61,770 | 0,333 | 0,743 |

## CONCLUSIONS

Research shows that resilience instruments have validity and reliability. According to the expert's judgment, it shows that 32 items of the resilience instrument are all valid. At the same time, the reliability results show that of the 32 items, there are 18 items that are reliable with an alpha value> 0,3. So it can be said that the resilience instrument has 18 valid and reliable items.

The contribution of the research, in general, is to provide theoretical insights into the field of psychology, especially positive psychology related to resilience. For the school, the results of it can provide information and a reference as a reference in planning school programs, including conducting training on resilience. For students, the research can make them aware of the importance of storage owned by students who live in the Islamic boarding school environment so that they are expected to be able to increase their resilience abilities. While the implication is that the instruments in the research can be used as a reference for future researchers who have an interest in conducting research in the field of resilience or further research applied to students living in the Islamic boarding school environment.

The limitation of the research is that the sample is still limited, only in two private schools, so it cannot be generalized to other areas. Suggestions for the next research are to increase the number of research samples and if it is going to make an instrument whose research sample is students of early adolescence (junior high school students). The language is made as simple as possible so that it can be easier to understand.

## REFERENCES


Adamson, K. A., & Prion, S. (2013). Reliability: Measuring internal consistency using Cronbach's Alpha. *Clinical Simulation in Nursing, 9*(5), 179-180. https://doi.org/10.1016/j.ecns.2012.12.001.

Azwar, S. (2019). *Reabilitas dan validitas* (4th Ed.). Yogyakarta: Pustaka Pelajar.

Baek, H. S., Lee, K. U., Joo, E. J., Lee, M. Y., & Choi, K. S. (2010). Reliability and validity of the Korean version of the Connor-Davidson resilience scale. *Psychiatry Investigation, 7*(2), 109-115. https://doi.org/10.4306/pi.2010.7.2.109.

Bahryni, S., Bermas, H., & Tashvighi, M. (2016). The self-efficacy forecasting based on hope to life and resiliency in adolescents suffering form cancer. *Biomedical & Pharmachology Journal, 9*(3), 1147-1156. https://dx.doi.org/10.13005/bpj/1062.

Basim, H. N., & Cetin, F. (2011). The reliability and validity of the resilience scale for adults-Turkish version. *Turkish Journal of Psychiatry, 22*(2), 104-114.

Farkas, D., & Orosz, G. (2015). Ego-resiliency reloaded: A three-component model of general resiliency. *Plos One, 10*(03), 1-26. https://doi.org/10.14755/MTAKIK.2014.0001.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. (2012). *How to design and evaluate research in education* (8th Ed.). New York: McGraw-Hill.

Gonzalez, S. P., Moore, E. W. G., Newton, M., & Galli, N. A. (2016). Validity and reliability of the Connor-Davidson Resilience Scale (CD-RISC) in competitive sport. *Psychology of Sport and Exercise, 23*, 31-39. https://doi.org/10.1016/j.psychsport.2015.10.005.

Harvey, J., & Delfabbro, P. H. (2004). Psychological resilience in disadvantaged youth: A critical overview. *Australian Psychologist, 39*(1), 3-13. https://doi.org/10.1080/00050060410001660281.

Hendriani, W. (2018). Positive meaning: The typical coping of resilient person towards changing conditions become individual with disability. *Indonesian Journal of Disability Studies (IJDS), 5*(2), 157-165. http://dx.doi.org/10.21776/ub.IJDS.2018.005.02.2.

Hidayati, K. (2012). Validasi instrumen non tes dalam penelitian pendidikan Matematika. *Prosiding Jurusan Pendidikan Matematika FMIPA UNY.* Yogyakarta, Indonesia. pp. 503-511.

Hjemdal, O., Friborg, O., Braun, S., Kempenaers, C., Linkowski, P., & Fossion, P. (2011). The resilience scale for adults: Construct validity and measurement in a Belgian sample. *International Journal of Testing, 11*(1), 37-41. https://doi.org/10.1080/15305058.2010.508570.

Janti, S. (2014). Analisis validitas dan reliabilitas dengan skala Likert terhadap pengembangan SI/TI dalam penentuan pengambilan keputusan penerapan strategic planning pada industri garmen. *Prosiding Seminar Nasional Aplikasi Sains & Teknologi (SNAST)*. Yogyakarta, Indonesia. pp. 155-160.

Luthar, S. S. (2003). *Resilience and vulnerability: Adaption in the context of childhood adversities*. Cambridge: Cambridge Universitu Press.

Nishi, D., Uehara, R., Kondo, M., & Matsuoka, Y. (2010). Reliability and validity of the Japanese version of the resilience scale and its short version. *BMC Research Notes, 3*(1), 1-6. https://doi.org/10.1186/1756-0500-3-310.

Reivich, K., & Shatte, A. (2002). *The resiliency factor: Seven keys to finding your inner strength and overcoming life's hurdles.* New York: Three Rivers Press.

Sagone, E., & Indiana, M. L. (2017). The relationship of positive affect with resilience and self-efficacy in life skills in Italian adolescents. *Scientific Research Publishing, 8*(13), 2226-2239. https://doi.org/10.4236/psych.2017.813142.

Santrock, J. W. (2012). *Adolescence* (15th Ed.). New York: Mc Graw Hill Education.

Setiawati, F. A. (2014). Perbandingan berbagai metode penskalaan yang dikembangkan Thurstone. *Jurnal Penelitian Ilmu Pendidikan UNY, 7*(1), 86-93. https://dx.doi.org/10.21831/jpipfip.v7i1.3114.

Setiawati, F. A., Mardapi, D., & Azwar, S. (2013). Penskalaan teori klasik instrumen multiple intelligences tipe Thurstone dan Likert. *Jurnal Pendidikan dan Evaluasi Pendidikan, 17*(2), 259-274. https://doi.org/10.21831/pep.v17i2.1699.

Sholichatun, Y. (2008). *Pengembangan resiliensi santri pondok pesantren (Catatan hasil aktivitas pengabdian masyarakat).* Malang: Fakultas Psikologi Universitas Islam Negeri Malang.

Shultz, K. S., Whitney, D. J., & Zickar, M. J. (2005). *Measurement theory in action: Case studies and exercises* (3rd Ed.). New York: Routledge.

Sinnott, J. D. (2013). *Positive psychology: Advances in understanding adult motivation*. New York: Springer Publishing.

Supriyanto, A., & Hendiani, N. (2018a). Self-efficacy scale fro people with drug abuse disorders. *JKI (Jurnal Konseling Indonesia), 3*(2), 57-63. https://doi.org/10.21067/jki.v3i2.2318.

Supriyanto, A., & Hendiani, N. (2018b). Self-efficacy level to recover from addiction in substance users in the center for drug rehabilitation. *Counsellia: Jurnal Bimbingan dan Konseling, 8*(2), 114-121. http://doi.org/10.25273/counsellia.v8i2.2944.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's Alpha. *International Journal of Medical Education, 2,* 53-55. https://doi.org/10.5116/ijme.4dfb.8dfd.

Widhiarso, W. (2009). Estimasi reliabilitas pengukuran dalam pendekatan model persamaan struktural. *Buletin Psikologi, 17*(1), 33-38. https://doi.org/10.22146/bpsi.11480.