Incorporating School Culture in Character Education Evaluation: The Development, Validity and Reliability Testing of the “CHILDREN” Character Assessment

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ABSTRACT

The development of character assessment instruments can be derived from the school culture which is arranged in the curriculum at the education unit level. The purpose of this study was to develop and simultaneously test the validity and reliability of a character assessment instrument in the form of a character survey to evaluate character education in the Cooperation Education Unit (SPK) based on school culture. The ADDIE development model was used in developing the character assessment instrument. The product was extensively tested on 200 students from one SPK school, and the data were processed using IBM SPSS 25 for Windows and LISREL 8.80. Using various validity tests on the 25 statement items, it was found that: (1) in the content validity test, 22 (88%) statement items had very good validity, and 3 (12%) statement items had good validity, (2) in the construct validity test, it was obtained that all statement items can measure the construct and meet the specified goodness of fit criteria, (3) in the empirical validity test, the minimum value of $r_{h}$ is 0.201 and is greater than $r_{t}(0.138)$ so that the instrument can be declared as valid, and (4) under the reliability test using Cronbach’s Alpha as a metric, the instrument obtained a value of 0.943 or very high. Based on these results, it can be concluded that the character survey instrument developed is feasible to be used in evaluating school culture-based character education.

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1. INTRODUCTION

Evaluation of learner learning outcomes includes three domains, cognitive, affective, and psychomotor domains. Measuring the achievement of these three domains nationally is used as the main focus of education quality improvement programs in Indonesia starting in 2020. This is reflected...
in the National Assessment (AN) program, which consists of the Minimum Competency Assessment (AKM), Character Survey, and Learning Environment Survey (Kemdikbud, 2020). However, the assessment of these three domains is not new to Indonesia’s educational process, and it has previously been clearly stated in every curriculum policy implemented in Indonesia. Evaluation can be used as a tool to encourage students to be more active in learning and as an effort by teachers to improve the quality of the learning process and encourage schools to improve the quality of their schools.

Before 2020, the assessment of student learning outcomes nationwide only focused on the cognitive achievements of students through test assessments (National Examinations). The existence of character and learning environment surveys is new for all stakeholders in education. Although, in their daily lives, educators should have carried out a character survey (perhaps under a different term) to observe the achievement of learning objectives in the affective realm. However, interviews with several educators in schools who have carried out character surveys show that the validity and reliability of the instruments used have not been tested. Moreover, the school has not developed further instrument by considering aspects of character-strengthening education and the attitude component of the Graduate Competencies Standards (SKL) from the curriculum provided by Foreign Educational Institutions (LPA). As a result, there is an opportunity that the character survey results obtained are not valid and reliable enough to represent students’ condition (Juniar, 2021) authentically.

Character is one aspect of assessment in the affective or non-cognitive realm (Istiyono, 2020). According to Muchlas Samawi, a character is interpreted as a basic value that builds a person’s personality that can be formed due to the influence of heredity and environmental influences that are manifested in their attitudes and behaviours in everyday life. Ongoing problems such as teenage brawls, fights, and sexual abuse of drugs and alcohol are hot topics for discussion. Various efforts have been made to prevent this from happening, such as by making regulations and applying stronger laws. Education is used as an alternative that is preventive because education is a tool to build a nation’s civilisation. Education is expected to develop a better quality for future generations. Through the Ministry of Education and Culture, since 2010, the character education system has been mobilized, it is even hoped that it will be implemented and linked in every subject.

The formation of students’ character is inseparable from the school’s culture, where they are educated (Nirmalasari, 2021). School culture directly gives rise to new habits in the school environment, one of which is in the learning atmosphere or environment. The atmosphere or learning environment formed from this school culture will then impact students’ character (Amelia & Ramadan, 2021). School culture is a set of values that underlies behaviour, traditions, habits, and daily life practised by school heads, teachers, parents, students and the community (Degeng, I. N. S., Dewi, A. K. T., & Hadi, 2019). The success of an educational institution is not only supported by facilities and infrastructure, but quality teachers or good student input also greatly influences it. School culture is very important in the formation of student character. School culture includes interactions between school principals and teachers (Hasnadi, 2019) Teachers with teachers, teachers with parents, teachers with students, students with students, and school employees with schools. The implementation of character education in schools leads to the formation of school culture, namely the values that underlie behaviour, traditions, daily habits, and various symbols that are practised by all school members and the surrounding community (Putry, 2019). This shows that school culture has a major influence on the process of achieving success in character education. Therefore, in the development of character education instruments, it is necessary to adapt to school culture because school culture reflects the school’s vision and mission, as well as the competency standards of graduates formed in the educational unit.

Research conducted by (Herdiana et al., 2021) states that cultural values are a source of ethics for building character. The Indonesian nation is a nation rich in culture. How are these cultural values transmitted through character education at educational tri centres, educational institutions, families, or the environment. In line with research conducted by (Wagiran, 2013) states that local wisdom values are not an obstacle to progress in the global era but become an extraordinary transformational force in improving the quality of human resources as a nation’s competitive and comparative advantage capital.
Therefore, extracting local wisdom values is a strategic step in an effort to build national character. Another study conducted by (Sudrajad and Nor, 2019) explained that validation was carried out by lecturers of physics education studies, for the three character assessment instruments with ten character values found in physics subjects, obtained a validity index of 3.22 with a high category and from science teachers Physics of junior high school obtained a validity index of 3.46 with a very high category. Thus the ten character values listed in the SMP physics Science subject that are developed are suitable for use in teaching and learning activities at school.

Some of the research described above, the research focus focuses on the development of character assessment instruments. However, the scope of development of character assessment instruments is often specific to one particular subject, one class, or one study group, or in general, only refers to the national education SKL. Doing so fails to take the culture of each school into account, as well as program differences, since the Curriculum and Lessons (KDP) and the learning process need to be assessed separately. There have not been any studies that developed character assessment instruments based on school culture to assess character in the Cooperation Education Unit (SPK). Therefore, the authors took one of the SPK to represent an example of developing character assessment instruments by educational units based on school culture. This is because SPKs have autonomy in curriculum development by referring to national and international standards, allowing for more complex character development compared to schools that only implement the national curriculum.

In this study, one of the SPKs on the island of Bali was taken. The reason for making it a research sample is because this school uniquely manages and instils character values in students at school. Additionally, in accordance with the Ministerial Decree of the Minister of Education and Culture Number 36 of 2014 concerning the management and implementation of education by Indonesian educational institutions with foreign educational institutions, Sekolah Cendekia Harapan also continues to implement the national curriculum, specifically the subjects of PPKn, Indonesian/Indonesian Studies, and religion. Several policies related to the management of education in Indonesia from the Ministry of Education and Culture of the Republic of Indonesia are also adhered to by the Sekolah Cendekia Harapan, one of which is strengthening character education (PPK). Therefore, in this study, the author intends to develop character assessment instruments in the Cooperation Education Unit (SPK) by considering school culture, Curriculum and Lessons (KDP), and Graduate Competencies Standards (SKL) in the affective realm of national and international curriculum. Based on the things described above, this study will analyze School Culture in the Evaluation of Character Education: Development, Testing the Validity and Reliability of Child Character Assessments.

2. METHODS

The research carried out is a type of development research or R & D (Research & Development). The Likert scale was used in the development of the character assessment instruments. The development research cycle, according to Sukmadinata (2013), was adhered to by going through three stages, including (1) preliminary study; (2) product design and development; and (3) product testing (Lestari & Harjono, 2021). The design and development of character assessment instruments based on school culture referred to the ADDIE development model developed by Molenda and Raiser in 2003, which has five stages: (1) Analysis; (2) Design; (3) Development; (4) Implementation; and (5) Evaluation.

This research was conducted to develop and simultaneously test the validity and reliability of the character assessment instrument “CHILDREN” to evaluate the results of school culture-based character education in the Education Unit in collaboration with Sekolah Cendekia Harapan. The data collection techniques used in this study were document studies, interviews, and questionnaires. Document studies were conducted to obtain information related to graduate competency standards in the affective realm of the national curriculum and international curriculum (Cambridge), as well as
Curriculum and Lessons (KDP) and character survey assessments in the National Assessment (AN). Interviews were conducted to obtain information related to Sekolah Cendekia Harapan’s school culture, especially in character education development. Meanwhile, the questionnaire was conducted to obtain questionnaire trial data which was then analyzed to see the validity and reliability of the instrument. Respondents in the instrument trial were students of SD and SMP Cendekia Harapan with a random sampling technique. Validity and reliability analysis in this study was carried out with the help of IBM SPSS 25 for Windows data processing software.

3. FINDINGS AND DISCUSSION

After designing and developing a character assessment instrument based on school culture using the ADDIE development model developed by Molenda and Raiser in 2003, which includes the stages of (1) Analysis; (2) Design; (3) Development; (4) Implementation; and (5) Evaluation the character assessment instrument, “CHILDREN”, was produced as an evaluation of the results of school culture-based character education in the Education Unit in collaboration with Sekolah Cendekia Harapan.

3.1 Findings

The first stage is Analysis. At this stage, a study of documents and interviews related to the components in the assessment of the character of ‘CHILDREN’ at the Sekolah Cendekia Harapan were conducted. The results of document studies and interviews show that the school has values or cultures that produce outreach to student competencies in the realm of effectiveness with the character of CHILDREN. Where CHILDREN stands for: (1) Creative; (2) Honest; (3) Intelligent; (4) Lovable; (5) Discipline; (6) Responsive; (7) Eager; and (8) Naturalist. The CHILDREN character also represents the National SKL, International SKL, Character Education Strengthening Program (PPK), and the National Assessment character survey components.

Based on the results of the analysis above, researchers developed a character assessment instrument based on school culture or values, namely “CHILDREN” by considering the national curriculum SKL, Cambridge curriculum SKL, PPK, and National Assessment character survey. This development is carried out in the second stage, namely Design. The character assessment instruments produced in this second stage of development are seen in Table 1 and Table 2.

<table>
<thead>
<tr>
<th>CHILDREN</th>
<th>SKL K13</th>
<th>SKL Cambridge</th>
<th>PPK</th>
<th>Survey Character AN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>Knowledgeable</td>
<td>Innovative</td>
<td>Creative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We have our way of thinking. Making breakthroughs, and innovation, show appreciation, love, and sympathy in different ways.</td>
<td>Noble character</td>
<td>Confident</td>
<td>Religious</td>
</tr>
<tr>
<td>Honest</td>
<td>Confident</td>
<td>Believers</td>
<td>Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>We have our way to say things that happened. Be brave to admit your mistake, and make an apology. We have our way to show ourselves. Without pretending.</td>
<td>Believers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent</td>
<td>Knowledgeable</td>
<td>Responsible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>We have our way to have balance in cognitive and emotionally intelligent.</td>
<td>Believers</td>
<td>Engage</td>
<td>Nationalist</td>
</tr>
</tbody>
</table>
We have our way to see differences in different things around us. And have a willingness to love each other.

**Discipline**

We have our way to e discipline. To understand our responsibility and do it seriously without any force.

**Respectful**

We have our way of being aware that every child is different and respecting the differences.

**Eager**

Encourage them to learn from anything and anyone.

**Naturalist**

Encourage them to learn from nature. Do experiential learning and explain phenomena through experiencing them.

(Source: Permendikbud No. 20 of 2016; Cambridge (2021); Presidential Regulation No. 87 of 2017; Ministry of Education and Culture (2020))

After the instrument design is completed, the third stage of development is carried out, namely Development. At this stage, instrument preparation is done based on Table 1 above, generating the following character assessment instrument (see Table 2).

**Table 2. Character Assessment Instrument “CHILDREN”**

<table>
<thead>
<tr>
<th>No.</th>
<th>Character Assessment Instrument Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>Creating a variety of ideas, answers, or questions that vary in problem-solving.</td>
</tr>
<tr>
<td>1</td>
<td>Expand basic ideas/concepts to enhance and maximize creative efforts for problem-solving.</td>
</tr>
<tr>
<td>2</td>
<td>Applying creative ideas as a real contribution to problem-solving in everyday life.</td>
</tr>
<tr>
<td>Honest</td>
<td>Stating or expressing facts and feelings as they are.</td>
</tr>
<tr>
<td>4</td>
<td>Willing to admit your shortcomings and mistakes.</td>
</tr>
<tr>
<td>5</td>
<td>Be consistent in your actions.</td>
</tr>
<tr>
<td>Intelligent</td>
<td>Able to use logic and assess the implications of an argument.</td>
</tr>
<tr>
<td>7</td>
<td>Able to analyze the logical sequence of problems and solve problems.</td>
</tr>
<tr>
<td>8</td>
<td>Have high self-confidence.</td>
</tr>
<tr>
<td>9</td>
<td>Able to handle emotions when relating to others.</td>
</tr>
<tr>
<td>Lovable</td>
<td>Doting on others and all of God's creatures.</td>
</tr>
<tr>
<td>11</td>
<td>Be respectful and able to harmonize existing cultural differences.</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>No.</th>
<th>Character Assessment Instrument Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Creating harmonious relationships within existing cultural differences.</td>
</tr>
</tbody>
</table>

**Discipline**
- 14 Follow all applicable regulations in the surrounding environment.
- 15 Realizing that all his actions affect others and the environment.
- 16 Take responsibility for oneself and all actions or decisions it takes.

**Respectful**
- 17 Demonstrate an attitude of respect and respect for others.
- 18 Maintain the noble culture of locality / national identity and be open to information or other cultures.
- 19 Have the ability to collaborate or collaborate with others.

**Eager**
- 20 Able to understand new goods or knowledge from various learning resources independently.
- 21 Reflecting on learning outcomes to improve self-quality.
- 22 Have a lifelong spirit of learning.

**Naturalist**
- 23 Able to reason natural phenomena with a scientific attitude that can be logically accounted for.
- 24 Have a desire to contribute goodness or research results to environmental conservation.
- 25 Keeping the surrounding environment more comfortable and beautiful.

Educational experts and educational practitioners further inspect the validity of the "CHILDREN" character assessment instrument. The validity is assessed on the suitability of the language, materials, and instrument constructs. Validators in this study consisted of one education expert and two education practitioners. The results of expert validation were analyzed using Aiken's V formula to calculate the content validity coefficient. Based on the results of the analysis, it was found that 88.00% of instrument items have excellent content validity, and 12% of instrument items have good validity. This shows that the entire instrument item has represented the measured construct, namely the "CHILDREN" character.

The fourth stage is Implementation. At this stage, instruments that experts and practitioners have validated were revised following validator input. They were then implemented in SD and SMP Cendekia Harapan. The instrument trial was carried out by providing questionnaires to 200 students, consisting of 140 students of SD Cendekia Harapan and 60 students of SMP Cendekia Harapan. Then, the test results data were analyzed for validity and reliability (Azwar, 2013). It explains that reliability is used as a measurement to explain the extent to which these results can be trusted. After that, the data from the trial results were analyzed for empiric validity and reliability using IBM SPSS 25 for windows data processing software, while the construct validity of the instrument was analyzed by Confirmatory Factor Analysis (CFA) analysis using LISREL 8.80 software.

The results of the CFA analysis showed that all constructs on the "CHILDREN" character assessment used to form a character assessment model in the confirmatory factor process had met the established goodness of fit criteria. This can be seen from the value of Chi-square in the range of $0 \leq \chi^2 \leq 2df$, which was 52.25 (good fit); the RMSEA value which is in the range of $0 \leq \text{RMSEA} \leq 0.05$, which was 0.025 (good fit); and the p-value was in the range of $0.01 < p \leq 0.05$, which is 0.03052 (acceptable fit). Thus, the predicted character grading model with the observation values satisfies the match of the model. The results of the standardized loading factor estimation also show that all indicators have a standardized loading factor value above 0.60; so, it can be said that the indicators in the character...
assessment of "CHILDREN" are valid for measuring its construct. Furthermore, the results of the empirical validity test with N of 200 and a significance level of 5% with a table r of 0.138 obtained the result that the lowest calculated r was 0.201. This shows that the value of r is greater than that of r of the table, so it can be concluded that all 25 items of the instrument are valid for evaluating the character "CHILDREN". Meanwhile, the reliability test results also show that the reliability index is 0.943, where the value should range from 0.81 – 1.00. So, it can be said that the instrument’s reliability is very high. Based on the test results above, it can be said that the "CHILDREN" character assessment instrument developed has been tested to be valid and reliable in measuring its construct and meets the criteria for matching the assessment model.

In line with research conducted by (Nisa et al., 2021) research stated that development research is a character assessment instrument. The development design used is the ADDIE learning design. The instrument’s internal validation results show that the developed questionnaire is very valid and can be used without improvement. The external validation of the low-class character assessment instrument, it is known that all statement items in the instrument are valid. The reliability of the low-class character assessment instrument was 0.986 on the first test and 0.984 on the second test. External validation of the instrument character assessment for high class, it is known that all statement items are valid.

The final stage in the development of this instrument is Evaluation. This evaluation stage aims to assess the quality of teaching, both before and after the implementation stage (Branch, n.d.). Determination of evaluation criteria, selection of appropriate evaluation tools and implementation of appropriate evaluations and implementation of appropriate evaluations. In the validation stage of the character assessment instrument "CHILDREN" received input to adjust the language used in statement items number 7, 11, and 14 to the language skills of primary and secondary school students so that the readability of the instrument was better for respondents. Next, the researcher refined the linguistics of the statements and validated them back to the experts and practitioners. Experts and practitioners ultimately confirmed that the entire instrument item was valid and could be used in later steps. Meanwhile, based on trials, the children’s character assessment instrument empirically has also been proven to be valid and reliable in measuring the character of CHILDREN students. Therefore, it can be concluded that the character assessment instrument "CHILDREN" is worthy of being used as a measuring tool for the character achievement of students at Sekolah Cendekia Harapan.

3.2 Discussion

School culture-based character education is one of the programs directed by the Ministry of Education and Culture of the Republic of Indonesia, starting from the level of early childhood education to upper secondary/vocational education. Initially, character education was only focused on a class-based context, but in its implementation, everything that happens in the classroom is also influenced by the entire school environment, which shapes the culture in the daily lives of school residents. In school, culture-based character education, three main factors need to be considered: history, behaviour, and organization. Historical factors give colour to the educational process; behavioral factors determine the goals, character values, and any policies related to school governance; and organizational factors determine how schools are driven by school residents (Effendy, 2018:10). Therefore, the school culture will be formed when each school citizen aligns their vision and mission to that of the organization. The relationship between school culture and the educational process and the results/outcomes of educational programs can be described in Figure 1.
Incorporating School Culture in Character Education Evaluation: The Development, Validity and Reliability Testing of the “CHILDREN” Character Assessment

Figure 1. Dynamics of the Role of School Culture on Educational Processes and Outcomes

Based on the analysis of the character assessment instrument developed by the researchers concerning school culture, the researcher can formulate four basic steps to develop a school culture-based character assessment instrument suitable for use. Development of character assessment instruments based on indicators set by the Ministry of National Education (Kemendiknas, 2010). The indicators that will be developed into character assessment instruments are honesty, disciplined, tolerance, creativity, love, peace, love to read, curiosity, national spirit, love of the motherland, independence, friendly/communication and care for the environment. From these indicators, the researcher developed character assessment instruments in the Cendekia Harapan school by discovering the uniqueness of school culture through document studies and interviews with school stakeholders. Second, formulating dimensions of character values that become the competency standards of graduates from an affective aspect based on school culture. Third, identifying the relationship between the programs that have been implemented and the Graduate Competency Standards (SKL) according to the curriculum and character education programs determined by the local or central government, as well as the final assessment grid for education levels from education units and the government. Fourth, formulate indicators of success or achievement of character values instilled through school programs that have been implemented.

Practically, the character assessment instruments that have been developed can be applied directly at Sekolah Cendekia Harapan. In addition, this research instrument can also be used as a model for developing character assessment instruments based on school culture in SPK or other national and private schools. This is because each school has distinctive characteristics and values that are unique to the school culture in developing students’ character. So far, character assessment has focused more on producing insights nationally and has not facilitated the uniqueness of each school. Therefore, the instruments developed in this study have advantages in integrating aspects of school culture with graduate competency standards nationally or internationally in measuring the character of students. However, it still has the disadvantage that it cannot be used directly in other schools, due to the uniqueness of school cultures. Therefore, this character assessment instrument needs to be modified if it is to be used in other schools.

4. CONCLUSION

Based on the research findings and conclusions, it is concluded that all instrument items were valid and reliable in measuring the character of students. This is indicated by the validity of all instrument items whose $r$ score exceeds the critical value, implying that all are valid. The CFA analysis also revealed that all constructs on the “CHILDREN” character assessment that was used to form a character assessment
assessment model in the confirmatory factor process met the established goodness of fit criteria. Furthermore, the reliability test results revealed that Cronbach’s Alpha was 0.943, indicating that the criteria were very reliable. The four indicators developed are: finding the uniqueness of school culture, formulating dimensions of character values which become graduate competency standards from the affective aspect based on school culture, identifying the linkages of programs that have been implemented with Graduate Competency Standards (SKL) according to the curriculum and character education programs determined by the regional or central government, as well as the evaluation grid for the end of the education level from the education unit and the government and formulating indicators of success or achievement of character values instilled through school programs that have been implemented. The instruments developed in this study have advantages in integrating aspects of school culture with graduate competency standards in measuring student character nationally or internationally. However, due to the uniqueness of school cultures, it cannot be used directly in other schools. Modifications to this character assessment instrument will need to be made for future research or development if it is to be used in other schools.

REFERENCES


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