Scientific Learning Based on *Tri Hita Karana* on Pancasila Profile Students of Early Childhood

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**A B S T R A C T**

Nowadays there is incompatibility with moral ethics and Pancasila values through the media. The emergence of bad behavior such as violence in the name of religion, bullying at school and outside school, student brawls, sexual harassment between school friends, theft, and bullying in the media, can become role models for children's behavior if not dealt with immediately. This study aims to analyze the effect of scientific learning based on *Tri Hita Karana* on the profile of Pancasila early childhood students. This study uses the experimental design for 50 early childhood children (5-6 years). Data was collected using observation guidelines that had been tested for content validity to observe the children’s participation. The score data obtained for each variable was transformed to a scale of 100. The data in the form of percentages were analyzed for the normality of the data distribution and declared normal, and the linearity analysis of the regression line was declared linear. Hypothesis testing data analysis techniques apply simple regression and multiple regression. The error level used is 0.05. It was found that scientific learning based on *Paluhuran, Pawongan*, and **Palemahan** positively affected the profile of Pancasila students. Taken together, scientific learning based on *Tri Hita Karana* positively affects the profile of Pancasila early childhood students. It is hoped that all parties involved in the project to strengthen the profile of Pancasila early childhood students will apply scientific learning based on *Paluhuran, Pawongan*, and **Palemahan** holistically and integratively.

1. **INTRODUCTION**

In its vision and mission, the Ministry of Education, Culture, Research, and Technology of the Indonesia Republic emphasizes educational methods to realize the profile of Pancasila students. Pancasila is the basis of the state and ideology of the Indonesian nation. The Pancasila Student Profile is an effort to translate the vision and mission of education into a format easily understood by stakeholders and can be
applied to activities at and outside of school (Jamaludin et al., 2022; Wahyuni et al., 2023). Every citizen must have excellent and intelligent character related to the precepts in Pancasila, such as religion, social care, independence, national spirit, democracy, tolerance, and discipline (Monalisa, 2022; Octavia & Rube’i, 2017). Pancasila is the binder and driving force in the struggle for Indonesian independence. Pancasila is an ideology that is by the personality of the nation and is the nation’s foundation, which contains noble values as a solution to solving problems (Astuti & Dewi, 2021; Irawati et al., 2022). Indonesian Pancasila Student Profile is defined as a competent lifelong learner who behaves according to Pancasila values. The Pancasila Student Profile has six dimensions that are optimally developed and balanced, namely: 1) faith, piety to God Almighty; 2) global diversity; 3) working together; 4) independent; 5) critical reasoning; and 6) creative (Kiska et al., 2023; Nurhayati, 2022). These six dimensions are a unity that cannot be separated. Lifelong education starts from early childhood education, elementary, secondary, and higher education to older people. Instilling Pancasila values is best done in early childhood so children can apply Pancasila values in real life (Kusumawardani et al., 2021; Nafisah et al., 2022). In early childhood education, the development of Pancasila values is carried out through habituation and example, implementing religious values, honesty, tolerance, and discipline through assignment methods, case studies, role-playing, and exciting practices in character education (Pusptasari & Anggrıani, 2022; Silahuddin, 2017). A study found that the values of cooperation, democracy, unity, and sportsmanship in the traditional game Gempuran proved to help develop social skills, feelings of fun, sportsmanship, and creative behavior in early childhood (Slamet et al., 2022; Wulandari, 2022).

Observations on the planning and implementation of early childhood learning before, during, and after COVID-19 found that most of the Learning Plans and Implementation were only based on the performance of themes and partial growth and development achievements, without being oriented towards developing life skills learning outcomes according to the child’s developmental level. Daily lesson plans are often oriented towards the partial achievement of physical-motor, cognitive, language, social-emotional, or religious/moral development rather than holistic, integrative achievement. Children’s learning achievements have not been able to produce adequate life skills (Asokan et al., 2019; Lai & Hong, 2015; Zandkarimi., 2013). The rapid development of social media and mainstream media and the closure of schools due to the COVID-19 pandemic have created significant problems in education and learning. Problems mainly arise due to learning loss from closing schools and the ease of disseminating information that is inconsistent with the moral ethics and values of Pancasila through the media. The emergence of bad behavior, such as violence in the name of religion, bullying at school and outside school, student brawls, sexual harassment between schoolmates, theft, and bullying in the media, can become behavior models for children if not handled immediately. The results of previous research found that children’s moral and ethical behavior in elementary schools could be increased through the Pancasila student project (Khoirillah & Cabyono, 2022; Octavia & Rube’i, 2017).

The scientific learning model provides opportunities for children to elaborate and explore the objects being studied and aims to hone children’s abilities through direct experience (Di & Depok, 2020; Melita Rahardjo, 2019). This learning model can also build children’s responsibility towards an observed object. Children from an early age can think critically, actively, and productively using scientific learning models. Children can express opinions, be confident, and communicate well if teachers can implement scientific learning models optimally (Avelar et al., 2022; Duan, 2021). Children can connect one object to another through direct observation. The teacher’s ability to link children’s learning experiences at home and the environment adapted to the implementation plan of scientific learning impacts the quality of the process and results of children’s learning (Lai & Hong, 2015; Nur Afifah & Sinaga, 2022).

Tri Hita Karana is a value of a harmonious relationship between Paluhuran (human-God), Pawongan (human-human), and Pulemahau (human-nature) to achieve happiness in life (Lilik & Mertayasa, 2019; Rasmini, 2018; Wiweka, 2014). Harmonious values of the human-God-nature relationship are used as concepts/materials in preparing lesson plans so that children learn according to the context. Children understand concepts more quickly if learning is carried out by learning experiences (Adhitama, 2020; Arta Jaya, 2019; Mahendra & Kartika, 2021).

This study aims to analyze the relationship between applying the Tri Hita Karana-based scientific learning model to the increase in the Pancasila Student Profile in early childhood education. The novelty of this research integrates the Tri Hita Karana concept in the scientific learning model on the achievement of Pancasila student profiles. The implementation of scientific learning based on Tri Hita Karana will be experimented with in three designs: 1) the implementation of scientific learning based on Paluhuran; 2) the design of the implementation of Pawongan-based learning; 3) the design of the implementation of learning based on weakness.
2. METHOD

This study applied a one-group experimental design. There are three types of scientific learning experiments based on *Tri Hita Karana* in developing the profile of Pancasila early childhood students (Hastjarjo, 2019). Experiment one is action-based scientific learning (X₁), two scientific learning based on *Pawongan* (X₂), three palm-based scientific learning (X₃), and Pancasila student profiles (Y). Each experiment was conducted in group B with 50 children as subjects at Pelangi PAUD with the address at Jalan Durandini Mataram, West Nusa Tenggara. X₁ data, namely the implementation of scientific learning based on *Paluwuran*, was collected using observation guidelines regarding children’s participation in the implementation of learning. The action is carried out five times. Each action is carried out one day. X₁ data was obtained from the average score of children’s participation in learning. The implementation of scientific learning based on *Pawongan*, was collected using observation guidelines regarding children’s participation in the implementation of learning. The action is carried out five times. Each action is carried out one day. X₁ data was obtained from the average score of children's participation in learning. Data X₃, namely the implementation of scientific learning based on *Pawongan*, was collected using observation guidelines regarding children's participation in the implementation of learning. The action is carried out five times. Each action is carried out one day. X₃ data was obtained from the average score of children's participation in learning. Y data is the average Pancasila student profile scores collected using observation guidelines in each experimental activity.

The measuring instrument for Pancasila student profiles (54 items) consists of 6 dimensions, namely: 1) Faith, piety to God Almighty, and noble character; 2) Global Diversity; 3) Mutual Cooperation; 4) independence; 5) Critical Reasoning; 6) Creative. Scientific learning measurement instruments are constructed based on the *Tri Hita Karana* principle (*Paluwuran, Pawongan, and Palemahan*). The instrument consists of 21 items covering five aspects, namely: 1) Observing, 2) Asking the observed object, 3) Collecting data, 4) Processing information/associating, and 5) Communicating. Each instrument was tested for content validity using the Gregory technique. The analysis results for the Pancasila student profile instrument were obtained at 0.907 and were classified as valid. The *Tri Hita Karana*-based scientific learning implementation instrument was obtained at 0.904 and is considered valid.

The Pancasila student profile observation instrument produces a Y variable score, and the score obtained is transformed into a scale of 100 (%) percentage. The instrument for measuring child participation in scientific learning based on *Tri Hita Karana* is applied to produce scores for variables X₁, X₂, and X₃. Each score of these variables is transformed into a scale of 100 (%) percentage, so data X₁, X₂, X₃, and Y have the same scale and the same unit of analysis, namely children. Complete the instruments in Table 1. Where each dimension/item is given a value of 1-4. Score 4 means ‘always’, that is, if the respondent always does according to the statement, score 3 means ‘often’, that is, if the respondent often does according to the statement, score 2 means ‘sometimes’, that is, if respondent sometimes do according to the statement, while score 1 means ‘never’, if respondent never does according to the statement.

3. RESULT AND DISCUSSION

Result

Based on the normality distribution test results is show in Table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Paluwuran</em>-Based Scientific Learning</td>
<td>0.978</td>
</tr>
<tr>
<td><em>Pawongan</em>-Based Scientific Learning</td>
<td>0.975</td>
</tr>
<tr>
<td><em>Palemahan</em>-Based Scientific Learning</td>
<td>0.969</td>
</tr>
<tr>
<td>Profile of Pancasila Early Childhood Students</td>
<td>0.963</td>
</tr>
</tbody>
</table>

Based on Table 1 it can be concluded that the data of the variables X₁, X₂, X₃, and Y is normally distributed. Thus, the data meets the requirements for analysis using parametric statistics. Based on the results of the analysis of the linearity test of relations is show in Table 2.

<table>
<thead>
<tr>
<th>Group</th>
<th>Parameters</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile of Pancasila Early</td>
<td>Deviation</td>
<td>11.497</td>
<td>25</td>
<td>0.460</td>
<td>1.627</td>
<td>0.122</td>
</tr>
</tbody>
</table>
Based on Table 2, it can be concluded that the relationship between variables $X_1$, $X_2$, $X_3$, and $Y$ is linear, so it meets the requirements for analysis using parametric statistics using multiple regression techniques to test the hypothesis. The results of descriptive statistical analysis in Table 3 use conclusions that are formulated based on the following criteria: 85-100% is excellent, 70-84% is good, 55-69% is quite good, 40-54% is not good, and 25-39% is too bad.

### Table 3. Descriptive Analysis Results

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile of Pancasila Early Childhood Students</td>
<td>84.82</td>
<td>5.809</td>
<td>50</td>
</tr>
<tr>
<td>Paluhuran-Based Scientific Learning</td>
<td>75.38</td>
<td>7.964</td>
<td>50</td>
</tr>
<tr>
<td>Pawongan-Based Scientific Learning</td>
<td>69.58</td>
<td>11.053</td>
<td>50</td>
</tr>
<tr>
<td>Palemahan-Based Scientific Learning</td>
<td>83.00</td>
<td>7.980</td>
<td>50</td>
</tr>
</tbody>
</table>

Based on Table 3, the results of the analysis are concluded: the profile of Pancasila early childhood students is classified as very good; the implementation of scientific learning based on Paluhuran is classified as good; the implementation of scientific learning based on Pawongan is quite good; the implementation of weakness-based learning is quite good. The results of the analysis of hypothesis testing using the simple regression technique are presented in Table 4.

### Table 4. Results of Hypothesis Testing Analysis Using Simple Regression Techniques

<table>
<thead>
<tr>
<th>Group</th>
<th>R</th>
<th>R Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile of Pancasila Early Childhood Students</td>
<td>0.995</td>
<td>0.989</td>
</tr>
<tr>
<td>Paluhuran-Based Scientific Learning</td>
<td>0.996</td>
<td>0.992</td>
</tr>
<tr>
<td>Pawongan-Based Scientific Learning</td>
<td>0.996</td>
<td>0.992</td>
</tr>
</tbody>
</table>

Based on Table 4 can be concluded that the implementation of hammer-based scientific learning has a robust correlation and positively affects the profile of Pancasila early childhood students. Implementing scientific learning based on Pawongan has a robust correlation and positively affects the profile of Pancasila early childhood students. The implementation of palm-based scientific learning has a robust correlation and positively affects the profile of Pancasila early childhood students. The results of the analysis of the hypothesis testing of the multiple regression technique is shown in Table 5.

### Table 5. Results of Hypothesis Testing Analysis Using Multiple Regression Techniques

<table>
<thead>
<tr>
<th>Group</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1X_2-Y$</td>
<td>0.997</td>
<td>0.994</td>
<td>0.994</td>
<td>0.459</td>
</tr>
<tr>
<td>$X_1X_3-Y$</td>
<td>0.996</td>
<td>0.992</td>
<td>0.991</td>
<td>0.547</td>
</tr>
<tr>
<td>$X_2X_3-Y$</td>
<td>0.996</td>
<td>0.992</td>
<td>0.992</td>
<td>0.533</td>
</tr>
</tbody>
</table>

Base on Table 5, it can be concluded that: 1) there is a robust correlation and a positive effect simultaneously on the implementation of Paluhuran-based and Pawongan-based learning on the profile of Pancasila early childhood students. 2) There is a solid correlation and a positive effect together on the implementation of Paluhuran-based and on-the-job-based learning on the profile of Pancasila early childhood students.
childhood students. 3) There is a solid correlation and a positive effect together on the implementation of Pawongan-based and palm-based learning on the profile of Pancasila early childhood students. Results of hypothesis testing analysis using multiple regression techniques with three predictors between variables $X_1, X_2, X_3$ with $Y$ is show in Table 6.

### Table 6. Results of Hypothesis Testing Analysis Using Multiple Regressions

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0.997</td>
<td>0.994</td>
<td>0.463</td>
</tr>
</tbody>
</table>

Based on Table 6, it can be concluded that there is a robust correlation and a positive effect together on the implementation of scientific learning based on Paluhuran, Pawongan-based, and Pawongan-based on the profile of Pancasila early childhood students. Finally, partial test analysis results between $Y, X_1, X_2, X_3; Y, X_2, X_3; Y, X_3 - X_1, X_2$ is show in Table 7.

### Table 7. Results of Partial Test Analysis between Variable

<table>
<thead>
<tr>
<th>Group</th>
<th>B</th>
<th>t</th>
<th>Sig.</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paluhuran-Based Scientific</td>
<td>0.289</td>
<td>4.043</td>
<td>0.001</td>
<td>0.512</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pawongan-Based Scientific</td>
<td>0.297</td>
<td>4.412</td>
<td>0.001</td>
<td>0.545</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palemahan-Based Scientific</td>
<td>0.028</td>
<td>0.454</td>
<td>0.652</td>
<td>0.067</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 7 which can be concluded: 1) there is a positive effect of implementing scientific learning based on Paluhuran on the profile of Pancasila students after being controlled for scientific learning based on Pawongan and Palemahan. 2) There is a positive influence of scientific learning based on Pawongan on the profile of Pancasila students after being controlled for scientific learning based on Paluhuran and Palemahan. 3) After being controlled for scientific learning based on Paluhuran and Pawongan, scientific learning based on Palemang does not affect the Pancasila profile of early childhood.

**Discussion**

The Pancasila student profile describes individual Indonesian citizens’ personalities, abilities, and character. The Pancasila student profile is built on the values of the foundation of the Republic of Indonesia, namely Pancasila. The formation of a Pancasila student profile is pursued through education and learning at the three education centers, namely the family, community, and school (Gianistika, 2022; Hidayah et al., 2021). Formal education in Indonesia starts from Kindergarten to Higher Education. Kindergarten is the first and foremost education that underlies the growth and development of children at a higher level of education. Based on this, early childhood education at the Kindergarten level must inculcate Pancasila values to form a profile of Pancasila in early childhood students (Kusumawardani et al., 2021; Nurhayati, 2022). The profile of Pancasila students, as outlined in the teacher’s manual for the Pancasila strengthening project for Early Childhood Education units, consists of 1) faith, piety to God Almighty and noble character; 2) global diversity; 3) independence; 4) work together; 5) critical reasoning and; 6) Creative .

Learning to achieve the profile of Pancasila early childhood students must be integrated into all aspects of learning. Integrating the content of Pancasila student profiles in early childhood is a challenge for teachers, so it requires creativity to design and carry out enjoyable, fun, and integrated learning in children’s real lives. Relevant learning to develop the six dimensions of the Pancasila student profile is scientific learning (Ferdiansyah & Kaltsum, 2023; Utari & Afendi, 2022). Scientific learning has five main steps, namely: 1) observing the object being studied using the five senses; 2) asking problematic matters from the results of observing; 3) seeking information to obtain answers to questions that arise; 4) associating, namely categorizing/grouping, categorizing, drawing conclusions, and building a synthesis; 5) communicate the conclusions obtained verbally and nonverbally (Marwiyati & Istiningsih, 2020; Zakso et al., 2022).

A comprehensive philosophy of life concerning divinity, humanity, and the universe is necessary for developing plans and implementing scientific learning to make it more exciting and enjoyable for children. In Hindu belief, this philosophy is *Tri Hita Karana*. *Tri Hita Karana* is the foundation of life and, simultaneously, the goal of life for Hindus. As a foundation of life, all activities carried out must be based on divine, human, and natural values. Meanwhile, as the goal of life, every human being is directed to realize harmonious relations between humans and God, humans and humans, and humans and nature (Mahendra & Kartika, 2021; Yuliandari & Sunariani, 2020). *Tri Hita Karana* in humans is holistic integrative into personality, character, skills, and everyday human behavior. Scientific learning based on *Tri Hita Karana* means that learning activities follow the five steps of scientific learning, and the application of each learning
step is based on the values of Paluhuran/Divinity, Pawongan/Humanity, and Palemahan/Nature Preservation (Karmini et al., 2021; Ketut Susiani et al., 2022).

Scientific research on the effect of scientific learning based on Tri Hita Karana on the profile of Pancasila early childhood students has produced convincing findings and conclusions. Scientific learning based on Paluhuran, Pawongan, and Palemahan has a solid correlation and positive influence both jointly and individually on the profile of Pancasila students (faith and piety to God Almighty and noble character; global diversity; independence; cooperation; critical reasoning; and creative) (Martinez et al., 2015; Silaban et al., 2022). Conceptually, the results of scientific learning based on revelation/divinity are very relevant in developing indicators of learning outcomes in the dimensions of faith, devotion to God Almighty, noble morality, and global diversity. Pawongan/humanitarian-based scientific learning is relevant to achieving learning outcomes on independent and cooperative dimension indicators. Meanwhile, scientific learning based on conservation/nature conservation is closely related to indicators of critical and creative reasoning dimensions (Arjaya & Puspandewi, 2017; Fitria et al., 2021). Implementing scientific learning based on Paluhuran, Pawongan, and Palemahan must be holistic and integrative in other curricular learning so that the profile of Pancasila students can be developed in complementary and complete dimensions (Dam et al., 2019; Koesomadinata, 2022).

Behavioristic theory does not support implementing scientific learning based on Tri Hita Karana because behavioristic theory views the elements/parts of behavior change as learning outcomes. The behavioristic theory is not in line with Gestalt theory, and Gestalt theory prioritizes phenomena that are holistic in both the learning process and learning outcomes (Mahendra & Kartika, 2021; Wardhani et al., 2020). Implementing scientific learning based on Tri Hita Karana, which is holistic integrative, is in line with Gestalt theory, which states that the aspects of Paluhuran, Pawongan, and Palehnan as the basis of scientific learning lose meaning if implemented separately. The process and results of this study are relevant to constructivist theory; namely, the learning process carried out by children is a way of constructing their thoughts into a new synthesis (Karmini et al., 2021; Kusumayani et al., 2019).

Scientific learning based on Paluhuran, Pawongan, and Palemahan is a plan and implementation of learning constructed by researchers. The framework for planning and implementing it is adopted from preparing science and combined with the foundation of divine, human, and nature conservation values. The planning and implementation of the learning are holistic and integrative, based on the elements of science learning and the tri hita karan aspects. The learning outcomes in the form of Pancasila student profiles consist of six dimensions, which are also holistic. The research results are beneficial for implementing early childhood education to apply scientific learning based on Tri Hita Karana in forming children who have a complementary Pancasila profile themselves. Theoretically, the results of the implementation of scientific learning based on Tri Hita Karana, which positively affects the profile of Pancasila students, can enrich the learning model in projects to strengthen the profile of Pancasila students in Indonesia.

4. CONCLUSION

Scientific learning based on Paluhuran, Pawongan, and Palemahan has a robust correlation and positively affects the profile of Pancasila early childhood students. The results of the multiple regression test concluded that implementing scientific learning based on Paluhuran, Pawongan, and Palemahan strengthened the profile of Pancasila early childhood students. It is hoped that every early childhood educator and teacher will design and implement scientific learning based on Tri Hita Karana to accelerate the achievement of strengthening the profile of Pancasila early childhood students.

5. REFERENCES


https://doi.org/10.36733/jsp.v7i2.66.


