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Integration of Islamic Educational Values in Teaching of Science through Games to Kindergarten Pupils in Palu City, Indonesia



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ABSTRACT: This aims to discuss the integration of Islamic education in science teaching through games to kindergarten pupils in Palu city, Indonesia. This study used a qualitative approach involving two kindergartens in Palu city. Data was gathered through direct observation, in-depth teacher interviews, and document analysis. The findings show that Islamic education values have been integrated into the teaching of science during school days learning. The kindergartens used a number of learning centers, such as the science center, tauhid center, and art center, to integrate Islamic values into the teaching of science at the kindergarten level. This study also contributes to practices in which other kindergartens might use these strategies in the integration of Islamic education values with the learning of science.

KEYWORDS: Integration, Islamic education, Islamic values, science, kindergarten

I. INTRODUCTION

Children are individuals who need direction and guidance from parents, teachers, and people around them [1]. With good direction and guidance from teachers and parents, children can develop the basic skills needed. For this reason, early childhood education is needed so that it can direct the child's basic abilities as much as possible. A number of parties have studied the importance of developing science learning in early childhood because, at an early age, a child's brain develops rapidly [2, 3]. The process of brain growth goes according to the growth of the child's body. For example, when a child is 5 years old, his brain growth will reach 80%. Thus early childhood education requires the right strategy to stimulate the growth of these children's brains.

The Indonesia Ministry of National Education has issued regulation Number 58 of 2009 concerning competencies that must be mastered by early childhood in early childhood education programs. One aspect that is developed in early childhood education is children's cognitive development. Cognitive development is related to the introduction of science in Kindergarten. This is in accordance with Government Regulation no. 58 of 2009 which states that in the development of children aged five to six years, teachers need to pay attention to cognitive development in the educational process at Kindergarten. Efforts to improve cognitive abilities need to be made by increasing the ability of general knowledge and science [4, 5]. The process of increasing cognitive abilities can be done through the introduction of the concepts of shape, color, size, and pattern; and the concept of numbers, number symbols, and letters.

Cognitive development is one of the areas of the basic development in the kindergarten curriculum, which plays a strategic role in efforts to develop children's thinking power [6, 7]. This thinking power functions to help children to be able to process their learning outcomes and help develop their logic. The development of science learning in children also has a very important role in assisting cognitive development in early childhood. Teachers need to be aware of the importance of imparting science to children from an early age because children currently live in a world that is dynamic, developing, and changing continuously. The development of the world today is increasingly complex, which requires good thinking skills in every child.

Science learning strongly supports children's cognitive development because science is knowledge about the natural surroundings, which contains theories or concepts obtained through observation, research, and experiments on natural phenomena [8, 9]. Therefore, the process of observation and research can be taught to children from an early age so that it supports children's cognitive development and increases their understanding of various natural knowledge around them.

However, introducing science to children must be adapted to the stages of the child's age and physical development [10, 11]. Therefore, the process of teaching science to children cannot be done in the same way for all children of different ages. The introduction of science needs to be done according to the age and physical development of children so that they are not burdened with a heavy brain. In the introduction of science, teachers can train children to use their five senses to recognize various objects or natural phenomena around them. Children can be trained to see, feel, smell, feel, and hear by using their age-appropriate minds. Thus children can gain new knowledge from the results of their sensing. Introduction to science that is carried out from an early age also needs to be done with activities that are fun for children and through habituation so that children experience the science process slowly.

A number of studies on teaching science to children have been carried out by a number of researchers [12]. However, the study focused on elementary and middle school children. Meanwhile, research on science learning for young children between the ages of five and six who are studying in Kindergarten still needs to be completed. Research related to science learning for early childhood can reduce our understanding of science learning strategies for children in an effort to improve children's cognitive abilities.

For this reason, this research was conducted to analyze the ways of learning science and those that are integrated with Islamic religious values in kindergartens aged between five and seven years. The purpose of this research is to provide understanding to academics and practitioners regarding good science learning strategies for children in Kindergarten. This research can be useful for the academic world and practitioners, both government and private parties, who organize Kindergarten education. Thus learning science to children can help their cognitive development properly.

II. LITERATURE REVIEW

A. Integration of Islamic Education Values in Science Teaching

Integration of values in learning is a process of guidance through the example of a teacher who is oriented towards inculcating life values, which include religious, cultural, ethical, and aesthetic values, to form students who have spiritual intelligence, self-control, good personality, and noble character [13, 14]. Integration is a unified whole, not divided and divided. Integration includes the needs or completeness of the members that form a unit with a close, harmonious relationship between the members. Meanwhile, what is meant by the integration of values in learning is the process of unifying values -educational values with religious values in the learning process. The concept of unification between educational and religious values means integrating these two values.

Islam is a religion that pays attention to all aspects of human life in order to provide perfect happiness. Islam also provides instructions that humans can follow in carrying out their life activities [15, 16]. For example, when humans carry out educational activities, they need to be equipped with religious values to balance knowledge and religion. The balance between general knowledge and religious values is important for humans so that the education they have can give meaning to life. Islam is a religion that gives mercy to all humans and obliges humans to seek knowledge through education inside and outside formal education. Even Allah sent down the Qur'an with verses that commanded the Prophet to read and read because reading is one way to gain knowledge. Thus humans can develop their knowledge and use this knowledge for their own welfare.

A number of Islamic education studies are still descriptive, normative, and adaptive in nature, influenced by western researchers [17, 18]. As a result, a number of educational approaches in Indonesia are also influenced by western culture, which lacks religious and social values. For example, western education emphasizes a positivist paradigm that is far from religious values. Meanwhile, Islam requires education based on divine values because Muslims believe that the world and its contents are God's creations, not the result of human engineering. Meanwhile, the western education paradigm emphasizes logic without linking it to religious values.

Indonesian cultural traditions that have come into contact with various cultures have given birth to educational traditions that require society to incorporate religious values into the educational process at all levels. Thus, general education integrated with Islamic education's values can provide a balance in science. Thus, science will be able to form Muslim scholars with knowledge and religious values. The existence of scientific integration is an attempt to improve the history of scientific understanding in the past, which separated science from religion. For this reason, science learning in the future must be carried out with an integrated science approach. So far, the Ministry of Religion of the Republic of Indonesia has implemented several strategies for the integration of knowledge in Islamic educational institutions, such as interdisciplinary, multidisciplinary, and integration. The goal is for students to have broad insight into various branches of knowledge. Thus all schools under the department of religion are required to apply the concept of integrating knowledge in school learning from Kindergarten to the tertiary level.

The aim of the integration of knowledge in science learning is also related to the government's efforts to educate students to have a moderate appreciation of the differences in the various branches of knowledge being studied [19]. A moderate view can eliminate fanaticism, prejudice, and narrow insights. Then the scientific paradigm without religion can also be eliminated so that the attitude of scientific egoism can also be eliminated. The integration of Islamic educational values with science has an important role in minimizing the lack of theological aspects in learning. Thus learning activities have an important role in shaping student development at the Kindergarten education level. This is the same as the purpose of human creation, namely, to worship Allah, as stated in QS. Az-Zariyyat: 56:

وَمَا خَلَقُتُ ٱلْجِنَّ وَٱلْإِنسَ إِلَّا لِيَعْبُدُونِ ٥٦

And I did not create jinn and humans except that they serve Me

III. METHODOLOGY

Translation:

This study uses a qualitative method [20] to investigate the strategy of Islamic education values integration in the teaching of science at kindergartens in Palu City, Indonesia [21, 22]. Data were collected through direct observation in the case field and indepth interviews with teachers and kindergarten principals [23]. Written materials were also analyzed to understand the strategy used in the integration of learning science and Islamic values. Data analysis consists of several procedures, which include reduction and verification techniques with various data sources [24]. The reduced data is then analyzed, reflecting on the theoretical concepts used in this study. Finally, the results were presented based on thematic issues found in the data [25, 26], which show the study's insight relating to the use of higher-order thinking skill strategy in teaching Islamic religious subjects within the state high school.

IV. RESULTS AND DISCUSSION

A. Integration of Islamic education values in learning themes

One of the activities carried out by the teacher in designing the Daily Activity Plan is the activity of integrating the values of Islamic education (Wahyuddin, Nurdin, & Pettalongi, 2022) one of the missions in kindergartens in the city of Palu. This is explained by the informant below:

The mission of the Kindergarten in the city of Palu is to ensure that children aspire to become Muslim entrepreneurs following the example of the Prophet Muhammad, who is polite and independent. For this reason, it is necessary to determine the values of Islamic education in designing daily activity plans in order to realize this mission. The values of Islamic education can be taken from the exemplary stories of the prophets, Islamic figures, verses of the Koran, Asma ul husna and the hadith of the Prophet

The activity of making daily activity plans needs to integrate the values of Islamic education. The goal is to achieve the mission in Kindergarten. The values of Islamic education can be taken from the exemplary stories of the prophets, Islamic figures, verses of the Koran, asma'ul husna, and hadiths of the Prophet. With regard to the values of Islamic education, other informants explained that:

To integrate the values of Islamic education, we must pay attention to the learning themes and the goals to be achieved by children so that the values of Islamic education are in line with the learning themes and goals to be achieved by children.

The process of integrating the values of Islamic education carried out by Palu Kindergarten teachers is adapted to the learning themes and goals to be achieved by students. Therefore, in designing the Daily Activity Plan, the teacher analyzes the lesson's theme and objectives by categorizing the values of Islamic education that will be applied in the learning process. Other informants added the following:

In integrating the values of Islamic education, teachers must also pay attention to the learning centers that are part of the education system in kindergartens in the city of Palu, starting from monotheism centers to art centers. In making daily activity plans that we carry out from Monday to Friday, we also establish different centers every day, thus requiring different values of Islamic education

The values of Islamic education were integrated when kindergarten teachers in the city of Palu, namely by making an Activity Plan Making, had to pay attention to learning centers. The designed daily lesson plan from Monday to Friday had different centers so that the educational values The integrated Islam is also different. For more details, the learning centers used in Kindergarten can be explained as follows:

In the education system organized by several kindergarten foundations in the city of Palu, they use a learning system that combines learning with games through a central system adopted from the Beyond Center and Circle Time (BCCT). The centers implemented are: tauhid center, exercise center, life skill center, science center, block center, and art center.

Based on the informant's statement, it can be understood that the education system implemented in Palu Kindergarten adopts the Beyond Center and Circle Time (BCCT) concept. The centers determined based on the BCCT are the monotheism center, exercise center, life skill center, science center, block center, and art center. Several learning centers can be seen in the following figures:





Picture 1. Block Centre and Science Centre



Picture 2. Lifeskill Centre and Exercise Centre



Picture 3. Art Centre and Tauhid Centre

Based on some of the pictures, it can be understood that each center has its own classroom, which is facilitated by various learning media that support the learning system, making it easier for children to absorb the subject matter taught by the teacher. Every day the learning center is taught alternately with the values of different Islamic education as well, as explained by the informant below:

In general, the learning centers are carried out based on the curriculum and daily activity plans, which include, on Mondays, learning is carried out at the monotheism block center, Tuesdays at the monotheism science center, Wednesdays at the tauhid life skills center, on Thursday the tauhid exercise center and on Friday at art tauhid center

The learning centers implemented in the Kindergarten in Palu City are different every day. Implementing learning at a different center every day is so students don't get bored. Then also so that students get new knowledge on different days. In other words, the values of Islamic education that will be applied also vary according to the theme and learning objectives. From the analysis of the curriculum and daily activity plans, it can also be seen that all centers taught from Monday to Friday are always integrated with Islamic values.

B. Model of Integration of Islamic value in teaching sciences

The values of Islamic education that are integrated into the learning activities carried out at the Palu Kindergarten are carried out by the teacher to realize the vision and mission of the Educational Park [22]. The values of Islamic education began to be seen being integrated from the beginning of the learning activities, as the results of the researchers' observations on the learning activities carried out by the teacher in the Education Park. An informant said the following:

Learning activities begin with intentions and prayers before learning, and then the teacher invites the children to sing songs, play brain games, and a competition to move books. After that, the children sang several songs, followed by telling folk tales that contained moral messages, such as the story of a monkey who is naughty and likes to steal bananas. Then the monkey got lost in the forest because other animals were chasing him. After that, the teacher conducts dialogue and guides the child to find the moral value of the story

The initial learning activities were carried out on two different days. In this initial activity, the teacher began to integrate the values of Islamic education through reading prayer studies and Dhuha prayers. However, on the first day, the teacher tells fairy tales which are then shown the moral values that come from these fairy tales so that children can apply them

in their lives. On the second day, the teacher invites children to memorize asma'ul husna al-awwal and al-thawwab and their meanings so that children can get to know the names of Allah through memorizing the two asma'ul husna. Furthermore, other participants said the following:

In the morning material activities on Wednesday, the teacher begins his activities by reading hadiths about maintaining cleanliness, reviewing past material, and then carrying out learning according to a certain theme. For example, the teacher introduces natural phenomena on earth, such as volcanic eruptions, and convinces children about good luck and bad luck. Then the teacher invites the children to play with letter cards with new vocabulary to add to the children's vocabulary. After that, the teacher invites the children to learn English vocabulary to remember several English words.

In the morning material learning activities, the teachers also integrated the values of Islamic education, which were carried out at the beginning of the activity, explaining the certain subject matter, as for the values of Islamic education that are integrated into these learning activities, namely the value of fate in Islamic teachings, such as the understanding that everything that happens in this world (such as floods, landslides, volcanic eruptions, and death) is a destiny that Allah has arranged. Thus humans need to do good in preparation for death. Furthermore, the snack time activities also integrate the values of Islamic education. One of the informants said the following

The teacher carries out the snack time activity by directing the children to gather together and leading the reading of the prayer meal which is carried out with the children. After that the children have breakfast with the teacher while reading a prayer together. Then the teacher guides the children to tidy up the room and put the food boxes back in the place provided. After that, the children can play freely. However, the teacher explained that playing must be careful and use time well in playing because time is God's most precious gift

During recess activities, the teachers still integrate Islamic educational values in the form of guiding children to pray before and after doing something. For example, when tidying up the dining area and giving messages, the teachers convey Islamic educational values. As for science center activities, the teachers also integrate Islamic values with science by linking science with Islamic education. An informant said the following.

The teacher begins the activity by reading a book about natural phenomena, namely volcanic eruptions, explaining and entering several vocabularies related to this (Wednesdays and Thursdays), on Wednesdays the teacher guides children to play the role of a fishing family, namely as a father fishing by boat. Small, as a mother selling fish in the market (money and toys) as a school child, in these activities, the values of Islamic education were integrated, namely being diligent in playing games. Whereas on Thursday, the game is to trace a picture of an erupting volcano by sticking paper onto a picture of an erupting volcano and the child traces it, followed by putting the numbers into a basin filled with water and then the child writing down the numbers that are visible, the teacher emphasizes that the activity is tracing pictures and Writing down the numbers that appear in the basin is an ability (al-qawiyy) bestowed by Allah.

Based on the results of the opinions of these sources, it can be understood that teachers continue to integrate the values of Islamic education into the center's activities. On Wednesday, the teacher integrates Islamic educational values, namely persistence in tracing pictures so that children can learn to make pictures of volcanoes. Whereas on Thursday, the values of Islamic Education are integrated into the form of the power to pay attention and write down the numbers that are in a basin filled with water. So that on these two days, you can see the harmonization values carried out by the teacher in the learning process. This alignment activity is to improve children's motor skills through tracing and observing activities. Thus children can get used to paying attention to the circumstances around them to gain knowledge and values of life. One informant said the following:

The activities carried out are guiding the child to perform ablution and then guiding the child to read Iqra' (Wednesday Iqra' p. 31 and Thursday Iqra' p. 32), then memorizing dhikr after prayer, waking up prayers and hadiths to keep clean (Wednesday), memorizing letters al-qadr, asmaul husna al-awwal and al-thawwab (Thursday) then midday prayers in congregation.

The informant's opinion shows that the midday prayer activity is an activity that contains Islamic educational values both when the teacher guides the child to perform ablution and guides the child to read Iqra'. After that, the study hours still contain the values of Islamic education, namely memorizing dhikr after prayer, waking up, and listening to hadiths about maintaining cleanliness. Then the children perform Dzuhur prayer activities in the congregation, which is also part of the integration of Islamic educational values.

C. Some of the Islamic values integrated into science learning

The educational process in Kindergarten uses a learning while-playing system so that the learning process is carried out by the teacher using various types of games and learning media as well as certain values that are integrated into these learning

activities. In kindergartens that have a vision and mission, namely to become the favorite Islamic Kindergarten in Indonesia and a mission to ensure that children aspire to become Muslim entrepreneurs according to the character of the Prophet Muhammad, polite and independent values that are integrated with games designed by the teacher. -are the values of Islamic education. This research is focused on science learning, so the focus of the author's research is also on the learning process, especially science centers, which are mostly carried out by the educational park every Tuesday.

The school theme is the initial theme of learning in the odd semester. In this theme, children are introduced to the school and the various activity programs in it so that children can adapt to the school environment they have just entered. Based on the results of the author's observations of this theme, it can be described as follows :

Children who have just entered Kindergarten are very unfamiliar with activities in Kindergarten. Therefore the first theme taught is the theme of my school, where learning and playing with God's gifts are carried out for three weeks with the theme namely: introducing the parts of the school, introducing the tools learning tools, and introducing school activities.

The theme of my school is that learning and playing with God's grace is the first theme that a child who has just entered Kindergarten gets. Through this theme, children are introduced to new activities. Thus they need adjustments to Kindergarten activities. Therefore Kindergarten helps children adjust to activities in the new educational environment by introducing various learning themes. The values of Islamic education that are integrated into the learning process can be seen from the explanations of the following participants:

In the opening hours of class activities, the values of Islamic education are integrated, namely teaching children to read study prayers, guiding children to pray by reading letters an-Nas and al-Falaq, and memorizing asma'ul husna: al-rahman and aruterus and its meaning. Classrooms and playgrounds are good learning places because children can gain knowledge. In science center activities, the children are invited to go around the school, and the teacher introduces parts of the school while inviting the children to say alhamdulillah for having a good learning place. In recess activities, the teacher teaches the children to read the prayers for meals and prayers after eating.

The values of Islamic education that are integrated in the learning are: reading learning prayers, guiding children to pray dhuha by reading surahs an-Nas and al-Falaq, memorizing asma'ul husna: al-rahman and ar-rahim and their meanings, classrooms, and playgrounds are places of learning that should be grateful for because children can gain knowledge, take children around the school, and the teacher introduces parts of the school and then invites children while saying alhamdulillah for having a good place to study as for the values of Islamic education that were integrated in the second week, namely introducing learning tools, in this theme the values of Islamic education that were integrated were: opening activities, teaching children to read learning prayers, guiding children to pray dhuha by reading letters al-Ikhlas and told the children to memorize the asma'ul husna: as-salam and al-mu'min and their meanings.

In the morning, material activities, namely books, pencils, blackboards, tables, and benches, are human creations as tools for learning God's gift of reason. In science center activities, guiding children to trace school patterns by pasting paper over pictures. During recess activities, the teacher guides children to read. Prayer for eating and prayer after eating. In the activities of the Dzuhur prayer series, the activities carried out by the teacher are guiding children to perform ablution 'memorizing surahs al-Ikhlas and al-Lahab, and reading Iqra. The learning activity ends by guiding the children to read surah al-Ashr, pray after studying, pray outside the classroom/home, and pray before traveling.

Whereas in the third week, integrated Islamic education values are carried out in early learning activities by reading study prayers, guiding children to pray dhuha by reading surahs al-Ikhlas and al-Lahab, and memorizing asma'ul husna: as-salam and al-mu'min and their meanings. In the morning material activities, the teacher provides books, pencils, blackboards, tables, and benches by explaining that all these items are man-made whose knowledge is given by God. In science center activities guiding children to play tracing the shape of the blackboard, the shape of the book, and the shape of the pencil by pasting the paper over the pictures. The learning activity ends with guiding the children to read a variety of short prayers.

5. CONCLUSION

We found that kindergarteners have successfully integrated Islamic education values into the teaching of science to kindergarten pupils. The kindergartens utilized learning centers such as science centers, tauhid centers, and art centers to integrate Islamic values into learning science for their pupils. The integration was also conducted through daily practicing Islamic religious teachings during school time. Science was taught side by side with the teaching of Islamic values. This study contributes to the body of knowledge regarding the integration of Islamic education values with the learning of science at the kindergarten level. This study also contributes to practices in which other kindergartens might use these strategies in the integration of Islamic education values with the learning of science.

REFERENCES

- 1) Lansdown, G., S.R. Jimerson, and R. Shahroozi, *Children's rights and school psychology: Children's right to participation*. Journal of School Psychology, 2014. **52**(1): p. 3-12.
- 2) Gustavsson, L., et al., Ways of dealing with science learning: a study based on Swedish early childhood education practice. International Journal of Science Education, 2016. **38**(11): p. 1867-1881.
- 3) Edwards, K. and J. Loveridge, *The Inside Story: Looking into Early Childhood Teachers' Support of Children's Scientific Learning.* Australasian Journal of Early Childhood, 2011. **36**(2): p. 28-35.
- 4) Niaz, M., Enhancing thinking skills: Domain specific/ domain general strategies. Instructional Science, 1994. **22**(6): p. 413-422.
- 5) Makmur, M., N. Nurdin, and A. Pettalongi. *Islamic Education Values In Sintuwu Maroso Culture*. in *Proceeding of International Conference on Islamic and Interdisciplinary Studies*. 2022. Palu: UIN Datokarama Palu.
- 6) Salmon, A., *Using music to promote children's thinking and enhance their literacy development*. Early Child Development and Care, 2010. **180**(7): p. 937-945.
- 7) Nicolopoulou, A., et al., Using the Transformative Power of Play to Educate Hearts and Minds: From Vygotsky to Vivian Paley and Beyond. Mind, Culture, and Activity, 2009. **17**(1): p. 42-58.
- B) Geake, J. and P. Cooper, Cognitive Neuroscience: implications for education? Westminster Studies in Education, 2003.
 26(1): p. 7-20.
- 9) Heyns, B., Schooling and Cognitive Development: Is There a Season for Learning? Child Development, 1987. **58**(5): p. 1151-1160.
- Smith, J. and W. McSherry, *Spirituality and child development: a concept analysis*. Journal of Advanced Nursing, 2004.
 45(3): p. 307-315.
- 11) Masten, A.S., *Global Perspectives on Resilience in Children and Youth*. Child Development, 2014. **85**(1): p. 6-20.
- 12) Palinge, E., N. Nurdin, and R. Rusdin. *The Importance of Islamic Education to the Early Childhood*. in *Proceeding of International Conference on Islamic and Interdisciplinary Studies*. 2022. Palu: UIN Datokarama Palu.
- 13) Lipson, M.Y., et al., Integration and Thematic Teaching: Integration to Improve Teaching and Learning. Language Arts, 1993. **70**(4): p. 252-263.
- 14) O'Sullivan, H., et al., Integrating professionalism into the curriculum: AMEE Guide No. 61. Medical Teacher, 2012. **34**(2): p. e64-e77.
- 15) Alharbi, J. and L. Al Hadid, *Towards an understanding of compassion from an Islamic perspective*. Journal of Clinical Nursing, 2019. **28**(7-8): p. 1354-1358.
- 16) Khaki, A., *The Effect of Religion and Denomination on Calmness in Residential Spaces Based on Islamic Teachings*. Journal of Religion and Health, 2021. **60**(2): p. 854-880.
- 17) Niyozov, S. and G. Pluim, *Teachers' Perspectives on the Education of Muslim Students: A Missing Voice in Muslim Education Research.* Curriculum Inquiry, 2009. **39**(5): p. 637-677.
- 18) Sahin, A., Critical Issues in Islamic Education Studies: Rethinking Islamic and Western Liberal Secular Values of Education. Religions, 2018. **9**(11): p. 335.
- 19) Samuels, B.M., *Can the Differences Between Education and Neuroscience be Overcome by Mind, Brain, and Education?* Mind, Brain, and Education, 2009. **3**(1): p. 45-55.
- 20) Nurdin, N., R. Stockdale, and H. Scheepers. *The Use of Social Media to Gather Qualitative Data: A Case of Government E-Procurement Implementation and Use.* in 24th Australasian Conference on Information Systems (ACIS) 2013. RMIT.
- 21) Nurfaiqah, N., N. Nurdin, and F. Alhabsyi. *Management of Al-Qur'an Learning at One Day One Juz Palu Community*. in *Proceeding of International Conference on Islamic and Interdisciplinary Studies*. 2022. Palu: UIN Datokarama Palu.
- 22) Rahmawati, R., N. Nurdin, and A. Pettalongi. *Science Learning Methods in Kindergarten Schools (Study at: Khalifah Kindergarten in Palu City 2021).* in *Proceeding of International Conference on Islamic and Interdisciplinary Studies.* 2022. Palu: UIN Datokarama Palu.
- 23) Jumahir, J., N. Nurdin, and A. Syahid. *The Role Of The Principal In The Development Of Religious Culture In Man 1 Banggai*. in *Proceeding of International Conference on Islamic and Interdisciplinary Studies*. 2022. Palu: UIN Datokarama Palu.
- 24) Zaid, Z., S.S. Pettalongi, and N. Nurdin, *Implementation of School-Based Management in Improving the Quality of State Islamic Junior High School.* International Journal of Social Science and Human Research, 2022. **5**(8): p. 3448-3455.
- 25) Nurdin, N., H. Scheepers, and R. Stockdale, *A social system for sustainable local e-government*. Journal of Systems and Information Technology, 2022. **24**(1): p. 1-31.

- 26) Nurdin, N. and S.S. Pettalongi, *Interpretive case study to understand online communication in an e-tendering project implementation*. Jurnal Manajemen Komunikasi, 2022. **7**(1): p. 39-54.
- 27) Wahyuddin, W., Nurdin, N., & Pettalongi, A. (2022). *Strategy for Developing Honesty and Caring Attitude in Students*. Paper presented at the Proceeding of International Conference on Islamic and Interdisciplinary Studies, Palu.



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