



Simple Percussion Ensemble on Early Childhood Social Development

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ABSTRAK

Anak usia dini sangat menyenangkan kegiatan bermain. Berdasarkan hasil observasi di taman kanak-kanak kelompok B terlihat 85% anak belum mampu berinteraksi dengan teman bahkan guru. Hal ini akan berdampak kepada perkembangan social anak usia dini. Penelitian bertujuan untuk menganalisis penggunaan perkusi botol berisi air terhadap perkembangan sosial pada anak. Jenis penelitian ini yaitu penelitian kuantitatif. Metode penelitian menggunakan pendekatan kuantitatif yang berbentuk quasy eksperiment. Metode yang digunakan dalam mengumpulkan data yaitu tes dengan subjek penelitian anak anak usia dini. Instrument yang digunakan dalam mengumpulkan data yaitu lembar soal tes. Teknik yang digunakan dalam menganalisis data yaitu analisis statistic inferensial (uji-t). Hasil penelitian yaitu anak pada kelas eksperimen yang menggunakan perkusi botol berisi air memiliki nilai rata-rata lebih tinggi jika dibandingkan dengan anak pada kelas kontrol yang menggunakan tepuk tangan. Disimpulkan bahwa perkusi botol berisi air efektif digunakan untuk mengembangkan perkembangan sosial pada anak usia dini. Ansamble perkusi sederhana dapat membantu meningkatkan suasana belajar yang menyenangkan pada siswa sehingga dapat meningkatkan perkembangan sosial pada anak usia dini.

ABSTRACT

Early childhood is very fond of play activities. Based on observations in kindergarten group B, it was seen that 85% of children were not able to interact with friends and even teachers. This will have an impact on early childhood social development. The study aimed to analyze the use of percussion bottles filled with water on social development in children. This type of research is quantitative research. The research method uses a quantitative approach in the form of experimental quasi. The method used in collecting data is a test with early childhood research subjects. The instrument used in collecting data is the test question sheet. The technique used in analyzing data is inferential statistical analysis (t-test). The results of the study werethat children in the experimental class who used percussion bottles filled with water had a higher average score when compared to children in the control class who used applause. It was concluded that percussion bottles filled with water are effectively used to develop social development in early childhood. Simple percussion ensembles can help improve the pleasant learning atmosphere in students so as to improve social development in children.

1. INTRODUCTION

Early childhood education (PAUD) is a development effort aimed at children from birth to the age of six which is carried out through providing educational stimulation to help physical and spiritual growth and development so that children are ready to enter further education. uniqueness and stages stages of development that early childhood goes through(Huliyah, 2016; M. Khaironi, 2017). One form of PAUD unit found in the formal education pathway is kindergarten (TK). The learning process in kindergarten has become a problem, especially in the city of Padang in recent years. This is caused by the learning process carried out which tends to be academically oriented, namely learning that emphasizes achieving children's abilities in reading, writing and arithmetic. Basically, the concept of education in kindergarten (TK) is to

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develop the various potentials possessed by children (Khadijah, 2016; Ma'sum, 2018), both physically and psychologically, this is caused by a misunderstanding of the concept of early childhood education (PAUD). Early childhood education is the provision of education provided to children aged 0-6 years which aims to optimize children's potential through development activities. comprehensive abilities and in accordance with the child's growth and development. This education seeks to optimize the golden age of children, so that children grow and develop according to developmental aspects (Khadijah, 2016; Sukatin et al., 2020) Early childhood is a child in the age range 0-6 years, where at this age all aspects of a child's development grow and develop maturely and perfectly to determine the child's next stage of development. There are five aspects of development in early childhood, namely religious values. and moral, cognitive, physical motoric, social and emotional, and arts in accordance with the agreement of education experts in Indonesia on the 2013 curriculum (Mulianah Khaironi, 2018; Wulandari & Purwanta, 2020) Art is one aspect that needs to be developed and stimulated well in early childhood. Where art itself consists of music, fine arts and dance arts. Musical arts are activities related to sounds, fine arts are activities related to images and dance are activities related to movement or body exercise. This art is one of the aspects that needs to be developed maximally to support children's readiness for the next life. (Kurniawan, 2019; Permana, 2018). Music is a unique system for communicating complex ideas and emotions. Music is a creative activity as a form of expression of beautiful human feelings that communicates ideas and emotions in the form of notes or other sounds that contain rhythm and harmony so that they can be understood and enjoyed. (Pangaribuan, 2021; Purhanudin & Nugroho, 2021). Percussion is the term for musical instruments whose playing technique is hit, either using hands, sticks and so on. Percussion is carried out using various instruments that can produce sounds which, when played simultaneously, produce beautiful sounds (Kurniawan, 2019; Syahfitra & Satria, 2021). Percussion play in early childhood is to give children the opportunity to do and play an object, be it a drum, bottle, can, etc. using their hands, sticks, etc., children hit together (percussion ensemble) with different beats to produce beautiful sounds. In this percussion ensemble, children do something actively, so this percussion game will be very good for developing creative activities and social interaction between individual children in learning the art of music.

Research on early childhood states that in childhood, there is a strong urge to get along with other people and want to be accepted by others, if these needs are not met, children will be unhappy. (Murni, 2017; Sabani, 2019). Early childhood is a critical time in obtaining all future learning, social and emotional development is an important component so teachers need to maintain the social emotional intelligence of early childhood (Hidayat, 2017; Naimah, 2019). The above statement is reinforced by the opinion which states that communication development for early childhood is very important in order to gain skills in understanding, expressing thoughts, feelings and information. (Hermoyo, 2015; Septiani, 2021). This understanding of communication starts before birth (during pregnancy) and continues throughout life, as a child so that he is able to hear, see and interpret information from other people. The explanation above illustrates the importance of social emotional learning, especially in social interactions in early childhood. This learning can take place in formal or non-formal environments. In formal early childhood education, namely Kindergarten, teachers have an important role in the development of their students' social interactions. Santrock, revealed that the most important function of peer groups is to provide a source of information and comparison about the world outside the family. Children's social learning stage begins when they interact with the environment outside the family, (Musyarofah, 2017; Xiao, 2018).

Social interaction can be interpreted as a dynamic social relationship and concerns relationships between individuals, between individuals and groups, as well as between one group and another group. This understanding explains that the scope of social interaction is quite broad and includes many individuals with different characteristics, so the ability to carry out social interactions needs to be developed from an early age. During the researcher's initial observations at the Padang State University Development Laboratory Kindergarten, the researcher found that the children at this school had many talents and interests in the field of musical arts, but did not have the infrastructure and forum to develop their talents. Children often show a reaction to their talent by banging on the table freely, but children do not receive direction and follow-up from teachers evenly. Researchers also found that there is a lack of variety of musical instruments used to facilitate children's social development. Furthermore, in honing children's talents in in the field of musical arts, the methods used by teachers are less varied. Based on observations made by researchers, several basic things were found: a). First, educators should direct each individual child in learning the art of music (percussion) by dividing into groups to play percussion musical instruments in the form of a percussion ensemble, b). Second, students' interest is very high in learning the art of music (percussion ensemble), c). Limited facilities and infrastructure hinder the process of learning the art of music itself. Based on findings in the field, the aim of this research is to interpret the indications that cause the musical arts learning process "Percussion Ensemble on children's

social development". Because of these problems, this research aims to look at the difficulties encountered by educators in the Percussion Ensemble learning process in the Development Laboratory Kindergarten, Padang State University and what efforts can be made to solve these problems, as well as obtain significant results or findings in accordance with the title of the research that the researcher is conducting.

2. METHOD

Based on the problem studied, namely "Percussion Ensembles on Children's Social Interaction" at the Development Laboratory Kindergarten, Padang State University, this type of research is quantitative with experimental methods in the form of quasi-experimental (quasi-experiment). The experimental method is a research method used to find the effect of certain treatments on others under controlled conditions (Antara, 2018; Sutono & Pamungkas, 2021). The reason for choosing experimental research is because an experiment in the field of education is intended to assess the influence of an action on behavior or test whether there is an influence of that action. The form of experimental research used is quasi experimental (quasi-experiment). This quasi experimental design was used because in reality it was difficult to get a control group that was used for research where there were two groups that were not chosen randomly and then a pretest was given to find out whether there were differences between the experimental group and the control group. with the control class.) by teaching the percussion ensemble with bottles filled with water while the control class was given no treatment or by clapping, then both groups were given a post-test.

3. RESULT AND DISCUSSION

Result

The data described in this research consists of two groups, namely data regarding the results of the pre-test (initial abilities) of social development in children before treatment was given to the experimental group and the control group. This research was conducted in classes B1 and B3 of Kindergarten Adhyaksa XXVI Padang which consisted of six meetings. During the meeting, the themes and sub-themes to be researched are determined. In the experimental class there were six meetings. One meeting was for the pre-test carried out by the researcher, and five meetings were for treatment. On the last day of treatment, a post-test was immediately carried out by the researcher. This research was conducted with the theme of animals and the sub-theme of aerial animals. Likewise, in the control class, six meetings were held using the clapping game. One meeting was for the pre-test carried out by the researcher and five meetings for the treatment carried out by the teacher. On the last day of treatment there was an immediate post-test carried out by the researcher. This research was conducted with the theme of animals and the sub-theme of aerial animals. In the control class, clapping was used for children's social development, while in the experimental class, water bottle percussion was used for children's social development. Data obtained from class B1 Kindergarten, Development Laboratory, Padang State University, semester 1 of the 2016/2017 academic year, the number of children in the Child Social Development results was 15 people. After obtaining the results of the pre-test on the child's Social Development, it can be seen that the highest score achieved by the child was 75 and the lowest score was 50. Data obtained from class B3 Kindergarten, Development Laboratory, Padang State University, semester 1 of the 2016/2017 academic year, shows the number of children in the Development Results Social as many as 15 people. After obtaining the results of the Social Development pre-test, it was seen that the highest score achieved by the child was 75 and the lowest score was 50. The data showed that the median was 59.87 with an average of 61.25 and a Standard Deviation of 7.63. Recapitulation of Results *Pre-test* The social development of children in the experimental class and control class is presented in [Table 2](#).

Based on [Table 2](#), the experimental class with 15 children received the highest score of 75 and the lowest score of 50. From the experimental class children's scores, the overall score was 962.5, with an average score of 64.16, a standard deviation of 8.05 and the variance value was 64.80. Meanwhile, the control class with 15 children received the highest score of 75 and the lowest score of 50. From the control class scores, the overall score was 918.75, with an average score of 61.25, standard the deviation is 7.63 and the variance value is 58.21. The data described in this research consists of two groups, namely data about the results of children's social development using water-filled bottle percussion, which is called the experimental group and data about the results of children's social development using clapping, which is called the control group. Data obtained from class B1 of the Development Laboratory Kindergarten, Padang State University, semester 1 of the 2016/2017 academic year, the number of children in the Social Development results using water bottle percussion was 15 people. This Percussion Ensemble is used to develop children's Social Development. Percussion is a combination of intonation sounds produced by an

object that can emit a vibration frequency either by hitting, shaking, rubbing, stirring, or in any other way that can create a sound vibration frequency on the object to produce a beautiful sound. This will develop children's social development. After obtaining the results of social development, it can be seen that the highest score achieved by the child is 100 and the lowest score.

Table 1. Frequency Distribution of Pre-test Results for Social Development of Control Class Children in Group B3 Children at Padang State University Laboratory Kindergarten

Interval Class	Midpoint	Fd	Frequency Increases From Bottom (cf)
75 - 79	77	1	15
70 - 74	72	0	14
65 - 69	67	4	14
60 - 64	62	4	10
55 - 59	57	3	6
50 - 54	52	3	3
Amount	-	15	-

Table 2. Recapitulation of Results Pre-test Social Development of Children in Experimental and Control Classes

Variable	Learning	
	Experiment B1	Control B3
N	15	15
The highest score	75	75
Lowest value	50	50
Number of values	962.5	918.75
Median	60.37	59.87
Average elementary school	64.16	61.25
SD2	8.05	7.63
	64.80	58.21

Data obtained from the B3 Kindergarten class at the Development Laboratory of Padang State University, semester 1 of the 2016/2017 academic year, showed that the number of children in the Social Development results using applause was 15 people. After obtaining the results of the child's social development, it can be seen that the highest score the child achieved was 93.75 and the lowest score was 63.75. In the experimental class with 15 children, the highest score was 100 and the lowest score was 75. From the scores of the experimental class children, the overall score was 1368.75, with an average score of 91.25, a standard deviation of 9.35 and a variance value of 87.42. The control class with 15 children received the highest score of 93.75 and the lowest score of 68.75. From this control class value, the total number obtained is 1193.75,

The research that was carried out by the researchers was carried out over 6 meetings consisting of one pre-test and five treatments, at the last meeting a post-test was immediately carried out. In the experimental class it was carried out by the researcher and in the control class the treatment was carried out by the school teacher who was observed by the researcher and the pre-test and post-test were carried out by the researcher. Based on the results of the pre-test, the social development of children in the experimental class and the control class in the pre-test was obtained. the average figure for the experimental class is 64.16. The average score for the control class is 61.25. Based on the results of the data analysis that has been carried out, tcount is **0.983** compared to α 0.05 (ttable, =2.0484) with degrees of freedom dk $(N1-1)+(N2-1)=28$. Thus $tcount < ttable$, namely $0.551 < 2.0484$, it can be said that the hypothesis H1 is rejected or H0 is accepted. It can be concluded that there is non-significant effectiveness in Percussion Ensembles against Child Social Development at the Development Laboratory Kindergarten, Padang State University. When the researchers looked at the percussion ensemble in the experimental class (B1) at the Neferi Padang University Laboratory Development Kindergarten in the pre-test, it was seen that the children were not yet creative in playing musical notes, there were children who hit too hard and hit carelessly, and some children just followed along. the tempo of their friends sounds louder, the children are not able to focus on creativity, as well as in the control class conducted by the teacher (B3) who uses applause. Then, based on the results of social development in the experimental class and control class in the post-test, the numbers obtained the experimental class average was 91.25 and the control class average was 79.58. Based on the results of the data analysis that has been carried out, tcount is 3.53

compared to α 0.05 ($t_{table} = 2.0484$) with degrees of freedom $dk (N1-1)+(N2-1) = 28$. Thus $t_{count} > t_{table}$, namely $3.53 > 2.0484$, it can be said that the H_a hypothesis is accepted or H_0 is rejected. It can be concluded that there is no significant effectiveness of the percussion ensemble against Social Development in children in Padang State University Laboratory Development Kindergarten.

Discussion

The use of percussion instruments as a medium in learning provides children with the opportunity to express their ideas through direct activities, so that children become more confident in playing music and playing with friends in the art of music (Kurniawan, 2019; Rustiyanti, 2019). Learning media is anything that can be used to channel messages (learning materials), so that it can stimulate students' attention, interest, thoughts and feelings in learning activities to achieve learning goals. (Nabila, Adha, & Febriandi, 2021; Rupnidah & Suryana, 2022). Percussion ensembles can develop the social development of early childhood, because with percussion ensembles children can play music with a variety of rhythm patterns and timbres from the percussion instruments themselves. (Fasa, 2020; Rumengan & Hartati, 2020). The percussion ensemble is the right medium for developing social development in early childhood. When researchers carried out the percussion ensemble in the experimental class (B1) at the State University Laboratory Development Kindergarten Padang, children look enthusiastic and confident in playing percussion, children are able to play percussion instruments, create rhythm patterns individually, play the patterns that are instructed well, are not influenced by the sounds played by their friends, because this percussion ensemble is an interesting and new medium for children. Similar research states that suggests that the characteristics of early childhood are: 1) Children are egocentric, 2) Children have a sense of curiosity, 3) Children are unique, 4) Children are rich in imagination and fantasy, 5) Children have short concentration power (Masdudi, 2016; Septianti & Afiani, 2020). Percussion ensembles are good for use as learning media to develop social development in children. In line with the opinion above that young children have a high curiosity and are rich in imagination and fantasy, researchers found that children had never experienced playing percussion with bottles filled with water as a medium for children's learning. In the percussion ensemble, children can also express their imagination and fantasies about sound because of the variety of sounds that can be produced through the percussion ensemble. (Fasa, 2020; Kurniawan, 2019).

In accordance with the agreement of education leaders in the 2013 Early Childhood Education Curriculum which stipulates that art is one aspect that must be developed in early childhood. Percussion ensembles are good for use as learning media to develop social development in early childhood. Meanwhile in the control class (B3) use clapping to develop children's social development through clapping. (Astari, Aisyah, & Sari, 2020; Mulyani, 2013). Clapping hands is one of the musical techniques that humans can use to play or accompany music, but clapping hands can only create limited tonal sounds. Clapping hands is also one thing that is commonly found and done by children. (Putra, Rachman, Raharjo, & Suharto, 2021; Rustiyanti, 2019) Based on the researchers' observations, the results of the social development of children in the experimental class were better than the results of the social development of children in the control class. This can be seen from the average of children in the experimental class which was higher than that of the control class. It can be concluded that the effectiveness of water-filled bottle percussion develops children's social development.

4. CONCLUSION

Based on the research conducted, it can be concluded that there is no significant effectiveness of the percussion ensemble against Social Development in children in Padang State University Laboratory Development Kindergarten. When researchers used a percussion ensemble in the experimental class (B1) at the Padang State University Development Laboratory Kindergarten in the pre-test, it was seen that the children were not yet creative in playing musical notes, there were children who hit too hard and hit carelessly, and some children just followed along. The tempo of their friends is louder, the child is not able to focus on creativity, as well as in the control class conducted by the teacher (B3) who uses clapping.

5. REFERENCES

- Antara, PA (2018). Stimulation of Creative Game Methods with Creative Movement and Character Designs in Developing Children's Spatial Abilities. JPUD - Journal of Early Childhood Education, 12(2), 301-310. <https://doi.org/10.21009/jpud.122.11>.
- Astari, T., Aisyah, SN, & Sari, DA (2020). PAUD Teachers' Responses Regarding Giving Rewards and Their Influence on Learning Motivation and Social-Emotional Development of Early Childhood. JECIES:

- Journal of Early Childhood Islamic Education Study, 1(2), 141-155. <https://doi.org/10.33853/jecies.v1i2.90>.
- Fasa, M. G. (2020). Percussion ensemble learning with non-conventional instruments at Harapan Kita Elementary School, Klaten. *IKONIK: Journal of Art and Design*, 2(1), 35-38. <https://doi.org/10.51804/ijsd.v2i1.610>.
- Hermoyo, P. (2015). Forming effective communication during early childhood development. *Pedagogy: Journal of Early Childhood and Early Childhood Education*, 1(1). <https://doi.org/10.30651/pedagogi.v1i1.21>.
- Hidayat, T. (2017). Critical thinking-oriented discovery learning model in learning to write reviews. *Literacy: Journal of Indonesian Language and Literature and Its Learning*, 1(1), 1-8. <https://doi.org/10.25157/literasi.v1i1.7>.
- Huliyah, M. (2016). The Nature of Education for Early Childhood. *Raudlatul Athfal Teacher Education Journal*, 1, 60-71. <https://doi.org/10.24090/insania.v15i3.1552>.
- Khadija. (2016). Early Childhood Cognitive Development. Medan: Perdana Publishing. [https://doi.org/10.1016/S0262-8856\(98\)00132-2](https://doi.org/10.1016/S0262-8856(98)00132-2).
- Khaironi, M. (2017). Moral education in early childhood. *Golden Age Journal*, 1(1), 1-15. <https://doi.org/10.29408/goldenage.v1i01.479>.
- Khaironi, Mulianah. (2018). Early Childhood Development. Hamzanwadi University Golden Age Journal, 3(1), 1-12. <https://doi.org/10.54045/ecie.v1i1.35>.
- Kurniawan, EY (2019). Creativity-based education for PGPAUD students through the use of used media in learning percussion music at Muhammadiyah University, Tangerang. *Ceria: Journal of the Early Childhood Education Study Program*, 7(2), 1-11. <https://doi.org/10.31000/ceria.v9i2.1272>.
- Ma'sum, T. (2018). Early Childhood Education Concept. Intizam, *Journal of Islamic Education Management*, 1(2), 95-112. <https://doi.org/10.24014/potensia.v1i2.3187>.
- Masdudi, M. (2016). Characteristics of the development of early childhood education. *AWLADY: Journal of Children's Education*, 1(2). <https://doi.org/10.24235/awlad.v1i2.739>.
- Mulyani, N. (2013). Emotional and Social Development in Early Childhood. *INSANIA: Journal of Alternative Thought in Education*, 18(3), 423-438. <https://doi.org/10.24090/insania.v18i3.1470>.
- Pure, M. (2017). Physical, cognitive, and psychosocial development in early childhood 2-6 years. *Bunayya: Journal of Children's Education*, 3(1), 19-33. <https://doi.org/10.22373/bunayya.v3i1.2042>.
- Musyarofah. (2017). Development of Early Childhood Social Aspects in ABA IV Mangli Jember Kindergarten in 2016. *Inject Journal: Interdisciplinary Journal of Communication*, 2(1), 99-122. <https://doi.org/10.18326/inject.v2i1.99-122>.
- Nabila, S., Adha, I., & Febriandi, R. (2021). Development of Pop Up Book Learning Media Based on Local Wisdom in Thematic Learning in Elementary Schools. *Basicedu Journal*, 5(5), 3928-3939. <https://doi.org/10.31004/basicedu.v5i5.1475>.
- Naimah, K. (2019). Developing social emotional intelligence in early childhood through eating together at school. *El-Wasathiya: Journal of Religious Studies*, 7(1), 63-85. <https://doi.org/10.5281/zenodo.3522844>.
- Pangaribuan, ES (2021). Use of Classical Music as a Media to Increase Emotional Intelligence in Toddlers Aged 0-5 Years. *REDOMINATE: Journal of Theology and Christian Education*, 3(2), 102-112. <https://doi.org/10.59947/redominate.v3i2.29>.
- Permana, G. (2018). Visualization of Art as a Creative Aspect of Advertising. *Journal of Fine Language*, 1(2), 108-114. <https://doi.org/10.31598/bahanrupa.v1i2.216>.
- Purhanudin, MV, & Nugroho, RAAE (2021). Music in the Context of Early Childhood Education. *Tonika: Journal of Art Research and Studies*, 4(1), 41-51. <https://doi.org/10.37368/tonika.v4i1.244>.
- Putra, REK, Rachman, A., Raharjo, E., & Suharto, S. (2021). Symbolic Interaction in Keroncong Music Performances by the Keroncong Gunung Jati New Musik Orchestra at Tawang Station, Semarang. *Gondang: Journal of Arts and Culture*, 5(1), 30-39. <https://doi.org/10.24114/gondang.v5i1.19996>.
- Rumengan, P., & Hartati, DS (2020). Transmutation, a Process for the Birth of a New Music Genre; Study of the Birth of the Kolintang Kayu Music Ensemble, a Music Genre in Minahasa. *Clef: Journal of Music and Music Education*, 1(2), 1-12. <https://doi.org/10.51667/cjmpm.v1i2.346>.
- Rupnidah, R., & Suryana, D. (2022). Early Childhood Learning Media. *Agapedia Early Childhood Education Journal*, 6(1), 51-61. <https://doi.org/10.17509/jpa.v6i1.48199>.
- Rustiyanti, S. (2019). Padusi Body Drumming 'TaTuPa' Method as Internal Music for NeoRandai Choreographic Visualization. *Recital: Journal of the Performing Arts*, 20(3), 161-175. <https://doi.org/10.24821/resital.v20i3.3394>.
- Sabani, F. (2019). Children's development during the elementary school years (6-7 years). *Didactics:*

- Journal of Education, 8(2), 89–100. <https://doi.org/10.58230/27454312.71>.
- Septiani, RD (2021). The Importance of Family Communication in Preventing Cases of Sexual Violence in Early Childhood. *Journal of Childhood Education*, 10(1), 50–58. <https://doi.org/10.21831/jpa.v10i1.40031>.
- Septianti, N., & Afiani, R. (2020). The Importance of Understanding the Characteristics of Elementary School Students at SDN Cikokol 2. *As-Sabiqun*, 2(1), 7–17. <https://doi.org/10.36088/assabiqun.v2i1.611>.
- Sukatin, S., Chofifah, N., Turiyana, T., Paradise, MR, Azkia, M., & Ummah, SN (2020). Analysis of Early Childhood Emotional Development. *Golden Age. Scientific Journal of Early Childhood Development*, 5(2), 77–90. <https://doi.org/10.14421/jga.2020.52-05>.
- Sutono, S., & Pamungkas, AP (2021). Application of the Quasi-Experimental Method in a Web-Based Information System for Drug Supply and Sales in Pharmacies. *Media Journal of Informatics*, 12(2), 44. <https://doi.org/10.35194/mji.v12i2.1225>.
- Syahfitra, MF, & Satria, TD (2021). Video Editing Application as a Learning Media in the Advanced Percussion Instrument Practice Course in the Music Education Study Program. *Gondang: Journal of Arts and Culture*, 5(2), 164–173. <https://doi.org/10.24114/gondang.v5i2.28236>.
- Wulandari, H., & Purwanta, E. (2020). Achievement of Early Childhood Development in Kindergarten during Online Learning during the Covid-19 Pandemic. *Journal of Obsession: Journal of Early Childhood Education*, 5(1), 452. <https://doi.org/10.31004/obsesi.v5i1.626>.
- Xiao, A. (2018). Concept of social interaction in communication, technology, society. *Journal of Communication: Journal of Communication, Media and Informatics*, 7(2), 94–99. <https://doi.org/10.31504/komunika.v7i2.1486>.