

# Cakrawala Dini:

# Jurnal Pendidikan Anak Usia Dini





# The Influence of TOCOMSION Media on Prosocial Behavior for Children 5-6 Years Old

Ester Gabriella Isme<sup>1\*</sup>, Kristin Anggraini<sup>2</sup>,

<sup>1, 2</sup> Department Early Childhood Education, Widya Mandala Surabaya Catholic University, Indonesia Correspondence: E-mail: <a href="mailto:ece.ester.g.21@ukwms.ac.id">ece.ester.g.21@ukwms.ac.id</a>

## ABSTRACT

This study analyses the effect of TOCOMSION media on the prosocial behaviour of children aged 5-6 years at Creative Excellent Children Kindergarten. Based on empirical studies, some children have difficulty sharing, cooperating, and showing empathy. One of the causes is a less interactive learning method. This study used the True Experimental Design method with pretest-posttest control group. The sample consisted of 25 children who were divided into experimental and control groups. Data were collected through observation and tests, then analysed using the Mann-Whitney U test. The results showed that TOCOMSION significantly improved prosocial behaviour, especially in the aspects of cooperation, sharing, and empathy. This happens because TOCOMSION integrates physical activities and social interactions that encourage children to work together and control emotions. Through repeated treatment, it is shown that TOCOMSION media has a significant effect on prosocial behaviour. In conclusion, TOCOMSION is effective in improving children's prosocial behaviour through interactive and fun learning. The implication is that this media can be an alternative for PAUD teachers to develop children's socialemotional skills. Enhancing children's learning experience is more interactive and fun, while developing social-emotional skills that are important for their future.

## ARTICLE INFO

#### Article History:

Submitted/Received 25 Feb 2025 First Revised 11 Mar 2025 Accepted 05 Apr 2025 First Available online 15 Apr 2025 Publication Date 01 May 2025

#### Keyword:

Children aged 5-6 years, Prosocial behavior, TOCOMSION media.

© 2025 Universitas Pendidikan Indonesia

## 1. INTRODUCTION

Education plays an important role in developing the potential of individuals and society, helping to overcome obstacles and achieve personal progress. Through education, individuals acquire a variety of knowledge, skills and views that broaden their way of thinking and enhance social and emotional development (Husnaini et al., 2024). In addition, education also forms discipline, values, religion, and morals that are essential in personal development, making it a major factor in building character (Waruwu, 2024). Similarly, in the context of early childhood education, education has an important role in facilitating children's character development, as regulated in Law No. 20/2003 on the National Education System. The crucial role of early childhood education in shaping children's development is emphasized to support social, emotional and cognitive development (Mariani et al., 2024). In childhood they have begun to interact with the environment, both with peers and teachers. This plays an important role in the formation of their social and emotional skills. When children interact with the environment, they learn to understand themselves, control their emotions, and develop the ability to communicate with others. Therefore, early childhood education is an important part of building the foundation of social skills that play a role throughout the child's life (Rosalin, 2024).

A child's life is in the age range from birth to 6 years old according to Permendikbud Number 137 of 2014. In this period, children show distinctive characteristics that distinguish them from other ages, such as egocentric nature that makes children tend to view the world from their own point of view, as well as uniqueness shown through the way children learn, react and interact. Early childhood is also known for high curiosity, strong imagination, and has a tendency to imitate the behavior of people around them, especially in children's social and emotional development. Children's social and emotional development is still in its early stages, so they need guidance in developing social skills, such as sharing, cooperating, and resolving conflicts properly. By understanding and supporting these characteristics through appropriate educational approaches, early childhood education can be the foundation in shaping children's personality and adaptability in the future (Islam et al., 2022).

Children's ability to adapt to their environment is often called the development of prosocial behavior. Children's social and emotional abilities within the scope of prosocial behavior development are the main aspects of positive social interactions that begin to develop. According to Eisenberg & Mussen (Lestari, 2022) defines prosocial behavior as a sincere act when helping and benefiting others. Prosocial behavior is a voluntary action that is carried out without expecting a reward from others. Prosocial behavior for children aged 5-6 years includes knowing the feelings of their friends and responding reasonably, respecting the rights or opinions or work of others, using accepted ways of solving problems, being cooperative with friends, showing a tolerant attitude, expressing emotions in accordance with existing conditions, and recognizing manners and courtesy in accordance with local sociocultural values (Alsafiah, 2023). Emotion regulation contributes significantly to the development of early childhood prosocial behavior, where children who are able to control their emotions tend to be more cooperative and empathetic towards their peers (Drupadi, 2020). Thus, prosocial behavior in early childhood can encourage the formation of social skills to empathize, cooperate, and show tolerance (Lapanda et al., 2022). These points can support adaptability and positive social interactions in the child's environment.

The ability of a child's prosocial behavior can be formed when they interact with their environment (Fahlevi et al, 2023). This was evident from a preliminary study conducted by researchers on children aged 5-6 years at Creative Excellent Children Kindergarten.

Researchers observed class B, which consisted of 25 children-13 in class B1 and 12 in class B2. The preliminary findings in class B1 indicated that two children exhibited anti-social behavior by refusing to help their peers complete Math Children's Worksheets on addition. These children even mocked their friends by saying, "Don't help, he never studies at home" and "His father sells meatballs, so he never studies". This mockery influenced the other 8 children who then looked down on their friends who were struggling and were reluctant to invite them to play, these children felt that their friends did not deserve help. The observation in class B2 also showed a similar thing, one of the children was seen hitting his friend, but the victim did not react at all, even the victim remained focused on his task. Unexpectedly the incident was observed by another friend in the group, then the other friend tried to hit the friend sitting next to him. This triggered an emotional reaction from most of the children in the class and eventually led to an uncontrollable physical altercation. These fights affected the classroom conditions to become unconducive. In the next observation meeting there were 5 children as the main triggers and 6 others behaving in an undisciplined manner such as talking loudly, shouting, answering questions in a loud or high voice, and pointing at the teacher impolitely. These conditions indicate a lack of optimal development of prosocial behaviors, such as empathy, tolerance, and respect for others or expected manners.

The lack of development of prosocial behavior is also balanced by the learning process that only focuses on children's worksheets. In the process of teaching and learning activities, the teacher gives assignments by 90%, and 3X a week the teacher dictates children one by one to the teacher and asks children to read a book entitled "How to Practically Read to Children". Activities that have been designed by teachers without an interactive media-based approach that can support the development of children's prosocial behavior. In essence, the use of interactive media can stimulate children's interest in learning through exploration, active involvement, and fun interactions. Through this media, children can play while learning to strengthen children's physical-motor, cognitive, language, art, social-emotional, value, religious and moral skills. Play gives children the opportunity to experience fun activities while helping children interact with others naturally (Sukatin et al., 2020). The use of interactive and creative learning media allows children to explore through play, thus improving various aspects of development, including children's social and emotional skills (Windayana, 2014). Thus, an interactive media-based approach to learning can support prosocial behavior and basic skills in early childhood more effectively and enjoyably than assignment methods that focus too much on drilling (Fachrurrazi & Kinasih, 2022).

A number of studies highlight the importance of interactive learning methods to improve early childhood prosocial behavior. These methods include Project-Based Learning (PBL) written by Wahyuni (Wahyuni & Hasriani, 2023), the traditional game Tarompah written by Siregar (Siregar & Nabila, 2022), KIORROGA (a game with rubber bands/ vegetable rubber) written by Syanurmala (Syahnurmala et al., 2022), and the traditional game Babintingan written by Annisa (Annisa & Djamas, 2021). Overall, these studies are effective in influencing early childhood prosocial behavior, especially in the aspects of cooperation and empathy. However, each method has limitations, such as lack of physical activity or limitations in supporting children's spontaneity (Putri et al., 2024). The research gap lies in the need for an interactive learning method that not only enhances prosocial behavior but also integrates structured physical activity and spontaneous social interactions effectively. This study addresses the gap by introducing TOCOMSION, a group mission-based interactive media that combines physical movement, teamwork, and emotional regulation in a structured yet playful manner. Unlike traditional methods, TOCOMSION actively involves children's whole-body coordination and requires real-time collaboration, making it a more holistic approach to

fostering prosocial behavior in early childhood education. TOCOMSION Media (Together Complete the Mission), which is inspired by the game Tarompah (clogs), but has differences in game techniques where TOCOMSION media prioritizes the use of eyes, hands, and feet. TOCOMSION media is a media in the form of clothing that can be used by 2 children at the same time where this clothing can be used to complete the mission together. Completing missions using TOCOMSION media can harmonize thinking, emotional control, and build positive interactions with peers.

The innovation of this research lies in the combination of structured physical activities with social-emotional learning through TOCOMSION media. Unlike existing approaches, TOCOMSION is designed as an interactive wearable tool that engages two children in collaborative mission-based tasks, promoting teamwork, emotional control, and problemsolving in real-time situations. This approach not only enhances prosocial behavior but also encourages synchronized movement, shared decision-making, and active engagement, aspects that are often lacking in traditional interactive learning methods. By emphasizing both physical coordination and social interaction, this study introduces a new, dynamic way to develop prosocial skills in early childhood education. Therefore, researchers are interested in examining the TOCOMSION interactive media, which combines structured physical activities and social-emotional development, to improve prosocial behavior in children aged 5-6 years. TOCOMSION media is a group mission-based media designed to encourage children to work together, solve problems, control emotions, and respect friends. This learning media is designed to resemble an element of children's daily lives, namely clothing, which is usually used by one person. But in this context, it is used by two children simultaneously, requiring them to collaborate in achieving a single goal. Through the use of one garment, both children are expected to harmonize their thoughts and emotions in order to be able to complete the mission together. With a mission that must be completed together, children learn to collaborate and develop empathy and tolerance in their interactions with their peers. Based on this explanation, the researcher is interested in conducting a study entitled "The Influence of TOCOMSION Media on Prosocial Behavior for Children 5-6 Years Old".

# 2. METHODS

This study used the true experimental pretest-posttest control group design method. A true experiment is the most powerful research method in making comparisons because it involves random assignment of research subjects (such as students, teachers, classes, or schools) into treatment and control groups. With random assignment, researchers can ensure that the two groups are truly comparable, so that observed differences in outcomes can be more reliably attributed to the intervention rather than to other uncontrolled factors or preexisting differences (Gribbsons & Herman, 1996). The research subjects in this study are children aged 5-6 years at Creative Excellent Children Kindergarten. Because all children (25 children) in group B do not yet have prosocial skills as stated in the STPPA scope of socialemotional development on prosocial behaviour. This research uses saturated sampling technique, according to Sugiyono's opinion (Sugiyono, 2011; Harlambang, 2024) states that saturated sampling is a sampling technique where all members of the population are used as samples. The sample was then divided into two groups, namely the experimental group and the control group. The experimental group received a learning intervention using TOCOMSION media, while the control group continued to follow the learning process as designed by the class teacher without the use of TOCOMSION media. Table 1 below describes the research design.

**Table 1.** Research Design (Source: Sugiyono, 2011)

	E. Researen Besigi	1 (30 ar der 3 agry 6110) 2	-011
Group	Pre-test	Treatment	Post-test
Experiment	01	Χ	02
Control	03	-	04

# Description:

O1 : Administration of the first test in the experimental classO2 : Administration of the final test in the experimental class

O3 : Administration of the first test in the control class
O4 : Administration of the final test in the control class

X: Treatment (application of the use of TOCOMSION media)

: Teacher's actual teaching condition

Data collection techniques in this study were carried out through tests, observation, and documentation. Tests were given to children in the form of pretest before treatment and posttest after treatment, with the aim of measuring changes in prosocial behavior after the use of TOCOMSION media. Observation was done directly to observe how the intervention process with TOCOMSION took place and how the children responded to the activity. During the research, documentation was also collected in the form of photographs and field notes describing children's activities during the learning process, including the process of administering the pretest and posttest.

After all data were collected, the analysis was carried out using a normality test using the Shapiro-Wilk test. If the data is not normally distributed, the Mann-Whitney test can be used as an alternative developed by H. B. Mann and D. R. Whitney (Susilawati, 2024). The Mann-Whitney test is a relevant test for detecting differences in treatment effects in experimental groups compared to control groups in a non-parametric manner (Susilawati, 2024). If the Asymp.Sig value is <0.05, then ho is rejected and states that there is a significant effect between the tested groups. Conversely, if Asymp.Sig > 0.05, then ho is accepted and indicates the result that there is no significant difference (Quraisy & Madya, 2021).

#### 3. RESULTS AND DISCUSSION

This study was conducted at Creative Excellent Children Kindergarten, during 12 effective school days. The research sample consisted of 25 children aged 5-6 years. The research took place from January 20 to February 5, 2025. On the first day of the study, the activity began with giving pretests to 25 children as an initial step to measure children's abilities. This test was designed in the form of a hula hoop wave activity. The activity was to move the hula hoop alternately from the child in the frontmost position to the child in the rearmost position in the group. Assessment of the pretest administration process is carried out using the predetermined test guidelines.

The pretest was conducted in each group, both the control group and the experimental group, which was then divided into two subgroups due to space limitations. Each subgroup contained 4-7 children, adjusting the conditions for implementing the activities. After dividing the children into two sub-groups, proceed with informing the rules of the wave hula hoop activity. The activity was carried out with a duration of about 10 minutes for each group, both treatment and control groups. The pretest results of the control group will be described in **Table 2** below.

**Table 2.** Control Group Pretest Result

•	Control Group				Total
No. Name	Indicator 1	Indicator 2	Indicator 3	Value	
1.	AAP	2	3	3	8
2.	ANZ	2	2	2	6
3.	DA	1	1	1	3
4.	GIC	2	2	2	6
5.	GLS	2	3	3	8
6.	GUC	2	3	3	8
7.	JCO	2	2	2	6
8.	JCP	2	2	2	6
9.	NPK	2	3	3	8
10.	NPY	2	3	3	8
11.	OGK	2	3	3	8
12.	ZEAN	2	3	3	8
	Amount				83

<b>Total Value</b>	Frequency
3	1
6	4
8	7
Amount of data	12
<b>Highest Score</b>	8
Lowest Score	3
Average	7,58

# Description:

Indicator 1: Children understand and demonstrate manners in accordance with local sociocultural values.

Indicator 2: Children shows enthusiasm to complete a task or obstacle correctly and quickly.

Indicator 3: Children control their emotions when facing challenges or difficulties in activities.

Assessment Description:

- 1: Not Yet Developed (NYD)
- 2: Starting to Develop (SD)
- 3: Developing as Expected (DE)
- 4: Developing Very Well (DVW)

The following are the results of the discussion of the pretest results of the control group. Indicator 1, in the control group of 12 children, 11 children were at the Starting to Develop (MB) level. The first subgroup had the initials GIC, GLS, JCP, JCO, and NPK; the second subgroup had the initials AAP, ANZ, GUC, NPY, OGK, and ZEAN. Children in both subgroups were willing to apologize after being asked by the researcher. One other child is at the underdeveloped level (NYD), the child with the initials DA has not shown understanding and application of manners.

Indicator 2, in the control group consisting of 12 children, 7 children were at the achievement of developing as expected (DE). This can be seen in children with the initials NPY, AAP, GLS, GUC, NPK, OGK, and ZEAN, who are able to complete tasks with enthusiasm correctly and quickly. At the achievement of starting to develop (MB) there were 4 children with the initials ANZ, GIC, JCO, and JCP who gave up easily and needed encouragement from the researcher. One other child is at the achievement of not yet developing (BB), the child whose initials are DA shows a giving up attitude from the beginning of the activity.

Indicator 3, in the control group of 12 children, 7 children were in the achievement of developing as expected (DE). This can be seen in children with the initials NPY, AAP, GLS, GUC, NPK, OGK, and ZEAN, who are able to control their emotions well and remain calm when facing difficulties moving the hula hoop. In the achievement of starting to develop (SD) there are 4 children with the initials ANZ, GIC, JCO, and JCP who look angry because of lack of coordination with friends, with this the researcher helps to encourage children to be able to reduce and manage emotions well. One other friend with the initials DA has not shown how to manage his emotions. The results of the experiment group pretest will be described in **Table 3** below.

**Table 3.** Experiment Group Pretest Result

	Experiment Group			Total	
No.	Name	Indicator 1	Indicator 2	Indicator 3	Value
1.	ATA	2	3	3	8
2.	CO	2	3	3	8
3.	CS	1	1	1	3
4.	DAA	2	2	2	6
5.	DGAT	2	2	2	6
6.	EB	2	3	3	8
7.	ENEB	1	1	1	3
8.	FAS	2	3	3	8
9.	KHR	2	3	3	8
10.	KQRR	2	2	2	6
11.	NVP	2	3	3	8
12.	RRW	2	3	3	8
13.	SFO	2	2	2	6
	Amount				86

<b>Total Value</b>	Frequency
3	2
6	4
8	7
Amount of Data	13
<b>Highest Score</b>	8
Lowest Score	3
Average	7,85

# Description:

Indicator 1: Children understand and demonstrate manners in accordance with local sociocultural values.

Indicator 2: Children shows enthusiasm to complete a task or obstacle correctly and quickly.

Indicator 3: Children control their emotions when facing challenges or difficulties in activities. Assessment Description:

- 1: Not Yet Developed (NYD)
- 2: Starting to Develop (SD)
- 3: Developing as Expected (DE)
- 4: Developing Very Well (DVW)

The following are the results of the discussion of the pretest results of the experiment group. Indicator 1, in the experimental group of 13 children, 11 children were in the beginning to develop (SD) achievement. The first subgroup had the initials DGAT, SFO, DAA, KQRR, and RRW; the second subgroup had the initials ATA, CO, EB, FAS, KHR, and NVP. Children in both subgroups were willing to say sorry after being asked by the researcher. The other two children were in the not yet developed (NYD) achievement, children with the initials CS and ENEB had not shown understanding and application of manners.

Indicator 2, in the experimental group of 13 children, 7 children were in the achievement of developing as expected (DE). This can be seen in children with the initials ATA, CO, EB, FAS, KHR, NVP, and RRW, able to complete tasks with enthusiasm correctly and quickly. In the achievement of starting to develop (SD) there are 4 children with the initials DAA, DGAT, KQRR, and SFO who give up easily and need encouragement from the researcher. The other two children were in the achievement of not yet developing (NYD), children with the initials CS and ENEB showed a giving up attitude from the beginning of the activity.

Indicator 3, in the experimental group of 13 children, 7 children were in the achievement of developing as expected (DE). This can be seen in children with the initials KHR, ATA, CO, EB, FAS, NVP, and RRW, who are able to control their emotions well and remain calm when facing difficulties moving the hula hoop. In the achievement of starting to develop (SD) there are 4 children with the initials DAA, DGAT, KQRR, and SFO who look angry because of lack of coordination with friends, with this the researcher helps provide reinforcement so that children are able to relieve and manage emotions well. Two other friends with the initials CS and ENEB have not shown how to manage their emotions.

The pretest results showed that most children in the control and experimental groups were in the Starting to Develop (SD) category in prosocial behavior indicators, with some children even still at the Not Yet Developed (NYD) level. This is in line with Eisenberg & Mussen's (Lestari, 2022) research which states that prosocial behavior in children does not develop automatically but is influenced by the social environment and interaction experiences. The lack of social interaction-based activities in learning can cause children to have difficulties in sharing, cooperating and controlling emotions.

Furthermore, the researcher gave treatment which was carried out for 10 days. The treatment was carried out on the second to eleventh day of the research period, which took place from January 21 to February 5, 2025. The treatment provided is a series of activities that utilize TOCOMSION media, in accordance with the design that has been prepared by the researcher. Assessment of the treatment process was carried out using the predetermined observation guidelines. The final process of this study is the implementation of posttest activities for children who are research samples. This posttest aims to measure the extent of the development of children's prosocial behavior after being given treatment using TOCOMSION media. The results of this posttest are a reference in assessing the effectiveness of the treatment that has been given during the study.

The treatment activities were carried out for 10 meetings using TOCOMSION media in five different activities. So that on the sixth to tenth day of treatment there is a repetition of activities like the previous five days. This is done in the hope that children will become more skillful and improve children's prosocial behavior. The next activity is the implementation of Posttest activities still using the same play method as done in the pretest stage, namely the hula hoop wave activity, to maintain consistency of evaluation. The results of the control group posttest will be described in **Table 4** below.

Table 4. Control Group Posttest Result

<b></b>	<b>A.</b>	Control Group			Total
No.	Name	Indicator 1	Indicator 2	Indicator 3	Value
1.	AAP	1	1	1	3
2.	ANZ	2	2	2	6
3.	DA	2	2	2	6
4.	GIC	2	3	3	8
5.	GLS	2	3	3	8
6.	GUC	2	2	2	6
7.	JCO	2	2	2	6
8.	JCP	1	1	1	3
9.	NPK	2	3	3	8
10.	NPY	2	3	3	8
11.	OGK	2	3	3	8
12.	ZEAN	2	3	3	8
	Amount			78	

Total Value	frequency
3	2
6	4
8	6
Amount of Data	12
Highest Score	8
<b>Lowest Score</b>	3
Average	6,5

# Description:

Indicator 1: Children understand and demonstrate manners in accordance with local sociocultural values.

Indicator 2: Children shows enthusiasm to complete a task or obstacle correctly and quickly. Indicator 3: Children control their emotions when facing challenges or difficulties in activities. Assessment Description:

- 1: Not Yet Developed (NYD)
- 2: Starting to Develop (SD)
- 3: Developing as Expected (DE)
- 4: Developing Very Well (DVW)

The following are the results of the discussion of the posttest results of the control group. Indicator 1, in the control group of 12 children, 10 children were in the starting to develop (SD) achievement. The first subgroup with the initials GIC, GLS, JCO, and NPK; the second subgroup with the initials DA, ANZ, GUC, NPY, OGK, and ZEAN. Children in both subgroups were able to say sorry and thank you when they made mistakes during the activity but needed the help of the researcher to help remind them to apply it. The other two children are in the not yet developed (NYD) achievement, children with the initials AAP and JCP have not shown understanding and application of manners.

Indicator 2, in the control group of 12 children, 6 children were in the achievement of developing as expected (DE). This can be seen in children with the initials ZEAN, GIC, GLS, NPK, NPY, and OGK, who are able to complete tasks with enthusiasm correctly and quickly. In addition, there are 4 children in the achievement of starting to develop (MB) there are 4

children with the initials ANZ, DA, GUC, and JCO who give up easily and need encouragement from researchers. The other two children were in the achievement of not yet developing (NYD), children with the initials AAP and JCP showed a giving up attitude from the beginning of the activity.

Indicator 3, in the control group of 12 children, 6 children were in the achievement of developing as expected (DE). This can be seen in children with the initials NPK, GIC, GLS, NPY, OGK, and ZEAN, who are able to control their emotions well and remain calm when facing difficulties in moving the hula hoop from themselves to other friends. In the achievement of starting to develop (SD) there are 4 children with the initials ANZ, DA, GUC, and JCO who look angry because of their lack of coordination with friends, it seems that their friends are playing with the hula hoop so it is difficult to pass. The incident was observed with this researcher helping to encourage children to be able to reduce and manage emotions well. Two other friends with the initials AAP and JCP have not shown how to manage their emotions.

After learning without TOCOMSION, some children in the control group experienced a slight increase in prosocial behavior, but the increase was not significant. This can be explained through Vygotsky's theory (Muzzamil, 2021) which emphasizes that children's social development is highly dependent on interactions supported by the right environment. Since the learning method in the control group was conventional and did not stimulate active cooperation, the development of children's prosocial behavior remained limited. The results of the experiment group posttest will be described in **Table 5** below.

**Table 5**. Experiment Group Posttest Result

No	Nama	Experiment Group			Total
No. Name	Indicator 1	Indicator 2	Indicator 3	Value	
1.	ATA	3	4	4	11
2.	CO	3	4	4	11
3.	CS	3	4	3	10
4.	DAA	3	4	4	11
5.	DGAT	4	4	4	12
6.	EB	3	4	4	11
7.	ENEB	3	4	4	11
8.	FAS	3	4	4	11
9.	KHR	4	4	4	12
10.	KQRR	3	4	3	10
11.	NVP	3	4	3	10
12.	RRW	3	4	4	11
13.	SFO	4	4	4	12
		Amount			

frequency
3
7
3
13
12
10
10,92

Description:

Indicator 1: Children understand and demonstrate manners in accordance with local sociocultural values.

Indicator 2: Children shows enthusiasm to complete a task or obstacle correctly and quickly. Indicator 3: Children control their emotions when facing challenges or difficulties in activities. Assessment Description:

- 1: Not Yet Developed (NYD)
- 2: Starting to Develop (SD)
- 3: Developing as Expected (DE)
- 4: Developing Very Well (DVW)

The following are the results of the discussion of the posttest results of the experiment group. Indicator 1, in the experimental group of 13 children, 11 children were in the achievement of developing as expected (DE). The first subgroup had the initials DGAT, FAS, KHR, CS, DAA and EB; the second subgroup had the initials ATA, CO, ENEB, KQRR, NVP, RRW and SFO. Children in both subgroups were able to say thank you when they successfully passed the hula hoop because the communication was very good. The other two children were in the developing very well (DVW), children with the initials DGAT and KHR were able to give an appeal to their friends to say sorry when something went wrong when moving the hula hoop and say thank you when they saw their friends helping.

Indicator 2, in the experimental group of 13 children, all experimental group children were in the achievement of developing very well (DVW). This can be seen that all children are able to complete with enthusiasm and provide encouragement to their friends. The encouragement or support provided was both verbal and direct action. Children always from start to finish encourage their group mates. Not forgetting when channeling the hula hoop children will definitely help their friends who find it difficult when passing the hula hoop.

Indicator 3, in the experimental group of 13 children, 9 children were in the achievement of developing very well (DVW). This can be seen in children with the initials EB, ATA, CS, CO, DAA, DGAT, ENEB, FAS, RRW, and SFO, who are able to control their emotions very well, remain calm, and set an example for KHR who looks difficult because of the disturbing hair tie. In the achievement of developing as expected (DE) there are 4 children with the initials CS, KHR, KQRR, and NVP seen able to control their emotions well and remain calm when facing difficulties when passing the hula hoop to the next friend. Even the children looked so excited, and asked for additional opportunities to play again.

The experimental group showed a significant increase in the indicators of cooperation, emotional control, and empathy after being given treatment using TOCOMSION media. According to Piaget (Cendana, 2022), games that involve physical and social interaction help children develop social and emotional skills as they learn to adjust to the rules and feelings of others. TOCOMSION, which is based on physical activity and cooperation, supports this theory, where children learn to adjust their movements and emotions with a partner in a team, thus improving their prosocial behavior.

All data obtained in this study were analyzed. The normality test used in this study is the Shapiro-Wilk Test. **Table 6** outlines the results of the normality test.

**Table 6.** Result of the normality test

		statistic	df	Sig.
Control	Pretest	.711	12	.001
	Posttest	.757	12	.003
Experiment	Pretest	.735	13	.001
	Posttest	.820	13	.012

The results of the data calculation above, the significance value obtained in the pretest and posttest results of the experimental group is 0.001 and 0.012. Based on the criteria of the normality test, if the Sig. > 0.05 then the data is considered normally distributed, if the Sig value. < 0.05 then the data is considered not normally distributed. It can be concluded that the data above, the value of Sig. <0.05, then it can be said that the data is not normally distributed. The data in this study were not normally distributed so the Mann-Whitney test was used. **Table 7** outlines the results of Mann-Whitney test.

**Table 7.** Mann-Whitney Test Results

	Results
Mann-Whitney U	.000
Asymp. Sig. (2-tailed)	<,001
Exact Sig. [2*(1-tailed Sig.)]	<,001 <sup>b</sup>

The results of the data calculation above show that Asymp. Sig < 0.001. Based on the criteria of the Mann-Whitney test, if Asymp. Sig < 0.05 then ho is rejected and ha is accepted. Conversely, if Asymp. Sig > 0.05 then ho is accepted and ha is rejected. It can be concluded that the data above 0.001 < 0.05, then ho is rejected and states that there is a significant influence between the experimental group and the control group.

#### 4. CONCLUSION

This research concludes that the TOCOMSION media significantly improves the prosocial behavior of children aged 5-6 years. The findings confirm that interactive and structured physical activities incorporated in TOCOMSION effectively enhance children's cooperation, emotional control, and social interactions. The game-based approach fosters engagement, collaboration, and empathy, making it an effective educational tool for early childhood learning environments.

Despite its effectiveness, TOCOMSION has limitations, such as the need for constant teacher supervision and structured guidance to ensure that all children actively participate. Additionally, the reliance on a physical medium may pose challenges in limited-space classrooms. Future improvements could include digital or alternative interactive formats to increase accessibility and flexibility in implementation.

#### 5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

# 6. REFERENCES

Alsafiah, C. M., Tabroni, I., Mark, E., and Maharjan, K. (2023). Development of labyrinth media to stimulate prosocial behavior skills of 5-6 years old children in Purwakarta. Journal of Computer Science Advancements, 1(1), 62-72.

Annisa, D., dan Djamas, N. (2021). Meningkatkan perilaku prososial anak usia 5 – 6 tahun melalui permainan Tradisional Babintingan. Jurnal Anak Usia Dini Holistik Integratif (AUDHI), 3(1), 42. <a href="https://doi.org/10.36722/jaudhi.v3i1.592">https://doi.org/10.36722/jaudhi.v3i1.592</a>

- Cendana, H., dan Suryana, D. (2022). Pengembangan permainan tradisional untuk meningkatkan kemampuan bahasa anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(2), 771-778. https://doi.org/10.31004/obsesi.v6i2.1516
- Drupadi, R. (2020). Pengaruh regulasi emosi terhadap perilaku prososial anak usia dini. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini, 11*(1), 30-36. <a href="https://doi.org/10.17509/cd.v11i1.20326">https://doi.org/10.17509/cd.v11i1.20326</a>
- Fachrurrazi, A., dan Kinasih, T. (2022). Pelatihan media interaktif untuk pembelajaran pengembangan kemampuan sosial anak usia dini. *Kanigara*, *II*(1), 186–194. <a href="http://jurnal.unipasby.ac.id/index.php/kanigara/article/view/5066%0Ahttp://jurnal.unipasby.ac.id/index.php/kanigara/article/download/5066/3457">http://jurnal.unipasby.ac.id/index.php/kanigara/article/download/5066/3457</a>
- Gribbsons, B. dan Herman, J., (1996) "True and quasi-experimental designs", *Practical Assessment, Research, and Evaluation* 5(1): 14. doi: https://doi.org/10.7275/fs4z-nb61
- Harlambang, A. L. S. (2024). Pengaruh ekstrakurikuler drumband terhadap disiplin bermusik anak. *NakKanak: Journal of Child Research*, 1(3), 95–102. https://journal.trunojoyo.ac.id/v3/nakkanak/article/view/1-3/17
- Husnaini, M., Sarmiati, E., dan Harimurti, S. M. (2024). Pembelajaran sosial emosional: tinjauan filsafat humanisme terhadap kebahagiaan dalam pembelajaran. *Journal of Education Research*, 5(2), 1026–1036. https://doi.org/10.37985/jer.v5i2.887
- Islam, U., Syekh, N., Hasan, A., dan Padangsidimpuan, A. A. (2022). Pentingnya pendidikan pada anak usia dini 1 Sakinah, 2 Dewi Shara Dalimunthe. *Pengabdian Kepada Masyarakat*, 1(1), 26–44.
- Lapanda, S., Sofia, A., dan Drupadi, R. (2022). Hubungan empati dengan perilaku prososial anak usia dini. *Incrementapedia: Jurnal Pendidikan Anak Usia Dini, 4*(2), 1–7. <a href="https://doi.org/10.36456/incrementapedia.vol4.no2.a5817">https://doi.org/10.36456/incrementapedia.vol4.no2.a5817</a>
- Lestari, M. O. (2022). Perilaku prososial remaja ditinjau dari jenis kelamin. *Jurnal Pendidikan Dan Konseling*, 4(2), 380–387.
- Mariani, M., Hendra, H., Lukman, L., dan Syamsuddin, I. P. (2024). Peran orang tua dalam pendidikan anak usia dini di TK Jia Lestari. *Pelangi: Jurnal Pemikiran dan Penelitian Pendidikan Islam Anak Usia Dini*, 6(2), 219-231. <a href="https://doi.org/10.52266/pelangi.v6i2.3376">https://doi.org/10.52266/pelangi.v6i2.3376</a>
- Muzzamil, F. (2021). Pengaruh lingkungan terhadap perkembangan sosial emosional anak. *MURANGKALIH: Jurnal Pendidikan Anak Usia Dini*, 2(02). https://doi.org/10.35706/murangkalih.v2i02.5811
- Putri, A., Amanda, A., Hasnah, A., Sianturi, B. Y., Putri, S. D., dan Sidik, F. (2024). Meningkatkan kesadaran dan kebugaran jasmani anak sekolah dasar melalui program edukasi dan aktivitas fisik yang menyenangkan. *Jurnal Ilmiah Kajian Multidisipliner*, 8(6), 2118–7302.
- Quraisy, A., dan Madya, S. (2021). Analisis nonparametrik *mann whitney* terhadap perbedaan kemampuan pemecahan masalah menggunakan model pembelajaran *problem based learning. VARIANSI: Journal of Statistics and Its Application on Teaching and Research,* 3(1), 51–57. <a href="https://doi.org/10.35580/variansiunm23810">https://doi.org/10.35580/variansiunm23810</a>
- Rosalin, V. F. (2024). Perkembangan sosial anak usia 3-5 tahun yang paud dan tanpa paud di

- Desa Binakal Kecamatan Binakal Kabupaten Bondowoso. TRILOGI: Jurnal Ilmu Teknologi, Kesehatan, Dan Humaniora, 5(3), 381–390. <a href="https://doi.org/10.33650/trilogi.v5i3.8629">https://doi.org/10.33650/trilogi.v5i3.8629</a>
- Siregar, S., dan Nabila, N. (2022). Efektivitas permainan tradisional tarompah stimulasi pembentukan perilaku prososial anak usia 5-6 tahun. Journal on Teacher Education, 4(2), 491-498.
- Sukatin, Q. Y. H., Alivia, A. A., dan Bella, R. (2020). Analisis psikologi perkembangan sosial emosional anak usia dini. Bunayya: Jurnal Pendidikan Anak, 6(2), 156-171. http://dx.doi.org/10.22373/bunayya.v6i2.7311
- Susilawati, M., Selpia, D., Fathurrahman, M., Pratiwi, N., dan Purnami, R. (2024). Penerapan uji mann-whitney dalam perbandingan prestasi akademik mahasiswa statistika Universitas Hamzanwadi angkatan 2022 dan 2023. Jurnal Eksbar, 1(2), 19-28.
- Syahnurmala, H., Syafrida, R., Nirmala, I., Rahayu, E. T., Universitas, M., Karawang, S., Universitas, D., dan Karawang Abstract, S. (2022). Meningkatkan perilaku prososial anak usia 5-6 tahun menggunakan kinds rubber rope games (KIORROGA) di TKQ Salsabila Karawang. Jurnal Ilmiah Wahana Pendidikan, 8(16), 228-238. https://doi.org/10.5281/zenodo.7067584
- Wahyuni, S., dan Hasriani, H. (2023). Upaya meningkatkan perilaku prososial anak usia dini menggunakan model project based learning. Jurnal Pemikiran Dan Pengembangan *Pembelajaran, 5*(2), 1163–1168.
- Waruwu, F. (2024). Peran pendidikan karakter dalam membentuk sikap positif terhadap belajar anak di sekolah. Jurnal Review Pendidikan Dan Pengajaran, 7(3), 11002–11008. http://journal.universitaspahlawan.ac.id/index.php/jrpp
- Windayana, H. (2014). Pengembangan media pembelajaran interaktif, kreatif, dan edukatif untuk anak usia dini. Jurnal Cakrawala Dini, 5(1), 26-32. <a href="https://doi.org/10.17509/cd.v5i1">https://doi.org/10.17509/cd.v5i1</a>