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To cite this article:

Valianto, Akhmad, Hariadi, Novita, Suharjo, & Nurkadri (2023). The impact of implementing games with parental support on fundamental movement skills of elementary school students. *International Journal of Education in Mathematics, Science, and Technology (IJEMST), 11*(3), 643-661. https://doi.org/10.46328/ijemst.3240

International Journal of Education in Mathematics, Science and Technology

2023, Vol. 11, No. 3, 643-661 https://doi.org/10.46328/ijemst.3240

The Impact of Implementing Games with Parental Support on Fundamental Movement Skills of Elementary School Students

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Article Info

Article History

Received:
11 August 2022
Accepted:
09 March 2023

Keywords

Galah Asin game
Parental support
Fundamental movement skills

Abstract

This research aims to determine the impact of *Galah Asin* games with parental support on the fundamental movement skills of elementary school students. The sampling technique by dividing the population into two groups: a group that used the Galah Asin game (group I) and a group that used a modified Galah Asin game (group II) in the test of the level of support from the student's parents in carrying out movement activities. Based on test results, each group was ranked, and then 27% from the top were taken as a group with high parental support and 27% from the bottom as a group with low parental support. The method employed in this research was an experimental method with a 2x2 ANOVA design. Based on the results, the modification of the Galah Asin game has no better impact than the Galah Asin game on fundamental movement skills in elementary school students. There is an interaction between the Galah Asin game and parental support of fundamental movement skills in elementary school students. Students with high parental support do not have a better impact on fundamental movement skills than students with low parental support in elementary school students. Galah Asin game modifications have a better impact than Galah Asin games on fundamental movement skills for students with high parental support in elementary school.

Introduction

Considering the development of physical education learning in the development and improvement of the quality of learning in schools, physical education learning has been deemed insufficient to meet the primary learning objectives. Physical education is the process of consciously and systematically educating individuals or members of society through various physical activities to obtain physical growth, health, physical fitness, abilities, skills, intelligence, harmony, and personality development. Physical education is a systematic process that uses physical activity to improve the individual organically, neuromuscular, perceptually, cognitively, socially, and emotionally (Dewi & Verawati, 2021). According to Imran Akhmad (2022), physical education is a medium to encourage the development of motor skills, physical abilities, knowledge, reasoning, value appreciation (attitudes, mental, emotional, spiritual, and social), and habituation of a healthy lifestyle that boils down to stimulating balanced growth and development (Endriani et al., 2022). Physical education develops students' abilities through movement to achieve health and the expected educational goals, including knowledge, skills, and attitudes (Supriadi et al.,

2022). The role of physical education is significant because it provides opportunities for students to be directly involved in various learning experiences through physical activities, play, and sports that are carried out systematically. Learning experiences are directed to foster and build healthy and active lifestyles throughout life (Akhmad & Mesnan, 2019).

Physical Education is an essential part of the educational process. It means that 'physical education' is not just a decoration or ornament affixed to the school program as a tool to keep children busy. However, physical education is an important part of education (Endriani et al., 2022; Zeng et al., 2022). It can be interpreted as a developmental aid through learning activities. Psychologically, learning can be interpreted as obtaining behavioral changes (both cognitive, effective, and psychomotor) to obtain the responses needed to interact with the environment efficiently. The objective of physical education carried out by a teacher in the teaching and learning process must be the flow of curriculum objectives. Understanding the meaning and application of basic techniques of traditional demands, teachers are expected to be able to explain and apply specific learning objectives; hence, they are easy to observe. The role of the teacher and the objective of teaching and learning activities are mainly to educate and teach students. In addition, the teacher also acts as a corrector, an informant of scientific development, an organizer, an encourager of enthusiastic and active learning, a supervisor, and an evaluator of the learning process given to students (Mustafa & Dwiyogo, 2020). Three aspects of assessment subjects are *cognitive*, *affective*, and *psychomotor*. Cognitive skills mean a thought process to solve a problem or decide the abstract to the concrete by looking at the state of the surrounding environment. Affective relates feelings, values, appreciation, motivation, and attitudes. Furthermore, psycho-motor ability involves adaptive movement or trained motion and non-discursive communication skills.

Physical education is an educational effort that employs the human body as an intermediate target in fostering the full development of the human being. Physical education uses more game exercises deliberately created according to the needs of those currently educated (Sutini, 2018). Physical Education is proven to improve children's social and communication skills. It can also improve the child's affective, cognitive, and psychomotor abilities (Gustiana, 2011). Physical education activities are carried out in schools starting from the elementary to the high school level, aimed at building the motor skills of these students (Mesnan et al., 2019). Motor skill, including fundamental movement skill, is certainly needed by children when carrying out their daily activities independently. Fundamental movement skills relate to non-locomotor, locomotor, and manipulative motions. Lemos et al. (2012) and Lubans et al. (2010) stated that children commonly use fundamental movement skills to improve their quality of life. *Fundamental movement skills* can be interpreted as a process of obtaining an ever-evolving motion that is impacted by several things, namely: (1) the process of developing nerves and muscles that are also impacted by heredity, (2) the result of previous motion experience, (3) the experience of current motion, (4) the motion described concerning a particular movement pattern. To get a full education and good movement skills, indeed, there is support from people close to the child. Parents are the most frequent people and also closest to the child, so parental support is needed in the growth and development of the child, both affective, cognitive, and psychomotor aspects. The method of parents in guiding their children can be obtained from the educational process and their experiences. Parents' attention, instead of supporting, directing, and warning, is also focused on providing learning facilities and meeting learning needs to support the smooth running of children's learning at

school and home. It is in line with Ayu's opinion (2009): parents' attention to their children in support and learning facilities will affect the child's success.

Nowadays, sports have developed widely in human life. In the past, sports were used only to compete to determine the winners. Sports have developed periodically; at present, sports have developed to improve the growth and development of children in the affective, cognitive, and psychomotor realms. Sports are designed as physical education and health aimed at instilling the essence of sports in every student; hence, they feel the importance of carrying out movement activities through sports activities at school, commonly referred to as physical education and health. Active children who carry out movement activities will be able to improve their physical health and motor skills, which will help them in their daily activities. Physical education in schools is designed in the form of games; thus, these activities can increase student motivation to perform.

Games are a form of activity in physical education lessons at school. During playtime, students will perform exciting and joyful games. Indeed, playing is encouragement from within the child or an instinct. These instincts and impulses must be worked out and controlled. Therefore, playing is a necessity. Traditional games introduce children to the cultural values and social norms required to form relationships or social contacts and have an appropriate role in their social standing in society. Traditional games are not just providing recreational or fun value. More than that, traditional games also have sports values and even social values. It is because traditional games contain sportsmanship, honesty, accuracy, agility, accuracy in determining steps, and jointly working in groups. Research by Hanief & Sugito (2015), Nugrahastuti et al. (2012), and Pembelajaran et al. (n.d.) found that traditional games are a means of developing aspects of a child's basic development, such as physical-mythic, cognitive, social-emotional, and language. Moreover, children can get to know the local cultural values of each type of game. It is in line with the early childhood learning motto, "*learning while playing*". Stimulating aspects of child development come from games, especially traditional games of ancestral culture.

Games in Physical Education and Sports Learning

Teachers must pay attention to and adjust the learner's learning by getting students excited and interested in physical education learning. Traditional games in warming-ups can be an option in physical education learning. Fun game activities and more pressing have rules based on a mutual agreement to provide a learning experience. The interest in a person will give an idea of the activity to achieve the goal. In learning, many students are less interested in lessons that include practical and theoretical activities to achieve a goal. Interest is a sense of preference and attachment to a thing or activity without anyone telling (Ariyanto et al., 2020). The game becomes a medium of interest in movement activities during physical education because it is an attraction for students; therefore, games can be a solution in physical education, especially when warming up before the core material (Centelles et al., 2022; Itsna & Sasminta, 2016; Patterson, 2022; Pialarissi et al., 2022; Rahimi et al., 2021; Tarigan & Stevani, 2020).

Traditional games are games that grew and developed amid society in ancient times, i.e., simple and easy games for all ages and hereditary, passed down from generation to generation. Traditional games are also symbolic of

hereditary knowledge and have various functions or messages behind them; in principle, games can be played by anyone interested in them, both children and adults (Widodo & Lumintuarso, 2017). Traditional games are games full of noble values and norms that are useful for children to understand and seek balance in the order of daily life (Latif et al., 2019: 84).

This traditional game is understood as a game played by a certain group of people in a region because traditional games differ from one region to another. It aims to provide entertainment, spend spare time, and improve social relationships. Kurniawan & Hanief (2022) define traditional games as activities with specific rules that reflect their role and origin or are rooted in primitive culture. Traditional games are a means of playing and improving the quality of social relations between players. However, they can also contribute academically. Ribarto et al. (2019) mention that traditional games are also called "*folk games*". It is a kind of entertainment designed to entertain oneself and serve as a means of maintaining social relationships and comfort.

Gustian et al. (2019) state that traditional folk games are a cultural product of great value to children, providing benefits to children in the context of fantasy, entertainment, creativity, and sports, as well as teaching them how to practice social life, skills, decency, and dexterity. It is in line with many socio-cultural scientists' insights who believe that traditional children's games are cultural elements that cannot be underestimated because these games have a good effect on children's development. According to Saputra et al. (2015), traditional games were highly popular in Indonesia before the introduction of technology. Traditional games are also forms of games that have existed since ancient times and have been passed down from generation to generation. They are enjoyable and provide numerous benefits for children, including the development of creativity, dexterity, quick thinking, the cultivation of a leadership spirit, and the openness of children's insights. According to Dewi & Faridah (2022), traditional games are defined as games passed down from one generation to the next, containing good, positive, valuable, and desirable values.

The elements of cultural values in traditional games are generally positive to shape children's personalities into a virtuous generation of the nation (Dewi et al., 2023). Exceptions to traditional games are undeniable. The rapid advancement of technology in the modern era results in consequences due to advancements in various areas, including the types of children's games. The shift in children's play from traditional to modern games based on online games has resulted in the loss of the positive impact on children, which should be obtained from traditional games. According to Nugrahastuti et al. (2012), traditional games are played because of the greater appeal of modern games; although such modern games as video games and other games supported by computer development are harmful to children's development and can lead to addictions that are often negatively correlated. Ali & Aqobah (2021) state that although Indonesia is rich in a variety of traditional games owned by each region, since the introduction of various modern games, children have begun to abandon the existing traditional games. Pardamean Saragih & Nugraha (2020) revealed that children's play patterns began to shift to playing inside the house. Games played in the house are more individual, so they cannot develop the child's social skills.

The traditional game of *Galah Asin* is a game that can improve children's motor skills. In this game, children are required to move, such as stopping, jumping, turning, bending, running, walking, sliding, and other movements

included, in locomotor and non-locomotor movements. To complete this game with three children's motor skills, namely coupled with manipulative movements, it is necessary to modify this game so that it is better and more meaningful for children to play because it will be able to improve their motor skills completely. Galah Asin is a kind of regional game from Indonesia that is still currently found and played by students at school. Pardamean Saragih & Nugraha (2020) and Saputra et al. (2021) state that the *Galah Asin* game is a group game consisting of two groups, i.e., each team consists of 3-5 people. The point of the game is to block the opponent from being able to pass through the line to the last row back and forth and to achieve victory. Members of the group must completely carry out the process of going back and forth within a predetermined area. The traditional game of *Galah Asin* exists in almost every region throughout Indonesia, with a different name for each: in Central Java, it is known as the game of *gobak sodor*; in Jakarta, it is called "*galasin*"; and in North Sumatra, it is called "*margalah*". Indeed, this game has the same rules.

Galah Asin is a game that is played in groups. The game consists of two groups, i.e., each group consists of 3–8 people, or it can be adjusted to the number of participants with the same number of members respectively. The members of this group who turned to guard the field were divided into two groups: the group members who guarded the horizontal and vertical border lines. These members try to block the opponent and those who also try to cross the line. Then, group members who guarded the vertical border of the row (only one person) have access to the entire row. The vertical boundary is located in the center of the field. If the group that is part of the players manages to escape the guarding of the group on duty, then the players' group is declared the winner. One round of play is when all the players reach the other side of the field, guarded by the opposing team, then return to their original place. If the guard manages to touch the players' group or his opponent's body, the game is restarted, and the actor turns into a guard.

The essence of the Galah Asin game is to block the opponent from crossing the line to the last line by going back and forth. Pembelajaran et al. (n.d.) revealed that there are positive values in the *Galah Asin* game, including training motor skills, strategies, cooperation, sportsmanship, caring, trust, and independence. According to Ariani (2017), the transfer of value in the *Gobag Sodor* game occurs directly through appreciating his experience in the game. Children will learn the value of honesty because they will also attempt to be honest while playing. They can also score points by familiarizing themselves with the game's rules. Assuming a child who is accustomed to sportsmanship, then it has the value of sportsmanship. Children can also get good grades by imitating their parents. They will lead and organize the game of *Gobag Sodor* by imitating older children to create strategic arrangements or leadership; hence, younger children also have strategic management and leadership values. In addition, the child can easily get grades through explanations from parents or seniors. Another benefit of the traditional game of *Gobag Sodor* is training physical skills to be strong, healthy, and capable.

In this research, the traditional game of *Galah Asin* was modified into a game using a ball. This game evolves not only to go through every line guarded by a guard and back again to the starting line performed by the attacker but has evolved to bring down the life of the defensive game to get points by using the ball placed on the back line of the opponent's defense. The objective of the game has evolved to improve cooperation, motor skills, fitness, coordination, self-confidence, competition spirit, sociability, and also the spirit of sportsmanship.

The fundamental movement activities developed in the modified Galah Asin ball game are manipulative movement activities, including throwing and catching the ball, rolling the ball, and also bouncing the ball. In addition to these movement elements, there are other elements, i.e., the cooperative element, which includes teamwork. The development of the *Galah Asin* game in physical education using the ball is carried out to prepare students to move actively while learning to improve their fundamental movement skills. Saputra et al. (2021) explain that traditional games of *Galah Asin* can improve elementary school students' cognitive, affective, and psychomotor abilities. Pardamean Saragih & Nugraha (2020) reveals that the research results suggest developing gross motor development for students by providing a modification of the *Galah Asin* game and the need for high parental support to accompany the child in carrying out every movement activity to get maximum benefit.

Method

The method used in this research was an experimental method with a 2x2 ANOVA design. In the research design, experimental units were grouped in cells like many treatments being studied. The treatment was randomly performed on the experimental units in each cell. The matrix was designed at a 2x2 level.

Table 1. The 2 x 2 Factorial Design of ANOVA

Game Type (A) / **Parental Support (B)**	***Galah Asin* Game (A_1)**	***Galah Asin* Modified Game (A_2)**
High (B_1)	$A_1 B_1$	$A_2 B_1$
Low (B_1)	$A_1 B_2$	$A_2 B_2$

The sampling technique of dividing the population into two groups: a group that carried out the *Galah Asin* game (A_1) and a group that carried out the *Galah Asin* modified game (A_2), were tested for parental support against their fundamental movement skills. The type of test employed to determine high and low parental support levels was parental support tests. Based on the test results, each group was ranked, and 27% from the top were taken as a group with high parental support and 27% from the bottom as a group with low parental support.

Samples were taken from the 27% lower limit to represent the group with low scores and the 27% upper limit to represent high scores. From the calculation of the percentages above, eight samples were determined for students with high parental support. In the same way, eight sample subjects who had low parental support were determined; thus, the total number of samples involved in the research was 16 people. Then, referring to the grouping results, the number of samples obtained from each sub-groups (A_1B_1, A_1B_2, A_2B_1, and A_2B_2) totaled four students with disabilities, so two experimental groups were obtained, i.e., the group given the *Galah Asin* game and the Galah Asin modified game. The distribution of treatment sample groupings is listed in the table below:

The data obtained were quantitative. Quantitative data were acquired from tests and measurements of children's fundamental movement skills: non-locomotor, locomotor, and manipulative. A *variance analysis technique*

(ANOVA) was employed to analyze the data in this research, followed by the Tukey Test with a significant level of $\alpha = 0.05$.

Table 2. Sampling with ANOVA 2x2

Game (A) / **Parental Support (B)**	**Galah Asin**	**Galah Asin Modification**	**∑ Line**
High Parental Support	4	4	8
Low Parental Support	4	4	8
∑ Column	8	8	16

Results

The research results and discussion review the results from descriptive and inferential analysis results. Descriptive analysis is intended to describe, in general terms, the characteristics of research variables in the form of mean scores, median scores, mode scores, standard deviations, and variances. The inferential analysis is used to test research hypotheses. The analysis requirements test consists of the normality and homogeneity data tests. In contrast, the research hypothesis test consists of a *Galah Asin* game with a modified *Galah Asin* against fundamental movement skills, considering parental support and the interaction between the two factors. In addition, the results of supporting data are displayed in the form of a comparative test between the two groups. Furthermore, this chapter will explain the discussion and limitations of the research results obtained.

The data description of the research results aims to find out a general overview of the characteristics of fundamental movement skills in elementary school students who became the research subjects. Fundamental movement skills result in four treatment groups based on the games (Galah Asin and Galah Asin modified game) and parental support (high and low). The group divisions in the Galah Asin and Galah Asin modified games are compiled from parental support data sorted from highest to lowest data. The description of the fundamental movement skills data of each treatment group, consisting of the number of samples, average, variance, standard deviation, maximum value, minimum value, median, and mode, is described in Table 3.

There were four samples in the *Galah Asin* game group with high parental support where the average value was 62.25, the variance was 30.33, the standard deviation was 5.51, the maximum value was 68, the minimum value was 56, the median was 63, and there was no mode. In the Galah Asin game group with low parental support, there were four samples with an average number of 65, a variance of 58, and a standard deviation of 7.62, while the maximum value was 73, the minimum value was 55, the median was 66, and there was no mode.

Meanwhile, in Galah Asin's modified game group with high parental support, there were four samples where the average was 72.75, the variance was 6.25, the standard deviation was 2.50, the maximum value was 74, the

minimum value was 69, the median was 74, and the mode was 74. In the Galah Asin modified game group with low parental support, there were four samples with an average of 62.25, a variance of 42.92, and a standard deviation of 6.55. The maximum value was 68, the minimum value was 54, the median was 63.5, and there was no mode.

Table 3. Data Summary of Fundamental Movement Skills Research Outcomes

	***Galah Asin* Game Group (1)**	**Galah Asin Modified Game Group (2)**
High Parental Support (1)	$n_{11} = 4$	$N_{21} = 4$
	$\dot{X}_{11} = 62.5$	$\dot{X}_{21} = 72.75$
	$S^2_{11} = 30.33$	$S^2_{21} = 6.25$
	$S_{11} = 5.51$	$S_{21} = 2.50$
	Max_{11} score = 68	Max_{21} score = 74
	Min_{11} score = 56	Min_{21} score = 69
	Median $(Me)_{11} = 63$	Median $(Me)_{21} = 74$
	Mode $(Mo)_{11}$ = -----	Mode $(Mo)_{21} = 74$
Low Parental Support (2)	$n_{12} = 4$	$N_{22} = 4$
	$\dot{X}_{12} = 65$	$\dot{X}_{22} = 62.25$
	$S^2_{12} = 58$	$S^2_{22} = 42.92$
	$S_{12} = 7.62$	$S_{22} = 6.55$
	Max_{12} score = 73	Max_{22} score = 68
	Min_{12} score = 55	Min_{22} score = 54
	Median $(Me)_{12} = 66$	Median $(Me)_{22} = 63.5$
	Mode $(Mo)_{12}$ = -----	Mode $(Mo)_{22}$ = -----

Normality Test

The normality test is one of the conditions for parametric tests. A normality test is a test carried out to assess data distribution in a data group or variable. The objective of a normality test is to determine whether the data distribution is normally distributed or taken from a normal population. In this research, the normality test used was the *Liliefors* test. Fundamental decision-making on the *Lilifors* test is:

If the value of $L_{count} < L_{table}$, then the data is normally distributed.

If the value of $L_{count} > L_{table}$, then the data is not normally distributed.

The results of the analysis of the *Lilifors* normality test are given in the table. Based on the normality calculation results of the fundamental movement skills data of the Galah Asin game group as a whole (A_1), it is known that $L_0 = 0.1407 < L_t = 0.2850$ with $\alpha = 0.05$ and $n = 8$; thus, it can be concluded that the distribution of fundamental movement skills data in the Galah Asin game group sample as a whole (A_1) comes from a normally distributed population. From the normality calculation results of the fundamental movement skills data of the Galah Asin modified game group as a whole (A_2), it is known that $L_0 = 0.1841 < L_t = 0.2850$ with $\alpha = 0.05$ and $n = 8$; thus, it

can be concluded that the distribution of fundamental movement skills data in the sample of the Galah Asin modified game group as a whole (A_2) comes from a normally distributed population. Meanwhile, according to the normality calculation results of the fundamental movement skills data in the Galah Asin game group with high parental support (A_1B_1), it is known that $L_0 = 0.1737 < L_t = 0.3810$ with $\alpha = 0.05$ and $n = 4$; hence, it can be concluded that the distribution of fundamental movement skills data in the Galah Asin game group sample with high parental support (A_1B_1) came from a normally distributed population. Furthermore, its results in the Galah Asin game group with low parental support (A_1B_2), it is known that $L_0 = 0.1549 < L_t = 0.3810$ with $\alpha = 0.05$ and $n = 4$; thus, it can be concluded that the distribution of fundamental movement skills data in the sample of the Galah Asin game group with low parental support (A_1B_2) came from a normally distributed population. In addition, when the Galah Asin modified game group with high parental support (A_2B_1), it is known that $L_0 = 0.3085 < L_t = 0.3810$ with $\alpha = 0.05$ and $n = 4$; hence, it can be concluded that the distribution of fundamental movement skills data in the sample of the Galah Asin modified game group with high parental support (A_2B_1) came from a normally distributed population. Besides that, according to the results of the Galah Asin modified game group with low parental support (A_2B_2), it is known that $L_0 = 0.1894 < L_t = 0.3810$ with $\alpha = 0.05$ and $n = 4$; hence, it can be concluded that the distribution of fundamental movement skills data in the sample of the Galah Asin modified game group with low parental support (A_2B_2) came from a normally distributed population.

Table 4. Data Normality Test Outcomes

No	Normality Test	L_{Count}	L_{Table}	A	Description
1	A1	0.1407	0.2859	0.05	Normal
2	A2	0.1841	0.2859	0.05	Normal
3	A_1B_1	0.1736	0.3810	0.05	Normal
4	A_1B_2	0.1549	0.3810	0.05	Normal
5	A_2B_1	0.3085	0.3810	0.05	Normal
6	A_2B_2	0.1894	0.3810	0.05	Normal

Homogeneity Test

The homogeneity test aims to determine whether the variance of several populations or data groups has the same criteria. This homogeneity test is a prerequisite in parametric tests on variance analysis. In this research, the test was carried out to test the homogeneity of *Fisher* and *Bartlett*. The fisher homogeneity test was used to assess the homogeneity of the *Galah Asin* game group and the Galah Asin modified game group's fundamental movement skills data. Meanwhile, the Barlett homogeneity test was employed to test the data of each group, namely the game group with parental support.

The results of the calculation analysis are shown in Table 5. The homogeneity test of the fundamental movement skills data in the Galah Asin game group (A_1) and the Galah Asin modified game (A_2) was carried out using Fisher tests. From the Fisher homogeneity test analysis results, we obtained a F_{table} (7.7; 0.05) = 1.33 and a $F_{count} = 3.79$. Since $F_{count} < F_{table}$ (1.33 < 3.79), then H_0 is accepted, and it is concluded that both data have the same or homogeneous variance. The homogeneity test of variance results of fundamental movement skills of the Galah

Asin game group with high parental support (A_1B_1) and low parental support (A_1B_2) and the Galah Asin modified game group with high parental support (A_2B_1), high and low motivation (A_2B_2) were carried out using Barlett. Based on the analysis of the Barlett, the homogeneity test obtained X_2 (0.05; 3) = 7.82 and X^2_{Count} = 3.25. Since $X^2_{Count} < X^2_{Table}$ (3.25 < 7.82), then H_0 was accepted and concluded that the data of the fundamental movement skills of the Galah Asin game group with high parental support (A_1B_1), low parental support (A_1B_2), and the Galah Asin modified game group with high parental support (A_2B_1), and high and low motivation (A_2B_2) had the same or homogeneous variants.

Table 5. Data Homogeneity Test Outcomes

Fisher Homogeneity Test				
Homogeneity Test	**F_{Count}**	**F_{Table}**	**α**	**Description**
A_1 and A_2	1.33	3.79	0.05	Homogeneous
Barlett Homogeneity Test				
Homogeneity Test	**X^2_{Count}**	**X^2_{Table}**	**α**	**Description**
A_1B_1, A_1B_2, A_2B_1 and A_2B_2	3.25	7.82	0.05	Homogeneous

Hypothesis Testing

The analysis used in processing the data of the research results (*expose facto*) consists of two free variables, one attribute variable, one bound variable, and two paths ANOVA, while the calculation analysis is as follows:

Table 6. Summary of Two Paths ANOVA Analysis Outcomes

Source of Variance	**db**	**JK**	**RJK**	**F_C**	**F_T**	
					α: 0.05	**α: 0.01**
Inter-column (Ak)	1	56.25	56.25	1.64	4.75	9.33
Inter-Line (AB)	1	64.00	64.00	1.86	4.75	9.33
Interaction (I)	1	169.00	169.00	4.92	4.75	9.33
Inter-column (A)	3	289.25	96.42	2.80	3.49	5.95
In Group (D)	12	412.50	34.38	---	---	---
Total in Reduction (TR)	15	701.75	---	---	---	---
Average/ Correction (R)	1	68906	---	---	---	---
Total (T)	16	69608	---	---	---	---

Hypothesis I: The Galah Asin modified game has a better impact than the Galah Asin game on fundamental movement skills in mentally impaired students.

Hypothesis Tested:

$H_0 : \mu_{A1} = \mu_{A2}$ and $H_1 : \mu_{A1} \neq \mu_{A2}$

Hypothesis Testing:

Based on the summary table, ANOVA's two paths on the inter-column row (AK) obtained the value of F_{count} = 1.64 and F_{Table} with α: 0.05 = 4.75 and α: 0.01 = 9.33. Then, $F_{count} < F_{Table}$ (1.64 < 4.75 with α: 0.05), so H_1 is rejected and H_0 is accepted. It can be concluded that there is no difference between students with mental disabilities who are given a Galah Asin modified game and students who are given a Galah Asin game against fundamental movement skills at a significance level of 95%. It suggests that modifying the Galah Asin game given to mentally impaired students is no better than the Galah Asin game for fundamental movement skills.

Hypothesis II: There is an interaction between Galah Asin games and parental support for fundamental movement skills.

Hypothesis Tested:

H_0 : Int. A x B = 0 and H_1 : Int. A x B ≠ 0

Hypothesis Testing:

According to the summary table of two paths ANOVA on the Interaction row (I) obtained the value of F_{count} = 4.92 and F_{Table} with α: 0.05 = 4.75; then, $F_{count} > F_{Table}$ (4.92 > 4.75), so H_1 is accepted and H_0 is rejected. It can be concluded that there is an interaction between the Galah Asin game and parental support on fundamental movement skills at a significance level of 95%.

Hypothesis III: Students with high parental support have a better impact on fundamental movement skills than students with low parental support.

Hypothesis Tested:

H_0 : $\mu_{B1} = \mu_{B2}$ and H_1 : $\mu_{B1} \neq \mu_{B2}$

Hypothesis Testing:

Based on the summary table of two paths ANOVA on the Inter-Row row (AB) obtained the value of F_{Count} = 1.86 and F_{Table} with α: 0.05 = 4.75. Then, $F_{Count} < F_{Table}$ (1.86 < 4.75), so H_1 is rejected, and H_0 is accepted. Thus, it can be concluded that there is no difference between students with high parental support and students with low parental support on fundamental movement skills at a significance level of 95%. In other words, high parental support is no better than low support for skills.

Hypothesis IV: Galah Asin modified games have a better impact on fundamental movement skills for students with high parental support than Galah Asin games.

The results of the statistical calculation of the Tukey test obtained $Q_{Count} = 4.94$ and $Q_{Table} = 4.11$, where $Q_{Count} > Q_{Table}$ (4.94 > 4.53), so that H_0 is rejected and H_1 is accepted. There is a difference between the modification of the Galah Asin game and the Galah Asin game in mentally impaired students with high parental support at a significance level of 95%. Hence, it can be concluded that the modification of the Galah Asin game has a better impact compared to the Galah Asin game on fundamental movement skills for students with mental disabilities and higher parental support.

Tukey Test Summary

After conducting two paths ANOVA tests, it is necessary to test the differences between the Galah Asin game and the Galah Asin modified game to fundamental movement skills. The summary of the Tukey test calculation results is to determine the significance of the difference in fundamental movement skills between the Galah Asin modified game group and the Galah Asin game with high and low support from parents.

Table 7. Tukey Test Analysis Outcomes

Pairs of Compared Groups	Q_{count}	$Q_{standart}$ (α:0.05)	Conclusion
A_1B_1 and A_2B_1	4.94	4.53	($Q_h > Q_s$); thus Significant
A_1B_2 and A_2B_2	1.33		($Q_h < Q_s$); thus Insignificant

Discussion

There is No Difference between the Galah Asin Game and the Galah Asin Modified Game of Fundamental Movement Skills in Elementary School Students

The implementation of physical education in schools is focused on movement activities to achieve fitness and health. To perform physical activities, instead of achieving psychomotor, cognitive, and affective development, there is physical, movement, mental, and social development (Syahrial, 2015). Physical activities will be more fun if they are carried out in the form of play, where game activities are quite fun for students. Many forms of games can be given to children with mental disabilities to provide pleasure and develop the child's locomotor, non-locomotor, and manipulative movements. One of them is the traditional game of *Galah Asin*. The research results conducted by Pembelajaran et al. (n.d.) reveal that traditional games are effective in triggering a gross motor improvement in primary school children. Likewise, the traditional game of Galah Asin has many direct benefits for children, which starts from building a social character and working simultaneously. When playing the Galah Asin game, children will work jointly with their friends to perform teamwork to defeat the opponent. In addition, they will also take the initiative according to their duties and functions. Thus, the child's character will be built in this game, Galah Asin. Hence, it is also excellent to be developed by adding manipulative motion to its game. Galah Asin, a form of a game that improves the locomotor and non-locomotor motion abilities of children, needs to be introduced and performed. In this game, the child can perform running movements while also trying to catch the opponent to cancel the movement in the game. In fostering and informing the standard rules of this game, it is necessary to be informed of children with special needs through parents and teachers. However, because the child is closer to the parents, the rules of this game should be conveyed by parents, as also related to matters

that should or should not be done during the game. Parents become the closest people to children with mental disabilities. Some match rules must be understood by each player; thus, every mentally impaired child who wants to play Galah Asin must know the rules that apply in this game. With these limitations, children with mental disabilities need the support of their parents; hence, they can develop themselves in this game, where these abilities will develop while performing fundamental movements in their daily lives.

Similarly, in Galah Asin's modified game, movement activities are added, specifically manipulative. Each student is taught how to perform locomotor, non-locomotor, and manipulative movements by performing this game. Thus, there are additional rules that require understanding by the mentally impaired student. Parents' support is urgently needed to improve these students' fundamental movement skills. The Galah Asin modified game is a development of the Galah Asin traditional game. The game is designed to be easy to understand and can be played easily using simple instruments. This game can also be employed as a competition between groups that can increase children's interest and motivation in performing movement activities to improve their physical fitness and fundamental movement skills. Galah Asin modified game provides many benefits for children with special needs, such as mental impairment: increasing cooperation between groups, building good communication with others, improving children's motor skills, physical fitness, and coordination, increasing self-confidence, competitive spirit, sociability, and also the spirit of sportsmanship. Therefore, it is ideal for developing children with mental disabilities to improve their abilities and benefit their lives. The Galah Asin modified game can build student independence in children with special needs. With this game, the child's fundamental movement skills will be trained. It will greatly benefit children in carrying out their daily activities without requiring assistance from those closest to them. However, this research result concluded that there was no difference between the Galah Asin game and the Galah Asin modified game for fundamental movement skills in elementary school students.

Activities of the Galah Asin game and Galah Asin modified game among elementary school students in this research do not indicate differences between the two forms of games. There are several obstacles encountered by researchers during the study. Students who are present are not full, or the people who come are always changing, affecting the research results. Fundamental movement skills through Galah Asin game activities and Galah Asin modified games cannot be performed optimally.

There is an Interaction between Galah Asin Games and Parental Support on Fundamental Movement Skills

Parental support is critical, as parents must patiently remember, treat, teach, and train their children's abilities, whether in language, socialization, or developing fundamental movement skills. Parental support can be performed by giving attention and assistance in a certain form to provide strength; thus, the child can move forward. The support provided by parents and others is what the child needs; hence, they will feel affection. The support provided by parents can be in the form of reprimands, briefings, assistance in dealing with difficulties, or giving punishment if they make mistakes. Thus, there is an interaction between the Galah Asin game and parental support for the fundamental movement skills of elementary school students. Putra et al. (2021) state that parental support has a great psychological impact on children's learning activities. With the support of parents, children

will be more active and enthusiastic about learning because they know that it is not just themselves who want to move forward, but their parents too. The achievements of the child have an impact on the future development of education.

Fundamental movement skills, which include locomotor and manipulative movements, need to be developed by children and become the basis for performing movements in daily activities. Children will always do activities such as running and jumping and manipulative activities such as catching, throwing, and others. Repeating Galah Asin games will train their fundamental movement skills to help their daily activities. Therefore, it can be concluded that there is an interaction between Galah Asin games and parental support on fundamental movement skills of elementary school students.

Students with High Parental Support Have No Better Impact than Students with Low Parental Support on Fundamental Movement Skills

The form of games given to elementary school children cannot be separated from the understanding of its game, i.e., an activity carried out by several children in search of fun that can shape the child's personality process and help children achieve physical, intellectual, social, moral, and emotional development. This research shows that parental support significantly affects elementary school students' fundamental movement skills.

The research results by Ariyanto et al. (2020) reveal that traditional games are a means of developing aspects of children's basic development, such as physical motor, cognitive, social-emotional, and language. Children can achieve physical, intellectual, emotional, and social development through games. Physical development can be seen while playing. Intellectual development can be found by using or utilizing its environment. Emotional development can be seen when the child feels happy, angry, wins and loses, etc. Social development can be seen in its relationships with peers: helping, queuing to wait for games, and paying attention to the interests of others.

Parental support is significant in improving children's basic movement abilities, which can also improve children's cognitive abilities. Parents can give attention or support to a primary school child by providing attention and assistance in a certain form to generate strength so the child can move forward. They also can give children confidence in movement activities as emotional support.

According to I Nyoman Agus Adi Kesuma1 (2021), people's support in the form of Informational support, namely providing an evaluation of children's activities for improvement and appraisal support in the form of advising children at the right time, also needs to be applied so that children get an evaluation to correct deficiencies and also their mistakes. Thus, the child will develop his growth and development in terms of psychomotor, cognitive, and affective. Children will be able to receive input or improvement from their parents and friends, which is a guide to socializing with others. The intermental aspect of support consists of financial support and time given to pay attention to or guide children. The child needs financial support and time from his parents or other older people. Finances are required to meet the child's needs, and the time of a more mature person to teach and guide him is also needed; thus, the child does not feel alone. In carrying out games' movement activities, elementary

school students also need support so that the activities they do feel supported by their parents. Likewise, elementary school students who play Galah Asin games need to be supported by their parents. However, the simple rules of the game allow the child to digest the rules of this game and can be performed without parental engagement when playing. The research results prove that there is no difference between high and low parental supports on fundamental movement skills of elementary school students.

Galah Asin Modified Game Has a Better Impact than Galah Asin Game on Fundamental Movement Skills in Elementary School Students

Galah Asin activities and Galah Asin modified games have many direct benefits for children. Moerianto et al. (2021) explain that play, or a game as an activity related to the whole child's self, is an activity that will encourage the child to practice his skills by guiding the child's cognitive, language, psychomotor, and physical development. The play experience will encourage children to be more creative. Traditional games and the use of the latest technology are efforts as part of facilitating an activity. Development of media or applications to help activities in recording and providing an assessment of the result of motion on the basic components is something that very needed (Priyambada et al., 2022). To maintain children's movement abilities and character, it is necessary to apply a play approach, in addition to developing their potential (Ritonga et al., 2022).

The modification of the Galah Asin game developed from its game, namely by adding manipulative movements in its implementation, is the addition of the movements of throwing the ball, catching the ball, dribbling the ball, and also rolling the ball. It should be performed so that the Galah Asin game will have movement enrichment; hence, it can be utilized to improve fitness and also their fundamental movement skills. Compared to the Galah Asin game, the Galah Asin modified game has more complete movements, including several types of manipulative movements. Meanwhile, the Galah Asin game’s movements tend to be locomotor, so the Galah Asin modified game has a better impact than the Galah Asin game on fundamental movement skills. This research proved that the Galah Asin modified game had a better impact than the Galah Asin game on fundamental movement skills for elementary school students with high parental support.

Conclusion

Based on the data obtained from the research results, it can be concluded:

1. The modification of the Galah Asin game has no better impact than the Galah Asin game on fundamental movement skills in elementary school students
2. There is an interaction between the Galah Asin game and parental support of fundamental movement skills in elementary school students.
3. Students with high parental support have no better impact than students with low parental support on fundamental movement skills in elementary school students.
4. Galah Asin modified game has a better impact than the Galah Asin game on fundamental movement skills for mentally impaired students with high parental support in elementary school students.

It is hoped that future researchers would be able to find new theories related to the game of Galah Asin with parental support on fundamental movement skills in elementary school students.

Acknowledgments

The researcher's gratitude goes to the research members who have given the time to help the research process designed by the authors, and the researcher's gratitude goes to the Medan State University Research Institute for providing research funding.

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