



## The impact of folk games on primary school students

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### Abstract

Kazakhstan's efforts to expand its physical culture have brought tremendous benefits. However, there are still unresolved issues in the teaching of physical education in our country's schools. Despite many ethnic and cultural traditions, combining learning opportunities in the classroom is ineffective. Domestic experience in sports is underutilized due to a lack of educational literature and scientific evidence that supports the use of traditional outdoor sports. The purpose of this study is to improve the motor abilities of young children by using carefully selected traditional outdoor sports. A study on the use of folk games in working with children in primary schools found that teachers' knowledge of the possibilities of folk games is inadequate. Finally, the findings suggest that incorporating traditional games into the physical education curriculum for students in lower grades can serve as a model for healthy lifestyles. Various types of games and exercises help to improve physiological systems, physical development and physical fitness in children and foster positive moral and volitional qualities.

**Keywords:** Development, Elementary school, Folk games, Motor skills, Physical culture, Young children.

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### Contribution of this paper to the literature

This study contributes to the existing literature by identifying the effectiveness of the program for developing to improve the motor abilities of young children by using carefully selected traditional outdoor sports, the problems with the use of folk games in working with children in primary schools and how the entire process of improving the physical development of children takes place which contributes to foster positive moral and volitional qualities in elementary school students.

## 1. Introduction

Given the state of contemporary social development, high expectations are placed on the effectiveness and efficiency of the techniques and methods used in childhood physical education (Botagariyev et al., 2016). In this regard, Messmer (2018) believes that sports as a discipline in schools needs a new approach. Providing school children with effective content, methods and organization of sports activities will help instill a love of sports and a conscious attitude towards health (Anderson et al., 2013; Pasek et al., 2022). The primary school learning process is characterized by the physical and mental effort required by students to learn. As a result, adaptive reserves are depleted affecting the health of children of different ages (Maxwell, Reynolds, Lee, Subasic, & Bromhead, 2017). Children's and adolescent health has declined significantly over the last decade (Fegert, Vitiello, Plener, & Clemens, 2020; Sahoo et al., 2015). The findings of the study reflect the most recent trends in children's health (Waic & Pavlu, 2020). Any movements that correspond to the physiological characteristics of children have a healing effect, which can explain the high efficiency of a wide range of grading methods and forms (Tompsonowski, McCullick, Pendleton, & Pesce, 2015). In addition, adopting sound strategies helps adolescents become independent by developing appropriate abilities in basic movements, performing a variety of activities efficiently and being ready to quickly embrace new movements (Muratori, Lamberg, Quinn, & Duff, 2013). To help elementary school students develop skills and talents that are not only relevant to the instructional content but also prepare them for autonomous physical activity. Students must develop the motor skills necessary for independent study (Darling-Hammond, Flook, Cook-Harvey, Barron, & Osher, 2020; García-Marín & Fernández-López, 2020). Students should be prepared for self-study by receiving clear, concise guidance on the purpose and objectives of specific self-study, gradually learning about the self-study system and instilling the importance of technical and organizational skills (Agranovich et al., 2019; Cahill, 2008). However, if students only care about the results of their activities, it will be useless to improve their self-learning skills and abilities (Diamond, 2010; Roschelle, Pea, Hoadley, Gordin, & Means, 2000). The goal of sports is to develop a child's cognitive curiosity, natural inclinations and creative potential. In elementary school, children should learn from more complicated games (Gasim, 2020). Various classifications of physical games have been considered in the work of many authors (Maria & Tatiana, 2020). Games aid in the development of motor skills, synchronization of movements, strength, quickness, flexibility, individual skills and teamwork (Eigenschenk et al., 2019). A child cannot grow independently unless they learn about themselves, natural laws, people's lives and motor memory (Vasilopoulos & Ellefson, 2021). The game methods help people perceive data in a comfortable and emotional way. The researchers divided action-based games into instructional, therapeutic and educational categories based on their target audience. Teaching games are often used when working with children of different ages. "Play therapy", in the words of Landreth (2012), helps overcome challenges in reading, lag in speech development, study, tension and stuttering treatment among other things (Eather, Morgan, & Lubans, 2013). Properly organized, action-oriented games always elevate the emotional status of the lesson, diversify children's motor actions and foster their creativity in determining how to achieve the goal. A good game that does not appeal to the interests of children will not yield the desired pedagogical outcome. The organization and conduct of physical skill activities in physical culture classes have a significant impact on the development of moral and volitional traits such as courage, perseverance, willpower, mutual aid, responsibility for one's actions, teammates and so forth (Bull et al., 2020).

### 1.1. Research Problem Statement

To learn more about the topic of using folk games when working with children in schools, we surveyed elementary school teachers. We found that teachers had limited awareness of the possibilities of traditional folk games. Almost all school students study known physical skill games for preschoolers. Jogging, running, tagging and simple chores are among the suggested games. Only 21% of respondents agreed that games are used in primary school to help children develop personality traits. Among the specialists polled, 49% use traditional games in physical education lessons in children's free time activities primarily for the development and improvement of physical and motor skills and 30% use games to foster a positive psycho-emotional environment, maintain interest in participating in exercises, courteously exchange help and uphold ethical principles. In this regard, it is critical to investigate how children in primary school develop their motor skills through traditional outdoor activities because all of the body's functioning systems are still developing and have the greatest capacity for reserve at this age. Consequently, the goal of this study is to raise the motor skill level of students by carefully selecting conventional action-oriented games and taking their properties into account. This research will look into the following issues: (a) to determine whether action-oriented folk games are linked to students' physical and motor development in grades 1-4 and (b) to assess the impact of carefully selected folk action-oriented games on the growth of motor skills in elementary school students.

## 2. Materials and Methods

### 2.1. Participants and Settings

This study was carried out in Almaty, Kazakhstan during the years 2020 and 2021. The survey was conducted in elementary schools and involved children between the ages of 7 and 12. This study used a statistical sample of 80 students.

The techniques and goals of the study were explained to all children, parents and teachers. Before the study began, parents, teachers and students signed informed consent forms.

### 2.2. Applied Folk Outdoor Games

The goal of the game "hunters and falcons" is to improve dexterity, speed, coordination and health.

The goal of the "circular hunting" game is to develop motor skills in students as well as dexterity, ball control and jumping ability to promote the education of a culture of communication, mutual understanding and friendship and to develop students' communication skills.

The goal of the game "polar bears" is to keep the "bear" from slipping out from under the hands of the couple surrounding him until the "bear" has taunted him. When catching, it is forbidden to grab players by their clothes or those who run outside the site's boundaries.

Coordination games include "take care of your feet", "cockfight" and "pushing out in a squat " "runners", "hare without a den" and "the latter knocks out."

Flexibility games include "stick behind the back" and "race of balls in a circle."

"Watchman, hares and a bug" are games designed to improve speed.

Strength-building games include "moving ring," "jumps", "who will throw further?" and "who will jump further?"

According to the educational plan, these courses are supported by folk outdoor games taught in experimental classes, so that elementary school students have time to study. In addition to the traditional outdoor games, game exercises were conducted, the tasks were simple and the gameplay was monotonous. Athletics, sports games, ski training, gymnastics and other activities were introduced into the educational process after a discussion with physical education teachers who had a mandatory teaching load of 3 hours per week.

The following sequence was used throughout the game:

1. Create a game that students play to learn.
2. Post the game's title.
3. Inspirational help is needed (to get interest in the game).
4. The selection of judges, aides and drivers as well as a division into teams or groups.
5. A description of the game's objectives.
6. A description of the game's structure and content.
7. A description of the game's regulations.
8. Expansion and explanation of the game's regulations.
9. The start of the game.
10. Tracking the game's development and modifying the load.
11. Presiding over the game.
12. Reviewing the game.

Practice tools include leaps, benches, hoops and balls of various sizes.

The lesson formats used in the experiment are as follows:

- Grades for physical education classes are based on performance at sports events or holidays.
- Specific courses for a healthy lifestyle.
- Homework.

The following are the main topics covered during the training period:

- (1) Developed a special experimental training program and training system.
- (2) Conducted a special analysis to become acquainted with the necessary methodological and regulatory documents.
- (3) Developed methods for developing school children's skills in independent learning tasks including the skills of independent performance in physical education grades and developed a toolkit for teachers.
- (4) Interviews were conducted with subject teachers participating in the experiment.

### 3. Results

A diagram of how to complete the tasks for the defining stages of the first, second, and third graders are shown in Figures 1, 2, 3 and 4.

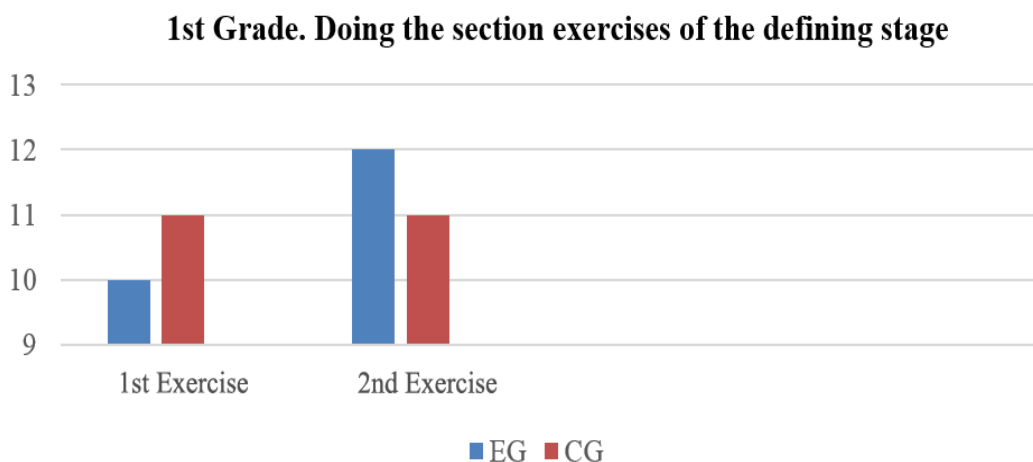


Figure 1. Completing the exercises for the first grade's defining stage.

**2<sup>nd</sup> Grade. Doing the section exercises of the defining stage**

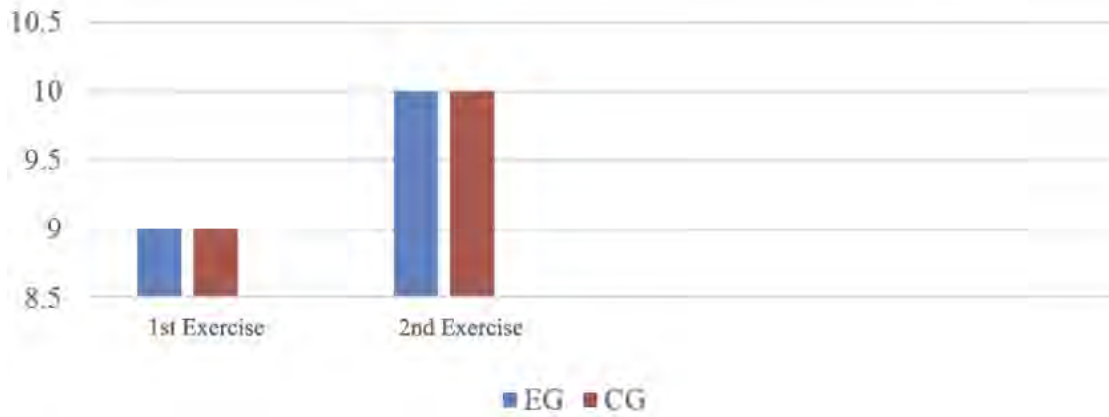


Figure 2. Completing the defining stage section exercises in second grade.

**3<sup>rd</sup> Grade. Doing the section exercises of the defining stage**

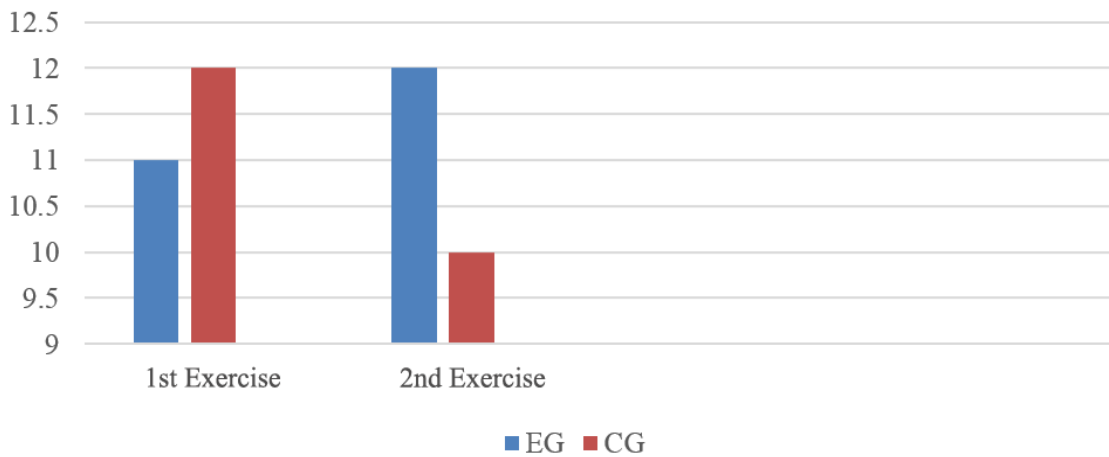


Figure 3. Completing the defining stage section exercises in third grade.

**4<sup>th</sup> Grade. Doing the section exercises of the defining stage**

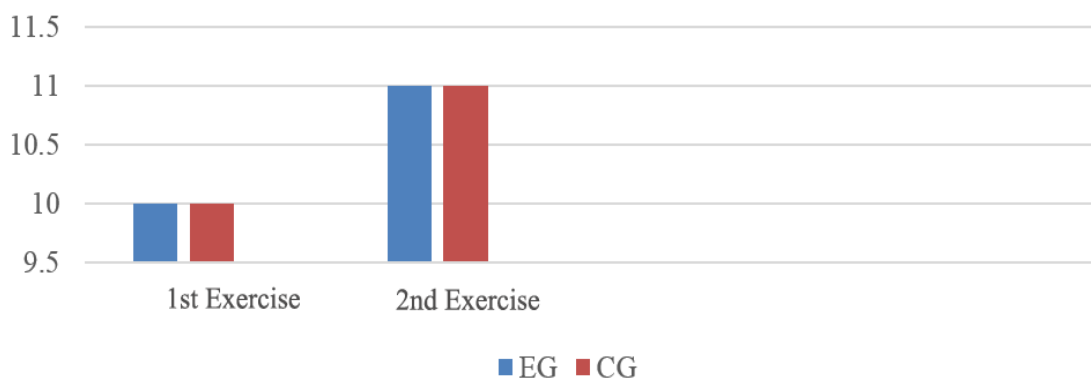


Figure 4. Doing the 4th-grade section exercises for the defining stage.

The following summarizes the outcomes of the program's implementation and evaluation (see Tables 1 and 2).

Table 1. Results of the defining and control experiment's first segment exercises (Grades 1,2,3,4).

The result of the first section exercise									
Grades	N	1		2		3		4	
Stages		Before	After	Before	After	Before	After	Before	After
Experimental group	40	25%	95%	22.5%	97.5%	27.5%	97.5%	25%	100%
Control group	40	27.5%	27.5%	22.5%	30%	30%	32.5%	25%	37.5%

Table 2. Results of the defining and control experiment's second segment exercises (Grades 1,2,3,4).

The result of the first section exercise									
Grades	N	1		2		3		4	
Stages		Before	After	Before	After	Before	After	Before	After
Experimental group	40	30%	90%	25%	95%	30%	97.5%	27.5%	97.5%
Control group	40	27.5%	30%	25%	30%	25%	35%	27.5%	32.5%

The first and second segment exercises between grades 1-4 show a considerable increase in the experimental group in Tables 1 and 2. In particular, according to the two types of exercise, the growth in all classes was 60% and it was clear that the control group remained constant. Mapping is used to illustrate these numerical results and the relative difference is readily apparent (see Figure 5).

### On the 1st and 2nd sections

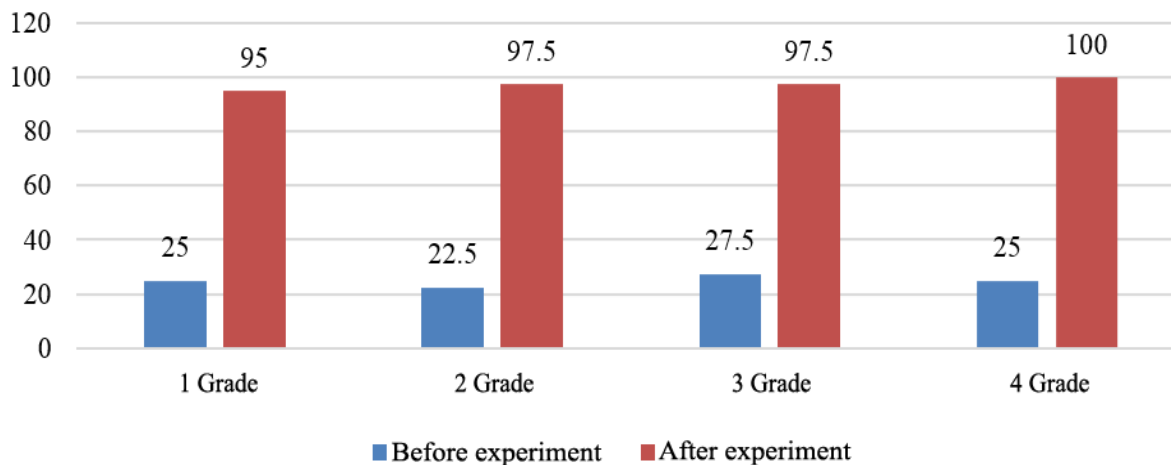


Figure 5. An explanation of how the definition and control stages in the experimental group changed relative to each other.

We observed that our experimental program affected students' motor skill development (see Table 3).

The validity of the difference between the initial and final stages of development was examined using Pearson (criterion X<sup>2</sup>).

Table 3. Table of calculations.

Number of students	1	2	3	4
Defining stage	37	38	39	39
Control stage	11	9	12	10

We calculate the criterion's rate according to the table:

$$X^2_{control} = 1 / n^1 n^2 \sum_{i=1}^k (n^1 Q^1_i - n^2 Q^2_i)^2 / Q^1_i + Q^2_i$$

Here:

n<sup>1</sup> = the number of students at the beginning of the experiment

n<sup>2</sup> = the number of students at the end of the experiment

Q<sup>1</sup> = skill level at the beginning of the experiment

Q<sup>2</sup> = skill level at the end of the experiment

X<sup>2</sup> control = the value of the control statistical criterion

$$X^2_{control} = 0.000061 * 802344.6 \sim 48.94$$

From the limit point table, we find the significance level α according to the significance level x (Pearson), k (k is the value of the level, in our case k = 4) the limit point x<sup>2</sup> KP (αk), in the right limit zone x<sup>2</sup> KP = 0.6. If x KP < x control, there is no need to rule out the assumption.

#### 4. Discussion

Through the use of carefully chosen traditional action-oriented games, this study examined how the motor skills of elementary school students improve. The findings of the study confirmed our premise. Traditional action-oriented games help students be more effective in helping young children in elementary school develop their motor abilities. The following three aspects of the research are reflected in them:

According to the accessibility concept, which is implemented in the guidelines "from ordinary to difficult," "from popular to unknown" and "from easy to complex," as mentioned in Parlebas (2020), teaching students and enhancing their motor activities should be carried out. Teaching students and enhancing their motor activities should be done in accordance with the accessibility concept, which is implemented in the guidelines "from ordinary to extraordinary," "from popular to unknown" and "from easy to difficult," as mentioned in Parlebas (2020).

According to Rasberry et al. (2011), school children of different primary orientations ranging from complex to selective loads should engage in a reasonable amount of physical activity.

In other words, the dynamics of students' physical activity levels progressively climb from the start of the semester until its midway point and then gradually decline. By adjusting the volume and intensity of physical exercise, it can be controlled (Talaghir, Iconomescu, & Stoica, 2018).

Outdoor games were incorporated into the curriculum of "Physical Education" based on the aforementioned recommendations and a rational systematization and classification of folk games according to distinct physical activity characteristics. In the "athletics" area, the game "3rd extra" successfully substituted jogging with workouts to enhance the technique of low and high starts. With its emotional content and effective general endurance development, the game "talking give a hand" can replace some of the cross-country training. A significant portion of the materials in the sports section can be replaced with the game which includes throwing and passing. These games include "stop" and "talking with the ball."

These carefully chosen traditional action games fall under the category of medium coordination complexity, with speed development as their primary goal. According to Barrett, Davies, Zhang, and Barrett (2015), the primary goal of these traditional games which fall under the category of medium coordination complexity is the development of speed.

Numerous studies Cloes (2017), Khudoiberganovna (2020) and Parlebas (2020) have demonstrated that the weekly physical education curriculum is based on the annual planning for the program. Its annual program dictates the weekly sports schedule (Sun, Chen, Zhu, & Ennis, 2012). By lowering some of their content, particularly motor actions that can be substituted by similar motor actions distinctive of a particular outdoor game as indicated in Hong, Hwang, Liu, Lin, and Chen (2016). It is essential to incorporate games in all main areas of the curriculum

in "physical education." An outdoor game's success mostly depends on the teacher's method knowledge, organizational abilities and professional abilities (Rudd et al., 2015). During the experiment, it was observed that systematic use of diverse folk games chosen in response to the assignment in each section of the lesson can maximize the activities of children. Moving, jumping and sprinting are particularly emphasized in a variety of outdoor sports. The use of creativity by students in both individual and group projects that integrate musculoskeletal skills and enable investigation of spatial and dynamic changes was encouraged. Each practice consists of both unique exercises and imitation components. School children are taught imitation activities to grasp the logical training technique. One kind of exercise that is done to avoid errors in performance technique is called a "special exercise." For instance, students learn to carry out activities linked to hunting and animal motions while playing the game "hunting."

The "Sakas" people who are regarded as the forefathers of the Kazakhs developed the idea of "animal style" in their cultural legacy. The terms "lion," "tiger" and "eagle" refer to both actual creatures and ideas that were ingrained in the lives of our ancestors. Since the time of their ancestors, Kazakhs have trained themselves to recognize all natural phenomena and believe themselves to be a part of nature. These ideas are the foundation of health. Kazakhs instruct their offspring to have "powerful wings like an eagle and to be "strong like a lion and a tiger." Students are encouraged to mimic a snow leopard's gait during the class (see Figure 6).

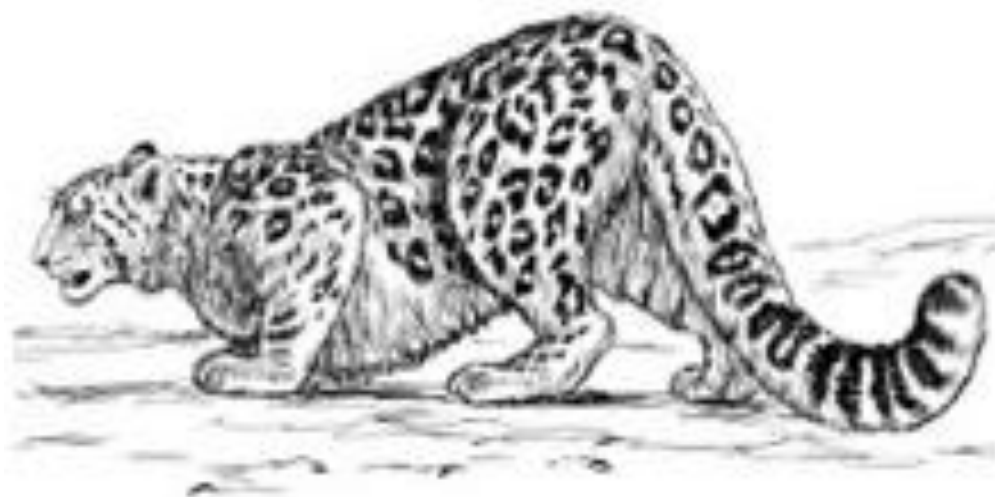


Figure 6. Snow leopard motion.

According to research, well-planned play makes children happy, gives them a functional high from their motor activity, fosters cooperation and helps them succeed in accomplishing common play objectives. This theory was supported by the research of (Sutapa, Pratama, Rosly, Ali, & Karakauki, 2021) which demonstrated how beneficial traditional outdoor sports have always been for the development of a wide range of motor skills and talents required for all kinds of occupations. It is possible to conclude from an analysis of the dynamics of the statistical data on the manifestation of children's motor abilities that the group showed significant and considerable development in these abilities across all of the tested domains. In addition, the data shows that the guided use of outdoor sports helped the development of their basic motor skills to be more prominent, steady and reliable. The complex use of carefully chosen outdoor sports and games was created with the age capacities of children allowing for the improvement of the fundamental physical attributes which fully supports the study's central concept.

#### 4.1. Limitations of the Study and Directions for Future Research

The targets of this study are only elementary school students in grades 1-4 who have unique characteristics according to their anatomical, physiological and psychological make-up as well as their capacity for adaptation to new environments. The amount of physical exercise decreases by 50% as children aged 6 to 8 shift from preschool to formal education. Moving from class to class during the training period does not boost a student's motor activity. As a result, it is crucial to provide children with daily motor activity that is appropriate for their age and health. This concept compels the instructor to reevaluate the best ways to structure the classroom to improve the lesson's instructional value. Future studies will focus on how school children acquire the desire to become physically better versions of themselves. The capacity to use physical culture as a tool to sustain high performance and improve health will be a key to find a solution to this issue.

## 5. Conclusion

Our research demonstrates that carefully chosen folk action-oriented games in physical education lessons give students the volume and intensity of physical activity they need, raise elementary school students' level of motor skills while taking into account their unique characteristics and encourage students to consider the efficacy of the development of school children's motor skills. As a result, school children are more inclined to engage in physical activity and sports to advance physical activity.

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