

## **The reduction in the practical permanent level has affected agility and explosive power of legs in primary school students**

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### **ABSTRACT**

The study aims to identify the impact of reducing the practical career (physical education Class) at the level of agility and explosive power of legs in elementary school pupils, aged 11-12, at the displaced schools of the representative of the Ministry of Education in Dohuk / Downtown. The descriptive method was used in comparison to fit the nature of the problem to achieve the objectives of the study. The research community consisted of 11-12-year-old displaced students in primary schools. The research community was 489 pupils, while the sample size was 67, so the sample representation of the community was 13.70% of the total research community. Used in research the following statistical processing: Mean, Standard deviation, Percentage, Independent T test. There are statistically significant differences between the pre and posttests of the research sample and in favor of the pre-test, as the value of (t) calculated for the agility test was (5.92) and with a significant level (0.001). The value of (t) calculated for the explosive power of legs was (2.75), with a significant level (0.007). There are significant differences between the pre and posttest of agility & explosive power of legs among primary school students aged 11-12 years.

**Keywords** : reduction practical permanence, physical education class, agility and explosive power of legs.

## Introduction

Researchers, scholars, students and all interested in children and their physical and motion capacities are not hidden from the importance of the school environment and its active and important role in raising the child in behavioral and motion (both physically and skillfully). Hence the importance of the lesson of physical education (physical education class) and its important and effective role in raising the level of pupils, especially inactive children. Bronikowski states that “the role of the school implies the preservation of pupils’ activity and therefore their good health” (Bronikowski, 2010). Thus, the physical education class can contribute to the development of the mobility abilities of students (both physically and skillfully) of the various physical exercises and motion skills containing different physical and motion skills for different sports and motivation skills. One of the most important factors is to provide a competition among children and persevere in performance, and the apparent psychological and physical returns of students, especially at this age stage where motivation and the desire to play at a high level of potential and modern motivation and motion skills produces a desire to stabilize and develop them. “The school must provide students with much fun and joyfulness, without embarrassing or making fun of others because of their limited capabilities” (Bronikowski, 2010). Also emphasize and develop positive qualities, as a leadership. “The opportunity for students to play a leading role in physical education is a critical factor in their level of activity during the second phase of primary and secondary education”(Minguet & Fernández, 2010). The responsible people of the educational process in the Ministry of Education have prompted the obvious importance and good space in the weekly quota schedule relative to the other classes and school-time courses, giving pupils space and time to exhaust potential by developing physical and motion energy and taking appropriate part of physical and motion activity. Many studies and research have addressed the lesson, importance and impact of physical education on physical, knowledge and social activity, including the Fairclough & Straton 2006, the effects of physical education on improving the level of student activity, which confirmed

that school sports is available to most young people and provides a structured context for physical activities, and that regular physical activity during childhood can give enhanced and long-term health benefits. From this perspective, one of the aims of physical education is to obtain the appropriate amount of physical activity during the course (Fairclough & Stratton, 2006). Trost and others in 2008 state that free-play programs are an important contributor to the physical activity of children. However, there is considerable room for improvement and development by making better use of the time allocated for physical activity within physical education lessons (Trost et al., 2008). The 2015 Boniśawska and others studied physical education and leisure lessons for primary school-age pupils, which focused on the participation of pupils in physical education and recreational courses, included a short version of the (HBSC) questionnaire "Healthy behaviour of a child at school age", sample of 371 pupils from fourth-sixth grade urban and rural schools (Boniśawska et al., 2015). While the study of ZADARKO and others in 2017 assessed the severity of physical education lessons based on selected forms of physical activity for children and young people, the study aims to assess the intensity of the main part of the physical education course for primary school children participating in three different classes in terms of the prevailing content of physical activity and studies for 30 students (ZADARKO et al., 2017). However, because of the height of Coronavirus, the Ministry of Education had to reduce the number of days of weekly classes and compensate them with remote teaching (online teaching) and to suit school materials with current time constraints and due to health conditions and preventive procedures, including spatial spacing and non-touching, as well as school-time reductions, the result was eliminated in classes of physical education and other study materials. The importance of research is therefore to study the impact of reducing the operational duration (physical education lesson) at the level of agility and explosive power of legs in primary school students, its impact on these physical qualities, and its identification and the problem. The researcher has chosen a sample of 11-12-year-old primary school students, and sees that the current study can be better employed to

study physical education in order to be adapted to the present time, and to benefit from the lesson more positively to contribute to the growing and development of physical and dynamic qualities of primary school students.

### **Problem of Research**

The problem of research is the following question: Does the reduction of practical permanent effects on agility and explosive power of legs?

### **Objectives of Research**

The study aims to identify what follows:

1. Identify the impact of reducing the level of practical permanence in the agility in primary school pupils at the age of 11-12 years.
2. Identify the impact of reducing the level of practical permanence in the explosive power of legs in primary school pupils at the age of 11-12 years.

### **Research Hypothesis**

1. There were no meaningful differences between pre-test and post-test of agility for primary school pupils aged 11-12 years.
2. There were no meaningful differences between pre-test and post-test of the explosive power of legs for primary school pupils aged 11-12 years.

### **Methods**

Participants were 11-12 primary school students in the fifth grade of Nasr-1 and Al-Nasr/2 for the displaced people [belonging to the Representative of the Ministry of Education in Dohuk]. Size of research community was 489 pupils, while the sample size was 67, so the sample representation of the community was 13.70% of the total research community. The study procedures were from 10/2/2021 to 25/2/2021. The yard of Al Nasr/1 was the field of tests

### **Research Methodology**

The researcher used the descriptive method in comparison to suit the nature of the problem and to achieve the objectives of the study.

### **Tools and means used in the research**

For the purpose of field research procedures, the Seeker has used the following devices: electronic timeline is measured for the nearest 1/100 of a

second, graded measurement tape in the centimeter unit, wall with a proper altitude, grade, a centimeter index and fixed on the wall a 2.5 meters long, water pot, chair, whistle, School yard, registration form, lists of five or corner banners (at least 30 cm length or flag), rectangle-shaped run field based on a solid and wooden land of 4.75 and 3m.

### **Data Collection Methods**

#### **Measures and Physical Tests.**

##### **Sargent Jump Test.**

- Tools and devices: a measurement tape, a wall with an appropriate altitude, a pot with water and a chair.
- Specifications and tools: the participant stands up to the wall with its right shoulder (or the shoulder of the arm) and the participant raises its arm on the wall high (after the fingers dipped into water) to make a mark on the wall at the most fingered point. The participant is swinging arms down with half the knees bent, and then it's weighted in front with the knees upward, to make another mark with the arm adjacent to the wall at the maximum point of fingers.
- Conditions: the participant has three best attempts.

Registration: Registration of the distance between the first and second mark, reflecting the participant number in this test at the centimeter.

##### **"Barrow"-Style Test (Zigzag Running).**

- Test purpose: measurement of total body agility during a transition movement.
- Tools: a rectangular jogging run field based on a solid and wooden land of 4.75 and 3 m wide, stopping hour, lists of five lists used in high-pitch or corner banners such as soccer not less than 30 centimeters length.
- Performance description: The participant takes the pre-start position behind the starting line and when giving it the start-up signal, the participant runs three times in a row between the five lists.
- Grade calculation: the participant time for the rectangle is recorded three times as close as 10/1 seconds, starting from the moment the start signal is given until the finish line is cut off.

### The reconnaissance experiment

The exploratory experiment was conducted on the 15 samples of the research community and was aimed primarily at the harmonization of the search sample with the test environment, as well as at identifying the obstacles facing the researcher during the final application of the tests. Also to ensure that the equipment and tools are valid and to ensure that the Assistant Task Force understands the methods of measurement and the method of work.

### Final application of the tests

The final (pre-tests) for search were applied to the main research sample (67) students dated 14/2 2021 to 18/2 2021 in the yard of Al Nasr/1 for the displaced. The tests were re-applied to the same sample for the period 20/2/2021 to 24/2/2021. The experience included measuring the following variables and in time of rest: The explosive power of legs (Sargent test) and the agility (Barrow test).

### Statistical means

Used in the research the following statistical processing: Accounting middle, standard deviation, percentage, Independent T test. The SPSS Statistical Package 23 was used to statistically process data.

### Results

#### Presentation and discussion of the results.

After the researcher applied his research tests to the search sample, the research has been found to the statistical features of the search variables, as shown in table (1).

**Table 1.** Shows the statistical features of research variables

Test Name	M	SD±	Mode	Skewness Coefficient	Result	
Explosive power of legs	pre	23.41	3.08	22	0.45	positive
	post	20.50	2.68	19	0.55	positive
Agility	pre	12.47	1.42	12	0.33	positive
	post	11.13	0.88	11	0.14	positive

Table (1) shows that both pre-test and post-test in an agility and explosive power of legs are appropriate for pupils in terms of level, since the skewness coefficient was 0.45-0.55-0.33-0.14, and is less than the right ones, which indicates the appropriateness of the tests to the level of the search sample.

The researcher then extracted the differences between the pre-test and post-test of both the tests in the sample of the research, as shown in table (2).

**Table 2.** Shows the statistical differences between the pre-test and post-test of the search sample

Test Name		M	SD±	t	Sig.	Result
Explosive power of legs	pre	23.41	3.08	2.75	0.007	<b>Significant Difference</b>
	post	20.50	2.68			
Agility	pre	12.47	1.42	5.92	0.001	<b>Significant Difference</b>
	post	11.13	0.88			

Table (2) shows statistical differences between pre-test and post-test in search sample and for pre-test, with a calculated value of (t) for the test of agility (5.92) and a meaningful level (0.001). Table 2 also shows statistically significant differences between pre-tests and post-tests in search samples and for pre-test, with a calculated value of (t) for the test of explosive power of legs (2.75) and a meaningful level (0.007). So the difference goes for pre-test because the pre-test is higher than the post-test of both tests.

### Discussion of Results

Through table 2 results, statistical differences are shown between pre-test and post-test for the tests of the two tests agility and explosive power of legs, for the pre-test, with the calculated value of the calculated agility test (5.92) and a meaningful level (0.001), the value of (t) calculated for the test of the explosive power of legs (2.75) and at a meaningful level (0.007), and the difference towards pre-test is higher than the post-test of both tests. The McKenzie et al. 1996 study, which emphasized that physical inaction was a risky behavior of

cardiovascular diseases and so on, and schools could promote public health objectives by increasing physical activity among young people (Mckenzie et al., 1996).The study (Janssen & LeBlanc) concluded that physical activity was linked to many health benefits for school-age children and young people It also recommended that cardiovascular-focused air activities and respiratory systems be of great health benefit (Janssen & LeBlanc, 2010).The researcher attributes the reason for these results to a suspension or disruption of the imposition of a curfew or similar preventive and precautionary measures due to the pandemic, as well as the reduction of practical duration or the abolition of physical education, and the near-complete dependence on distance education, thereby reducing these physical qualities in the sample search.

### **Conclusions**

The Seeker concluded the following:

1. There are significant differences between the pre-test and post-test of the agility in primary school pupils aged 11-12.
2. There are significant differences between the pre-test and post-test of the explosive power of legs in primary school pupils aged 11-12.

### **Recommendations**

The Seeker recommends the following:

1. Urge pupils to engage in physical activities in leisure time.
2. Raise the effective physical education quotas strongly moderate to high, with outdoor air with preventive measures in spatial spacing, non-touching, etc.
3. Adoption of integrated education even after the Corona pandemic in anticipation of any emergency.

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