

## Reflecting on Learning Athletics Number Rejects Bullets amid the Covid 19 Pandemic

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### ABSTRACT

This research aims to compare the bullet repellent force between the O'Brien force and the spin style, this study uses comparative causal research. The population in this study is all students of class VIII of a junior high school in Sijuk in the 2020/2021 school year. Through purposive sampling technique, the researchers took 15 students from the class. This research uses a Posttest only design which is causally competitive. After completing the treatments, the group was given a posttest for data collection. The initial analysis was conducted using hypotheses with the help of the SPSS24 (Statistical Product and Service Solution) computer program. The researchers examined the hypothesis using the t test (independent sample t-test). Based on the SPSS output, the t test (independent sample t-test) with a significant level of 0.04 with a specified lower limit of 0.05 obtained t calculated = 2.134 and t table = 2.0484. The  $H_0$  acceptance area is if t calculates < 2.0484, it is clear that  $H_0$  is rejected. Thus, it can be concluded that there is a comparison between O'Brien style and Spin style, O'Brien Style gives the best results to the results of learning to reject bullets from junior high school students in Sijuk Belitung Regency.

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## 1. INTRODUCTION

Physical education is a process of education of a person as an individual or member of society that is carried out consciously and systematically through various physical activities to obtain physical growth, physical health and freshness, abilities and skills, intelligence and development of harmonious character and personality in the framework of the formation of quality Indonesian people based on Pancasila (Hardman, 2008; Suherman et al., 2019). Physical education is one of the conscious efforts to create an environment that is able to influence the potential of students to develop towards positive behavior through physical activities (Mahendra et al., 2020). Physical activity is a form of stimulation created to affect the potentials that students have in physical education learning in schools ranging from early childhood education to secondary education. Through this physical activity, it is hoped that educational goals covering the cognitive, affective, physical, and psychomotor fields can be realized. The form of physical activity presented in the learning of physical education can be in the form of sports

or non-sports. Sports such as athletics, gymnastics, games, martial arts, and aquatics, are non-sports in the form of play, modification of sports, and other physical activities.

The school environment is where children develop affective, cognitive, physical, and psychomotor aspects. The development of these aspects of course learning activities will be designed in such a way that everything runs in accordance with the objectives of the learning process that has been set for each subject. Physical education is one of them. In physical education learning activities, there are two processes that take place, namely teaching activities and learning activities. In this learning activity there is an interaction between teachers and students. This interaction process involves the teacher as a source of information and the student as the subject of the learner. Teachers will teach various materials in accordance with the applicable curriculum. The material to be taught must certainly be planned in such a way that the learning goals are achieved. Teachers play a role in organizing and conditioning the learning environment so that students can learn safely and comfortably. The preparation carried out is to design learning starting from preparing materials, determining teaching methods, and determining facilities/ media tools.

Planned preparation will result in a meaningful learning process for students. Physical education learning activities that are correct, safe, and comfortable are very dependent on various aspects. First, teachers are a central element of the physical education learning process. It is in the hands of the teacher that eventually all learning processes are controlled although this will be contrary to the curriculum and methods to be used. Teachers plan learning from preparing the material to the final evaluation of the learning process. Learners are the second aspect that must be considered. Learners are the subject of a series of learning activities. Learners will directly get treatment from teachers and feel the learning process carried out by teachers. During the Covid-19 pandemic, there are several challenges and obstacles experienced by students, teachers, and parents in the online learning process. The challenges related to students are limited communication and socialization among students. The implementation of online learning is most widely implemented using the WhatsApp application, this application has a WhatsApp Group feature so that teachers and students can discuss and share documents with each other. Teachers take advantage of this feature to share learning material documents and assignments for students, then students will submit tasks that they have completed through this group as well. The thing that needs to be considered is the provision of assignments accompanied by monitoring and mentoring by teachers. The step taken is that the teacher asks for the help of parents and students' parents as contact persons with advance notification through WhatsApp Group.

In addition, it is also necessary to include coordination and interaction between teachers and parents of students in the form of video calls and photo documentation of student learning activities at home as a form of report that students actually carry out learning at home (Wicaksono & Rachmadyanti, 2017) in (Kudus, 2020). Third, the curriculum used by teachers as a reference or benchmark in planning learning activities. This curriculum requires students to master the basic competencies that have been determined. In this curriculum, teachers are no longer the only major source of learning. Teachers can develop their own learning designs that are tailored to the student's ability level and school circumstances. The fourth aspect is infrastructure. It is undeniable that infrastructure will make it easier for teachers to deliver physical education learning materials. The right facilities and infrastructure will allow teachers to be more optimal in teaching, students will also have more real learning experience. Fifth, the learning methods used directly will affect the smoothness of a learning process. Because, method is a way used to convey learning materials including classroom management. Methods that are often used during the Covid-19 pandemic such as online and offline methods, for online methods can be used as one of the things that are quite effective to overcome the problems that occur during this pandemic, because students do the learning process at home without having to do face-to-face which can endanger themselves in the Covid-19 pandemic at this time this method is suitable for the red zone, as for offline or outside learning methods, this one is done face-to-face by paying attention to zoning and applicable health protocols. This method is very suitable for students who are in the yellow or green zone area, especially with the new normal strict protocol.

Sixth, a conducive learning environment in the sense of being comfortable and safe to use in learning activities. If the environment or place where all learning activities will take place is conducive then teachers can deliver materials freely and students understand the material delivered. However, currently the learning environment is not conducive because there is a Covid-19 pandemic that allows it to be hampered or the teaching and learning process becomes less than optimal because schools enforce online learning. The Covid-19 pandemic affects every aspect of life, including the world of education. During this pandemic, the world of education became very hampered, to stop the spread of Covid-19 many countries postponed activities at school, as a result of the spread of the Covid-19 outbreak throughout the world, including Indonesia, there was a change in the learning system, thus making the learning process at school no longer carried out directly. Officially, the government of the Republic of Indonesia through the Minister of Education and Culture of the Republic of Indonesia issued Circular Letter No. 4 of 2020 concerning the implementation of education policies in the emergency period of the spread of CoronaVirus Disease (Covid-19) which stipulates that since it was signed on March 24, 2020, the learning process at all levels of education conducts the learning process from home through an online learning system. (Wulandari, Purwanta, & Children, 2021)

For that all aspects ranging from teachers, parents, and students are forced to switch and must master online-based learning, online technology that is commonly used such as using WhatsApps (WA), Google Form, Google Classroom, Google Drive, Youtube, WA group, and some even use the Zoom Meeting application (Anugrahana, 2020). Zoom Meeting itself is a learning medium using video, in this Zoom Meeting application we can communicate directly with anyone via video therefore, it is suitable to be used as a learning medium (Haqien, Rahman, & History, 2020). Indonesia is also relatively no different from other countries. Despite realizing that there is a disparity in access to learning technology and diverse parental backgrounds, the Ministry of Education and Culture of the Republic of Indonesia firmly enforces the online learning policy (Irawan, 2020; Katili, 2020; Makdori, 2020; Putsanra, 2020; Wahyudi, 2020), in a journal (Wahyono & Husamah, 2020).

The form of physical activity presented in the learning of physical education can be in the form of sports or non-sports. During the Covid-19 pandemic, physical activities can be done with video conference calls using the whatsapp application or zoom application. Sports such as athletics in throwing numbers, one of the categories in throwing numbers is bullet repellent. Bullet repellent is a form of movement to resist or push a round device (bullet) of a certain weight made of metal and can be modified using a bullet made of a plastic ball filled with cement with a weight that approaches the original bullet to do learning at home, which is done from the shoulder with one hand to reach a distance as far away. Achievement of bullet repellent achievement or other sports can not be separated from four important factors, including physical condition, technical ability (skill), tactics, and mental. The achievement achieved by bullet repellent athletes is to produce a bullet-dropping distance that exceeds the opponent without error, so that the stages in rejecting bullets such as sliding, repulsion, recovery, are important indicators in achieving bullet repellent sports achievements (N. T. Bullets, 2009).

Rejecting bullets is an attempt to reject bullets as far as possible with the correct style and technique. In the bullet repellent number is known two styles of repulsion, namely: Orthodox style (sideways style) and style (Bedagai, 2018). Obrein force turned his back to the direction of the bullet repellent (Peluru & Wijayanti, 2014). Before making the throw, the athlete does a 360-degree round before the throw is made. This style is able to provide the best momentum to throw bullets as far as possible. The spinning style is the most difficult style because athletes not only focus on repulsion but also on good spinning movements. If the athlete makes the slightest mistake in the twisting movement, it will have a bad effect on the throw and can lead to failure as well. The end result of a game is very important for everyone because it will affect the mentality of the next match and can win a match. To get a long repulsion result A bullet repellent athlete must have the correct strength, speed and technique that includes, range (Height of release), angle of release (angle of release), speed of throw (speed of release) in the journal (Ni Putu Nita Wijayanti, Slamet, 2019). Knowing the benefits of two styles, this

current study aims to compare the bullet repellent force between the O'Brien force and the spin style under the question, "What are the effect of learning athletics number rejects bullets using O'Brien force and the spin style amid the Covid 19 Pandemic?"

## 2. METHODS

Comparative causal or ex post facto is research that seeks to determine a cause or reason, for the presence of differences in behavior or status within a group of individuals. In other words, comparative causal research is research directed at investigating cause-and-effect relationships based on observations of the consequences that occur and looking for factors that are the cause through the data collected.

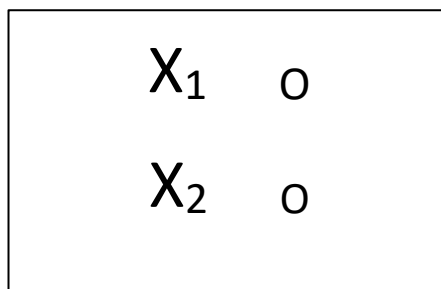


Figure 1. Causal-Comparative Research Design

Modifications of Fraenkel et al. (1993)

Information:

$X_1$  : O'Brien Style

$X_2$  : Spin Style

$O$ : Student Learning Outcomes

This experimental study involved 15 students from class VII in a junior high school in Sijuk, Belitung Regency. This research used a Posttest only design which is causally competitive. After completing the treatments, the group was given a posttest for data collection. The initial analysis was conducted using hypotheses with the help of the SPSS24 (Statistical Product and Service Solution) computer program. The researchers examined the hypothesis using the t test (independent sample t-test).

## 3. RESULTS AND DISCUSSIONS

### 3.1. Bullet Repellent Skills

The results of the student's bullet reject use O'Brien style and Spin style with repulsion results test in Figure 2. (the students' names are pseudonymous).

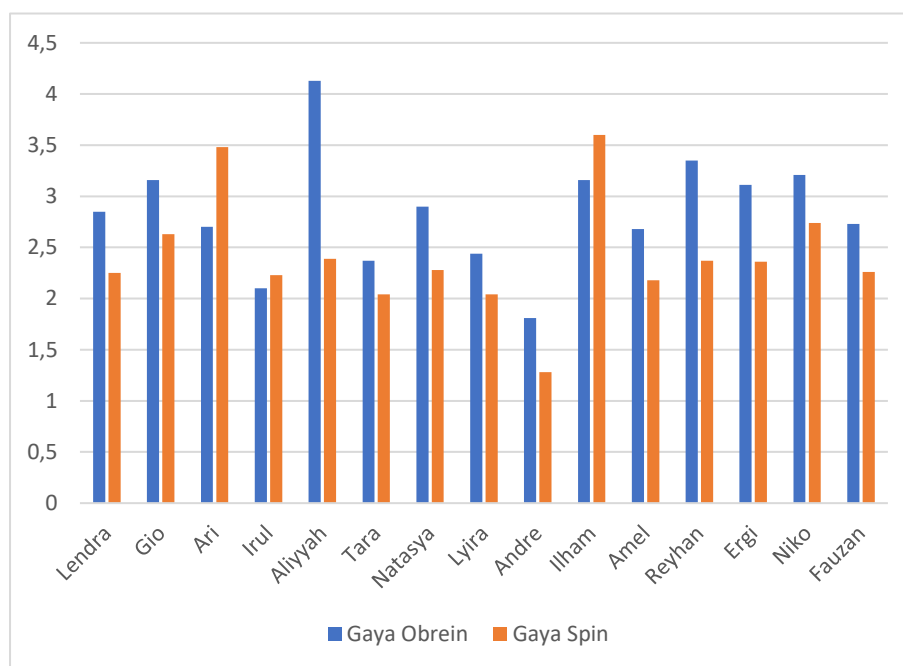


Figure 2 O'Brien's Style Repulsion Results and Spin Style

Students' ability to do good repulsion: there are 12 students who get the best grades using the O'Brien style and 3 students get the best grades using the spin style, but it needs to be maximized by digging and exploring skills and supporting aspects so as to produce the best repulsion in rejecting bullets.

Table 1 Descriptives Table

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Obrein	15	1.81	4.13	2.8467	.55988
Spin	15	1.28	3.60	2.4093	.56241
Valid N (listwise)	15				

From the results of the repulsion above can be known the average of the O'brien Force Repulsion Result is 2.84 and the Standard Deviation is 0.55. The Spin Force Repulsion Result is 2.40 and the Standard Deviation is 0.56. The calculation of averages and standard deviations uses the help of the SPSS24 (Statistical Product and Service Solution) program. After obtaining an average score based on Table 1 then analyzed using a different t-test to find out there is a comparison between o'brien style and spin style against student learning outcomes in figure 2.

Table 3 T-test

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Nilai	Equal variances assumed	.068	.796	2.134	28	.042	.43733	.20490	.01761	.85706
	Equal variances not assumed			2.134	27.999	.042	.43733	.20490	.01761	.85706

The repulsion ability that students have is related to skills and supporting factors to produce the best repulsion in bullet repellent learning. Based on the results of research on students and students of Sijuk Junior High School 1 in Tanjung Tinggi Village, Belitung Regency, it shows that 12 out of 15 students have good repulsion results using o'brien style, and 3 out of 15 students have good repulsion using spin style. The difference is relatively large because when doing the student's o'brien style is more and considered easy to do compared to the spin style, it causes the skills possessed and supporting factors to be more developed to produce the best repulsion in bullet repellent learning. Furthermore, explained each supporting factor in learning to reject bullets.

### 3.2. Students' Mentality

Humans are not only formed from the physical thing but there is a soul related to the mental that must be trained so that bullet repellent skills can be done optimally. Their mind stores the memory of motion and through the motor nerves, they can order the motion device to perform the task in accordance with the existing memory then the student is declared as a skilled student (Umair et al., 2019). Motion errors occur due to incomplete memory of motion and incompleteness of memory can be caused by incoming information that can not be received completely and misperception or the informant that does not convey in detail and completely. It does not happen because of physical ability. Inadequate physical ability causes the series of movements to be carried out in a state of lack of power. Lack of power makes the thrower unable to do the sequence of movements briefly.

### 3.3. Techniques and Tactics

Motion errors occur due to incomplete memory of motion, incompleteness of memory can be caused by incoming information that can not be received completely, misperception or the informant does not convey in detail and completely (Cui & Sun, 2021). If it does not happen because all three means caused by physical ability. Inadequate physical ability causes the series of movements to be carried out in a state of lack of power. Lack of power makes the thrower unable to do the sequence of movements briefly.

### 3.4. Physical Factor

The physical factor that supports this is quite large for this bullet repellent skill. Components of physical condition that support the bullet repellent sport are the explosiveness of the arm muscles, flexibility, and coordination. Muscle explosive power is needed for sports that require maximum, fast, and accurate muscle exertion. According to Newton & Kraemer (1994) muscle explosive power is the ability of a muscle or a group of muscles to contract explosively in a short time. Coordination contributes to a real appearance in every sports skill that uses hands in carrying out its activities. Coordination is an ability that can affect accuracy in bullet repellent skills. Muscle explosiveness is affected by the strength of muscle speed and contraction (Cormie et al., 2011). The explosive power referred to in this study is the explosive power of the arm muscles, the explosive power of the arm muscles is used when repulsing. Flexibility is the ability of joint space to explain that flexibility is the ability of the body to perform joint movements very broadly which is influenced by the shape of joints, muscles, ten-dons, and ligaments. Flexibility in this research is intended to be the ability of the hip joints to stretch as much as possible when performing twisting movements. Coordination is an ability that can affect accuracy in the ability to resist bullets. Coordination contributes to the appearance of a real to every sports skill that uses the hands in carrying out its activities.

### 3.5. Students' Motivation

The lack of motivation of students at the time of making movements that they consider difficult to do. According to Samsudin, motivation is the process of influencing or pushing from the outside towards a person or work group so that they are willing to carry out something that has been set. This motivation is lacking in students when doing repulsion by using a spin style. When doing repulsion students only make movements as they should, there is no desire to be better. This causes the repulsion result by using the spin style to be less maximal compared to using the O'Brien style which is considered easier to do.

## 4. CONCLUSION

The results of research on the comparison of repulsion styles to bullet repellent results with online learning in the covid-19 pandemic of junior high school in Sijuk Belitung regency for the 2020/2021 school year are the best and get the farthest repulsion results, namely O'brien style, due to the lack of several skill factors and supporting factors in bullet repellent learning. Based on the results of research and t-tests that have been conducted, it can be concluded that there is a comparison of the results of learning to reject bullets in junior high school students at Sijuk, Tanjong Tinggi Village, Belitung Regency, with a thitung value of 2,134 and at ttabel 2.0484. With a significant level of 0.05. Thus, for  $t$  count  $>$   $t$  table resulted in rejection in  $H_0$  so that  $H_1$  was accepted, thus there is a comparison between obrein style and spin style in getting the best score in bullet repellent learning. This study has weaknesses in relation to the data collection technique in which only single data collection technique was conducted. Therefore, next studies are suggested to do other techniques to get more comprehensive data.

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