

THE EFFECT OF DIRECT INSTRUCTION ON THE CHEST PASS LEARNING OUTCOMES IN CLASS X BASKETBALL GAME SMA NEGERI 1 CIAMPEL

Astri Ayu Irawan^{1*}, Husen Nurdin², Johansyah Lubis³, Rizky Aminudin⁴, Evi Susianti⁵

^{1,2,4,5}Health and Recreation Physical Education Study Program, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang, West Java, Indonesia

³Coaching Science Study Program, Faculty of Sports Science, State University of Jakarta, Jakarta, Indonesia

¹astriayuirawan2@gmail.com*, ²husenurdin21@gmail.com, ³johansyah.sport@unj.ac.id, ⁵sabeum.evi@gmail.com

Abstract: The purpose of this study was to determine whether there is an effect of direct instruction on learning outcomes of chest pass in basketball games for class X SMA Negeri 1 Ciampel. The research method in this is experimental, which is meant by experimental is an artificial condition in which these conditions are created and regulated by the researcher. After the pre-test was carried out, the researcher gave the treatment, namely by giving instruction to 40 respondents. The research instrument was the chest pass test. This research was processed using the t-count formula and compared with the t-table. The results of the study show that learning chest pass using direct instruction has a significant effect on the basketball chest pass skills of students of class X SMA Negeri 1 Ciampel, Karawang Regency, with the t-count result of 2.166 which is greater than the t-table 2.018. Based on these results, it can be concluded that the direct learning model (direct instruction) can improve chest pass skills in basketball games for Class X students of SMA Negeri 1 Ciampel. The novelty of this training model is to use a more varied direct learning model so that it is interesting and easy for respondents to do. The results of this study can be applied to class X at other places and schools with the aim of improving chest pass skills in basketball games.

Keywords: Direct Learning Model, Chest Pass, Basketball Game.

1. Introduction

Learning is an activity that is given by a teacher and students or students become recipients of this learning and learning is a process that will never stop as long as humans live on earth and no human will ever get success without going through the learning process. In the learning process carried out by students, it is influenced by two factors, namely internal factors and external factors, internal factors, namely the physical and spiritual condition of students, while external factors are the conditions of the environment around such as home, school, community. In teaching and learning activities, physical education is always directly related to clear goals, from these clear goals there are several benefits, among others, to develop physical, mental, social, and emotional fitness for the community. In addition, physical education can develop intellectual and emotional abilities as a whole through physical activities in the physical, psychomotor, affective, and cognitive realms.

The game of basketball is one of the physical education learning materials, sports and health in schools in its implementation, it must refer to the

content of educational goals including developing physical fitness skills and lifestyle. Basketball is a big ball game which is summarized in the subject matter of physical education. The basic motion techniques in basketball games are movement skills that are carried out in basketball playing activities related to playing ball activities, so that students are skilled at playing basketball, so the most basic thing is to master the basic basketball techniques. In passing the ball there are several types of passing, namely chest pass, chest meaning chest, chest pass is to give the ball to a friend by passing it right in front of the chest. The advantages of chest pass are faster, stronger to reach friends. Chest pass is a basic technique in basketball that is needed in the game in basketball, its reach is faster to reach friends. Group passing practice improves chest fitting skills [1].

Based on seeing the conditions carried out by the author on students, who took basketball lessons, the problems found were when students were receiving chest pass lessons given by their teacher they looked bored and when doing chest passes, the movements they made were not right on target, so that the chest pass movement is not

good enough. Ideally, a basketball player to be able to play well, of course, must have good game technique skills. Therefore, appropriate and varied training methods are needed to be able to improve basketball game skills. The results showed that there was a need for special treatment, be it technical, physical or mental training to be able to play a good basketball. Physical activity in improving the adaptation performance of playing basketball for female athletes [2]. Characteristics of biomechanics, psychology of elite athletes and professional basketball players [3]. Influence of basketball training on the features of women's physique[4]. Effect of modified equipment on the acquisition of motor task performance among children of low and high working memory capacity: A basketball-based experimental study [5].

Based on the results of observations and some of the research results mentioned above, then the authors observe the elements that can affect the chest pass movement not maximally. On the basis of its importance, the authors are interested in further researching about "The Effect of Direct Learning Model (Direct Instruction) on Chest Pass Learning Outcomes in Class X Basketball Games at SMA Negeri 1 Ciampel". It is hoped that the research can provide solutions for players to improve Chest Pass skills in basketball games.

2. Research Methods

This data research method is experimental, which is meant by experimental is an artificial condition in which these conditions are created and regulated by the researcher. Related to this experimental method, Sugiyono (2014: 72) argues that "The experimental research method can be interpreted as a research method used to find the effect of certain treatments on others under controlled conditions. Thus, experimental research is research that is carried out by manipulating the object of research and the presence of control. The research conducted was pre-experimental, with a research design in the

form of "the one group pretest-posttest design". This is because the researcher is not possible to choose students to form a new class in giving treatment to the influence of direct learning models (direct instruction) on learning outcomes of chest pass in basketball games for Class X students of SMA Negeri 1 Ciampel. Thus the results of treatment can be known to be more accurate, because it can compare with the conditions before being treated. This design can be described as follows:

O1 X O2

The sample is a part or representative of the population. The researcher wanted to find out whether the effect of the playing approach on the basketball chest pass skills of class X students at SMA Negeri 1 Ciampel. Due to limited personnel, time and funds, the researchers collected data as a sample using random sampling techniques or random samples from class X students who took part in learning activities at SMA Negeri 1 Ciampel with 65 students taken as many as 40 students. The characteristics of students aged 13-15 years can be given a variety of training models and training loads from outside their own body weights. Effect of balance and proprioceptive training on balancing and technical skills in 13-14-year-old youth basketball players [6]. Integral development of jumping and of shot accuracy of young basketball players 12-13 years [7]. Improving the protective technique of 13-14-year-old basketball players using rubber bands and unstable platforms [8].

Data obtained by playing approach using a lattice in the form of an assessment table consisting of indicators, descriptions of attitudes, and scores obtained and carried out by pre-test and post-test. While the chest pass is to obtain the required data. As for the tools in the process of implementing this test are:

Table 1. Norms of Assessment of Chest Pass Techniques

Very Good	4
Good	3
Not Good	2
Not Very Good	1

Data analysis Significance test using the formula:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$: S^2 = \frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1+n_2-2}$$

3. Result dan Discuss

Based on the explanations and descriptions that have been previously collected, this chapter will carry out the analysis and discussion obtained

in this study. The results of the study are described in accordance with the objectives and hypotheses previously proposed

Table 2. Calculated Mean, Standard Deviation, Minimum Value And Maximum Value

No.	Group	Statistic	Pre Test	Post Test
1	Direct Learning	Mean	54,2	74,17
		Std. Dev	9,21	9,206
		Min	40	60
		Max	73,333	93,333

Guided by the table above, the value of direct learning obtained a mean value of 54.2, a standard deviation of 9.21, a minimum value of 40, and a maximum of 73.333. while the data for the final test for teaching style mean 74.17, standard deviation 9.206, minimum value 60, and maximum 93.33. This means that there is an

increase in the final value of the direct learning model approach to learning outcomes of basketball chest pass after being given treatment. The research hypothesis was tested using t-test analysis, before t-test analysis was carried out, first the normality test was carried out.

Table 3. Initial Data Frequency Distribution

Kelas Interval	F Absolut data (FD)	F Relatif Data
40-48	14	35%
49-57	10	25%
58-66	11	27.50%
67-75	5	12.50%
76-84	0	0%
85-93	0	0%
94-102	0	0%
Total	40	100%

Figure 1. Initial Data Histogram

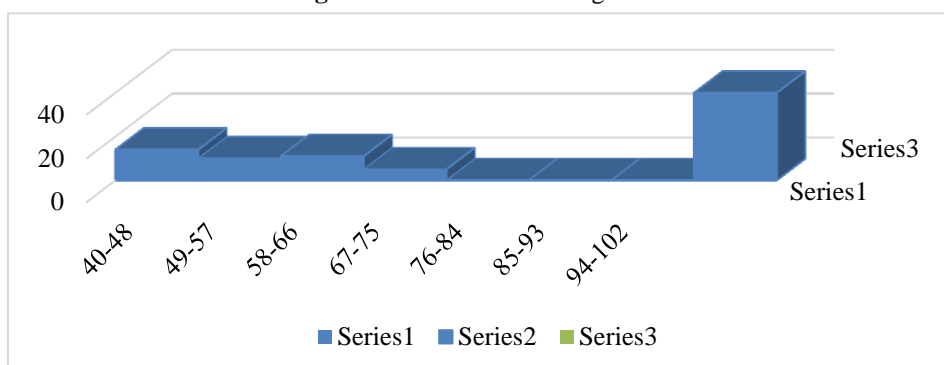


Table 4. Final Data Frequency Distribution

Kelas Interval	F Absolut data (FD)	F Relatif Data
40-48	0	0%
49-57	0	0%
58-66	5	12.50%
67-75	19	47.50%
76-84	11	27,5%
85-93	2	5%
94-102	3	7,5%
Total	40	100%

Figure 2. Final Data Histogram

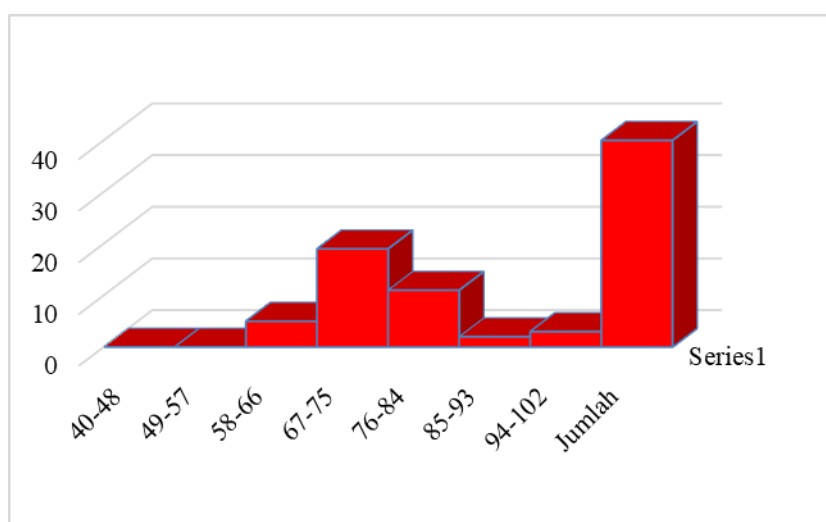


Table 5. Frequency Distribution of Initial and Final Data

Interval Class	F Absolut data (FD)	F Absolut data (FD)
40-48	14	0
49-57	10	0
58-66	11	5
67-75	5	19
76-84	0	11
85-93	0	2
94-102	0	3
Total	40	40

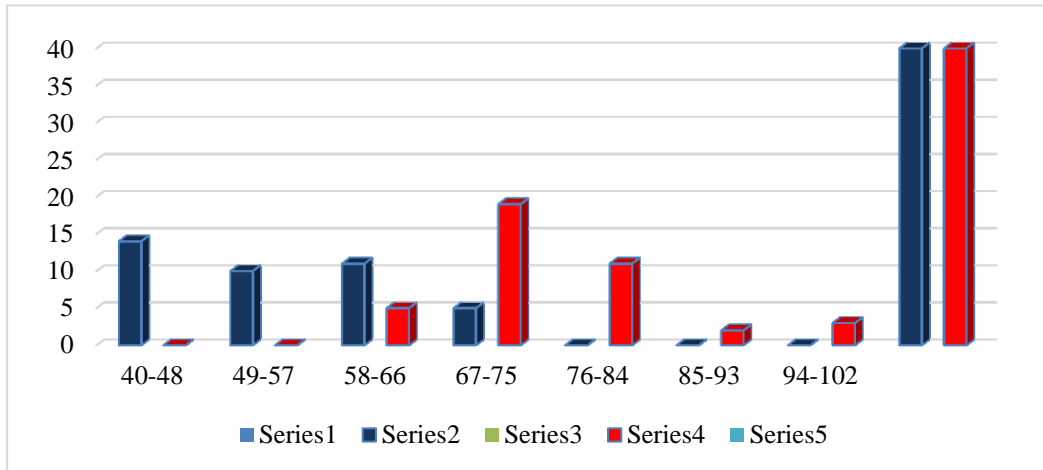


Figure 3. Enhancement Histogram

The normality test was carried out using the Lilliefors test with the real level (α) = 0.05. The test criterion is that the null hypothesis is rejected if the Lhitung (Lh) obtained from the observation data exceeds the Ltable (Lt) and vice versa the null hypothesis is accepted if the Lh which is

obtained is smaller and the Lt. Tests were carried out for each data group in each cell of the study design. The complete calculation results of the normality test can be seen in the appendix and the summary is shown in the following table:

Table 6. Normality Test

Group		N	L _{count}	L _{table}
Skill (<i>chest pass</i>)	Pre Test	40	0,138	0,140
	Post Test	40	0,1393	

Based on the results of the calculation of the normality test of the research group above, it was found that the Lhitung (Lh) price obtained was smaller than the Ltable price at the 0.05 level. Thus it can be concluded that all data groups in this study were taken from normally distributed populations so that they could be used for testing the research hypothesis. As explained in the previous chapter, that the hypothesis proposed in this study consists of 1 hypothesis. This hypothesis was tested using the t-test at the

significance level (α = 0.05). In this case the results of the analysis show whether the playing approach has improved or not. "There is an effect of the direct learning model (direct instruction) on the learning outcomes of chest pass in basketball games for class X SMA Negeri 1 Ciampel." (α = 0.05) = 2.018 which means $t_{count} > t_{table}$, it means that direct learning has a significant effect on the improvement of chest pass skills of students of SMA Negeri 1 Ciampel (The complete calculation can be seen in the attachment).

Table 7. The t-test of the initial data (pre test) and the final data (post test) of the Overall Training Method

Group	N	t _h	t _t
Direct instruction	40	2,166	2,018

4. Discouision

The discussion of the research results is intended as an illustration to make it easier to draw research conclusions. Chest pass skill is the ability to carry out the chest pass passing

technique as accurately as possible with the goal achieved by the target with the maximum distance. Chest pass skills are a description of a person's technical ability to pass the ball in

basketball. Chest pass skills have a very big role in a match which is one of the supporting achievements of a team, especially in an important match situation so that this team can win.

After analyzing the data using the t-test approach, the proposed research hypothesis was tested empirically. The hypothesis is accepted and can be verified. The research findings as stated in the previous section of this chapter are the results of statistical data analysis which need to be studied further in order to explain why there are hypotheses that are accepted and rejected. There is a significant influence on the effect of the direct learning model (direct instruction) on the learning outcomes of chest pass in the basketball game for class X SMA Negeri 1 Ciampel. The results of hypothesis testing through direct learning obtained a mean initial test value of 5.42, a standard deviation of 9.21, a minimum value of 40, and a maximum of 73.333 and a mean final test of 74.17, a standard deviation of 9.206, a minimum value of 60, and a maximum of 93.333. Based on the results of the calculation of the pre-test and post-test data using the t-test statistical approach, the direct learning group t count = 2.166 and t table ($\alpha = 0.05$) = 2.018 which means t count > t table has a significant effect on increasing chest skills student pass. In other words, the proposed research hypothesis is significantly verified.

Effect of balance and proprioceptive training on balancing and technical skills in 13-14-year-old youth basketball players [6]. Psychological selection in game sports on the basketball example [9]. Trust spectrum within sports team: Empirical evidence from professional basketball teams [10]. As stated in the previous theory study, direct learning is a form of learning that is conceptualized in the form of a good game in improving chest pass skills.

The results obtained from the implementation of this learning for 8 times were felt to be running poorly because students were too early to feel satisfied in implementing it, 8 meetings also made this learning boring for students so that the goals to be achieved in projecting students in the long term made students already feel you can do these moves. But behind this, the implementation of the direct learning model allows students to move repeatedly so as to improve students' ability to carry out chest passes. The most important thing in carrying out the chest pass is the execution of its movements repeatedly when it comes into contact with the ball. (Nuril Ahmadi, 2007: 17).

The basic chest pass technique steps are as follows:

a. Initial stance (preparation)

Based on the data analysis, the results obtained from the assessment of three judgments

(observers) of 40 samples, each judgment (observer) analyzed one sample in the initial attitude (preparation) for the first item obtained chest pass early attitude skills for the very good category 2 people (12.5%) belongs to the sample, 24 people (7.5%) are in the good category and 13 people (5%) are in the sufficient category, while the less category is 1 person (5%) which is owned by the sample.

b. Attitude of implementation (main)

Based on data analysis, the results obtained from the assessment of three judgments of 40 samples, each of which analyzes one sample. There is an attitude ability for carrying out chest pass in the very good category 4 people (12.5%) are owned by the sample and 24 people (10%) are in the good category and 12 people (7.5%) while the less category (0%) belongs to the sample .

c. Final Attitude

Based on the data analysis, the results obtained from the assessment of three judgments of 40 samples, each judgment analyzed one sample in the final attitude for the first item, there was a very good chest pass final attitude ability category 3 people (12.5%), and 19 people (710%) is in the good category 19 (7.5%) is in the moderate category, while the poor category (0%) is also owned by the sample From the description above based on the sub-indicators of the basic basketball chest pass technique as a whole, the initial attitude test (preparation), implementation attitude, final attitude, it is found that none of the variables are classified as very good category 2 people (8.69%), 18 people (78.26%) the basic technique of the chest pass ball was in the good category, 2 people (8.69%) were in the enough category, and 1 person (4.34%) was in the poor category. The average basic technical ability of basketball chest pass students at Ciampel 1 Public High School (mean) = 2.7 (86%) is classified as good. Based on the results of the analysis of processed data on the analysis of basketball chest pass learning for students of SMA Negeri 1 Ciampel which consists of indicators of learning chest pass basic techniques by three judgments to one sample and the total sample of 40 samples. For more details, it can be described below in accordance with the research question and problem limitation.

From the description above, it can be concluded that the level indicator of learning the basic technique of chest pass carried out by students of SMA Negeri 1 Ciampel is in the good category. Based on the description above, learning chest pass techniques carried out by students of SMA Negeri 1 Ciampel are still below average. Push up exercises improve chest pass skills [11]. Basketball game through a play approach [12]. Improving basketball chest pass skills through peer teaching methods of sports

education study program students [13]. Development of a chest pass training model in extracurricular activities [14]. Squat thrust and throw ball medicine against the ability to throw a basketball Chest pass [15]. The results obtained from the implementation of this research for 8 times have been able to help researchers to find out the results of the use of the direct learning model, in which this teaching style helps teachers and students in helping the learning process. And it is hoped that with this research, student learning (chest pass) will increase. Training with a frequency of 3-4 weeks can improve athlete's performance [16]. The effect of a 4 week plyometric training period on lower body muscle EMG changes in futsal players [17]. Therefore, the playing approach method is very influential in delivering the material and the opinions of Rusli

5. Conclusion

Based on the results of research and discussion, it can be concluded that the direct learning model (direct instruction) has a significant impact on the learning outcomes of chest pass skills in basketball games for class X SMA Negeri 1 Ciampel. This learning model is appropriate and in accordance with problem solving because chest pass skills need a direct approach to improving the technique, so students

Lutan and Adang Suherman (2000: 35-36) state, when the teacher realizes that the low quality of the game is caused by low skill abilities, the teacher has the following options:

The teacher can continue the game activity for some time so that students catch the general idea of the game they are doing.

- a. The teacher can return to the lower stages of learning and let students practice combining skills without pressure to master strategies.
- b. Teachers can change skills at a simpler and more mastered level so that students can concentrate on learning playing strategies. Means the teaching approach used in managing knowledge, principles, norms, rules in the motor learning process to achieve learning effectiveness.

can improve chest pass technique skills. The novelty of this research is the forms of direct learning that are more innovative and in accordance with the characteristics of class X students. It is hoped that the results of this study can be applied to other students who are in accordance with the characteristics of the students in this study.

References

- [1] F. Nurahman and M. Ridwan, "Pengaruh Variasi Latihan Passing Berkelompok Terhadap Kemampuan Chest Pass," pp. 715–724, 2007.
- [2] M. Sybil *et al.*, "Effect of physical activity with varying duration on adaptation processes of female basketball players," *J. Phys. Educ. Sport*, vol. 20, no. 6, pp. 3460–3466, 2020, doi: 10.7752/jpes.2020.06467.
- [3] C. Tokatlidou, C. E. Xirouchaki, E. Armenis, and N. Apostolidis, "Hematologic, biochemical, and physiologic characteristics of elite and professional basketball players," *J. Phys. Educ. Sport*, vol. 20, no. 6, pp. 3384–3390, 2020, doi: 10.7752/jpes.2020.06458.
- [4] T. Kutseryb, M. Hryniv, L. Vovkanych, and F. Muzyka, "Influence of basketball training on the features of women's physique," *J. Phys. Educ. Sport*, vol. 19, no. 4, pp. 2384–2389, 2019, doi: 10.7752/jpes.2019.04361.
- [5] M. Afrouzeh, R. M. Musa, P. K. Suppiah, and M. R. Abdullah, "Effect of modified equipment on the acquisition of motor task performance among children of low and high working memory capacity: A basketball-based experimental study," *J. Phys. Educ. Sport*, vol. 20, no. 5, pp. 2519–2525, 2020, doi: 10.7752/jpes.2020.05344.
- [6] E. D. Zacharakis, D. I. Bourdas, M. I. Kotsifa, E. M. Bekris, E. T. Velentza, and N. I. Kostopoulos, "Effect of balance and proprioceptive training on balancing and technical skills in 13-14-year-old youth basketball players," *J. Phys. Educ. Sport*, vol. 20, no. 5, pp. 2487–2500, 2020, doi: 10.7752/jpes.2020.05340.
- [7] M. Cieřlicka *et al.*, "Integral development of jumping and of shot accuracy of young basketball players 12-13 years," *J. Phys. Educ. Sport*, vol. 19, no. 3, pp. 992–1002, 2019, doi: 10.7752/jpes.2019.s3143.
- [8] M. Cieřlicka *et al.*, "Improving the protective technique of 13-14-year-old basketball players using rubber bands and unstable platforms," *J. Phys. Educ. Sport*, vol. 19, no. 3, pp. 903–911, 2019, doi: 10.7752/jpes.2019.s3130.
- [9] R. Sushko, N. Vysochina, A. Vorobiova, E. Doroshenko, V. Pastuhova, and F. Vysochin, "Psychological selection in game sports on the basketball example," *J. Phys. Educ. Sport*, vol. 19, no. 3, pp. 1708–1714, 2019, doi: 10.7752/jpes.2019.03250.
- [10] B. Józefowicz, "Trust spectrum within sports team: Empirical evidence from professional basketball teams," *J. Phys.*

- Educ. Sport*, vol. 20, no. 2, pp. 1144–1149, 2020, doi: 10.7752/jpes.2020.s2159.
- [11] Y. Meirizal and R. Rusmana, “Perbandingan Latihan Pull Up dan Latihan Push Up Terhadap Keterampilan Chest Pass Bola Basket,” *J. Kepeleatihan Olahraga*, vol. 10, no. 1, pp. 26–33, 2018.
- [12] H. Maksun and T. R. Wibowo, “Permainan Bola Basket Melalui Pendekatan Bermain,” *J. Pendidik. Olahraga*, vol. 8, no. 1, pp. 1–14, 2019, doi: 10.3157/jpo.v8i1.1213.
- [13] Ilham Arvan Junaidi, “Peningkatan Keterampilan Chest Passbola Basket Melalui Metode Peer Teachingmahasiswa Program Studi Pendidikan Olahraga,” *Penjaskesrek*, vol. 5, no. April, pp. 37–44, 2018.
- [14] M. A. Fika, “Pengembangan Model Latihan Passing Chest Pass Bola Basket Pada Siswa Ekstrakurikuler Bolabasket Smp N 1 Cepiring Tahun 2016 Skripsi,” *Skripsi*, 2016.
- [15] N. Nuraini, T. Sugihartono, and A. Sutisyana, “PENGARUH LATIHAN SQUAT THRUST DAN THROW BALL MEDICINE TERHADAP KEMAMPUAN JAUHNYA LEMPARAN CHEST PASS BOLA BASKET EKSTRAKURIKULER SMPN 22 PUTRI HIJAU BENGKULU UTARA,” *Sport Gymnast. J. Ilm. Pendidik. Jasm.*, vol. 1, no. 2, pp. 16–22, 2020, doi: 10.33369/gymnastics.v1i2.12806.
- [16] R. S. de Oliveira, J. P. Borin, P. T. Fernandes, M. C. Uchida, and T. de O. Borges, “Description of 18 weeks integrated training on the displacement speed in Brazilian futsal players,” *Rev. Bras. Ciencias do Esporte*, vol. 41, no. 3, pp. 308–313, 2019, doi: 10.1016/j.rbce.2018.06.001.
- [17] D. Rezaimanesh, P. Amiri-Farsani, and S. Saidian, “The effect of a 4 week plyometric training period on lower body muscle EMG changes in futsal players,” *Procedia - Soc. Behav. Sci.*, vol. 15, pp. 3138–3142, 2011, doi: 10.1016/j.sbspro.2011.04.260.