

BENCH DIP EXERCISE ON SMASH ACCURACY IN VOLLEYBALL ATHLETES

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Abstract

In this study, female volleyball players from the OPBVP Prabumulih club will be evaluated to identify the impact of bench dip training on smash accuracy. A quasi-experiment with a pre test-post test one group design was employed as the methodology. There were 35 participants in the study's sample. The tool is a test of smashing abilities. After receiving therapy for 5 weeks with a frequency of exercise four times per week, it was discovered that the treatment in this study took the form of Bench Dip exercise. Based on study and data analysis findings, it was determined that t_{count} (15.29) was higher than t_{tabel} (1.69) and that $t_{count} > t_{tabel}$ caused H_1 to be approved and H_0 to be rejected. Therefore, H_1 may be accepted, indicating that striking the ball hanging has an impact on improving the precision of the volleyball smash during practice sessions of the OPBVP Prabumulih club. This study implies that a kind of workout called bench dips may be utilized to increase smash accuracy.

Keywords : Bench Dip Practice; Smash Accuracy; Volleyball

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INTRODUCTION

Both top and lower class Indonesians like playing volleyball as a sport. This is evident from the numerous volleyball competitions between sports groups that take place at the regional, national, and even worldwide levels. Men and women of all ages, including toddlers, can participate in this sport (Candra, 2019). Volleyball is a sport that is organized and geared at improving fitness for beneficial results. Volleyball game is very fun because playing with the team (Aryanti etc, 2022). The game of volleyball is a game that is carried out in teams and has been highly developed among the community, the basic techniques of volleyball have a very important role in the game of volleyball before the players improve their abilities

to higher skills (Destriana et al., 2021). Volleyball is a game that requires teamwork to win matches (Azhar, 2017).

Sport is one of the needs of a person that must be taken into account in daily life in order to maintain health, because sport plays an important role in shaping the spiritual and physical soul so that it can form good characteristics and mindset (Oktariana, 2020). This, through regular exercise, these people will have optimal health compared to people who rarely exercise or never exercise at all (Widodo, W., & Hafidz, 2018).

A variation of the dip exercise is the bench dip exercise. Dips are commonly referred to be "squats" for the upper body since they may train a variety of different body muscles, including the triceps, chest, shoulders, back, and upper back. 2019's Dia Rahma Zuhro Bench dips are a moderately intense workout that you may do with your own body weight to target your arms, shoulders, and back. According to Bompa in textbooks (Iyakrus., 2015) Physiological and psychological processes are targeted in a systematic training process over a lengthy period of time, developing progressively and individually, in order to carry out duties.

The kick is the players' attempt to score, so the built kick is to make it so that the opposing team's blocker cannot predict the kick to be executed, both with the lure and the speed of the kick, the change of the kick is done by the position of the very back player. Which is difficult to block (attack from behind). Positional punching drills and variations should use effective and efficient training patterns and be innovative and up-to-date and easy to understand, especially for beginners (Nurfalah, et al 2019). Accuracy is the player's ability to aim something at the target they want to hit. The correct target in question is that the batter can hit the ball at the designated target in volleyball games (Putra, 2015).

When playing volleyball, OPBVP players already appeared to be skilled, but data from multiple sources, including the coach, made it evident that volleyball performance was still lacking. This was demonstrated in each match in which they took part. It is evident that 1) the athlete's punching motion appears to be difficult, which indicates that the punching motion is poor and, consequently, the force

generated is also poor, 2) the punch is weak, making it easy for the opposing players to block and deflect it, 3) the smash is easily executed on the opponent's block, 4) the ball frequently becomes stuck in the net every time you smash, and 5) student smashes frequently go out of bounds or miss the mark.

According to the author's findings in the field, on average only 5 successful swings are acquired after 10 hacking efforts during extracurricular activities, and from all club members, 30% to 70% of the can be unlocked. The volleyball players of the women's club OPBVP Prabumulih back, shoulder, and arm power might still be diminished during practice. The researcher chose the term "Influence of training of lying push-ups on the accuracy of striking among female players of the women's volleyball club OPBVP Prabumulih" as a result."

According to the issue statement above, the goal of this study was to "clarify" the relationship between push-up training on uneven bars and striking accuracy in female volleyball players from the OPBVP Prabumulih Women's Club.

METHOD

This study employs a quasi-experimental study design and is quantitative in nature. With one group both before and after testing, this study employed a pre-experimental study design. Treatments are assessed based on comparisons of tests results obtained before and after (Hamzah, 2016). In order to perform this study, pre- and post-tests were used, one before and one after a bench press. To ascertain the impact of push-up practice on the uneven bars on the OPBVP Prabumulih club's volleyball players' accuracy of strikes.

Sugiyono (Arifin, Zarifin, 2020) defines variables as everything that is described in some manner by researchers or symptoms that are being investigated in order to learn more about them and then make conclusions. The variables are the materials as well as the objects that are the focus of the study. These components are important to the results or conclusions of the study.

According to Arikunto (Khalijah, S., et al 2021), all objects of study are the population. Because if one wants to do a study, then all the elements that exist within the study, so the study is a population study. (Sugiyono, 2014) claims that

the sample reflects the traits that this group as a whole possesses. The population studied must be accurately represented in the samples that are drawn from it. 35 OPBVP Prabumulih athletes, with an average age of 18 to 21, served as the study's responders. This study used probability sampling (random sampling), which indicates that the sampling process was random or random in nature, assuming that every member of the population had an equal chance of being the study sample.

Following the acquisition of data, data collecting procedures are actions taken that are crucial elements in the research process and support the conduct of research. Measurements made during pre-test and post-test data collection, along with test results, served as the foundation for this study's data gathering approach.

A research tool is a tool that meets academic requirements so that it can be used as a tool to measure a measurement object or collect data about a variable.

Tabel 1. Judging Criteria

No	Point For Respondent's	Scor
1	Good	14-20
2	Enough	7-13
3	Less	<6

(Sugiyono, 2014)

The normality test is carried out as a consideration used to test the normality of the data. You need to use the frequency distribution data to determine the mean, standard deviation, and mode with the following steps:

- Range = largest data - smalls data
- Number of class intervals = $1 + 3.3 \log n$ (n = lots of data)
- in Class interval length = range/number of classes

This test was carried out on two paired samples. Paired samples are defined as samples with the same subject but subjected to two different procedures or measurements (Santoso, 2016). A statistical test with a paired sample t-test is used to explain whether there is a significant difference between the level of hitting accuracy before and after performing bench push-ups.

RESULT AND DISCUSSION

According to (Rohendi, et al, 2017) the game of volleyball is a sports game played by 2 teams in a team composed of 6 main players and separated by a net.

Volleyball players must master the techniques of serving, passing, hitting, blocking. . According to Santoso (2016), volleyball is a physical activity that can increase stamina and make people happy, which is very good for body health. Volleyball is a sport that requires balance, arm muscle strength and high concentration. The basic objective of volleyball, according to Irsyada (Santoso, 2016), is to get the ball into the opponent's zone through a net-shaped impediment and win by turning it off there. Because volleyball is so simple to play, it is particularly well-liked by the general populace in Indonesia.

According to Zuhermandi., (2015) a strike is a series of open movements, including an initial movement, a jumping stage, a striking stage, and a landing stage. The success of a strike is greatly influenced by the ability to coordinate movements and the level of sensitivity using the five senses. According to Cristanto (Ikbar, 2017), Smash is the most widely used form of attack after attack in an attempt to add value to a team in volleyball games. In order to get significant results in volleyball games, to build character, to achieve good results, for recreational purposes, to prepare activities.

Preliminary testing shows the highest number of collisions is 14 and the lowest is 4, with a mean of 7.97, a mode of 7.16 and a standard deviation of 20.22, and a slope of 0.04. Post-test result data with the highest number of beats 17 and the fewest 6, mean 10.9, mode 9, standard deviation 30.96, and curve slope 0.06. Based on a study showing that bench push-ups affect the punching accuracy of athletes who participate in OPBVP Prabumuleh's training sessions. Since it can be seen that the accuracy of the strike increased according to the results of the pre-test in the bench push-up exercise, after the treatment, an increase in the results after the test was observed.

Comparison of pre test and post test results can be obtained by comparison, namely the initial test with the most hits 14 and the fewest hits 4. The mean value between pre test and post test was 2.93. The results are 15.29 and t_{tabel} is 1.69 after calculations based on the results of the aforementioned "t-test" calculation, which is the outcome of the t distribution tabel with $dk(35-2) = 33$ and 95%. In the tabel,

a confidence interval ($\alpha = 0.05$) is shown. The conditions for the hypothesis test accept H_1 if the amount equals $t_{tabel}(1-\alpha)$ and reject H_0 if the amount is less than $t_{tabel}(1-\alpha)$. H_0 is denied, whereas H_1 is accepted, with the following statement: "OPBVP Prabumulih athletes' striking accuracy is impacted by push-up training on parallel bars".

Table 2. Data Distribution of Volleyball Smash Test Instruments (Pre test)

Variable	N	highest	lowest	Span	Mean	SB	
<i>Smash</i>	35	14	4	10	7,97	20,22	
Total Athletes						35	
OPBVP Prabumulih female athlete's average pre test score						7,97	

Table 2.demonstrates that the range is 10, the maximum score is 14, the lowest score is 4, the average from the pre test is 7.97, and the standard deviation from the pre test findings is 20.22.

Table 3. Distribusi Data Tes Smash Bola Voli (Post test)

Variable	N	highest amount	lowest amount	Span	Mean	SB	
<i>Smash</i>	35	17	6	11	10,9	30,96	
Total Athletes						35	
OPBVP Prabumulih female athlete's average post test score						10,9	

Tabel 4. List of Comperation of Pre test and Post test Smash Result

Results	N	highest	lowest	Mean	Difference between Mean Pre test and Post test
<i>Pre test</i>	35	14	4	7,97	2,93
<i>Post test</i>	35	17	6	10,9	

By comparing the results of the pre test and post test, its possible to compare the findings. For example, in the pre test, the maximum number of smashes was 14, while the lowest was 4. The mean difference between the pre-test and post-test was

2.93, with the greatest score being 17 and the lowest being 6, and the mean/average of the pre test being 7.97 and the post test worth 10.9 respectively.

Table 5. List of Hypothesis Test

Results	N	Mean	$\sum d$	$\sum x d$	$\sum Xd^2$
<i>Pre test</i>	35	7,97	93	10	37,96
<i>Post test</i>	35	10,9			

According to the hypothesis testing tabel, it can be observed that the experimental treatment group had an average pre test score of 7.97 and an average post test of 10.9, where d is 93, $x d$ 10, and Xd^2 37,96. The "t test" results are 15.29 and T (tabel) is 1.69 as a result of the T distribution tabel with dk $(35-2) = 33$ and 95% confidence level $(= 0.05)$, respectively, based on the results of the calculations above. The hypothesis is accepted if $t_{count} > t_{tabel}(1-)$, while the hypothesis is rejected if $t_{count} < t_{tabel}(1-)$. The H_0 hypothesis is rejected and the H_1 assertion, "There is an impact of bench dip training on the smash accuracy of OPBVP Prabumulih athletes," is accepted since there is a significant difference between the post test and pre test $t_{count}(15.29) > t_{tabel}(1.69)$.

CONCLUSION

Based on the data from the bench dip treatment, which was administered for 5 weeks at a frequency of 4 times per week, it can be shown that there was an increase of 2.93 between the results of the initial test (pre test) and the final test (post test). It has been determined that there is an effect of bench dip training on smash accuracy in OPBVP athletes Prabumulih after statistical t tests were used to test the normality of data and hypotheses. With a significance level of 0.05, t_{count} was 15.29 while t_{tabel} was 1.69, and since $t_{count} > t_{tabel}$, it was determined that there was an effect. The use of bench dip training as a form of training to improve athlete smash accuracy.

It is advised for players to keep performing bench dip workouts and other activities that help enhance smash accuracy. Coaches are advised to employ bench dip exercises as a way of practice to increase the precision of volleyball smashes. It is advised that future studies incorporate height measurements as data before doing bench dip workouts.

REFERENCES

- Arifin, Zarifin, Z. (2020). Metodologi Penelitian Pendidikan. *Jurnal Al-Hikmah*.
- Aryanti, S., Nurriazalia, M., Setiyo, E., Helmi, H., & Azhar, S. (2022). Powtoon-Based Learning Videos to Improve Learning Outcomes at Background Services in Elementary School Students. *Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan)*, 5(1), 217-226.
- Azhar, S. (2017). Pengaruh Metode Latihan Dan Motivasi Berprestasi terhadap Kemampuan Passing Atas Bola Voli. *Altius: Jurnal Ilmu Olahraga dan Kesehatan*, 6(1).
- Candra, A. (2019). *Upaya Meningkatkan Passing Atas Bola Voli Melalui Variasi Pembelajaran Pada Siswa Kelas VII 1 Smp Negeri 13 Kota Dumai*.
- Destriana, D., Destriani, D., & Yusfi, H. (2021). Pembelajaran Smash Permainan Bola Voli: Ujicoba Skala Kecil. *Jurnal MensSana*, 6(2), 126-132.
- Hamzah, M. F. (2016). Perbandingan Metode Pembelajaran Langsung Dan Metode Pembelajaran Tidak Langsung Terhadap Hasil Belajar Renang Gaya Dada (Studi Pada Siswa Kelas V Sdn Leminggir Kabupaten Mojokerto). *Jurnal Pendidikan Olahraga dan Kesehatan*, 3.
- Ikbar, R. (2017). Kontribusi Tinggi Badan Dan Tinggi Lompatan Terhadap Smash Bola Voli Pemain Voli Club Lavendos Vc Kecamatan Jaya Kabupaten Aceh Jaya. *Jurnal Ilmiah Mahasiswa Pendidikan Jasmani Dan Rekreasi*, 242—247.
- Iyakrus. (2015). Permainan Sepak Takraw. Palembang: Unsri Press.
- Khalijah, S., Suprpta, S., & Abbas, I. (2021). Hubungan Perhatian Orang Tua Terhadap Hasil Belajar Peserta Didik Pada Pembelajaran Geografi. *Lageografia*. 3, 401-416.
- Nurfalah, S., Hanif, A. S., & Satyakarnawijaya, Y. (2019). Model Latihan Smash Dalam Permainan Bola Voli Untuk Pemula. *Jurnal Pendidikan Olah Raga*, 1, 15–26.
- Oktariana, D., & Hardiyono, B. (2020). Pengaruh Daya Ledak Otot Lengan, Daya Ledak Otot Tungkai Dan Kekuatan Otot Perut Terhadap Hasil Smash Bola Voli Pada Siswa Smk Negeri 3 Palembang. *Journal Coaching Education Sports*, 1, 2020. <https://doi.org/10.31599/Jces.V1i1.82>
- Putra, A. P. (2015). *Peningkatan Kemampuan Akurasi Smash Bola Voli Dengan Metode Target Games Peserta Didik Kelas Vii Smp Negeri 4 Kalasan Sleman*.
- Rohendi, Aef, Dan Etor, S. (2017). *Metode Latihan Dan Pembelajaran Bola Voli Untuk Umum*. (Alfabeta.).
- Santoso, D. A. (2016). Analisis Tingkat Kebugaran Jasmani Atlet Bola Voli Putri Universitas Pgrri Banyuwangi. *Jurnal Kejaora*, 1.
- Sugiyono. (2014). *Metode Penelitian Pendidikan (Pendidikan Kuantitatif,*

Kualitatif dan R&D).

- Widodo, W., & Hafidz, A. (2018). Kontribusi Panjang Lengan, Koordinasi Mata Tangan, Dan Konsentrasi Terhadap Ketepatan Shooting Pada Olahraga Petanque. *Jurnal Prestasi Olahraga*.
- Zuhermandi. (2015). Penerapan Media Bola Gantung Untuk Meningkatkan Aktivitas Smash Dalam Permainan Bola Voli Pada Siswa Kelas X B Sma Negeri 1 Nanga Pinoh. *Jurnal Kesehatan Jasmani Dan Rekreasi*, 1, 23.