



Basic Volleyball Skills Among Students at Biga State Elementary School: A Survey Study

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Abstract

This study aimed to describe the level of basic volleyball skills—service, passing, and smash—among students at Biga State Elementary School, Walea Besar District, Tojo Una-Una Regency. A quantitative descriptive design was applied with a sample of 12 students. The results showed that for service technique, most students were in the moderate (50%), high (33%), and very high (17%) categories, with no students in the low or very low categories. For passing skills, the majority were in the low (50%) and high (42%) categories, while 8% were in the very low category, and none were in the moderate or very high categories. For smash skills, most students were in the low (42%) and moderate (42%) categories, with only 8% in the high category and none in the very low category. Overall, students demonstrated relatively good service skills, but passing and smash skills still require improvement through more intensive and continuous training.

Keywords : Basic Skills; Service; Passing; Smash.

Introduction

Volleyball is a popular team sport and is widely sought after in educational settings, including elementary schools. Volleyball not only teaches physical skills but also instills the values of teamwork , sportsmanship, discipline, and responsibility. According to Bompa (2009), basic technical skills such as serving, passing, and smashing are the main foundation of volleyball, which need to be taught and practiced from an early age to optimally develop students' playing abilities.

In elementary schools, mastery of basic volleyball techniques is often ignored or not systematically mapped out. As a result, the coaching and training carried out by physical education teachers tends to be general in nature without considering the students' initial skill level. In fact, mapping students' basic skills is very important as a basis for compiling learning and training programs that are right on target (Sukadiyanto & Tangkudung, 2011).

Biga State Elementary School, located in Walea Besar District, Tojo Una-Una Regency, is one of the elementary schools in the island region that has a high level of interest in volleyball sports activities. However, until now, there has been no data that describes the level of students' basic skills in volleyball in a measurable manner. This condition makes the evaluation and development of sports at the school less focused.

Based on this, this research is important to be conducted to map the basic skills of Biga State Elementary School students in volleyball, especially in the aspects of serving, passing, and smashing. This research is expected to provide objective information regarding students' abilities so that it can be used as a consideration for physical education teachers in designing volleyball learning and training programs that are appropriate to the abilities and needs of students.

This research is included in the quantitative descriptive research type. Descriptive research aims to describe certain phenomena, conditions, or variables systematically, factually, and accurately according to actual conditions in the field (Sugiyono, 2019). In the context of this research, the description in question is to map the basic volleyball skill levels of students at Biga State Elementary School, including serving, passing, and smashing abilities.

A quantitative approach is used because the data collected is in the form of skills test scores, which are then processed into numbers (statistics) to facilitate interpretation. This study did not provide any treatment or intervention to the participants, but only captured the students' actual abilities through structured tests. Thus, this research can provide an objective and detailed picture of students' basic abilities.

According to Arikunto (2019), quantitative descriptive research is highly appropriate in the field of physical education, particularly when researchers want to map students' skill levels or performance based on specific criteria. Descriptive research results are also useful as

a basis for developing training programs or improving future learning methods. With this method, it is hoped that physical education teachers at Biga State Elementary School can obtain valid data on student abilities, and then design learning or training strategies that suit the needs and characteristics of students. This research was conducted on April 12-13, 2025 at Biga State Elementary School.

According to Sukandarrumidi (2018), population is the entire object of research, whether it consists of real objects, abstract objects, events, or symptoms that are sources of data and have certain and the same characteristics . Meanwhile, Sutrisno Hadi (2015: 182) states that population is the entire population intended to be investigated. It is also said that population is limited to the number of residents or individuals who have at least one similar characteristic . So the definition above means that population is all individuals who will be used as research objects and all of these individuals must have at least the same characteristics. The population used in this study was the entire volleyball team of SD NEGERI BIGA , which consisted of 12 female students.

The sample in this study was taken using the total sampling technique. According to Sugiyono (2018:140), total sampling is a sampling technique in which all members of a population are sampled. Research conducted on populations under 100 should be conducted using a census, so that all members of the population are sampled as subjects of study or as respondents who provide information. Therefore, the sample in this study consisted of 12 female volleyball players from Biga State Elementary School .

The variable in this study is a single variable, namely the level of basic volleyball skills. The level of basic volleyball skills is the degree of consistent success in achieving a goal effectively and efficiently by high school students in volleyball skills consisting of underhand passing, overhand passing, serving, and smashing.

In principle, research is measuring social and natural phenomena. The research instrument is a tool used to measure the observed natural and social phenomena (Sugiyono, 2017:102). The instrument used is an instrument adopted from Nurhasan, 2001. Data analysis is one of the research activities in the form of the process of compiling and managing data in order to interpret the data that has been obtained. According to (Sugiyono 2017), data analysis is an activity after data from all respondents or other data sources are collected. Data presentation in this study is in the form of tables, diagrams and percentage calculations (Nana Syaodih Sukmadinata, 2015:233).

The data analysis technique used in this research is descriptive analysis technique. The following is what researchers use in conducting research. After calculating the percentage (%) of respondents' achievements, the next step is to group respondents' answers into several categories.

$$P = \frac{F}{N} \times 100\%$$

Information :

P : Percentage sought

F : Frequency

N : Number of respondents

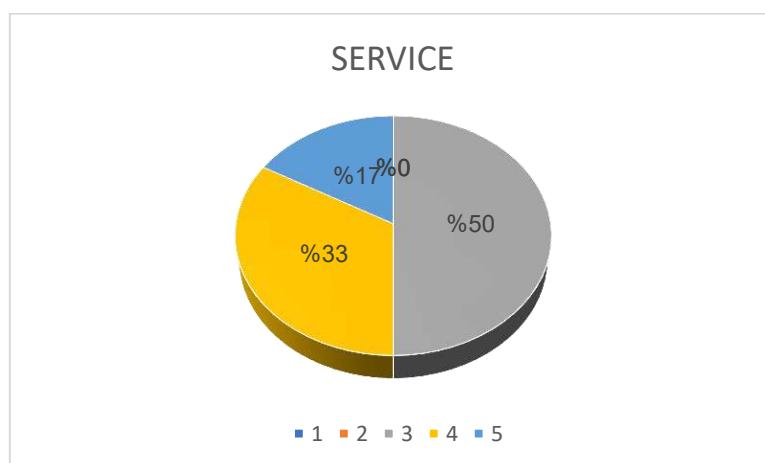
Results and Discussion

The presentation of the data analysis results includes quantitative descriptive analysis and assessment criteria that will be used referring to the norms that have been used to provide values for each score item. Then, a discussion of the analysis results and their relationship to the theory underlying this research is carried out to provide an interpretation of the results of the data analysis.

The subjects in this study were basic skills in the game of volleyball at Biga State Elementary School , Walea Besar District, Tojo Una-Una Regency.

1. Basic service technical skills

M	78
Elementary School	4
M-1.5SD	72
M-0.5SD	76
M+0.5SD	80
M+1.5SD	84



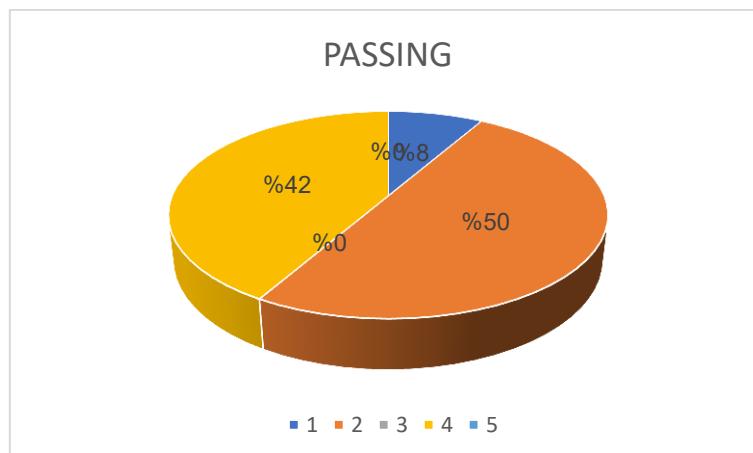
INTERVAL	CRITERIA	FREQUENCY	PERCENT
$x < 72$	VERY LOW	0	0%
$72 < X \leq 76$	LOW	0	0%
$76 < X \leq M + 80$	CURRENTLY	6	50%
$80 < X \leq 84$	TALL	4	33%
$84 > x$	VERY HIGH	2	17%
TOTAL		12	100%

Based on the results of the overall service analysis of 12 volleyball players at Biga State Elementary School , Walea Besar District, Tojo Una-Una Regency. There were no students in the very low and low categories (0%), the medium category was 6 students (50%), the high category was 4 students (33%), and the very high category was 2 students (17%).

2. Basic passing technique skills

M	77
Elementary School	3

M-1.5SD	72
M-0.5SD	75
M+0.5SD	78
M+1.5SD	82

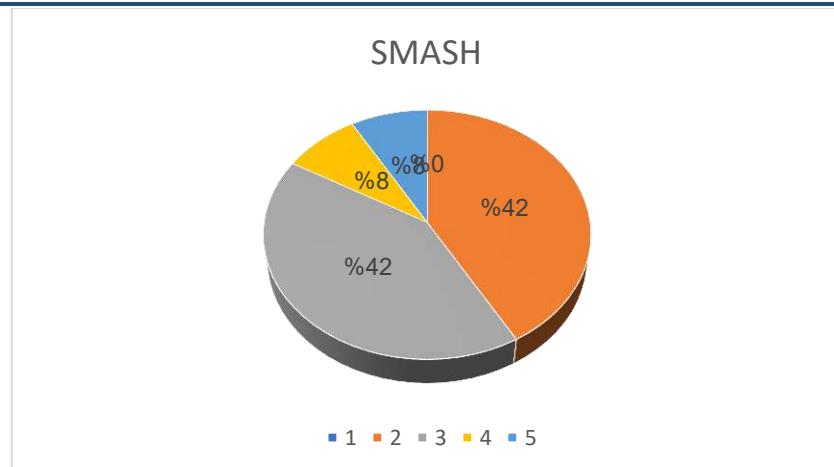


INTERVAL	CRITERIA	FREQUENCY	PERCENT
$x < 72$	VERY LOW	1	8%
$72 < X \leq 75$	LOW	6	50%
$75 < X \leq M + 78$	CURRENTLY	0	0%
$78 < X \leq 82$	TALL	5	42%
$82 > x$	VERY HIGH	0	0%
TOTAL		12	100%

Based on the results of the overall analysis of passing from 12 volleyball players at Biga State Elementary School , Walea Besar District, Tojo Una-Una Regency. The very low category was 1 student (8%), the low category was 6 students (50%) , no students were in the medium category (0%), the high category was 5 students (42%), no students were in the very high category (0%),

3. Basic passing technique skills

M	72
Elementary School	8
M-1.5SD	59
M-0.5SD	67
M+0.5SD	76
M+1.5SD	84



INTERVAL	CRITERIA	FREQUENCY	PERCENT
$x < 59$	VERY LOW	0	0%
$59 < X \leq 67$	LOW	5	42%
$67 < X \leq M + 76$	CURRENTLY	5	42%
$76 < X \leq 84$	TALL	1	8%
$84 > x$	VERY HIGH	1	8%
TOTAL		12	100%

Based on the overall analysis of smashes from 12 volleyball players at Biga State Elementary School, Walea Besar District, Tojo Una-Una Regency, there were no students in the very low category (0%), while there were 5 students in the low category (42%). medium category as many as 5 students (42%), high category 1 student (8%), high category 1 student (8%).

Conclusion

Based on the results of research on basic volleyball technical skills in 12 students at Biga State Elementary School, Walea Besar District, Tojo Una-Una Regency, the following conclusions can be drawn:

1. The majority of students' basic service skills were in the moderate to very high category, with 50% of students in the moderate category, 33% in the high category, and 17% in the very high category. This indicates that the students' service skills were relatively good, with no students in the low or very low categories.

2. The majority of students' basic passing skills were still in the low category (50%), followed by 42% in the high category, 8% in the very low category, and no students reached the very high or medium category. This indicates the need to improve passing skills through more intensive and targeted training.
3. Basic smash technique skills were dominated by the low and medium categories, with 42% of students each, and only 8% of students in the high category. No students fell into the very low category. This indicates that students' smashing abilities still need to be improved, particularly to increase the number of students reaching the high category.

Overall, the basic serving technique is considered good, while the basic passing and smashing techniques still require further coaching and training so that the quality of students' volleyball game can improve overall.

References

Anas Sudijono. (2012). Introduction to Educational Statistics. Jakarta. RajaGrafindo Persada

Anggraini, AW, Agus T., & Sulistyorini. (2016). Improving Underhand Passing Skills Using Varied Exercises in Volleyball Extracurricular Students at SMK Negeri 2 Singosari, Malang Regency. *Journal of Physical Education*, 26(2), 365-380.

Danang Pujo Broto. 2016. The Effect of Plyometric Training on Leg Muscle Power in Young Volleyball Athletes. Yogyakarta: Yogyakarta State University. Motion, Volume VI, No. 2, September 2015

Detriana and Giartama. 2020. Mixed Volleyball Learning Techniques. Palembang: Bening Media Publishing. Erianti. 2011. Volleyball Textbook. Padang: FIK UNP

Fallo, IS & Hendri. 2016. Efforts to improve volleyball smash skills through command-style learning. *Journal of Sports Education*, 5(1).

Giriwijoyo, S., & Sidik, D. (2013). Sports Physiology: Human Body Functions in Sports for Health and Achievement. Rosdakarya Youth.

Hidayat, M Taufik. (2015). "Improving Underhand Pass Ability in Volleyball Games Through Underhand Pass Practice Sitting Standing on a Bench and Underhand Pass by Walking in Grade VI Students of SDN Tanggul Wetan 01 Jember". *Journal*. Vol 4, No 1, February 2016. Page 154.

Hananingsih, W. (2018). The Relationship Between Height and Smash Accuracy in Volleyball. *JPIIn (Journal of Indonesian Education*, 1(2), 36–43.

Hanifah, Raudhatul and Rifki Muhammad Sazeli. 2019. The Effect of Jump in Place and Quick Leap Training on Increasing the Explosive Power of Leg Muscles of Philipos 50 Kota Volleyball Athletes. *Stamina Journal* 2 (1), 62-73.

Hendro Kusworo. 2012. Developing the Physical Condition of Tennis Athletes Using Weight Training. Gorontalo: Gorontalo State University. *Health & Sport Journal*, Volume 5, Number 3, August 2012

Ismail, M., & Tunggul, E. (2020). The Effect of Bench Step Training on Semi-Smash Ability in Volleyball Games at the Hmbs Club. *Tadulako Journal of Sport Sciences and Physical Education*, 8 (1), 131–136.

Kardiyanto, DW, & Sunardi. (2020). *Volleyball Coaching*. Sidoarjo: Zafatama Jawara

Kenniadi, K., Paryadi, P., & Ismawan, H. (2021). Analysis of Basic Technical Skills in Football Games Among Extracurricular Students of Sma Negeri 8 Malinau. *Borneo Physical Education Journal*, 2(1), 21–30.

Listina, Ria . 2012. *Getting to Know the Sport of Volleyball*. East Jakarta: PT Balai Pustaka (PERSERO). Mustafa, PS (2014). *Guide to Variations in Volleyball Overhand Service Practice*. Faculty of Sports Science, State University of Malang.

Nurhasan and Abdul Narlan. (2015). *Tests and Measurement of Sports Education*. Tasikmalaya: PJKR FKIP UNSIL Language Center, Ministry of National Education (2001). *Big Indonesian Dictionary*. Jakarta: Balai Pustaka.

Paglia, J. (2015). *A guide to volleyball basics*. USA: Sporting Goods Manufacturing Pramana,

RA, Syafei, MM, & District, C. (2021). Survey of Interest in Learning Physical Education and Physical Fitness Level of Grade X Students at SMK Pamor Cikampek During the Covid 19 Pandemic. *Wahana Pendidikan scientific journal*, 7(4).

Pranopik, M Riza. 2017. “Development of Volleyball Smash Training Variations”. *Jurnal Prestasi*. Vol 1. No 1. Pg 32.

Pratiwi, E., Barikah, A., & Asri, N. (2020). Comparison of Physical Fitness of Indoor Volleyball and Sand Volleyball Athletes of the Indonesian Volleyball Association of South Kalimantan Province. *Olympia Journal*, 2 (1), 1–7.

Ruslan. (2015). *Volleyball Sport*. Depok: Optima Intelligence Association

Sriwana, (2014). Comparison of underhand passing exercises in pairs with passing against a wall on underhand passing ability in volleyball at SMP Negeri 19 Palu. Palu: Tadulako University

Sugiyono (2017). *Qualitative Research Methods: For research that is: exploratory, enterprising, interactive, and constructive*. Bandung: Alfabeta Sukandarrumidi. 2018. *Research Methodology*. Yogyakarta: Gadjah Mada University Press

Sugiono. (2017). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alafabeta , CV

Supriyanto, S., & Martiani, M. (2019). The Contribution of Arm Muscle Strength to Smash Skills in Volleyball. Sports Hall: Journal of Physical Education and Sports, 3(1), 74–80.

Suprisno Hadi, M. (2015). Research Methodology. Yogyakarta: Pustaka Pelajar Winarmo , MEdkk . (2013). Basic Techniques of Playing Volleyball. Malang : State University of Malang.

Winarno, WK (2021). Volleyball Arena based on steel material. State Islamic University of Maulana Malik Ibrahim Wulandari,

Ika Suci. 2014. “The Effect of Reward and Punishment Learning on Student Learning Motivation in Volleyball Underhand Passing Learning”. Journal of Physical Research. Vol 02, No 03. 2014. Page 54.

Yulianti, Mimi. 2013. The influence of learning methods and learning motivation on the volleyball playing ability of students at SMP Negeri 1 Batu Bersurat, Riau. Thesis (unpublished). Padang: UNP Postgraduate Program

Table 1. Musamus University Merauke Student Data

No	Name	ID	Class



Figure 1. MJPES cover

